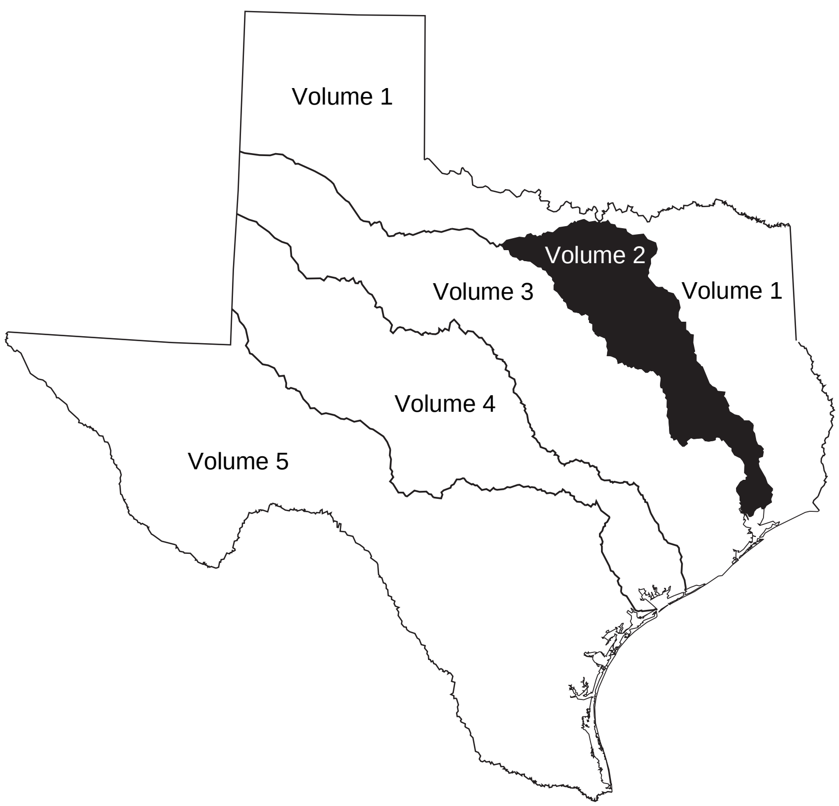
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Texas Water Year 2002

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

GALE A. NORTON, Secretary

GEOLOGICAL SURVEY

Charles G. Groat, Director

For additional information write to:
District Chief, Water Resources Division
U.S. Geological Survey
8027 Exchange Dr.
Austin, Texas 78754-4733

2003

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:

Mike E. Dorsey
Addis M. Miller III
Jimmy G. Pond
Timothy H. Raines
Debra A. Sneck-Fahrer
John W. Unruh
Ken VanZandt

The following individuals contributed to the collection, processing and preparation of the data:

<u>Houston Subdistrict Office</u>

Cindy Billington
Dexter W. Brown
J. Pat Bruchmiller
Mike R. Burnich
Al Campodonico
Trixie A. Delisle
Jeff W. East
Shawn M. French
Lee B. Goldstein
Jimmy E. Hopkins
Mark C. Kasmarek
Patrick O. Keefe
Wesley D. Meehan
Dale Melton
Russell Neill
Edna M. Paul
Cervando S. Ramirez
Elizabeth A. Roach
J. Gilbert Stuart

<u>Fort Worth Field Office</u>

Jack D. Benton
Dana A. Blanchette
Wendell L. Bradford
Martin J. Danz
Judith H. Donohue
Wilfredo Garcia-Garcia
Bradley L. Mansfield
Anthony J. McGlone
Jennifer L. Pickard
Darryl G. Pinion
Clyde T. Schoultz
Jeffrey T. Sandlin
Roger K. Trader
David V. Tudor

<u>Wichita Falls Field Office</u>

Randal S. Alexander
Stanley Baldys
Monti M. Haynie
Laith P. Hairell
David M. Holmes
Jackie D. Kelly
Heather L. Null
Michael T. Pettibon
Keith R. Snider

<u>San Antonio Subdistrict Office</u>

James M. Briers
Amy R. Clark
Eric B. Cooper
Shawn M. French
Allen L. Furlow
Jon R. Gilhousen
Ken C. Grimm
C.A. Hartmann, Jr.
Chiquita S. Lopez
Stephanie L. Marr
Cecilio R. Martinez
Vidal A. Mendoza
Robert T. Meyer
Michael B. Nyman
Cassi L. Otero
Diana E. Pedraza
Jorge O. Pena
Brian L. Petri
Richard N. Slattery
Douglas E. Thomas
Mark A. Warzecha
John F. Wojcik

<u>Austin Field Office</u>

Joseph T. Bentley
Michael G. Canova
Michael L. Greenslate
Searcy M. Jacobs
Venezia Muniz
Randy A. Samuelson
Jonathan W. Snatic
Milton W. Sunvison
K. Craig Weiss

<u>San Angelo Field Office</u>

Joe G. Beauchamp
Cary D. Carman
Hector H. Garza
Henry Jacques, Jr.
Lawanna M. Kiser
Richard L. Nichols
James B. Schiller
Tim E. Teagarden

This report was prepared in cooperation with the State of Texas and other agencies under the supervision of Jayne E. May, District Data Chief.

REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*

2. REPORT DATE
March 2003

3. REPORT TYPE AND DATES COVERED
Annual--Oct. 1, 2001, to Sept. 30, 2002

4. TITLE AND SUBTITLE
Water Resources Data--Texas, Water Year 2002, Volume 2
Trinity River Basin

5. FUNDING NUMBERS

6. AUTHOR(S)
S.C. Gandara

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Texas District
8027 Exchange Dr.
Austin, TX 78754-4733

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-TX-02-2

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Texas District
8027 Exchange Dr.
Austin, TX 78754-4733

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
USGS-WDR-TX-02-2

11. SUPPLEMENTARY NOTES
Prepared in cooperation with Federal, State, and local agencies.

12a. DISTRIBUTION / AVAILABILITY STATEMENT
No restriction on distribution.
This report may be purchased from
National Technical Information Service
Springfield, VA 22161

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

Water-resources data for the 2002 water year for Texas are presented in six volumes, and consist of records of stage, discharge, and water quality of streams and canals; stage, contents, and water-quality of lakes and reservoirs; and water levels and water quality of ground-water wells. Volume 2 contains records for water discharge at 45 gaging stations; stage only at 2 gaging stations; stage and contents at 23 lakes and reservoirs; water quality at 27 gaging stations; and data for 2 partial-record stations comprised of 1 flood-hydrograph and 1 crest-stage stations. Also included are lists of discontinued surface-water discharge or stage-only stations and discontinued surface-water-quality stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in Texas. Records for a few pertinent stations in the bordering States also are included.

14. SUBJECT TERMS
*Texas, *hydrologic data, *surface water, *water quality, flow rate, gaging stations, lakes, reservoirs, chemical analyses, sediments, water temperature, sampling sites.

15. NUMBER OF PAGES
397

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT
Unclassified

18. SECURITY CLASSIFICATION OF THIS PAGE
Unclassified

19. SECURITY CLASSIFICATION OF ABSTRACT
Unclassified

20. LIMITATION OF ABSTRACT

CONTENTS

ILLUSTRATIONS

TABLES

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; (p) precipitation.]

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

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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Punta De Agua Creek near Channing (d)	07227448	3,568	1968-73
East Cheyenne Creek Tributary near Channing (e)	07227460	1.60	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
Palo Duro Creek near Spearman (d)	07233500#	1,076	1954-79, 1999-2001
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Middle Pease River near Paducah (d)	07307750	1,086	1973-79
Middle Pease River near Paducah (d)	07307760	1,123	1980-82
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 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
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^2)	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,
“ “ “ “ (e)			1979-82
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 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^2)	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
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
White Rock Creek at Keller Springs Road, Dallas (d)	08057100	29.40	1961-79

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
Caney Creek near Groveton (e)	08066145	41.4	1966-73

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
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
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
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
Bintliff 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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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 Profitt (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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
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
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
Cobb Creek near Abbott (d)	08093400	12.40	1967-79
Aquilla Creek near Aquilla (d)	08093500#	308	1939-2001
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
Seabourne Creek near Rosenberg (e)	08114900	5.78	1968-74
Fairchild Creek near Needville (d)	08115500	26.20	1947-55
Big Creek near Guy (d)	08116000	116	1947-50
Dry Creek near Rosenberg (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
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	1961-95
Spring Creek near Tankersley (d)	08131000	699	1930-60
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
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 1 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
East Bouldin Creek at South 1st Street, Austin (d)	08157600	2.4	1997-2001
Blunn Creek near Little Stacey Park, Austin	08157700	1.2	1997-2001
Boggy Creek at US Highway 183, Austin	08158050	13.1	1977-86 1994-2001
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
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
Coleto Creek Reservoir inflow (Guadalupe diversion) near Schroeder (d)	08176990	357	1980-94
Coleto 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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
Ecleto 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
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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
Madera Canyon near Toyahvale (d)	08424500	53.80	1932-49
Phantom Lake Spring near Toyahvale (d)	08425500*	N/A	1932-34, 1942-66
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Limpia Creek near Fort Davis (d)	08432000	303	1925-32
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
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
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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
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

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^2)	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^2)	Type of record	Period of record (water years)
Red River near Gainesville	07316000	30,872	SC, Cl	1944-46,
			SC, T, pH, Cl	1953-63,
			SC, T	1967-89,
Red River at Denison Dam near Denison	07331600	39,720	SC	1944-89,
			T	1945-89
Little Pine Creek near Kanawha	07336750	75.40	T	1980
Red River near De Kalb	07336820	47,348	SC, T	1968-91
Middle Sulphur River near Commerce	07342480	44.1	Cl, pH	1987-2001
South Sulphur River near Cooper	07342500	527	SC, T, pH, Cl	1959-66,
				1968-72,
			SC, T	1973-89
Sulphur River near Talco	07343200	1,365	SC, T, pH, Cl	1966-72,
			SC, T	1973-91
White Oak Creek near Talco	07343500	494	SC, T, pH, Cl	1966-72,
			SC, T	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,
			SC, T	1973-89
Little Cypress Creek near Jefferson	07346070	675	SC, T, pH, Cl	1968-72,
			SC, T	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,
			SC, T	1973-92
Lake Fork Creek near Quitman	08019000	585	SC, T, pH, Cl	1968-72,
			SC, T	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,
			C	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,
			SC, T	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,
			SC, T	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,
			SC, T	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,
			T	1948-62

Station name	Station number	Drainage area (mi^2)	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	1967-68,
			T	1957-58,
				1966-68,
			S	1957-68
Clear Creek near Sanger	08051500	295	SC, T, S	1968-77
Little Elm Creek near Celina	08052650	46.70	SC	1967-75,
			T, S	1966-75
Little Elm Creek near Aubrey	08052700	75.50	SC	1967-75,
			T, S	1967-75
Elm Fork Trinity River near Lewisville	08053000	1,673	SC	1982-86,
			T	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	1968-2000,
			S	1972-75,
				1998-2000
			Cl	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	1968-1981,
				1987-2000
			pH, DO	1977,
				1986-2000
			Cl	1964-81,
				1986-2000
Trinity River at Trinidad	08062700	8,538	SC, T	1967-81
				1986-2000
			pH, DO	1967-81,
				1986-2000
			Cl	1966-94
			S	1978-94
Cedar Creek near Mabank	08063000	733	SC, T, pH, Cl	1956-57
Pin Oak Creek near Hubbard	08063200	17.60	SC	1967-72,
			T	1957-60,
				1965-72,
			S	1957-60,
				1962-72
Richland Creek near Richland	08063500	734	SC, T, pH, Cl	1968-69,
			SC, T	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	1956-66,
				1972,
			SC, T	1973-83
Trinity River near Oakwood	08065000	12,833	SC, T, pH, Cl	1948-54,
			SC, T, S	1977-81
Bedias Creek near Madisonville	08065800	321	SC, T	1985-87,
			S	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	1950-65,
			T	1965

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Trinity River at Anahuac	08067300	17,912	SC, pH, Cl	1950-65
Cedar Bayou near Crosby	08067500	69.4	SC, pH, Cl	1971-79
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

Station name	Station number	Drainage area (mi^2)	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	1942-91,
			T	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	196066,
				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 Laneport	08105700	738	T	1977-82
Brazos River at State Highway 21 near Bryan	08108700	39,049	SC, T	1961-65
Brazos River near Bryan	08109000	39,515	SC, T	1966
Brazos River near College Station	08109500	39,599	SC, T	1961-84
Yegua Creek near Somerville	08110000	1,009	SC, T	1961-67
Navasota River above Groesbeck	08110325	239	SC, T	1968-89
Navasota River near Groesbeck	08110400	311	SC, T	1968-78
Navasota River near Easterly	08110500	968	SC	1942-43,
				1947
Navasota River near Bryan	08111000	1,454	SC, T	1959-81,
			S	1976-81
Brazos River near Richmond	08114000	45,007	S	1966-86,
			SC	1942-95,
			T	1951-95
Brazos River near Rosharon	08116650	45,399	SC, T	1969-80
Brazos River at Harris Reservoir near Angleton	08116700	44,000	SC	1962-77,
			T	1967-77
Brazos River at Brazoria Reservoir near Brazoria	08117200	44,000	SC	1962-77,
			T	1967-77
San Bernard River near Boling	08117500	727	SC, T	1978-81
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,
			Cl	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	1948-51,

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
			S	1949-51
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	Cl	1997-2000
Blunn Creek near Little Stacey Park, Austin	08157700	1.2		1997-2001
Boggy Creek at US Highway 183, Austin	08158050	13.1	C	1977-86
			C, T	1994-2001
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, Cl	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
			Cl	1962-99
Guadalupe River at Victoria	08176500	5,198	SC	1946-81,
			T	1951-81
Coleto Creek Reservoir (Condenser No. 1) near Fannin	08177360	414	T	1980-94
Coleto 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
			Cl	1965-2000
San Antonio River near Falls City	08183500	2,113	SC, pH, T, DO	1987-96

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
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
Frio River at Calliham	08207000	5,491	SC, T	1968-81
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

WATER RESOURCES DATA—TEXAS, 2002

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 45 gaging stations; stage only at 2 gaging stations; stage and contents at 23 lakes and reservoirs; and water quality at 27 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-02-2.” 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 2002 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 (TWDB), 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 Transportations; 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 normal during water year 2002.

Conservation storage in 77 selected reservoirs throughout the State, with a combined conservation capacity of 34,481,000 acre-feet, increased from 76 percent at the end of September 2001 to 77 percent at the end of September 2002. Records from these reservoirs indicate that storage increased in 34, decreased in 39, and remained the same in 4.

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

Streamflow

In the area covered in volume 2, streamflow averaged normal during water year 2002. Streamflow for water year 2002 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 2002 averaged normal. Monthly mean discharges for water year 2002 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 normal during November, February, March and June through September, above normal during October, December, January, and April, and below normal during May. The station North Bosque River near Clifton had normal streamflow April through June and August, above normal streamflow during November

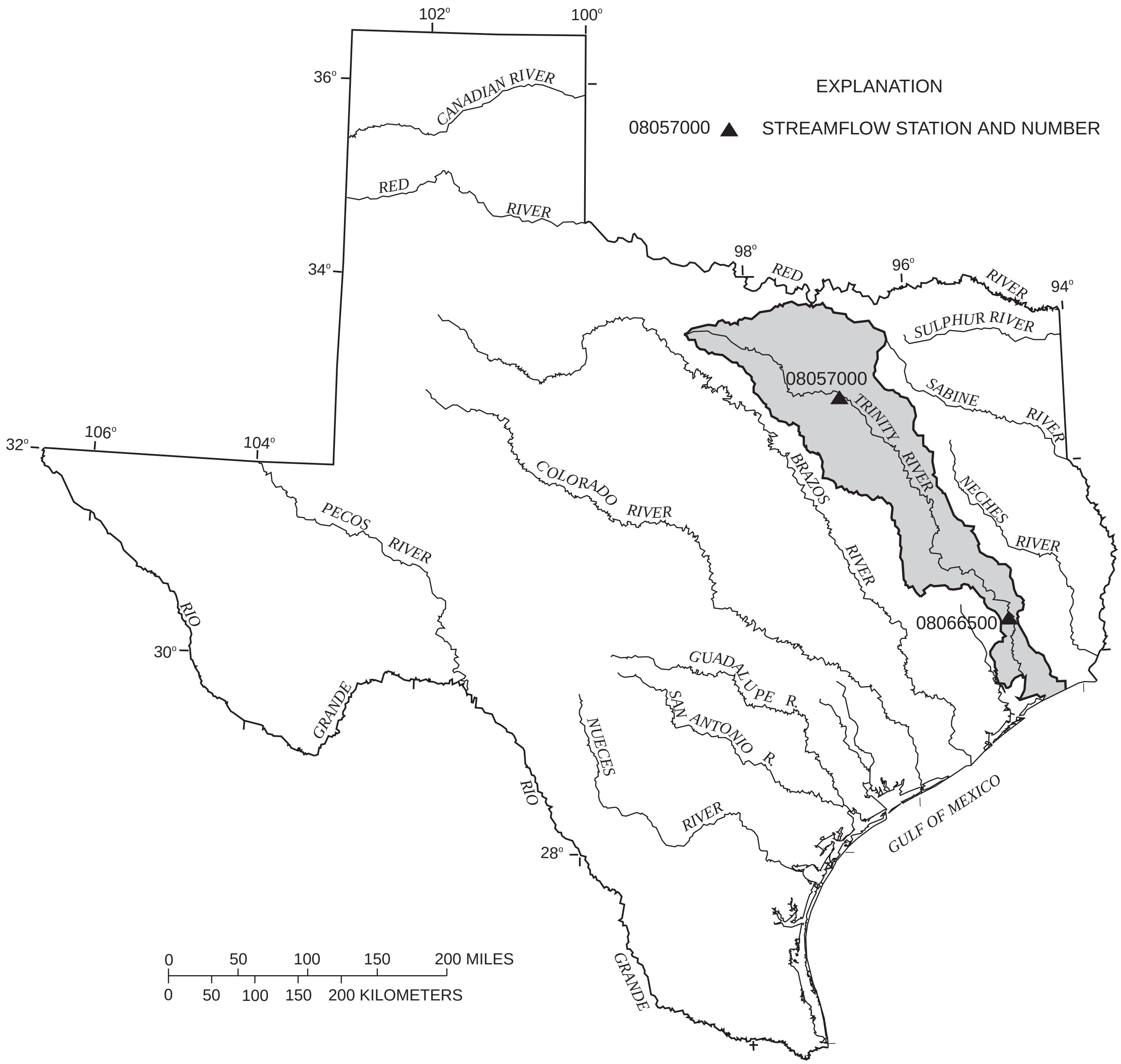


Figure 1. Area of Texas covered by volume 2 (shaded) and location of selected streamflow stations in volume 2.

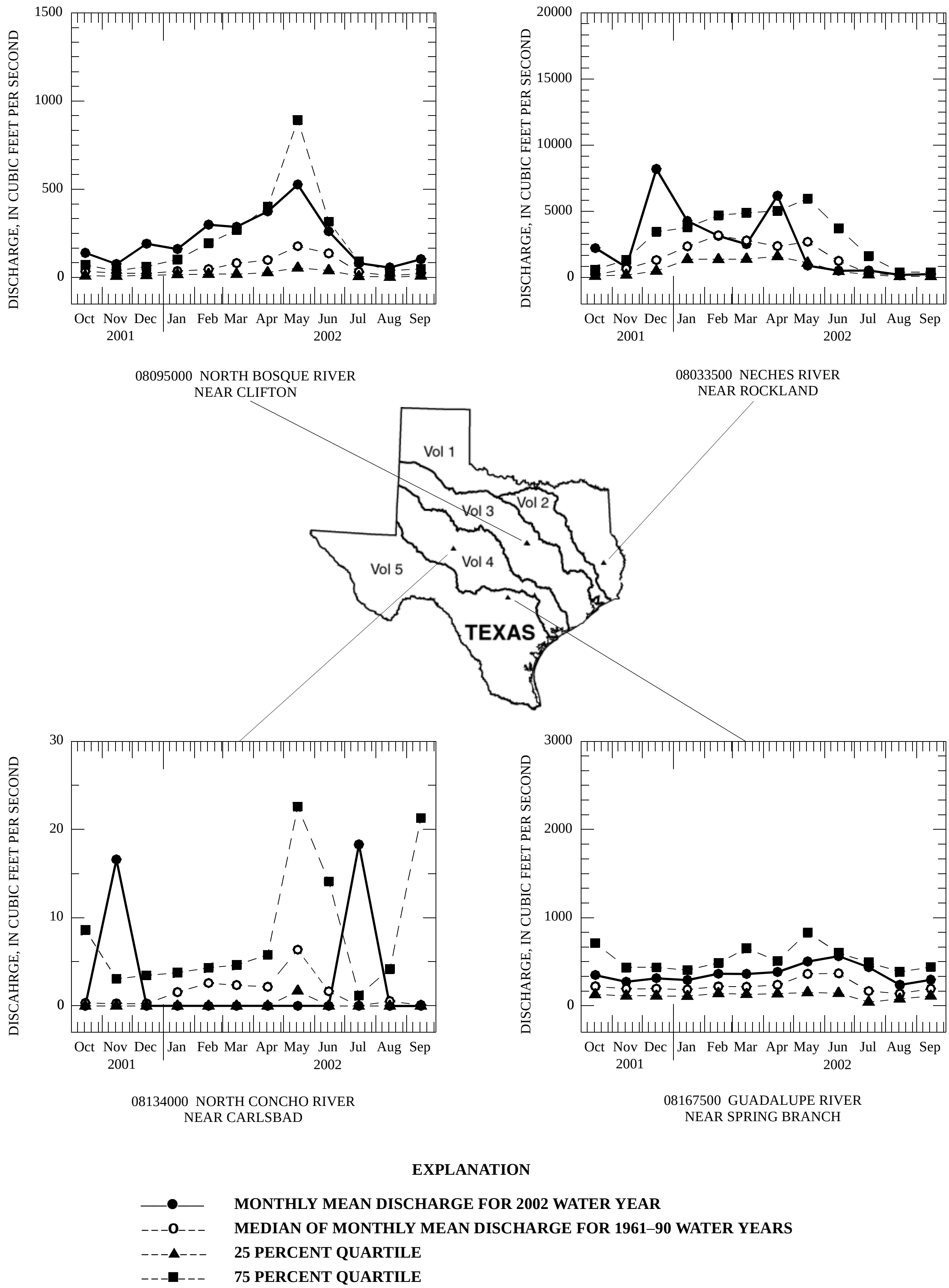


Figure 2. Monthly mean discharges at four long-term hydrologic index stations during 2002 water year and median of the monthly mean discharges for 1961–90 water years.

through March and July, and below normal streamflow in September. The station North Concho River near Carlsbad had normal streamflow for October, December through April, June, August, and September, above normal streamflow during November and July, and below normal streamflow in May. Streamflow for the station Guadalupe River near Spring Branch was normal during October, February through June and September, above normal for November through January, July, and August of water year 2002.

Conservation storage in 14 selected reservoirs in this area of the State, with a total combined conservation capacity of 6,816,000 acre-feet, remained at 93 percent of capacity from the end of September 2001 to the end of September 2002. Records from these reservoirs indicate that storage increased in 7 and decreased in 7.

Water Quality

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

Table 1. Streamflow at two selected stations

Station no. and name		Discharge during 2002 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
Trinity River Basin							
08057000	Trinity River at Dallas, TX	32,400	433	2,072	111,000	10	1,826 (1931-2002)
08066500	Trinity River at Romayor, TX	40,500	1,160	8,193	122,000	104	7,867 (1924-2002)

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 was operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. For the period 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 these 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. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at *http://bqs.usgs.gov/acidrain/*.

The 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.

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. Additional information about the NAWQA Program can be found at *http://water.usgs.gov/nawqa/*.

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 2002 water year that began October 1, 2001, and ended September 30, 2002. 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. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The “downstream order” system is used for regular surface-water stations and the “latitude-longitude” system is used for wells.

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 indention in the “List of Stations” in the front of this report. Each indention represents one rank. This downstream order and system of indention 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 headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, “WATER YEARS ____-____,” will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. However, data for partial water years, if any, will only be used in the statistical calculations, if appropriate. For example, all of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the “ANNUAL 7-DAY MINIMUM” statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the column heading. When this occurs, it should be noted in the REMARKS paragraph or in footnotes. Selected 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 SEVEN-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.)

MAXIMUM PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Occasionally the maximum flow for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak flow is given in the table and the maximum flow may be reported in a footnote or in the REMARKS paragraph in the manuscript.

MAXIMUM PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. Occasionally the meximum stage for a year may occur at midnight at the beginning or end of year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence for the maximum peak stage and maximum peak flow are different, 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^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

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

Records of Surface-Water Quality

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

Classification of Records

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

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

Arrangement of Records

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

On-Site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the 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 Code**
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
V	Analyte was detected in both the environmental sample and the associated blanks
M	Presence of material verified but not quantified

Printed Output	**Value-Qualifier Code**
d	Diluted sample: method hi range exceeded
v	Analyte detected in laboratory blank
q	Insufficient sample received
i	Result may be affected by interference
b	Value was extrapolated below
n	Below the NVD
r	Value verified by rerun, same method
p	Value reported is preferred
c	See laboratory coment
e	See field comment
k	Counts outside the acceptable range

Printed Output	**Null Value-Qualifier Code**
e	Required equipment not functional or available
i	Required sample type not received
r	Sample ruined in preparation
u	Unable to determine - matrix interference

Dissolved Trace-Element Concentrations

***NOTE**:--Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10’s to 100’s of nanograms per liter (ng/L). Data above the µg/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 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 simultaneoulsy 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. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound 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. (See also “Biomass” and “Dry weight”)

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 through 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 percentage weight 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 collected. 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 (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2). (See also “Biomass” and “Dry mass”)

Aspect is the direction toward which a slope faces with respect to the compass.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, whereas 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.

Bankfull stage, as used in this report, is the stage at which a stream first overflows its natural banks formed by floods with 1- to 3-year recurrence intervals.

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 peak flows per year will be published. (See also “Peak flow”)

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 consist 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 foot) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

Bedload discharge (tons per day) is the 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,” “Dry weight,” “Sediment,” and “Suspended-sediment discharge”)

Bed material is the sediment mixture of which a stream-bed, 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 that 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”)

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

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 (μm^3) is determined by obtaining critical cell measurements or 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 $4/3\ \pi r^3$ cone $1/3\ \pi r^2 h$ cylinder $\pi r^2 h$.

pi (π) is the ratio of the circumference to the diameter of a circle; pi = 3.14159….

From cell volume, total algal biomass expressed as biovolume (μm^3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes for all species.

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

Channel bars, as used in this report, are the lowest prominent geomorphic features higher than the channel bed.

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 warmblooded 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 water 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.

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 that physically affects 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^3/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-foot” sometimes is used synonymously with “cubic foot per second” but is now obsolete.

Cubic foot per second-day (CFS-DAY, Cfs-day, [$(ft^3/s)/d$]) 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, $(ft^3/s)/mi^2$] 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 “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 sediment 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 chemicals, 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 $CaCO_3$) 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:

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

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")

Embeddedness is the degree to which gravel-sized and larger particles are surrounded or enclosed by finer-sized particles. (See also "Substrate embeddedness class")

Enterococcus bacteria are commonly found in the feces of humans and other warmblooded 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 (nutrient medium for bacterial growth) and subsequent transfer to EIA medium. Enterococci include *Streptococcus feacalis, Streptococcus feacium, 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 warmblooded 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 (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Estimated (E) concentration value 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 semivolatile and extractable by ethyl acetate from air-dried streambed sediment. 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 sediment.

Fecal coliform bacteria are present in the intestines or feces of warmblooded animals. They often are 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 intestines of warmblooded 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 greater 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 often is 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.

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.

Geomorphic channel units, as used in this report, are fluvial geomorphic descriptors of channel shape and stream velocity. Pools, riffles, and runs are types of geomorphic channel units considered for National Water-Quality Assessment (NAWQA) Program habitat sampling.

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, as used in this report, includes all nonliving (physical) aspects of the aquatic ecosystem, although living components like aquatic macrophytes and riparian vegetation also are usually included. Measurements of habitat are typically made over a wider geographic scale than are measurements of species distribution.

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 commonly is 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 ($CaCO_3$).

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 that uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

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

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 index stations referred to in this report are 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")

Island, as used in this report, is a mid-channel bar that has permanent woody vegetation, is flooded once a year on average, and remains stable except during large flood events.

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 nondetection 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 (NWQL) 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 on the basis of the most current quality-control data and, therefore, may change. [Note: In several previous NWQL documents (NWQL Technical Memorandum 98.07, 1998), the LRL was called the nondetection 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.

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-sectional area per unit time. Usually expressed in watts per square meter.

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, λ 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 usually are 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, μg/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, μg/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, μg/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, μS/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 milligrams per liter 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.

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 nephelometric 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 United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States 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 sediment. May be reported as dissolved organic carbon (DOC), particulate organic carbon (POC), or total organic carbon (TOC).

Organic mass or **volatile mass** of a 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^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

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
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. For the sedimentation method, 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 of 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 a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

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. Although primarily consisting of algae, they also include bacteria, fungi, protozoa, 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 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, 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 commonly are known as algae. (See also “Plankton”)

Picocurie (PC, pCi) is one trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{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.

Pool, as used in this report, is a small part of a stream reach with little velocity, commonly with water deeper than surrounding areas.

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 [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The 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 with unenriched water samples. 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 [mg O/(m^2/time)] for periphyton and macrophytes or per volume [mg O/(m^3/time)] for phytoplankton. The 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 elements 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.

Reach, as used in this report, is a length of stream that is chosen to represent a uniform set of physical, chemical, and biological conditions within a segment. It is the principal sampling unit for collecting physical, chemical, and biological data.

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 nonexceedance 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 nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. 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”)

Riffle, as used in this report, is a shallow part of the stream where water flows swiftly over completely or partially submerged obstructions to produce surface agitation.

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 is used to denote location along a river.

Run, as used in this report, is a relatively shallow part of a stream with moderate velocity and little or no surface turbulence.

Runoff is the quantity of water that is discharged (“runs off”) from a drainage basin during 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).

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 affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of pre-cipitation.

Sensible heat flux (often used interchangeably with latent sensible heat-flux density) is the amount of heat energy that moves by turbulent transport through the air across a specified cross-sectional area per unit time and goes to heating (cooling) the air. Usually expressed in watts per square meter.

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-term 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 “Annual 7-day minimum” and “Recurrence interval”)

Shelves, as used in this report, are streambank features extending nearly horizontally from the flood plain to the lower limit of persistent woody vegetation.

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.

Soil heat flux (often used interchangeably with soil heat-flux density) is the amount of heat energy that moves by conduction across a specified cross-sectional area of soil per unit time and goes to heating (or cooling) the soil. Usually expressed in watts per square meter.

Soil-water content is the water lost from the soil upon drying to constant mass at 105 °C; expressed either as mass of water per unit mass of dry soil or as the volume of water per unit bulk volume of soil.

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 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 water, to evaluate mixing of different water, 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 the percentage covered by fine sediment:

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

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 foot) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is defined operationally 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 mate-rial collected on the filter or, more commonly, by difference, on the basis of 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 foot 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/d) 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^3/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, on the basis of 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 (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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

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

Thalweg is the line formed by connecting points of minimum streambed elevation (deepest part of the channel).

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 characterized 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 milliliters 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 "Bedload," "Bedload discharge," "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

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")

Transect, as used in this report, is a line across a stream perpendicular to the flow and along which measurements are taken, so that morphological and flow characteristics along the line are described from bank to bank. Unlike a cross section, no attempt is made to determine known elevation points along the line.

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 U.S. 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.

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.

Unconfined aquifer is an aquifer whose upper surface is a water table free to fluctuate under atmospheric pressure. (See "Water-table aquifer")

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.

Water table is that surface in a ground-water body at which the water pressure is equal to the atmospheric pressure.

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

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, 2002, is called the “2002 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 often are 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 OF THE U.S. GEOLOGICAL SURVEY

The USGS publishes a series of manuals titled the “Techniques of Water-Resources Investigations” that describe procedures for planning and conducting specialized work in water-resources investigations. The material in these manuals 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. Each chapter then is limited to a narrow field of the section subject matter. This publication format permits flexibility when revision or printing is required.

Manuals in the Techniques of Water-Resources Investigations series, which are listed below, are available online at http://water.usgs.gov/pubs/twri/. Printed copies are available for sale from the USGS, Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (an authorized agent of the Superintendent of Documents, Government Printing Office). Please telephone “1-888-ASK-USGS” for current prices, and refer to the title, book number, section number, chapter number, and mention the “U.S. Geological Survey Techniques of Water-Resources Investigations.” Other products can be viewed online at http://www.usgs.gov/sales.html, or ordered by telephone or by FAX to (303)236-4693. Order forms for FAX requests are available online at *http://mac.usgs.gov/isb/pubs/forms/*. Prepayment by major credit card or by a check or money order payable to the “U.S. Geological Survey” is required.

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, chap. D1. 1975. 65 p.

1–D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W.W. Wood: USGS–TWRI book 1, chap. D2. 1976. 24 p.

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, chap. D1. 1974. 116 p.

2–D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 p.

Section E. Subsurface Geophysical Methods

2–E1. *Application of borehole geophysics to water-resources investigations,* by W.S. Keys and L.M. MacCary: USGS–TWRI book 2, chap. E1. 1971. 126 p.

2–E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 p.

Section F. Drilling and Sampling Methods

2–F1. *Application of drilling, coring, and sampling techniques to test holes and wells,* by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 p.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

3–A1. *General field and office procedures for indirect discharge measurements,* by M.A. Benson and Tate Dalrymple: USGS–TWRI book 3, chap. A1. 1967. 30 p.

3–A2. *Measurement of peak discharge by the slope-area method,* by Tate Dalrymple and M.A. Benson: USGS–TWRI book 3, chap. A2. 1967. 12 p.

3–A3. *Measurement of peak discharge at culverts by indirect methods,* by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.

3–A4. *Measurement of peak discharge at width contractions by indirect methods,* by H.F. Matthai: USGS-TWRI book 3, chap. A4. 1967. 44 p.

3–A5. *Measurement of peak discharge at dams by indirect methods,* by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

3–A6. *General procedure for gaging streams,* by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.

3–A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.

3–A8. *Discharge measurements at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.

3–A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 p.

3–Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.

3–A11. *Measurement of discharge by the moving-boat method,* by G.F. Smoot and C.E. Novak: USGS–TWRI book 3, chap. A11. 1969. 22 p.

3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

3–A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.

3–A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.

3–A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.

3–A16. *Measurement of discharge using tracers,* by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.

3–A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.

3–A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 p.

3–A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.

3–A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.

3–A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

Section B. Ground-Water Techniques

3–B1. *Aquifer-test design, observation, and data analysis,* by R.W. Stallman: USGS–TWRI book 3, chap. B1. 1971. 26 p.

3–B2. *Introduction to ground-water hydraulics, a programed text for self-instruction,* by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.

3–B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J.E. Reed: USGS–TWRI book 3, chap. B3. 1980. 106 p.

3–B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.

3–B4. *Supplement 1***.** *Regression modeling of ground-water flow—Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 p.

3–B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 p.

3–B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 p.

3–B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 p.

3–B8. *System and boundary conceptualization in ground-water flow simulation,* by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

Section C. Sedimentation and Erosion Techniques

3–C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.

3–C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.

3–C3. *Computation of fluvial-sediment discharge,* by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

4–A1. *Some statistical tools in hydrology*, by H.C. Riggs: USGS–TWRI book 4, chap. A1. 1968. 39 p.

4–A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 p.

4–A3. *Statistical methods in water resources*, by D.R. Helsel and R.M. Hirsch: USGS–TWRI book 4, chap. A3. 1991. Available only online at http://water.usgs.gov/pubs/twri/twri4a3/. (Accessed August 30, 2002.)

Section B. Surface Water

4–B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.

4–B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.

4–B3. *Regional analyses of streamflow characteristics,* by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

Section D. Interrelated Phases of the Hydrologic Cycle

4–D1. *Computation of rate and volume of stream depletion by wells*, by C.T. Jenkins: USGS–TWRI book 4, chap. D1. 1970. 17 p.

Book 5. Laboratory Analysis

Section A. Water Analysis

5–A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 p.

5–A2. *Determination of minor elements in water by emission spectroscopy,* by P.R. Barnett and E.C. Mallory, Jr.: USGS–TWRI book 5, chap. A2. 1971. 31 p.

5–A3. *Methods for the determination of organic substances in water and fluvial sediments,* edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 p.

5–A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 p.

5–A5. *Methods for determination of radioactive substances in water and fluvial sediments,* by L.L. Thatcher, V.J. Janzer, and K.W. Edwards: USGS–TWRI book 5, chap. A5. 1977. 95 p.

5–A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 p.

Section C. Sediment Analysis

5–C1. *Laboratory theory and methods for sediment analysis*, by H.P. Guy: USGS–TWRI book 5, chap. C1. 1969. 58 p.

Book 6. Modeling Techniques

Section A. Ground Water

6–A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 p.

6–A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 p.

6–A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 p.

6–A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 p.

6–A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5. 1993. 243 p.

6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A6. 1996. 125 p.

6–A7. *User's guide to SEAWAT: A computer program for simulation of three-dimensional variable-density ground-water flow*, by Weixing Guo and Christian D. Langevin: USGS–TWRI book 6, chap. A7. 2002. 77 p.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

7–C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P.C. Trescott, G.F. Pinder, and S.P. Larson: USGS–TWRI book 7, chap. C1. 1976. 116 p.

7–C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L.F. Konikow and J.D. Bredehoeft: USGS–TWRI book 7, chap. C2. 1978. 90 p.

7–C3. *A model for simulation of flow in singular and interconnected channels,* by R.W. Schaffranek, R.A. Baltzer, and D.E. Goldberg: USGS–TWRI book 7, chap. C3. 1981. 110 p.

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

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

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

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, chap. A1. 1998. 47 p.

9–A2. *National field manual for the collection of water-quality data: Selection of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9–A3. *National field manual for the collection of water-quality data: Cleaning of equipment for water sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9–A4. *National field manual for the collection of water-quality data: Collection of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

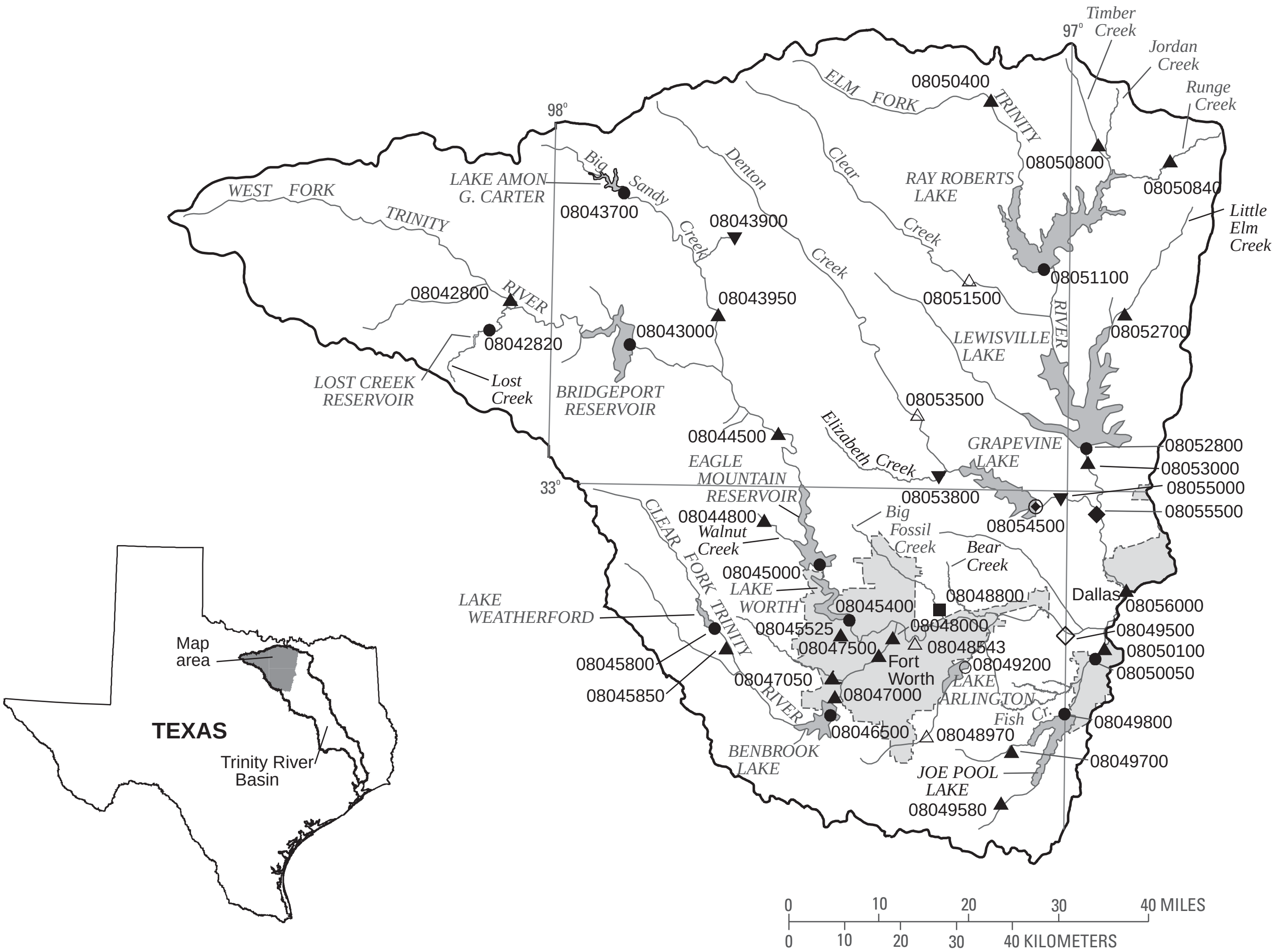
9–A5. *National field manual for the collection of water-quality data: Processing of water samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9–A6. *National field manual for the collection of water-quality data: Field measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9–A7. *National field manual for the collection of water-quality data: Biological indicators*, edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9–A8. *National field manual for the collection of water-quality data: Bottom-material samples,* by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 p.

9–A9. *National field manual for the collection of water-quality data: Safety in field activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 p.



EXPLANATION

08042800 ▲ **Surface-water continuous station and number**

08048543 △ **Surface-water continuous/water-quality station and number**

08045000 ● **Reservoir station and number**

08054500 ○ **Reservoir/water-quality station and number**

08053800 ▼ **Water-quality station and number**

08048800 ■ **Surface-water partial record/stage only station and number**

08049500 ◇ **Precipitation/water-quality station and number**

08055500 ◆ **SW Continuous/precipitation station and number**

08054500 ◈ **Reservoir/precipitation station and number**

Figure 3.--Map showing location of gaging stations in the first section of the 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^2.

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 NGVD of 1929 (from Texas Department of Transportation). Sept. 1960 to May 1961, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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^2 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^3/s (75,350 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1956-73).--Maximum discharge, 35,100 ft^3/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 FROM THE DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.03	0.00	0.36	0.00	0.34	29	0.90	0.00	0.22	0.00	0.00
2	0.00	0.01	0.00	0.44	0.00	0.32	13	0.75	0.00	0.20	0.00	0.00
3	0.00	0.00	0.00	0.41	0.00	0.29	5.7	1.4	0.00	0.56	0.41	0.00
4	0.00	0.00	0.00	0.41	0.00	0.23	5.9	3.0	0.00	0.72	1.0	0.00
5	0.00	0.00	0.00	0.56	0.21	0.08	4.7	4.6	57	e0.69	0.95	0.00
6	0.00	0.00	0.00	0.78	0.80	0.05	4.0	3.2	110	e2.8	0.73	0.00
7	0.00	0.00	0.00	19	0.61	0.04	20	2.8	101	33	0.41	0.00
8	0.00	0.00	0.00	0.31	0.49	0.03	179	2.4	86	29	0.23	0.00
9	0.00	0.00	0.05	0.22	0.47	0.02	196	1.9	34	18	0.09	0.00
10	0.00	0.00	6.2	0.16	0.65	0.15	136	80	13	9.6	0.04	0.00
11	8.8	0.00	0.00	0.09	0.74	0.00	83	124	5.2	3.6	0.04	0.00
12	3.8	0.00	0.00	0.47	0.71	0.00	43	14	2.6	1.9	0.03	0.00
13	3.8	0.00	0.00	2.1	0.44	0.00	25	4.3	1.9	1.9	0.00	0.00
14	15	0.00	0.00	0.06	0.56	0.00	113	5.4	2.5	1.2	0.00	0.00
15	94	0.00	0.00	0.58	0.33	0.00	249	1.5	1.1	5.3	0.00	0.00
16	24	0.00	3.2	0.02	0.51	0.00	134	0.73	6.9	4.3	0.00	0.00
17	6.0	0.00	9.5	0.0	0.24	0.00	59	0.61	11	1.6	0.00	0.00
18	2.7	0.00	2.4	0.00	0.13	0.00	22	0.25	9.9	7.6	0.00	0.00
19	1.6	0.00	2.3	0.00	0.58	8.0	8.1	0.05	51	11	0.00	0.00
20	1.4	0.00	2.7	0.00	0.88	74	4.2	0.00	28	2.9	0.00	0.00
21	1.2	0.00	2.2	0.10	0.89	45	2.5	0.00	10	1.3	0.00	0.00
22	1.1	0.00	1.6	0.00	0.82	17	1.7	0.00	3.8	0.95	0.00	0.00
23	1.2	0.00	4.5	0.00	0.73	26	1.4	0.00	1.8	0.54	0.00	0.00
24	1.0	0.00	18	0.00	0.67	13	1.3	0.00	1.1	0.35	0.00	0.00
25	0.84	0.00	8.2	0.64	0.59	7.9	1.1	0.00	0.92	0.48	0.00	0.00
26	0.59	0.00	0.97	0.31	0.63	4.7	0.94	0.00	0.64	0.14	0.00	0.00
27	0.40	0.00	5.3	0.00	0.81	3.2	0.85	0.00	0.48	0.07	0.00	0.00
28	0.30	0.00	0.70	0.00	0.40	2.9	0.80	0.21	0.31	0.02	0.00	0.00
29	0.19	0.00	0.58	0.00	---	2.6	0.89	0.06	0.16	0.02	0.00	0.00
30	0.09	0.00	0.53	0.00	---	2.9	1.5	0.00	0.13	0.01	0.00	0.00
31	0.05	---	0.45	0.00	---	7.1	---	0.00	---	0.00	0.00	---
TOTAL	168.06	0.04	69.38	27.02	13.89	215.85	1346.58	252.06	540.44	139.97	3.93	0.00
MEAN	5.421	0.001	2.238	0.872	0.496	6.963	44.89	8.131	18.01	4.515	0.127	0.000
MAX	94	0.03	18	19	0.89	74	249	124	110	33	1.0	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00
AC-FT	333	0.08	138	54	28	428	2670	500	1070	278	7.8	0.00

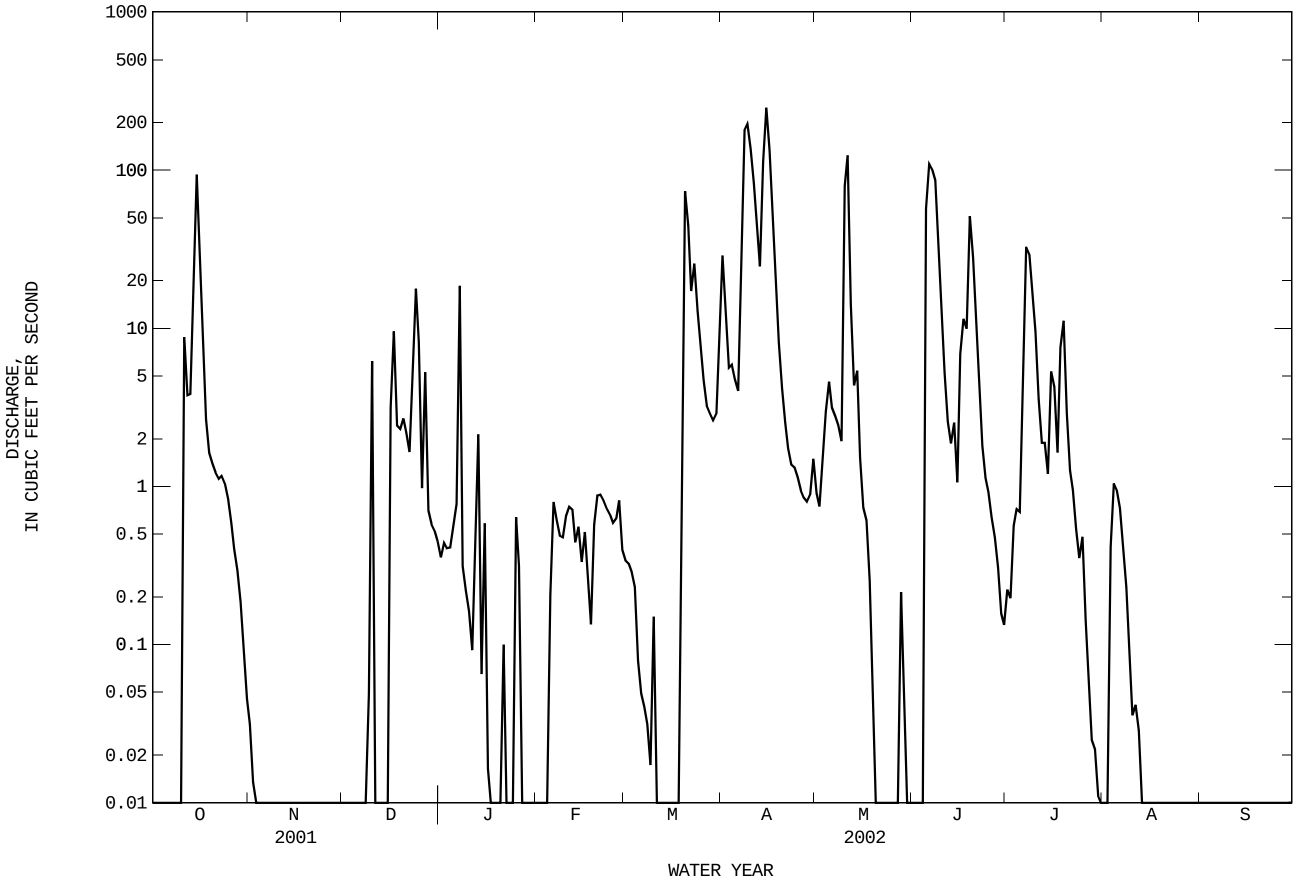
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	136.8	41.74	59.99	33.01	103.5	127.3	125.5	351.2	240.3	26.47	16.23	42.99
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
(WY)	1978	1978	1978	1978	1978	1978	1980	1984	1984	1978	1980	1982

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1974 - 2002z	
ANNUAL TOTAL	41782.19		2777.22			
ANNUAL MEAN	114.5		7.609		108.7	
HIGHEST ANNUAL MEAN					468	1990
LOWEST ANNUAL MEAN					0.072	1984
HIGHEST DAILY MEAN	5060	Feb 17	249	Apr 15	29100	May 17 1989
LOWEST DAILY MEAN	0.00	Jul 8	0.00	Oct 1	0.00	Apr 6 1974
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 8	0.00	Oct 1	0.00	Apr 12 1974
MAXIMUM PEAK FLOW			279	May 10	33300	May 17 1989
MAXIMUM PEAK STAGE			7.65	May 10	31.52	May 17 1989
ANNUAL RUNOFF (AC-FT)	82870		5510		78780	
10 PERCENT EXCEEDS	199		13		138	
50 PERCENT EXCEEDS	2.5		0.30		0.90	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated
z Period of regulated streamflow.

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



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 3.0 mi northeast of Jacksboro.

DRAINAGE AREA.--123 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. 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, 1012.95 ft; minimum contents, 8,680 acre-ft, Oct. 20, 2000, elevation, 1000.56 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 10,900 acre-ft, June 16, 17, 18, elevation, 1,006.88 ft; minimum contents, 10,070 acre-ft, Mar. 17, 18, elevation, 1,004.66 ft.

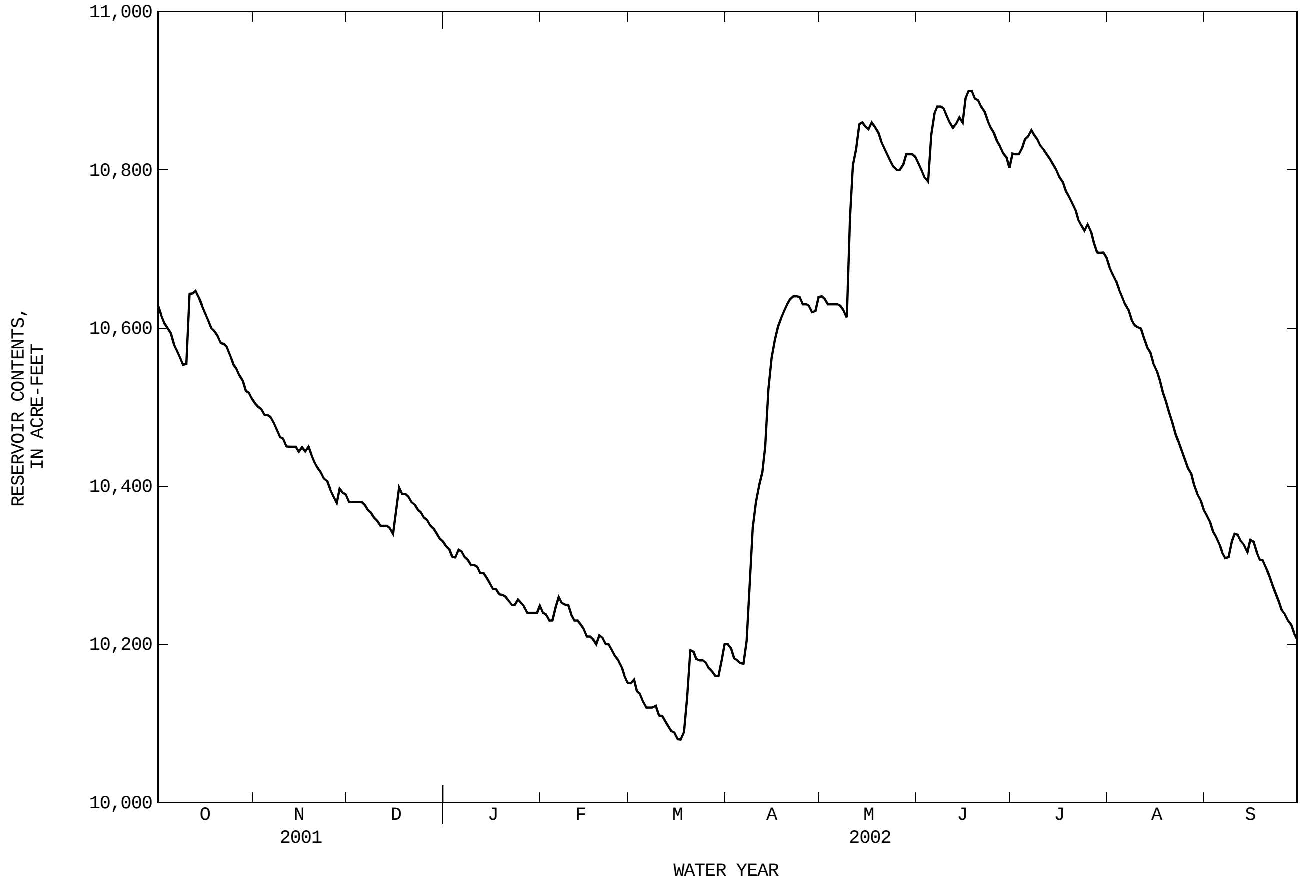
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10630	10500	10380	10320	10240	10150	10200	10640	10810	10820	10680	10360
2	10620	10500	10380	10320	10240	10160	10190	10640	10800	10820	10670	10360
3	10610	10500	10380	10310	10230	10140	10180	10630	10790	10820	10660	10340
4	10600	10490	10380	10310	10230	10140	10180	10630	10780	10830	10650	10340
5	10590	10490	10380	10320	10250	10130	10180	10630	10840	10840	10640	10330
6	10580	10490	10380	10320	10260	10120	10180	10630	10870	10840	10630	10320
7	10570	10480	10370	10310	10250	10120	10200	10630	10880	10850	10620	10310
8	10560	10470	10370	10310	10250	10120	10290	10620	10880	10840	10610	10310
9	10550	10460	10360	10300	10250	10120	10350	10610	10880	10840	10600	10330
10	10550	10460	10360	10300	10240	10110	10380	10740	10870	10830	10600	10340
11	10640	10450	10350	10300	10230	10110	10400	10810	10860	10830	10600	10340
12	10640	10450	10350	10290	10230	10100	10420	10830	10850	10820	10590	10330
13	10650	10450	10350	10290	10230	10100	10450	10860	10860	10810	10580	10330
14	10640	10450	10350	10280	10220	10090	10520	10860	10870	10810	10570	10320
15	10630	10440	10340	10280	10210	10090	10560	10860	10860	10800	10560	10330
16	10620	10450	10370	10270	10210	10080	10580	10850	10890	10790	10550	10330
17	10610	10440	10400	10270	10210	10080	10600	10860	10900	10780	10530	10320
18	10600	10450	10390	10260	10200	10090	10610	10850	10900	10770	10520	10310
19	10600	10440	10390	10260	10210	10130	10620	10850	10890	10770	10510	10310
20	10590	10430	10390	10260	10210	10190	10630	10840	10890	10760	10490	10300
21	10580	10420	10380	10250	10200	10190	10640	10830	10880	10750	10480	10290
22	10580	10420	10380	10250	10200	10180	10640	10820	10870	10740	10470	10270
23	10580	10410	10370	10250	10190	10180	10640	10810	10860	10730	10460	10260
24	10570	10410	10370	10260	10190	10180	10640	10800	10850	10720	10450	10260
25	10550	10400	10360	10250	10180	10180	10630	10800	10850	10730	10430	10240
26	10550	10390	10360	10250	10170	10170	10630	10800	10840	10720	10420	10240
27	10540	10380	10350	10240	10160	10170	10630	10810	10830	10710	10420	10230
28	10530	10400	10350	10240	10150	10160	10620	10820	10820	10700	10400	10220
29	10520	10390	10340	10240	---	10160	10620	10820	10820	10700	10390	10210
30	10520	10390	10330	10240	---	10180	10640	10820	10800	10700	10380	10210
31	10510	---	10330	10250	---	10200	---	10820	---	10690	10370	---
MEAN	10580	10440	10370	10280	10220	10140	10470	10770	10850	10780	10530	10300
MAX	10650	10500	10400	10320	10260	10200	10640	10860	10900	10850	10680	10360
MIN	10510	10380	10330	10240	10150	10080	10180	10610	10780	10690	10370	10210
(+)	1005.83	1005.50	1005.35	1005.14	1004.88	1004.99	1006.17	1006.65	1006.62	1006.31	1005.47	1005.01
(@)	-120	-120	-60	-80	-100	+50	+440	+180	-20	-110	-320	-160

CAL YR 2001 MAX 13040 MIN 9130 (@) +1220
WTR YR 2002 MAX 10900 MIN 10080 (@) -420

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

08042820 Lost Creek Reservoir near Jacksboro, TX--Continued



08043000 Bridgeport Reservoir above Bridgeport, TX

LOCATION.--Lat 33°13'22", long 97°49'54", Wise County, Hydrologic Unit 12030101, in brick valve house on upstream side and near left end of Bridgeport Dam on West Fork Trinity River, 4.6 mi west of Bridgeport, 13.0 mi upstream from Big Sandy Creek and at mile 626.

DRAINAGE AREA.--1,111 mi^2.

PERIOD OF RECORD.--Apr. 1932 to current year. Prior to Oct. 1950, end of month values only.
Water-quality records.--Chemical data: Oct. 1969 to Sept. 1984.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Jan. 12, 1988, nonrecording gages at various sites in vicinity of present gage at present datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily contents, which are poor. The reservoir is formed by a rolled earthfill dam 2,040 ft long. The dam was completed in Dec. 1931 and storage began Apr. 1, 1932. The original dam was 1,900 ft long, but was lengthened to 2,040 ft in 1971-72. The original service spillway was eliminated during construction (1971-72),and a new spillway with approach and discharge channels was built through natural ground 2,800 ft from the left end of dam. The new spillway is 90 ft wide and has eight vertical lift gates that are 11.25 x 22-ft. The controlled outlet works consist of a 48-inch diameter and an 18-inch diameter pipe encased in a concrete conduit extending through the dam. In addition, a controlled 60-inch diameter steel pipe extends through the service spillway wall to the spillway discharge basin. The dam is owned by the Tarrant Regional Water District. For elevations of outlet works, see table below. Capacity tables are based on surveys made in 1956 and 1968. Conservation pool storage is 374,836 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam...	874.0
Crest of spillway..	866.0
Top of gates...	842.0
Top of conservation pool...	836.9
Sill of gates..	820.0
Lowest value outlet (invert).......................................	751.4

COOPERATION.--Capacity table No. 5-C dated Oct. 1, 1988, was provided by Tarrant Regional Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 491,700 acre-ft, May 5, 1990, elevation, 844.36 ft; minimum contents observed since first appreciable storage in 1935, 7,170 acre-ft, Oct. 12-16, 1956.

EXTREMES FOR 2001 WY YEAR.--Maximum contents, 383,700 acre-ft, Apr. 11, elevation, 836.68 ft; minimum contents, 169,400 acre-ft, Oct. 20, elevation, 816.09 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 313,400 acre-ft, June 8, 9, 10, elevation, 830.98 ft; minimum contents, 278,600 acre-ft, Mar. 17, elevation, 827.86 ft.

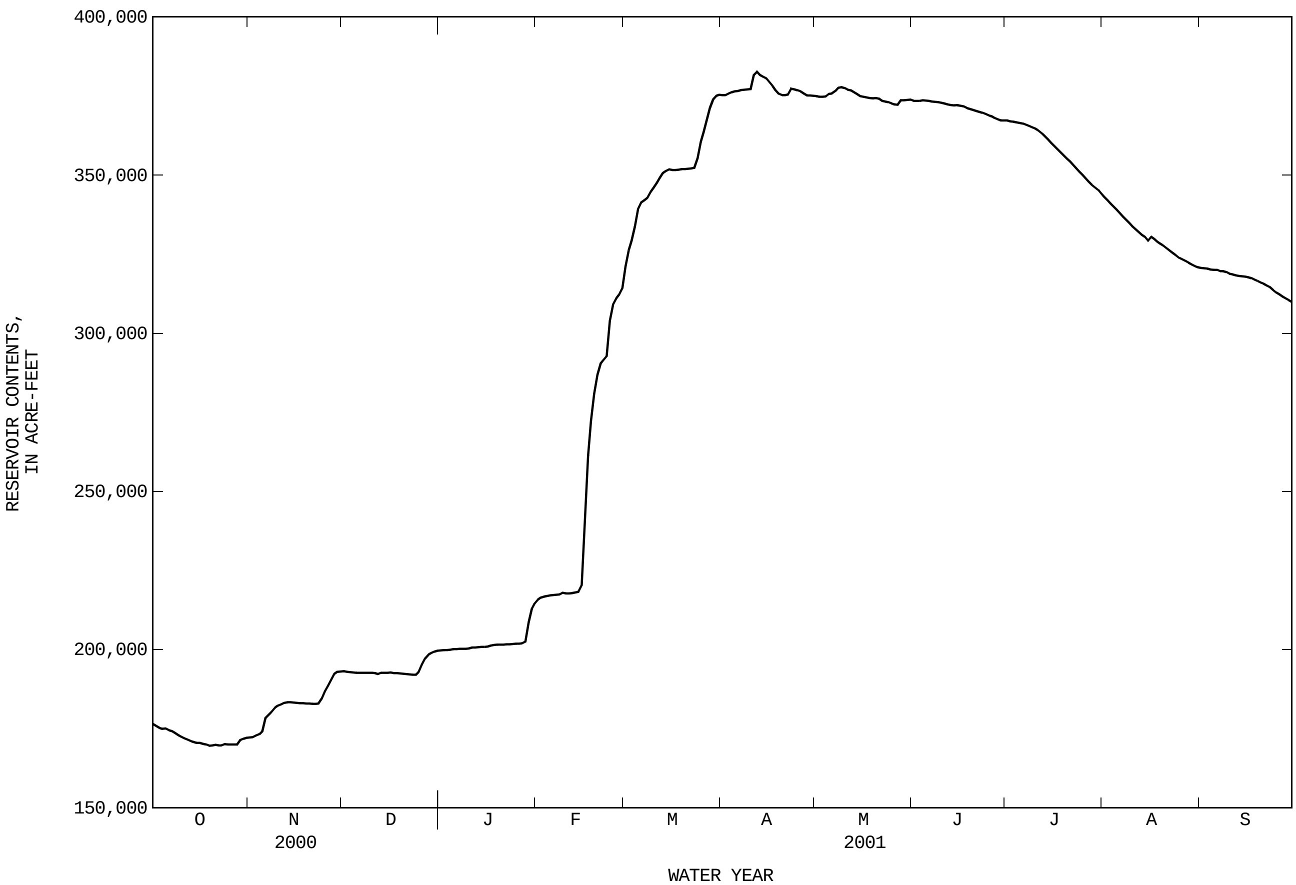
RESERVOIR STORAGE FROM DCP/EDL, in (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176500	172300	193100	199700	215800	321200	375300	375000	373500	367200	343100	320700
2	175900	172300	193000	199800	216400	326300	375300	374800	373400	367000	342100	320500
3	175200	172800	192900	199800	216700	329300	375800	374800	373400	366900	341000	320400
4	175000	173200	192700	199900	217000	333600	376200	374900	373600	366700	340000	320200
5	175000	174200	192700	200100	217100	339100	376500	375700	373600	366500	339000	320000
6	174600	178400	192700	200200	217200	341200	376600	375800	373500	366200	338000	320000
7	174200	179400	192700	200200	217300	342000	376900	376500	373300	365900	336900	319700
8	173600	180400	192700	200200	217500	342700	377000	377600	373100	365500	335900	319600
9	173000	181600	192600	200200	217900	344600	377100	377900	373100	365100	334800	319300
10	172500	182200	192700	200400	217800	345900	377200	377500	372900	364700	333800	318800
11	171900	182600	192600	200700	217800	347500	381700	377000	372700	364000	332900	318600
12	171500	183200	192300	200700	217800	349200	382600	376800	372400	363200	332000	318400
13	171100	183400	192600	200800	218000	350600	381600	376200	372100	362400	331100	318200
14	170800	183400	192700	200900	218300	351300	381100	375600	372000	361300	330400	318000
15	170500	183200	192700	200900	220300	351800	380500	375000	372200	360200	329300	317900
16	170500	183200	192700	201000	244100	351600	379400	374700	371900	359200	330500	317800
17	170200	183100	192600	201200	261300	351600	378100	374600	371700	358200	329800	317400
18	169900	183000	192500	201400	272300	351800	376800	374400	371300	357200	328800	316900
19	169600	183000	192400	201600	280900	351900	375600	374300	370900	356300	328200	e316500
20	169700	182900	192400	201600	286700	351900	375300	374400	370600	355200	327600	316000
21	169900	182800	192200	201600	290300	352000	375300	374200	370400	354300	326800	315600
22	169700	182800	192100	201600	291500	352100	375500	373500	370100	353300	326000	315000
23	169700	183000	192100	201700	292800	352300	377300	373200	369700	352200	325300	314500
24	170100	184400	192100	201800	304000	355200	377100	373000	369300	351100	324600	313700
25	170000	186800	193000	201900	309000	360500	376800	372600	368900	350100	323800	312900
26	170000	188600	195300	201900	310900	363500	376400	372400	368700	349000	323200	312200
27	170000	190600	197200	202000	312200	367400	375800	372300	368000	348000	322800	311600
28	170000	192300	198300	202500	314200	371300	375200	373700	367600	347000	322300	311000
29	171400	192900	198900	208500	---	374000	375200	373700	367300	346100	321700	310400
30	171800	193100	199300	212700	---	375100	375100	373800	367300	345300	321200	309800
31	172100	---	199600	214500	---	375400	---	373900	---	344300	320800	---
MEAN	171800	182500	193700	202000	251200	350800	377200	374800	371300	358100	330400	316700
MAX	176500	193100	199600	214500	314200	375400	382600	377900	373600	367200	343100	320700
MIN	169600	172300	192100	199700	215800	321200	375100	372300	367300	344300	320800	309800
(+)	816.43	818.95	819.70	821.38	831.05	836.05	836.02	835.93	835.42	833.57	831.62	830.68
(@)	-4700	+21000	+6500	+14900	+99700	+61200	-300	-1200	-6600	-23000	-23500	-11000

CAL YR 2000 MAX 223300 MIN 169600 (@) -22000
WTR YR 2001 MAX 382600 MIN 169600 (@) +133000

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

08043000 Bridgeport Reservoir above Bridgeport, TX--Continued



08043000 Bridgeport Reservoir above Bridgeport, TX--Continued

RESERVOIR STORAGE FROM DCP/EDL, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

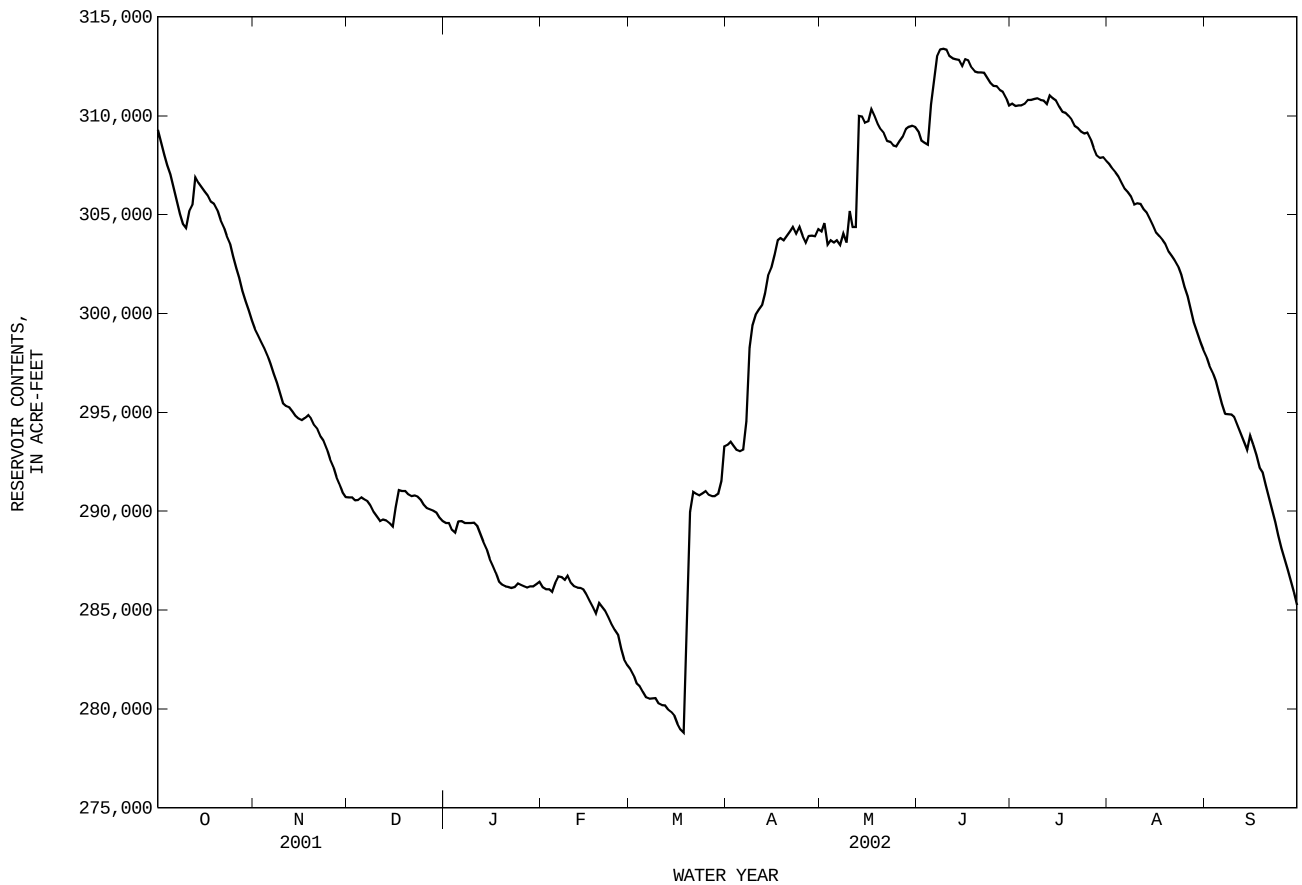
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309300	299200	290700	289400	286100	282000	293300	e304200	309200	310600	307600	297800
2	308700	298900	290700	289400	286100	281700	293500	e304600	308700	310500	307300	297400
3	308000	298600	290500	289100	286000	281300	293300	e303500	308600	310500	307100	297000
4	307500	298200	290600	288900	285900	281100	293100	e303700	308500	310500	306900	296600
5	307000	297900	290700	289500	286400	280900	293000	e303600	310600	310600	306600	296000
6	306300	297500	290600	289500	286700	280600	293100	e303700	311800	310800	306300	295400
7	305700	296900	290500	289400	286700	280500	294600	e303500	313000	310800	306100	294900
8	305000	296500	290300	289400	286500	280500	298300	e304000	313400	310900	305900	294900
9	304500	296000	290000	289400	286700	280500	299400	e303600	313400	310900	305500	294900
10	304300	295500	289700	289400	286400	280300	299900	e305200	313300	310800	305600	294800
11	305200	295300	289500	289300	286200	280200	300200	e304400	313000	310800	305500	294400
12	305500	295200	289600	288900	286100	280200	300400	e304400	312900	310600	305300	294000
13	306900	295000	289500	288500	286100	280000	301000	e310000	312900	311000	305100	293500
14	306600	294800	289400	288100	286000	279900	301900	310000	312800	310900	304800	293100
15	306400	294700	289200	287600	285800	279700	302300	309600	312500	310800	304500	293800
16	306200	294600	290200	287200	285400	279200	303000	309700	312900	310500	304100	293300
17	306000	294700	291100	286900	285100	279000	303700	310400	312800	310200	303900	292800
18	305700	294900	291000	286400	284800	e278800	e303800	310000	312400	310200	303700	292200
19	305500	294700	291000	286300	285400	e283800	e303700	309600	312200	310000	303500	292000
20	305200	294300	290800	286200	285100	290000	e303900	309300	312200	309800	303100	291300
21	304700	294100	290800	286200	284900	291000	e304200	309100	312200	309500	302900	290700
22	304400	293800	290800	286100	284600	290900	e304400	308700	312200	309400	302700	290100
23	303900	293600	290700	286200	284300	290800	e304000	308700	311900	309200	302400	289400
24	303600	293200	290600	286300	284000	290900	e304400	308500	311700	309100	302000	288800
25	302900	292600	290300	286300	283700	291000	e303900	308500	311500	309100	301400	288100
26	302300	292300	290100	286200	283000	290800	e303600	308700	311500	308800	300900	287600
27	301800	291700	290100	286100	282500	290800	e303900	308900	311300	308400	300200	287000
28	301100	291400	290000	286200	282200	290800	e303900	309300	311200	308000	299500	286400
29	300600	291000	289900	286200	---	290900	e303900	309400	310900	307900	299100	285900
30	300100	290700	289700	286300	---	291500	e304300	309500	310500	307900	298600	285200
31	299600	---	289500	286400	---	293300	---	309400	---	307700	298200	---
MEAN	304900	294900	290300	287700	285300	284600	300500	307300	311700	309900	303800	292300
MAX	309300	299200	291100	289500	286700	293300	304400	310400	313400	311000	307600	297800
MIN	299600	290700	289200	286100	282200	278800	293000	303500	308500	307700	298200	285200
(+)	829.78	828.97	828.86	828.58	828.19	829.21	e830.19	830.64	830.73	830.49	829.65	828.47
(@)	-10200	-8900	-1200	-3100	-4200	+11100	+11000	+5100	+1100	-2800	-9500	-13000

CAL YR 2001 MAX 382600 MIN 199700 (@) +89900
WTR YR 2002 MAX 313400 MIN 278800 (@) -24600

e Estimated

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

08043000 Bridgeport Reservoir above Bridgeport, TX--Continued



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^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Satellite telemeter at station with voice modem.

REMARKS.--Records good except those for estimated daily contents, which are fair. 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 1.0 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 NGVD of 1929. 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 ft NGVD of 1929. The principal spillway tower has a 24 ft uncontrolled weir at 920 ft NGVD of 1929. 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

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, 28,500 acre-ft, June 7, elevation, 919.93 ft; minimum contents, 23,800 acre-ft, Mar. 16, elevation, 917.16 ft.

RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

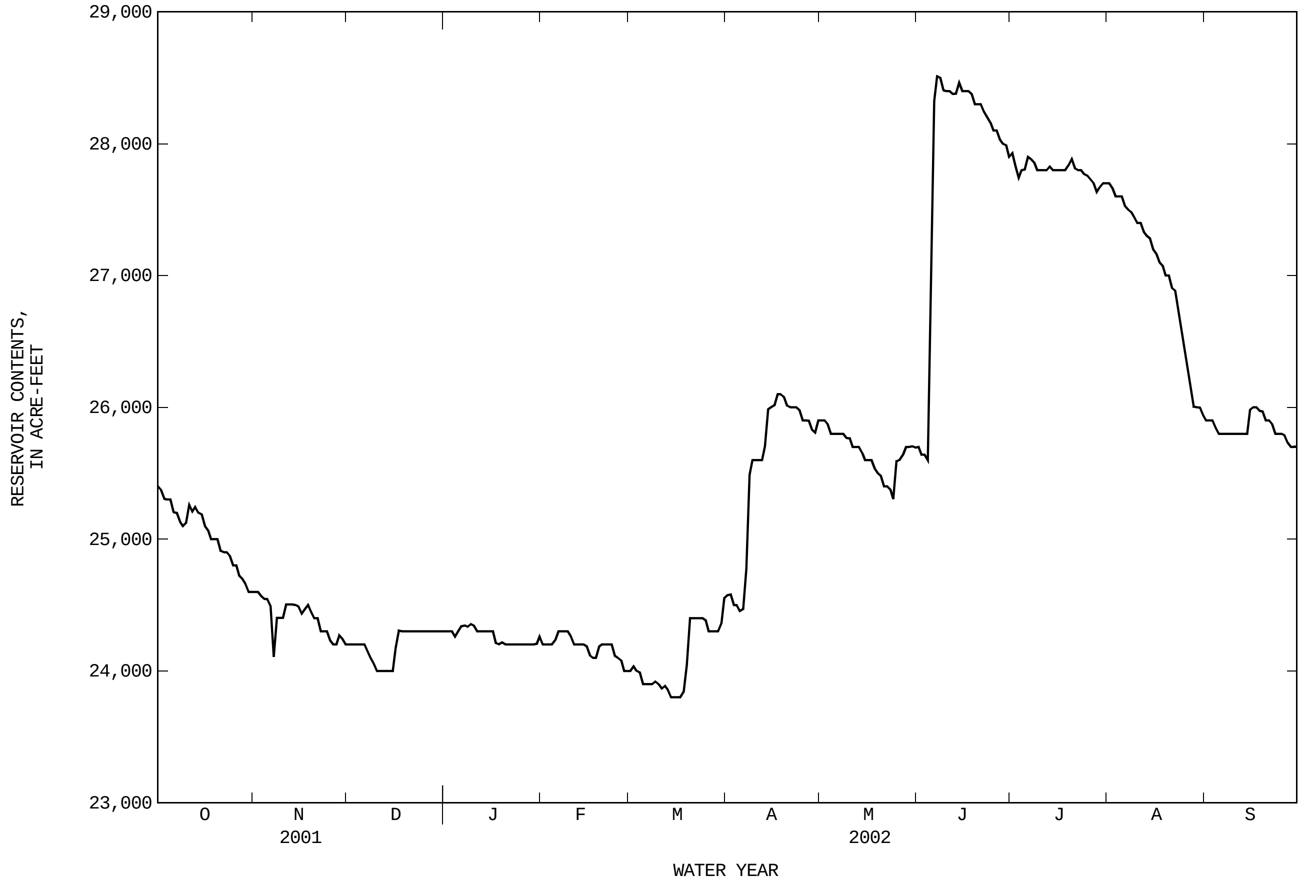
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25400	24600	24200	24300	24200	24000	24600	25900	25700	27900	27700	25900
2	25400	24600	24200	24300	24200	24000	24600	25900	25600	27800	27700	25900
3	25300	24600	24200	24300	24200	24000	24500	25900	e25600	27700	27600	25900
4	25300	24500	24200	24300	24200	24000	24500	25800	e25600	27800	27600	25800
5	25300	24500	24200	24300	24200	23900	24500	25800	27200	27800	27600	25800
6	25200	e24500	24200	24300	24300	23900	24500	25800	e28300	27900	27500	25800
7	25200	e24100	24200	24300	24300	23900	24800	25800	e28500	27900	27500	25800
8	25100	e24400	24100	24300	24300	23900	25500	25800	28500	27900	27500	25800
9	25100	e24400	24100	24400	24300	23900	25600	25800	28400	27800	27400	25800
10	25100	e24400	24000	24300	24300	23900	25600	25800	28400	27800	27400	25800
11	25300	e24500	24000	24300	24200	23900	25600	25700	28400	27800	27400	25800
12	25200	e24500	24000	24300	24200	23900	25600	25700	28400	27800	27300	25800
13	25200	e24500	24000	24300	24200	23900	25700	25700	28400	27800	27300	25800
14	25200	24500	24000	24300	24200	23800	26000	25700	28500	27800	27300	25800
15	25200	24500	24000	24300	24200	23800	26000	25600	28400	27800	27200	26000
16	25100	24400	24200	24300	24100	23800	26000	25600	28400	27800	27200	26000
17	25100	24500	24300	24200	24100	23800	26100	25600	28400	27800	27100	26000
18	25000	24500	24300	24200	24100	23800	26100	25500	28400	27800	27100	26000
19	25000	24400	24300	24200	24200	24000	26100	25500	28300	27800	27000	26000
20	25000	24400	24300	24200	24200	24400	26000	25500	28300	27900	27000	25900
21	24900	24400	24300	24200	24200	24400	26000	25400	28300	27800	26900	25900
22	24900	24300	24300	24200	24200	24400	26000	25400	28200	27800	26900	25900
23	24900	24300	24300	24200	24200	24400	26000	25400	28200	27800	26800	25800
24	24900	24300	24300	24200	24100	24400	26000	25300	28200	27800	26600	25800
25	24800	24200	24300	24200	24100	24400	25900	25600	28100	27800	26500	25800
26	24800	24200	24300	24200	24100	24300	25900	25600	28100	27700	26300	25800
27	24700	24200	24300	24200	24000	24300	25900	25600	28000	27700	26100	25700
28	24700	24300	24300	24200	24000	24300	25800	25700	28000	27600	26000	25700
29	24700	24200	24300	24200	---	24300	25800	25700	28000	27700	26000	25700
30	24600	24200	24300	24200	---	24400	25900	e25700	27900	27700	26000	25700
31	24600	---	24300	24300	---	24600	---	e25700	---	27700	25900	---
MEAN	25000	24400	24200	24300	24200	24100	25600	25700	27900	27800	27000	25800
MAX	25400	24600	24300	24400	24300	24600	26100	25900	28500	27900	27700	26000
MIN	24600	24100	24000	24200	24000	23800	24500	25300	25600	27600	25900	25700
(+)	917.65	917.41	917.45	917.43	917.29	917.61	918.43	918.29	919.61	919.48	918.44	918.28
(@)	-820	-400	+100	0	-300	+600	+1300	-200	+2200	-200	-1800	-200

CAL YR 2001 MAX 38000 MIN 21300 (@) +3010
WTR YR 2002 MAX 28500 MIN 23800 (@) +280

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

e Estimated

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



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

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 Sept. 2002 (discountinued).

INSTRUMENTATION.--Wet/dry precipitation collector, weighing-bucket type recording rain gage with event recorder, and a National Weather Service 8-in rain gage (back-up only).

EXTREMES FOR CURRENT YEAR.--Maximum field pH, 6.3, Jan. 22-29, Feb. 26-Mar. 5, June 11-18: minimum field pH, 4.5, Sept. 10-17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)	CALCIUM ATM DEP WET DIS (MG/M2) (82933)	MAG-NESIUM ATM DEP WET DIS (MG/M2) (83003)
OCT 30-NOV 06	0905	--o	--o	1.75	.17	.18	1.08	.790	1.53	1.64	3.46	.6	.1
NOV 13-20	0905	--e	4.6	.42	.04	.37	.23	.120	.430	.72	1.39	3.0	.3
DEC 11-18	0905	9	4.9	.08	M	M	.03	.080	.100	.05	.54	5.3	.3
DEC 26 2001-JAN 02 2002	0855	--o	--o	.28	.02	.03	<.02	<.090	.420	.10	.65	.1	U
JAN 22-29	0905	16	6.3	.91	.04	.05	.23	.660	.340	.15	2.69	7.4	.4
JAN 29-FEB 05	0905	13	4.8	.18	.02	.02	.17	.250	.250	.28	.98	3.1	.4
FEB 05-12	1035	6	5.0	<.01	<.003	<.003	M	.050	.090	.02	.34	<.1	<.02
FEB 12-19	0905	11	5.7	.60	.04	.04	.26	.300	.150	.26	1.40	13.5	.9
FEB 26-MAR 05	0905	23	6.3	1.80	.12	.10	.41	.580	.770	.28	2.36	8.7	.6
MAR 12-19	0905	15	4.8	.19	.03	.04	.23	.330	.180	.32	1.42	11.4	1.8
MAR 19-26	0905	7	5.3	.11	.01	.01	.04	.120	.100	.05	.56	5.6	.3
MAR 26-APR 02	0908	8	5.9	.52	.02	.04	.06	.200	.160	.10	.98	23.6	1.0
APR 02-09	0830	13	5.1	.58	.03	.06	.11	.330	.200	.20	1.68	42.3	2.3
APR 09-16	0915	14	4.8	.42	.03	.04	.12	.350	.450	.16	1.63	9.5	.7
APR 16-23	0900	--o	--o	1.72	.15	.22	.72	1.06	.800	1.25	4.68	1.7	.1
APR 30-MAY 07	0930	12	5.7	1.03	.06	.14	.22	.530	.520	.32	2.13	4.3	.3
MAY 07-14	0850	13	5.5	.40	.05	.09	.33	.550	.250	.48	1.61	15.7	2.0
MAY 21-28	0905	11	6.0	.43	.07	.22	.29	.050	.240	.50	1.13	24.1	3.7
MAY 28-JUN 04	0855	6	5.4	.12	.02	.03	.10	.150	.130	.13	.40	.7	.1
JUN 04-11	0945	8	5.4	.20	.02	.11	.11	.230	.160	.18	.92	15.9	1.7
JUN 11-18	0850	9	6.3	.75	.03	.05	.11	.200	.220	.16	.69	26.0	1.0
JUN 25-JUL 02	0945	9	5.3	.20	.04	.04	.20	.180	.180	.35	1.16	6.5	1.4
JUL 02-09	0925	10	5.8	.24	.03	.18	.31	.020	.220	.52	1.08	12.0	1.7
JUL 09-16	0910	8	6.0	.57	.01	.05	.03	.270	.300	.07	.67	25.6	.7
JUL 16-23	0915	12	4.7	.18	.01	.09	.04	.100	.320	.08	.98	2.2	.2
JUL 23-30	0925	9	5.8	.55	.04	.02	.17	.180	.240	.28	.67	19.1	1.3
JUL 30-AUG 06	0905	10	5.9	.52	.06	.01	.40	.250	.250	.63	.88	6.8	.8
AUG 20-27	0905	10	5.2	.69	.04	.05	.10	.120	.260	.16	.88	9.8	.5
SEP 03-10	0922	9	6.1	.12	.04	.81	.06	.510	.110	.14	.74	3.3	1.1
SEP 10-17	0940	18	4.5	.34	.01	.02	.01	.340	.390	.06	2.08	7.6	.3

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	POTASSIUM ATM DEP WET DIS (MG/M2) (83121)	SODIUM ATM DEP WET DIS (MG/M2) (83139)	NITROGEN AMMON. ATM DEP WET DIS AS N (MG/M2) (83045)	NITROGEN NITRATE ATM DEP WET DIS AS N (MG/M2) (83069)	CHLORIDE ATM DEP WET DIS (MG/M2) (82945)	SULFATE ATM DEP WET DIS AS SO4 (MG/M2) (83161)	VOLUME ATM DEP WET (L) (83177)
OCT 30-NOV 06	.1	.4	.300	.6	.6	1.3	.025
NOV 13-20	2.7	1.6	.900	3.1	5.2	10.0	.490
DEC 11-18	.3	1.7	5.10	6.4	3.3	35.7	4.484
DEC 26 2001-JAN 02 2002	U	<.005	<.030	.1	U	.2	.020
JAN 22-29	.4	1.9	5.40	2.8	1.2	22.0	.554
JAN 29-FEB 05	.3	2.9	4.20	4.3	4.8	16.7	1.158
FEB 05-12	<.02	U	.400	.7	.2	2.8	.550
FEB 12-19	.9	5.9	6.70	3.4	5.9	31.6	1.530
FEB 26-MAR 05	.5	2.0	2.80	3.7	1.3	11.4	.327
MAR 12-19	2.1	13.5	20.0	10.8	19.2	85.0	4.063
MAR 19-26	.4	1.8	6.40	5.1	2.6	28.6	3.464
MAR 26-APR 02	1.8	2.9	9.20	7.5	4.5	44.5	3.082
APR 02-09	4.1	8.1	23.8	14.4	14.6	122	4.951
APR 09-16	.9	2.7	7.90	10.3	3.6	37.0	1.541
APR 16-23	.2	.7	1.00	.8	1.2	4.6	.067
APR 30-MAY 07	.6	.9	2.20	2.2	1.3	8.9	.283
MAY 07-14	3.5	12.9	21.7	9.8	18.9	63.2	2.667
MAY 21-28	12.5	16.3	3.10	13.2	28.1	63.4	3.812
MAY 28-JUN 04	.2	.6	.900	.8	.8	2.4	.407
JUN 04-11	8.5	9.0	18.5	12.7	14.3	73.0	5.391
JUN 11-18	1.8	3.7	7.00	7.7	5.6	23.9	2.357
JUN 25-JUL 02	1.5	6.4	5.80	5.9	11.3	37.5	2.193
JUL 02-09	9.2	15.6	<.780	10.8	26.0	54.1	3.401
JUL 09-16	2.4	1.3	12.2	13.5	3.1	30.0	3.045
JUL 16-23	1.2	.5	1.20	3.9	1.0	12.1	.838
JUL 23-30	.8	6.1	6.20	8.3	9.7	23.3	2.363
JUL 30-AUG 06	.2	5.1	3.20	3.2	8.2	11.5	.884
AUG 20-27	.7	1.4	1.80	3.6	2.3	12.4	.960
SEP 03-10	22.1	1.7	14.0	3.0	3.8	20.2	1.854
SEP 10-17	.4	.3	7.70	8.6	1.3	46.5	1.520

Remark codes used in this report:
- < -- Less than
- M -- Presence verified, not quantified
- U -- Analyzed for, not detected

Null value qualifier codes used in this report:
- e -- Required equipment not functional/avail
- o -- Insufficient amount of water

08043950 Big Sandy Creek near Chico, TX

LOCATION.--Lat 33°16'27", long 97°40'42", Wise County, Hydrologic Unit 12030101, at left downstream side of bridge on Farm Road 1810, 4.5 mi upstream from Greathouse Branch, 6.0 mi east of Chico, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--312 mi^2.

PERIOD OF RECORD.--Oct. 1936 to current year. Prior to 1996 water year, published as "near Bridgeport" (station 08044000).
Water-quality records.--Chemical data: Apr. 1993 to Sept. 1995. Biochemical data: Apr. 1993 to Sept. 1995. Sediment data: Apr. 1993 to Sept. 1995.

REVISED RECORDS.--WSP 1148: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 728.88 ft above NGVD of 1929. Prior to May 24, 1996 at datum of 724.44 ft, prior to Oct. 1, 1984, at datum 3.00 ft higher. Satellite telemeter at station.

REMARKS.--Records poor. Since May 1, 1956, at least 10% of contributing drainage area has been regulated. During the year, the city of Bowie diverted water from Lake Amon G. Carter for municipal use and discharged wastewater effluent into tributaries to Big Sandy Creek upstream from this station. Flow is also affected at times by discharge from the flood-detention pools of 19 floodwater-retarding structures. These structures control runoff from a 46.0 mi^2 area upstream from this station and below Lake Amon G. Carter. No known diversions. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--20 years (water years 1936-55), 85.6 ft^3/s (62,030 acre-ft/yr) at site and datum then in use.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1936-55).--Maximum discharge, 53,000 ft^3/s June 10, 1941, gage height, 15.69 ft, at site and datum then in use; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1887 occurred in 1908 and 1915 and reached about the same stage as that of June 10, 1941, at site and datum then in use.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.02	0.04	0.73	0.95	1.3	96	24	11	7.6	7.5	1.3
2	0.01	0.01	0.04	0.73	1.0	1.6	46	14	9.3	8.6	5.6	1.2
3	0.06	0.00	0.05	0.73	0.91	1.6	28	12	7.9	15	4.4	1.1
4	0.11	0.00	0.07	0.79	1.5	1.5	21	11	6.6	19	3.9	1.1
5	0.12	0.00	0.10	0.91	2.8	1.6	20	11	1070	15	3.9	1.1
6	0.13	0.01	0.07	0.99	3.3	1.7	19	11	1170	15	3.3	1.0
7	0.15	0.00	0.05	0.79	5.2	1.9	382	9.9	262	11	2.9	0.97
8	0.18	0.00	0.01	0.77	3.9	2.1	1170	9.7	110	7.8	2.7	1.1
9	0.22	0.00	0.02	0.80	3.0	1.4	e809	8.3	68	6.5	3.6	1.5
10	0.27	0.00	0.03	0.79	2.1	1.1	e554	55	48	5.9	6.7	1.3
11	6.6	0.01	0.06	0.71	1.4	1.2	e335	31	36	5.4	5.9	1.1
12	1.2	0.02	0.12	0.67	1.3	1.2	e149	12	29	91	4.2	1.1
13	8.5	0.18	0.12	0.70	1.1	1.4	e77	9.5	28	75	2.7	1.0
14	0.50	0.02	0.10	0.68	1.2	1.5	315	8.8	47	59	2.1	1.0
15	0.16	0.03	0.10	0.76	1.1	1.3	119	8.2	33	24	1.9	2.2
16	0.08	0.04	11	0.69	1.00	1.1	64	21	34	21	1.7	1.5
17	0.07	0.05	30	0.76	1.0	1.1	78	130	26	25	1.7	1.1
18	0.06	0.04	7.7	0.90	18	3.9	44	40	20	21	1.6	0.98
19	0.06	0.03	2.4	0.97	36	136	35	14	16	15	1.5	1.0
20	0.04	0.00	1.1	1.0	12	731	31	9.9	13	12	1.5	0.96
21	0.05	0.01	0.97	1.1	5.5	166	27	8.3	11	12	1.4	0.95
22	0.05	0.03	0.93	1.1	2.8	54	24	7.5	10	10	1.3	0.92
23	0.04	0.04	0.81	1.0	2.0	31	21	6.7	9.0	8.0	1.3	0.87
24	0.00	0.01	0.72	0.98	1.8	24	20	6.2	8.4	7.0	1.3	0.84
25	0.00	0.00	0.73	0.95	1.8	18	16	308	7.8	9.1	1.3	0.86
26	0.00	0.01	0.75	0.92	1.1	14	16	89	7.6	8.5	1.3	0.90
27	0.00	0.02	0.76	0.92	1.0	13	18	37	7.3	6.9	1.4	0.88
28	0.00	0.28	0.80	0.97	1.1	13	16	43	6.8	6.2	1.6	0.91
29	0.00	0.05	0.74	1.0	---	12	14	40	5.9	6.1	1.5	0.90
30	0.00	0.05	0.69	1.0	---	143	32	22	5.7	9.8	1.5	0.91
31	0.00	---	0.75	1.1	---	555	---	15	---	12	1.4	---
TOTAL	18.66	0.96	61.83	26.91	115.86	1938.5	4596	1033.0	3124.3	555.4	84.6	32.55
MEAN	0.602	0.032	1.995	0.868	4.138	62.53	153.2	33.32	104.1	17.92	2.729	1.085
MAX	8.5	0.28	30	1.1	36	731	1170	308	1170	91	7.5	2.2
MIN	0.00	0.00	0.01	0.67	0.91	1.1	14	6.2	5.7	5.4	1.3	0.84
AC-FT	37	1.9	123	53	230	3850	9120	2050	6200	1100	168	65

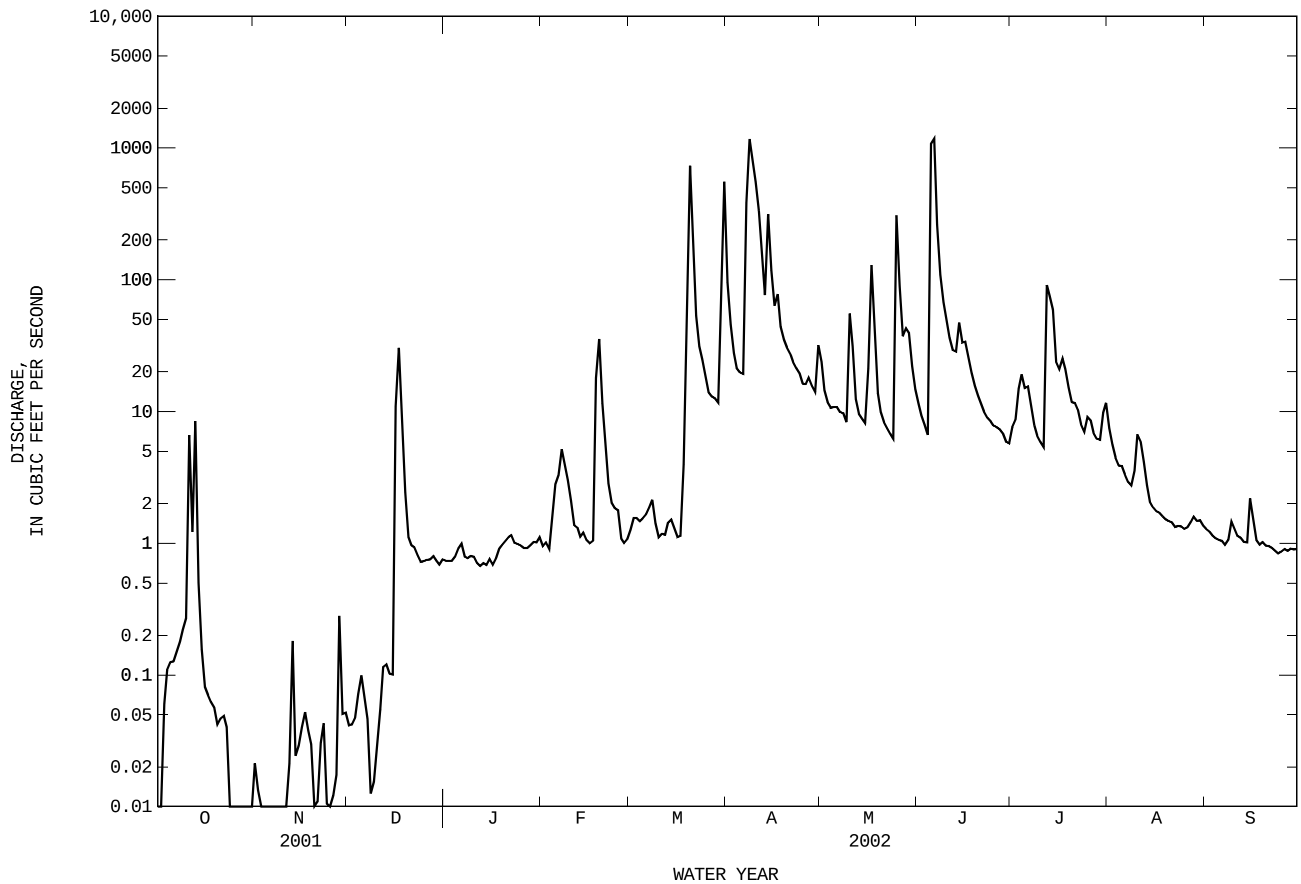
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	97.28	39.81	39.25	28.76	51.57	91.74	103.5	211.6	129.8	18.75	10.41	26.57
MAX	1829	298	743	257	401	570	1175	1284	1250	181	230	491
(WY)	1982	1965	1992	1992	2001	1977	1957	1990	1989	1973	1973	1962
MIN	0.000	0.000	0.000	0.000	0.13	0.000	0.000	0.002	0.000	0.000	0.000	0.000
(WY)	1959	1956	1956	1956	2000	1956	1956	1980	1956	1964	1957	1956

08043950 Big Sandy Creek near Chico, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1956 - 2002z	
ANNUAL TOTAL	31014.66		11588.57			
ANNUAL MEAN	84.97		31.75		70.85	
HIGHEST ANNUAL MEAN					317	1982
LOWEST ANNUAL MEAN					0.40	2000
HIGHEST DAILY MEAN	1860	Feb 16	1170	Apr 8	23800	Oct 13 1981
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1	0.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 24	0.00	Oct 24	0.00	Oct 5 1955
MAXIMUM PEAK FLOW			1560	Jun 5	g45000	Oct 13 1981
MAXIMUM PEAK STAGE			12.12	Jun 5	g14.78	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	61520		22990		51330	
10 PERCENT EXCEEDS	256		40		92	
50 PERCENT EXCEEDS	2.2		1.5		6.0	
90 PERCENT EXCEEDS	0.04		0.04		0.00	

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



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^2.

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

GAGE.--Water-stage recorder. Datum of gage is 660.57 ft above NGVD of 1929. 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^2 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.

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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

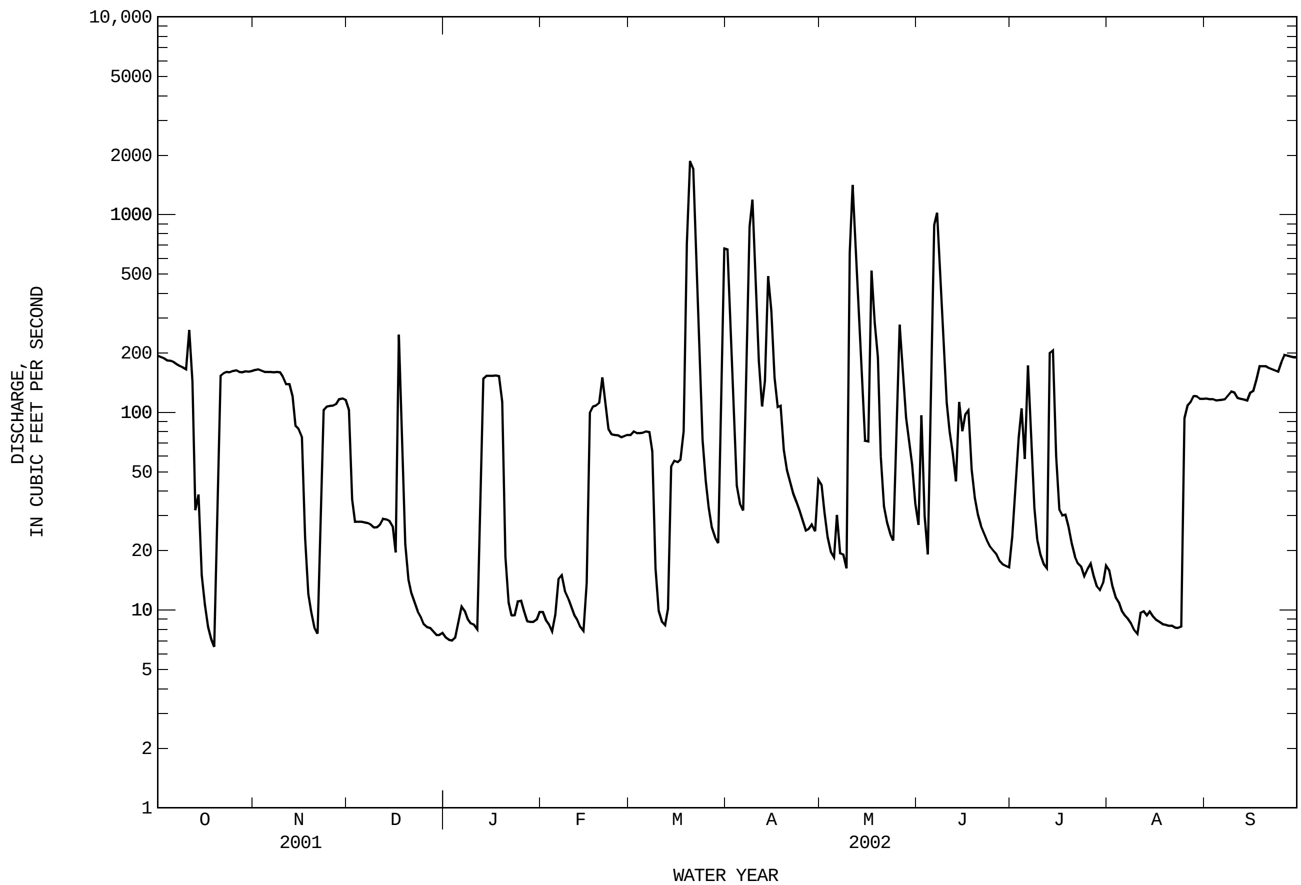
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	193	164	103	7.2	9.8	77	667	43	27	24	16	117
2	190	165	36	7.1	8.9	80	182	31	96	41	13	117
3	187	162	28	7.0	8.4	79	77	23	30	75	12	117
4	183	160	28	7.2	7.8	78	43	20	19	105	11	115
5	182	160	28	8.7	9.5	79	35	19	258	58	9.9	115
6	180	160	28	10	14	80	32	30	887	172	9.4	116
7	175	160	28	9.9	15	79	165	19	1020	84	9.0	116
8	171	160	27	9.0	13	64	869	19	551	33	8.5	122
9	169	160	26	8.6	12	16	1190	16	263	23	7.9	127
10	165	151	26	8.4	11	9.9	543	641	112	19	7.5	126
11	261	139	27	8.0	9.4	8.7	181	1410	80	17	9.7	118
12	142	139	29	46	8.9	8.4	107	650	62	16	9.8	117
13	32	120	29	148	8.2	10	144	244	45	199	9.4	116
14	38	86	28	153	7.9	53	488	118	113	206	9.8	115
15	15	82	26	153	14	57	327	72	80	60	9.3	125
16	11	75	20	153	99	56	150	71	97	32	8.9	128
17	8.2	23	246	153	107	58	106	520	102	30	8.7	146
18	7.2	12	64	153	108	80	108	285	51	30	8.5	171
19	6.5	9.8	22	113	112	713	64	190	37	26	8.4	171
20	40	8.2	14	19	150	1870	51	60	30	22	8.3	171
21	153	7.6	12	11	112	1720	44	33	27	19	8.3	167
22	158	21	11	9.4	83	674	39	28	24	17	8.2	165
23	160	103	9.9	9.4	77	171	35	24	22	17	8.1	162
24	160	107	9.2	11	77	73	32	22	21	15	8.2	160
25	162	108	8.5	11	76	45	28	87	20	16	93	179
26	163	108	8.2	9.9	75	33	25	276	19	17	108	195
27	160	110	8.1	8.8	76	26	26	159	18	15	113	193
28	160	117	7.8	8.7	77	23	27	94	17	13	121	191
29	161	117	7.5	8.7	---	22	25	73	17	13	121	190
30	161	115	7.5	8.9	---	86	46	54	16	14	117	190
31	162	---	7.6	9.8	---	674	---	34	---	17	117	---
TOTAL	4115.9	3209.6	960.3	1288.7	1386.8	7103.0	5856	5365	4161	1445	1017.8	4358
MEAN	132.8	107.0	30.98	41.57	49.53	229.1	195.2	173.1	138.7	46.61	32.83	145.3
MAX	261	165	246	153	150	1870	1190	1410	1020	206	121	195
MIN	6.5	7.6	7.5	7.0	7.8	8.4	25	16	16	13	7.5	115
AC-FT	8160	6370	1900	2560	2750	14090	11620	10640	8250	2870	2020	8640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	295.7	186.0	174.0	105.6	153.6	234.2	271.7	687.1	452.0	197.5	218.9	177.9
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	0.75	0.10	0.26	0.59	25.2	2.76	7.11	0.025	0.23
(WY)	1957	1984	1953	1956	1953	1955	1955	1959	1953	1979	1980	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1947 - 2002	
ANNUAL TOTAL	94424.9		40267.1			
ANNUAL MEAN	258.7		110.3		263.6	
HIGHEST ANNUAL MEAN					1094	1982
LOWEST ANNUAL MEAN					58.6	1953
HIGHEST DAILY MEAN	4480	Feb 17	1870	Mar 20	38800	Oct 14 1981
LOWEST DAILY MEAN	5.0	Sep 15	6.5	Oct 19	0.00	Aug 6 1948
ANNUAL SEVEN-DAY MINIMUM	5.3	Sep 11	7.3	Dec 29	0.00	Sep 25 1952
MAXIMUM PEAK FLOW			2410	Mar 20	60400	Oct 14 1981
MAXIMUM PEAK STAGE			17.27	Mar 20	25.87	Oct 14 1981
ANNUAL RUNOFF (AC-FT)	187300		79870		191000	
10 PERCENT EXCEEDS	567		185		477	
50 PERCENT EXCEEDS	158		51		66	
90 PERCENT EXCEEDS	12		8.7		4.4	

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



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges and those above 3,000 ft^3, which are poor. No known regulation or diversions. No flow at times.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.24	0.23	0.51	0.91	1.1	1.3	8.0	3.4	2.1	14	0.11	0.06
2	0.24	0.23	0.51	0.93	0.96	1.7	3.9	3.0	1.9	35	0.11	0.05
3	0.26	0.26	0.48	0.95	0.95	1.7	2.6	6.1	1.6	5.7	0.08	0.04
4	0.26	0.27	0.53	1.1	1.0	1.4	2.2	7.8	1.5	2.5	0.07	0.04
5	0.23	0.27	0.53	1.3	3.1	1.4	2.4	54	4.7	1.9	0.06	0.05
6	0.20	0.31	0.51	1.4	9.0	1.5	4.6	19	10	1.0	0.05	0.04
7	0.24	0.28	0.45	1.1	2.5	1.7	52	7.8	5.0	0.55	0.05	0.05
8	0.26	0.30	0.41	1.0	1.6	1.8	93	7.5	4.4	0.47	0.04	0.07
9	0.28	0.28	0.40	1.0	1.3	1.5	20	6.1	2.3	0.44	0.04	0.08
10	0.27	0.26	0.38	1.0	1.1	1.3	12	14	1.8	0.41	0.05	0.05
11	0.75	0.26	0.49	0.99	0.93	1.3	8.6	8.6	1.7	0.39	0.07	0.03
12	2.7	0.39	0.69	0.88	0.99	1.4	6.9	4.5	1.5	0.35	0.06	0.03
13	0.80	0.39	0.73	1.0	1.0	1.1	28	11	1.7	0.39	0.05	0.03
14	0.34	0.45	0.72	0.96	1.1	1.1	29	5.7	1.8	0.42	0.04	0.03
15	0.24	0.45	0.71	0.88	1.1	0.98	e15	3.6	2.4	0.46	0.04	0.04
16	0.17	0.49	5.0	0.88	1.1	0.94	e12	3.1	8.8	0.66	0.04	0.03
17	0.17	0.66	21	0.95	0.97	1.0	e10	3.6	8.0	0.59	0.03	0.03
18	0.16	0.57	5.3	0.99	1.2	15	e8.6	3.2	3.8	0.48	0.04	0.03
19	0.14	0.47	1.9	1.1	9.8	443	e5.9	2.6	3.1	0.46	0.04	0.05
20	0.14	0.35	1.3	1.0	5.2	171	e5.2	2.3	2.6	0.44	0.04	0.04
21	0.18	0.32	1.1	0.95	1.6	27	e4.7	2.2	2.2	0.39	0.03	0.03
22	0.18	0.33	1.1	0.94	1.1	11	e4.2	2.0	1.9	0.32	0.04	0.03
23	0.20	0.42	0.97	1.0	1.1	6.2	e4.0	2.0	1.5	0.26	0.06	0.03
24	0.19	0.38	0.88	3.9	1.2	4.9	3.8	2.0	1.4	0.21	0.06	0.02
25	0.17	0.33	0.90	4.5	1.1	3.5	3.6	2.0	1.3	0.21	0.07	0.03
26	0.16	0.33	0.88	1.4	0.96	2.7	3.4	15	1.2	0.14	0.07	0.03
27	0.16	0.32	0.91	1.0	0.99	2.5	4.2	6.0	0.97	0.12	0.07	0.03
28	0.15	0.42	0.97	0.99	1.1	2.6	4.2	5.2	0.85	0.12	0.07	0.03
29	0.19	0.54	0.95	1.0	---	2.6	3.7	11	0.81	0.11	0.08	0.02
30	0.20	0.54	0.89	1.1	---	4.2	3.6	4.5	1.2	0.13	0.07	0.02
31	0.21	---	0.88	1.3	---	33	---	2.6	---	0.14	0.06	---
TOTAL	10.08	11.10	52.98	38.40	55.15	752.32	369.3	231.4	84.03	68.76	1.79	1.14
MEAN	0.325	0.370	1.709	1.239	1.970	24.27	12.31	7.465	2.801	2.218	0.058	0.038
MAX	2.7	0.66	21	4.5	9.8	443	93	54	10	35	0.11	0.08
MIN	0.14	0.23	0.38	0.88	0.93	0.94	2.2	2.0	0.81	0.11	0.03	0.02
AC-FT	20	22	105	76	109	1490	733	459	167	136	3.6	2.3

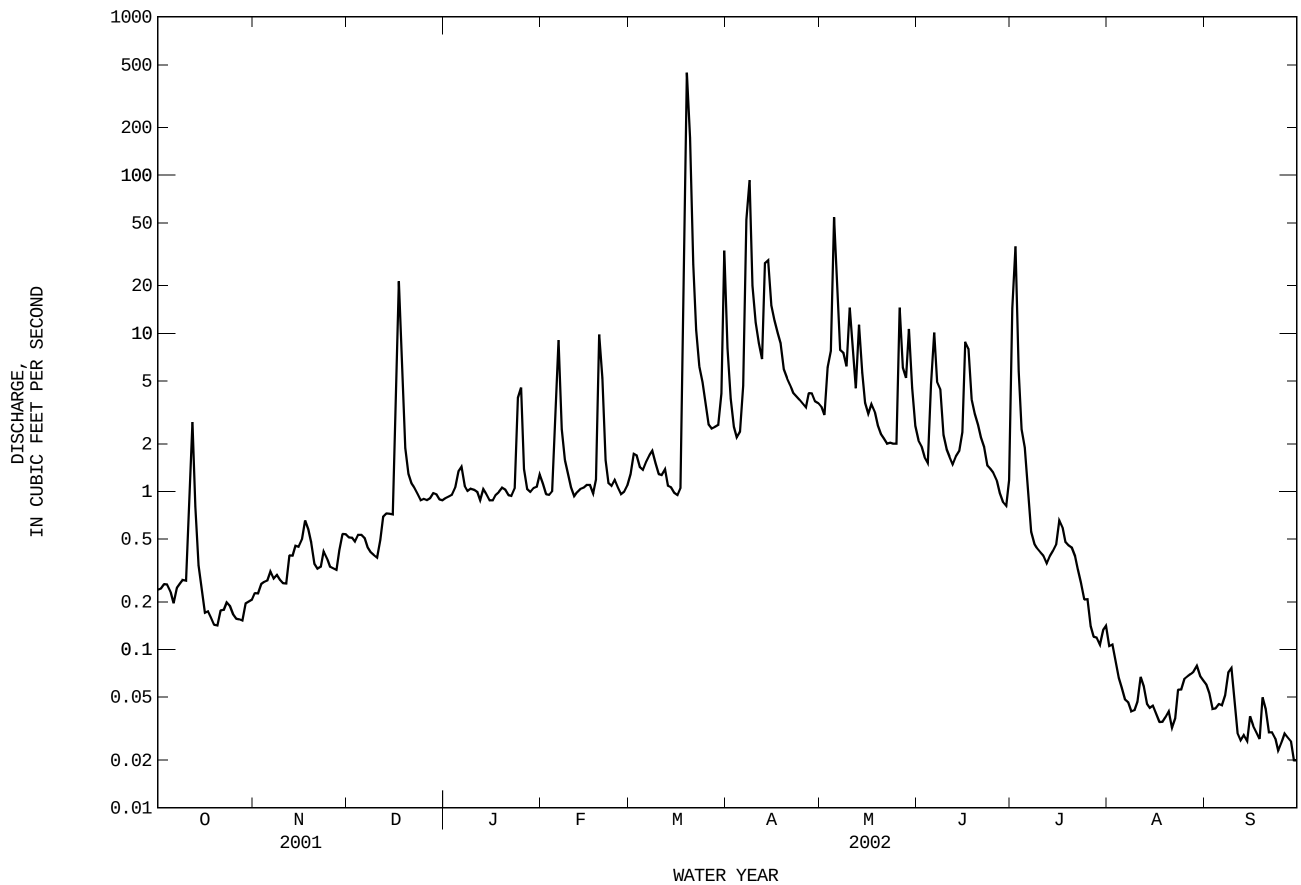
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.042	19.60	7.466	6.990	46.48	41.48	20.22	22.84	15.58	3.793	3.905	1.408
MAX	7.64	120	17.9	17.0	178	104	82.1	92.2	53.0	19.1	14.6	4.52
(WY)	1999	1997	1998	1998	1997	1998	1997	1997	2000	1997	1997	1996
MIN	0.003	0.25	0.61	0.27	0.54	6.76	5.36	1.43	0.84	0.13	0.004	0.000
(WY)	2000	2000	2000	2000	2000	2000	2000	1996	1999	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1996 - 2002	
ANNUAL TOTAL	5427.22		1676.45			
ANNUAL MEAN	14.87		4.593		15.86	
HIGHEST ANNUAL MEAN					53.7	1997
LOWEST ANNUAL MEAN					3.98	1996
HIGHEST DAILY MEAN	1180	Feb 16	443	Mar 19	2350	Mar 16 1998
LOWEST DAILY MEAN	0.14	Oct 19	0.02	Sep 24	0.00	Sep 4 1999
ANNUAL SEVEN-DAY MINIMUM	0.16	Oct 16	0.03	Sep 24	0.00	Sep 4 1999
MAXIMUM PEAK FLOW			3570	Mar 19	b12100	Feb 23 2001
MAXIMUM PEAK STAGE			11.16	Mar 19	d21.21	Oct 19 1993
ANNUAL RUNOFF (AC-FT)	10760		3330		11490	
10 PERCENT EXCEEDS	17		7.1		21	
50 PERCENT EXCEEDS	1.0		0.96		1.9	
90 PERCENT EXCEEDS	0.23		0.05		0.10	

e Estimated
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^3.

08044800 Walnut Creek at Reno, TX--Continued



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^2.

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 NGVD of 1929. 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 fair. 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^2 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, 181,800 acre-ft, May 13, elevation, 649.47 ft; minimum contents, 141,200 acre-ft, Mar. 14, 18, elevation, 644.59 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152200	148100	146000	145800	143600	142900	167800	177500	178600	175600	164600	147900
2	151900	148100	146000	145600	143500	143300	169300	177600	178200	175600	164100	147500
3	151700	148100	146000	145300	143500	142900	169600	177700	178000	175900	163400	147100
4	151500	148100	146100	145000	143400	142700	169400	177600	177700	176100	162700	146700
5	151600	147900	146100	145400	143700	142500	169400	178400	177900	176100	162100	146400
6	151200	147800	146100	145300	144000	142600	169400	178500	178600	176600	161400	146000
7	150900	147600	145900	145000	144000	142700	170500	178200	179900	176700	160700	145600
8	150600	147600	145700	144800	143900	142700	173400	178100	180000	176600	160000	145300
9	150600	147400	145000	144600	144000	142900	175700	178300	179400	176300	159200	145300
10	150700	147200	144700	144400	144100	142400	178000	178400	178900	176000	158500	145300
11	151400	147200	144600	144100	143700	142100	179400	179000	178600	175600	158000	145300
12	151600	147300	144900	143800	143600	142100	179800	180600	178500	175100	157600	145200
13	152100	147300	144900	143500	143600	141700	180100	181100	178400	174800	157100	145100
14	151800	147300	144700	143500	143200	141600	180200	180100	178500	174800	157100	145100
15	151800	147300	144800	143400	143300	141700	179300	179400	178200	174500	156600	145300
16	151300	147400	146400	143500	143000	141400	178500	178800	178700	174200	156000	145100
17	150700	147800	147600	143500	143000	141400	178700	179400	178600	173900	155400	144900
18	150200	147800	147800	143500	143000	141600	178600	179600	178400	173500	154800	e144500
19	150000	147900	148000	143700	143500	144200	178700	179000	178100	173000	154200	e145000
20	149700	147400	147700	143600	143500	153700	178600	178600	177900	172500	153800	e144700
21	149400	147100	147600	143600	143700	157600	178600	178300	177700	171900	153200	e144300
22	149400	146900	147600	143700	143700	161500	178300	177900	177400	171400	152700	e144000
23	149400	146700	147400	143800	143600	163800	178100	177700	177100	170800	152100	143700
24	149400	146600	147200	144100	143400	164500	178300	177700	176900	170200	151500	143300
25	149000	146300	147000	143900	143800	165200	178100	177700	176600	169500	150900	143000
26	148800	146300	146800	143700	143500	165000	177800	178300	176200	168800	150400	142800
27	148700	146200	146700	143600	143000	165200	177700	178700	175900	167800	149900	142500
28	148400	146300	146600	143500	142900	165300	177900	179100	175700	166900	149500	142200
29	148300	145900	146500	143400	---	165500	177800	179400	175300	166300	149100	141900
30	148200	145800	146200	143400	---	165900	177600	179100	174900	165800	148700	141600
31	148100	---	146000	143800	---	166500	---	178900	---	165300	148300	---

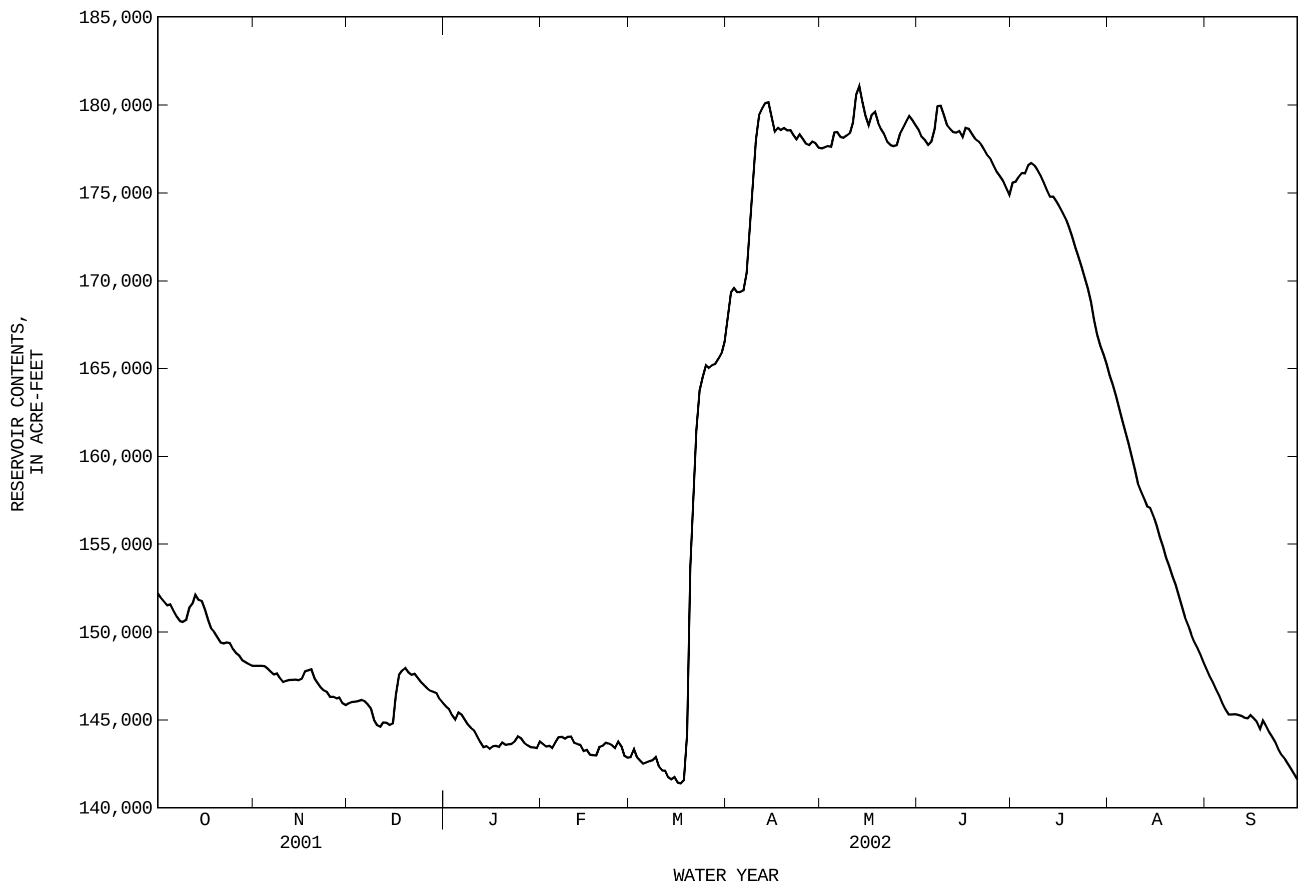
08045000 Eagle Mountain Reservoir above Fort Worth, TX--Continued

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	150300	147200	146300	144100	143500	150500	176200	178700	177800	172800	155900	144800
MAX	152200	148100	148000	145800	144100	166500	180200	181100	180000	176700	164600	147900
MIN	148100	145800	144600	143400	142900	141400	167800	177500	174900	165300	148300	141600
(+)	645.49	645.20	645.22	644.94	644.82	647.74	649.01	649.15	648.71	647.60	645.52	644.65
(@)	-4100	-2300	+200	-2200	-900	+23600	+11100	+1300	-4000	-9600	-17000	-6700

CAL YR 2001 MAX 188700 MIN 113400 (@) +32700
WTR YR 2002 MAX 181100 MIN 141400 (@) -10600

e Estimated

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



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^2.

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 NGVD of 1929. 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 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, 38,550 acre-ft, Apr. 16, elevation, 594.41 ft; minimum contents, 32,050 acre-ft, Sept. 18, elevation, 592.48 ft.

RESERVOIR STORAGE FROM EDL/DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

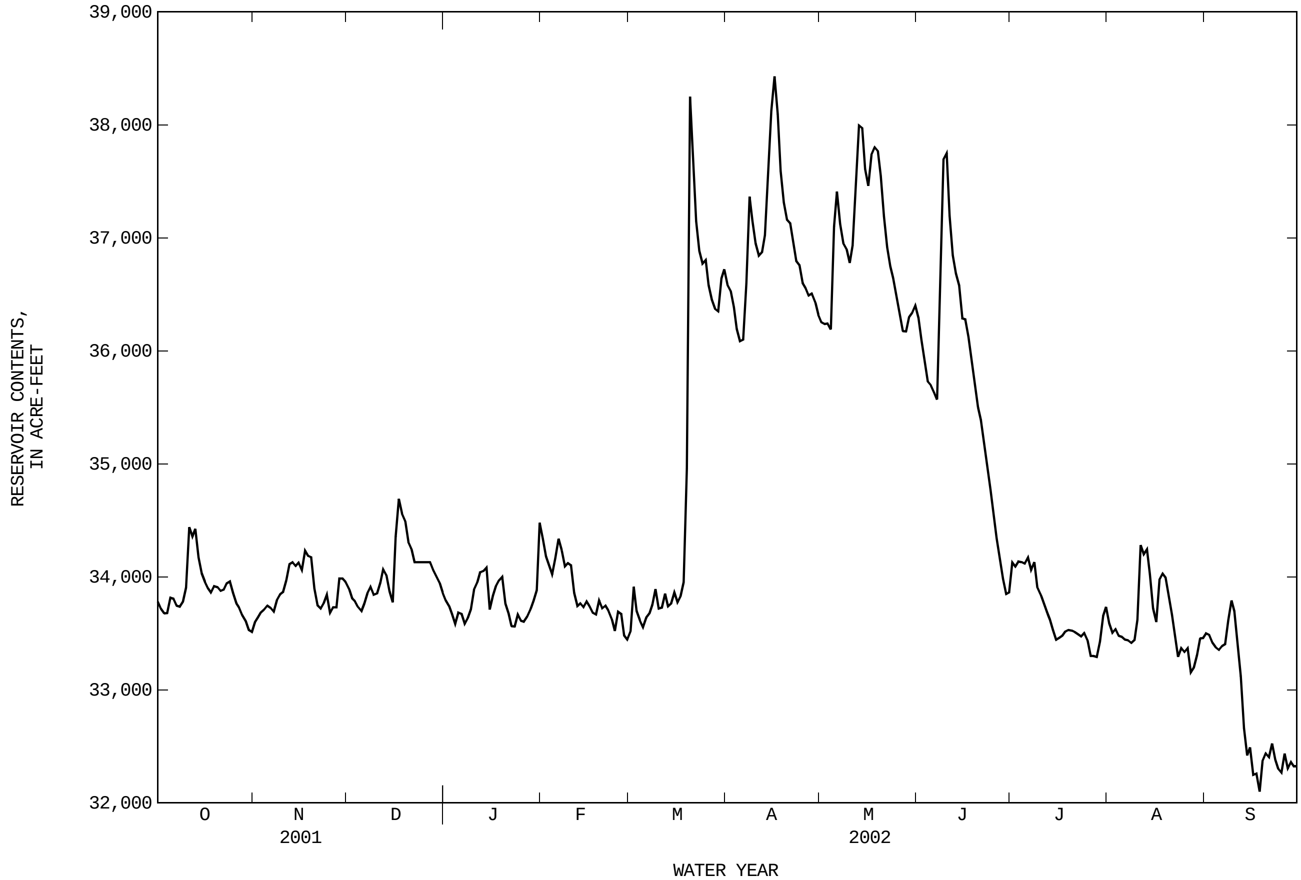
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33780	33590	33900	e33790	34340	33520	36580	36250	36290	34130	33590	33500
2	33720	33640	33810	e33740	34180	33910	36530	36240	36100	34090	33500	33480
3	33680	33690	33780	33670	34100	33700	36390	36240	35920	34140	33540	33410
4	33680	33710	33730	33580	34020	33620	36190	36190	35730	34130	33480	33380
5	33810	33740	33700	33680	34170	33550	36080	37100	35690	34110	33470	33350
6	33810	33730	33770	33670	34340	33640	36100	37410	35630	e34170	33440	33380
7	33740	33690	33850	33580	34230	33670	36600	37120	35570	e34060	33440	33400
8	33740	33790	33910	33630	34090	33750	37370	36950	36580	e34130	33420	33620
9	33770	33840	33840	33710	34120	33890	37150	36900	37690	e33910	33440	33790
10	33900	33860	33850	33880	34100	33720	36950	36780	37750	33850	33620	33690
11	34440	33970	33950	33950	33850	33730	36840	36930	37200	33770	34280	33420
12	34360	34110	34070	34040	33740	33850	36880	37400	36850	33690	34200	33120
13	34420	34130	34020	34050	33760	33740	37020	38000	36680	33630	34240	32660
14	34170	34100	33870	e34080	33730	33760	37570	37970	36580	33530	34020	32420
15	34030	34130	33770	e33710	33780	33860	38130	37610	36290	33440	33720	32490
16	33960	34060	34350	33830	33740	33770	38430	37460	36280	33460	33600	32250
17	33900	34230	34690	33910	33680	33820	38100	37740	36120	33480	33970	32260
18	33860	34180	34560	33970	33660	33950	37600	37800	35910	33510	34030	32100
19	33920	34170	34500	34000	33790	34960	37310	e37770	35690	33530	33990	32370
20	33910	33900	34310	33760	33720	38250	37160	37550	35500	33520	33830	32430
21	33870	33750	e34250	33670	33740	37670	37130	37190	35390	33510	33660	32400
22	33880	33720	e34130	33560	33700	37150	36970	36920	35170	33490	33480	32520
23	33940	33770	e34130	33560	33630	36880	36800	36740	34970	33470	33290	32380
24	33960	33840	e34130	33670	33520	36770	36760	36640	34770	33500	33370	32300
25	33860	33680	e34130	33610	33690	36800	36600	36490	34550	33440	33330	32260
26	33770	33730	e34130	33600	33670	36580	36550	36340	34340	33300	33370	32430
27	33730	33730	e34130	33650	33480	36450	36490	36170	34160	33300	33150	32300
28	33660	33990	e34060	33710	33440	36370	36510	36170	33980	33290	33190	32360
29	33610	33990	e34000	33790	---	36350	36430	36290	33850	33430	33300	32320
30	33530	33950	e33950	33880	---	36640	36320	36330	33860	33650	33450	32320
31	33510	---	e33860	34480	---	36720	---	36400	---	33730	33460	---
MAX	34440	34230	34690	34480	34340	38250	38430	38000	37750	34170	34280	33790
MIN	33510	33590	33700	33560	33440	33520	36080	36170	33850	33290	33150	32100
(+)	592.94	593.08	e 93.05	593.23	592.92	593.90	593.78	593.80	593.05	593.01	592.93	592.57
(@)	-310	+440	-90	+620	-1040	+3280	-400	+80	-2540	-130	-270	-1140

CAL YR 2001 MAX 42200 MIN 29410 (@) +3350
WTR YR 2002 MAX 38430 MIN 32100 (@) -1500

e Estimated

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

08045400 Lake Worth above Fort Worth, TX--Continued



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^2.

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

GAGE.--Water-stage recorder. Datum of gage is 580.00 ft above NGVD of 1929. Satellite telemeter at station.

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

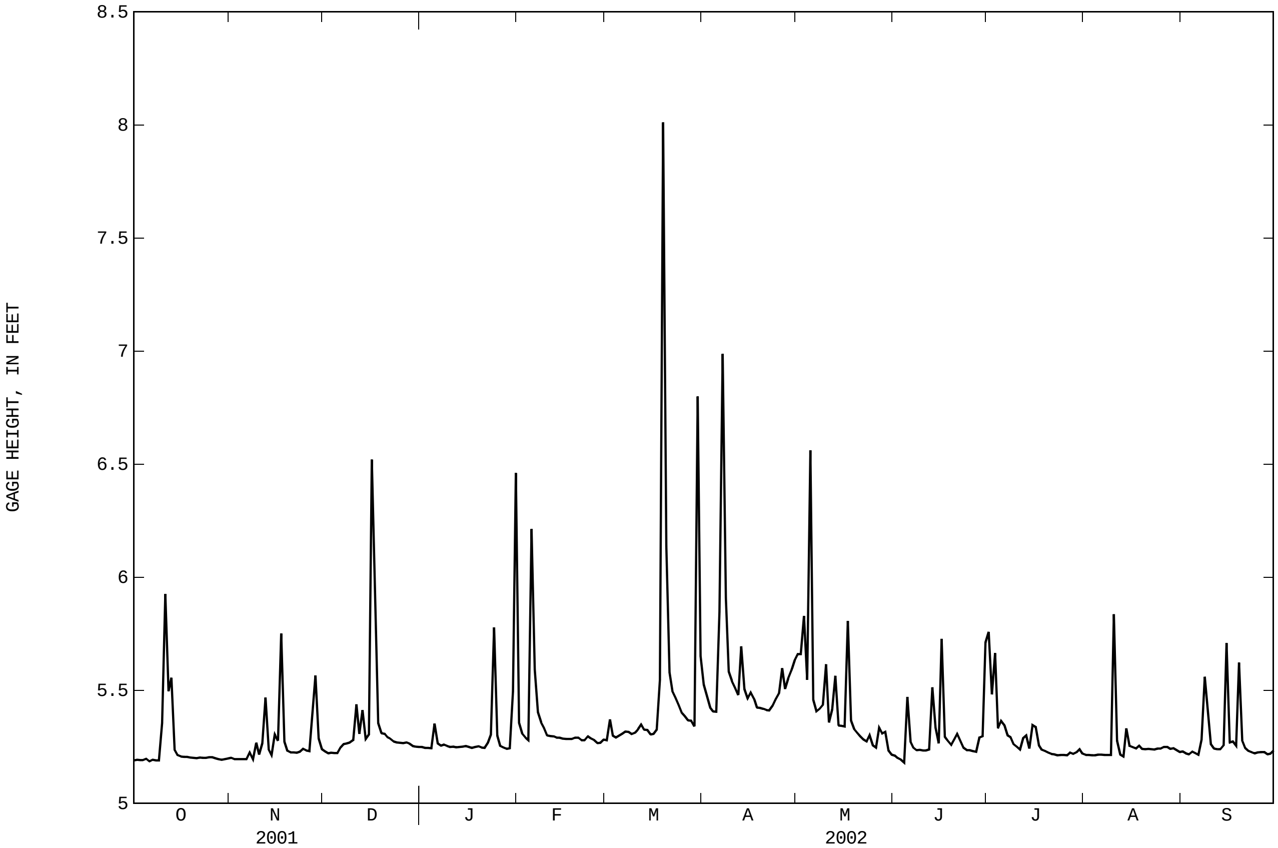
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 14.70, Jun. 4, 2000, at 0015 hours; minimum gage height, 4.36, Jun. 20, 2000, at 0515 hours.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 13.47 ft, Mar. 19; minimum gage height, 5.16 ft, June 3, 4, 5.

GAGE HEIGHT FROM DCP, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.19	5.20	5.23	5.25	5.36	5.28	5.52	5.66	5.21	5.76	5.21	5.23
2	5.19	5.19	5.22	5.24	5.31	5.37	5.47	5.66	5.20	5.48	5.21	5.22
3	5.19	5.19	5.22	5.24	5.29	5.30	5.42	5.83	5.19	5.66	5.21	5.22
4	5.19	5.20	5.22	5.24	5.28	5.29	5.41	5.54	5.18	5.33	5.21	5.23
5	5.20	5.20	5.22	5.35	6.21	5.30	5.40	6.56	5.47	5.36	5.21	5.22
6	5.19	5.19	5.25	5.26	5.59	5.31	5.85	5.46	5.27	5.35	5.22	5.21
7	5.19	5.22	5.26	5.25	5.40	5.32	6.99	5.41	5.25	5.30	5.21	5.28
8	5.19	5.20	5.26	5.26	5.36	5.32	5.91	5.42	5.24	5.29	5.21	5.56
9	5.19	5.27	5.27	5.25	5.33	5.30	5.58	5.43	5.24	5.26	5.21	5.40
10	5.36	5.21	5.28	5.25	5.30	5.31	5.54	5.61	5.23	5.25	5.84	5.26
11	5.92	5.26	5.44	5.25	5.30	5.33	5.51	5.36	5.23	5.24	5.28	5.24
12	5.50	5.47	5.31	5.25	5.30	5.35	5.48	5.41	5.24	5.29	5.22	5.24
13	5.55	5.24	5.41	5.25	5.29	5.33	5.69	5.56	5.51	5.30	5.21	5.24
14	5.24	5.21	5.28	5.25	5.29	5.32	5.50	5.34	5.33	5.24	5.33	5.26
15	5.21	5.30	5.30	5.25	5.29	5.30	5.46	5.34	5.26	5.35	5.25	5.71
16	5.21	5.28	6.52	5.25	5.28	5.31	5.49	5.34	5.73	5.34	5.25	5.27
17	5.20	5.75	5.78	5.24	5.28	5.32	5.46	5.81	5.29	5.26	5.24	5.27
18	5.20	5.27	5.35	5.25	5.28	5.54	5.42	5.36	5.27	5.24	5.26	5.25
19	5.20	5.23	5.31	5.25	5.29	8.01	5.42	5.33	5.26	5.23	5.24	5.62
20	5.20	5.22	5.31	5.25	5.29	6.14	5.42	5.31	5.28	5.22	5.24	5.28
21	5.20	5.22	5.29	5.24	5.28	5.58	5.41	5.29	5.31	5.22	5.24	5.24
22	5.20	5.22	5.28	5.26	5.28	5.50	5.41	5.28	5.28	5.22	5.24	5.23
23	5.20	5.23	5.27	5.30	5.30	5.47	5.43	5.27	5.24	5.21	5.24	5.22
24	5.20	5.24	5.27	5.78	5.29	5.43	5.46	5.30	5.23	5.21	5.24	5.22
25	5.20	5.23	5.27	5.30	5.28	5.40	5.49	5.26	5.23	5.21	5.24	5.22
26	5.20	5.23	5.27	5.25	5.27	5.38	5.60	5.25	5.23	5.21	5.25	5.23
27	5.20	5.40	5.27	5.25	5.27	5.37	5.51	5.34	5.23	5.22	5.25	5.23
28	5.20	5.56	5.26	5.24	5.28	5.36	5.55	5.31	5.29	5.22	5.24	5.22
29	5.19	5.29	5.25	5.24	---	5.34	5.59	5.32	5.30	5.22	5.24	5.22
30	5.20	5.24	5.25	5.49	---	6.80	5.63	5.23	5.71	5.24	5.23	5.23
31	5.20	---	5.25	6.46	---	5.65	---	5.21	---	5.22	5.23	---
MEAN	5.25	5.27	5.33	5.32	5.34	5.53	5.57	5.45	5.30	5.30	5.25	5.28
MAX	5.92	5.75	6.52	6.46	6.21	8.01	6.99	6.56	5.73	5.76	5.84	5.71
MIN	5.19	5.19	5.22	5.24	5.27	5.28	5.40	5.21	5.18	5.21	5.21	5.21

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



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair 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^2 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, 18,200 acre-ft, May 12, elevation, 895.60 ft; minimum contents, 13,600 acre-ft, Mar. 16, elevation, 891.21 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

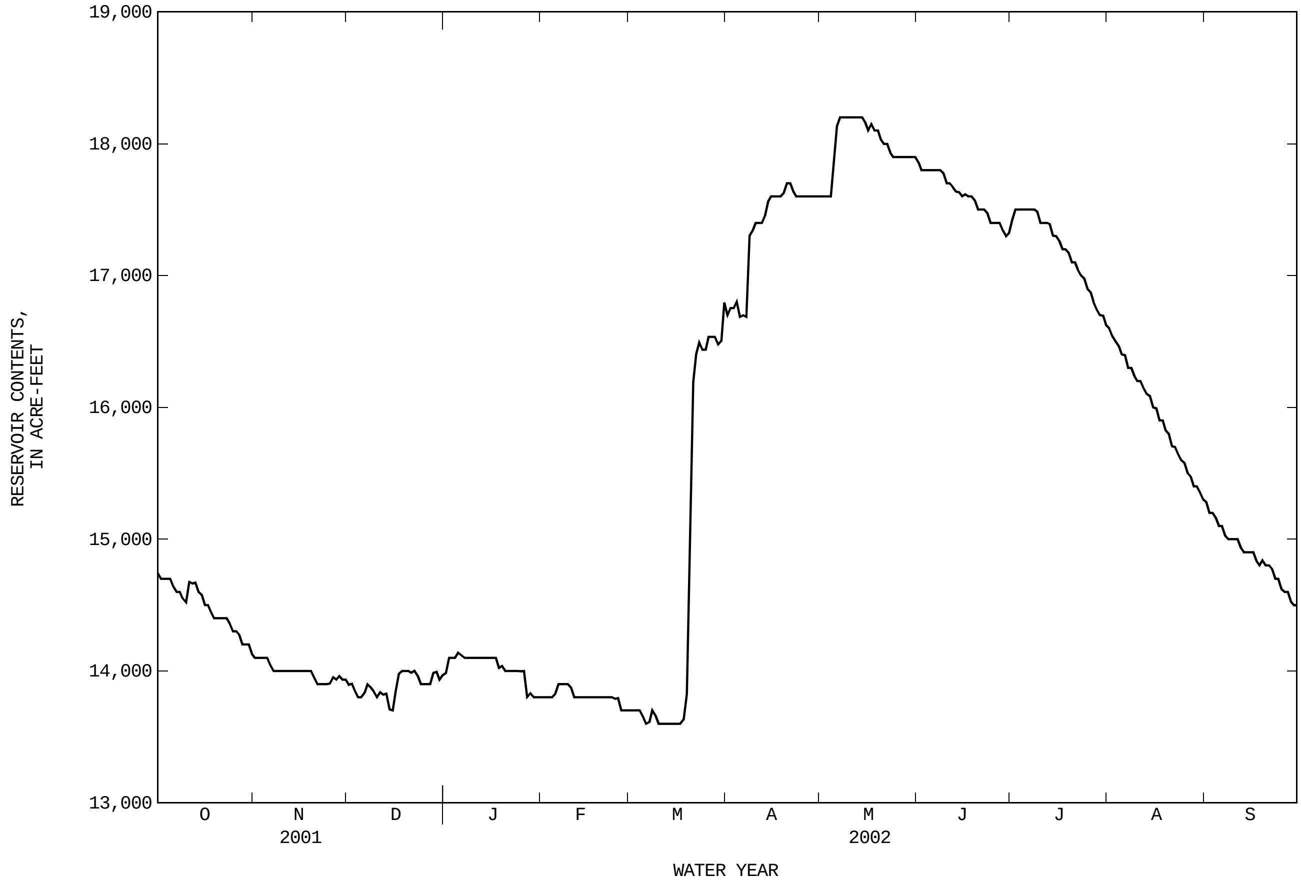
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14700	14100	e13900	e14000	13800	13700	e16700	17600	17900	17400	16600	15300
2	14700	14100	e13900	e14100	13800	13700	e16800	17600	17800	17500	16500	15200
3	14700	14100	e13800	14100	13800	13700	e16800	17600	17800	17500	16500	15200
4	14700	14100	e13800	14100	13800	13700	e16800	17600	17800	17500	16500	15200
5	14700	14100	e13800	14100	13800	13700	e16700	17900	17800	17500	16400	15100
6	14600	14000	e13800	14100	13900	13600	e16700	18100	17800	17500	16400	15100
7	14600	14000	e13900	14100	13900	13600	e16700	18200	17800	17500	16300	15000
8	14600	14000	e13900	14100	13900	13700	e17300	18200	17800	17500	16300	15000
9	14500	14000	e13800	14100	13900	13700	17300	18200	17800	17500	16200	15000
10	14500	14000	e13800	14100	13900	13600	17400	18200	17700	17400	16200	15000
11	14700	14000	e13800	14100	13800	13600	17400	18200	17700	17400	16200	15000
12	14700	14000	e13800	14100	13800	13600	17400	18200	17700	17400	16100	14900
13	14700	14000	e13800	14100	13800	13600	17500	18200	17600	17400	16100	14900
14	14600	14000	e13700	14100	13800	13600	17600	18200	17600	17300	16100	14900
15	14600	14000	13700	14100	13800	13600	17600	18200	17600	17300	16000	14900
16	14500	14000	13800	14100	13800	13600	17600	18100	17600	17300	16000	14900
17	14500	14000	14000	14100	13800	13600	17600	18100	17600	17200	15900	14800
18	14400	14000	14000	14000	13800	13600	17600	18100	17600	17200	15900	14800
19	14400	14000	14000	14000	13800	13800	17600	18100	17600	17200	15800	14800
20	14400	13900	14000	14000	13800	e15200	17700	18000	17500	17100	15800	14800
21	14400	13900	14000	14000	13800	e16200	17700	18000	17500	17100	15700	14800
22	14400	13900	14000	14000	13800	e16400	17600	18000	17500	17000	15700	14800
23	14400	13900	14000	e14000	13800	e16500	17600	17900	17500	17000	15600	14700
24	14400	13900	13900	e14000	13800	e16400	17600	17900	17400	17000	15600	14700
25	14300	13900	13900	e14000	13800	e16400	17600	17900	17400	16900	15600	14600
26	14300	e14000	13900	e14000	13700	e16500	17600	17900	17400	16900	15500	14600
27	14300	e13900	e13900	e13800	13700	e16500	17600	17900	17400	16800	15500	14600
28	14200	e14000	e14000	e13800	13700	e16500	17600	17900	17300	16700	15400	14500
29	14200	e13900	e14000	13800	---	e16500	17600	17900	17300	16700	15400	14500
30	14200	e13900	e13900	13800	---	e16500	17600	17900	17300	16700	15400	14500
31	14100	---	e14000	13800	---	e16800	---	17900	---	16600	15300	---
MEAN	14500	14000	13900	14000	13800	14700	17400	18000	17600	17200	16000	14900
MAX	14700	14100	14000	14100	13900	16800	17700	18200	17900	17500	16600	15300
MIN	14100	13900	13700	13800	13700	13600	16700	17600	17300	16600	15300	14500
(+)	891.79	891.57	891.59	891.45	891.32	894.31	895.04	895.28	894.78	894.17	892.94	892.13
(@)	-500	-200	+100	-200	-100	+3100	+800	+300	-600	-700	-1300	-800

CAL YR 2001 MAX 20000 MIN 13700 (@) -700
WTR YR 2002 MAX 18200 MIN 13600 (@) -100

e Estimated

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

08045800 Lake Weatherford near Weatherford, TX--Continued



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair. 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	1.3	2.2	1.8	1.5	1.5	2.3	1.3	1.0	17	0.47	0.23
2	0.03	1.4	2.5	1.8	1.7	1.6	2.2	1.2	1.2	6.6	0.38	0.22
3	0.02	1.4	1.9	1.8	1.6	1.5	1.7	1.6	1.5	3.5	0.35	0.20
4	0.03	1.3	2.2	1.6	1.7	1.5	1.6	1.2	1.1	2.5	0.40	0.19
5	0.02	1.5	2.3	1.6	7.1	1.6	1.4	82	1.8	2.3	0.46	0.20
6	0.04	1.5	2.4	1.5	2.3	1.6	7.8	15	1.6	2.0	0.45	0.19
7	0.04	1.3	2.5	1.5	1.5	1.5	28	4.3	1.1	1.9	0.45	0.20
8	0.05	1.3	2.4	1.5	1.5	1.5	31	2.7	0.99	1.8	0.40	0.27
9	0.06	1.4	2.4	1.4	1.4	1.6	9.0	2.3	0.99	2.0	0.36	0.39
10	1.2	1.4	2.4	1.4	1.4	1.5	4.7	2.6	1.3	1.8	0.30	0.32
11	9.1	1.7	2.6	0.83	1.4	1.5	3.7	3.1	1.1	0.97	0.37	0.34
12	0.83	1.8	2.6	1.4	1.5	1.5	3.3	3.4	0.87	1.3	0.42	0.31
13	1.1	1.6	1.9	1.1	1.4	1.5	9.9	5.4	1.6	1.7	0.42	0.31
14	1.1	1.4	1.8	1.4	1.3	1.6	5.1	2.4	1.0	1.1	0.45	0.31
15	0.99	1.6	2.0	1.3	0.81	1.5	3.5	2.3	1.5	0.72	0.42	0.45
16	0.92	1.6	18	1.6	1.4	1.4	2.8	2.1	3.6	0.81	0.34	0.41
17	1.1	2.2	7.2	1.6	1.4	1.3	2.4	2.9	0.96	0.99	0.31	0.42
18	1.1	1.5	1.9	1.5	1.4	2.2	2.1	2.3	0.62	0.86	0.31	0.41
19	1.2	1.4	1.7	1.6	1.5	88	2.0	2.0	0.54	0.62	0.29	1.6
20	1.3	1.5	1.7	1.4	1.4	31	1.9	2.0	0.56	0.53	0.28	0.41
21	1.3	e1.6	1.7	1.3	1.6	13	1.8	1.9	1.0	0.50	0.26	0.51
22	1.5	1.5	1.7	1.6	1.2	6.4	1.7	1.7	0.58	0.48	0.26	0.40
23	1.3	1.7	1.8	1.5	1.4	4.5	1.6	1.2	0.46	0.47	0.26	0.34
24	1.3	1.4	1.7	1.9	1.3	2.8	1.3	0.66	0.43	0.47	0.26	0.22
25	1.2	0.95	1.8	1.7	1.4	2.1	1.3	0.57	4.8	0.48	0.28	0.19
26	1.3	1.3	1.7	1.6	1.4	1.8	1.4	0.88	0.82	0.45	0.28	0.19
27	1.2	0.70	1.8	1.7	1.6	1.6	1.3	1.9	0.52	0.43	0.26	0.47
28	1.2	1.1	1.9	1.7	1.5	1.6	1.2	1.9	1.1	0.40	0.26	0.45
29	1.2	2.3	1.8	1.6	---	1.7	1.2	2.0	1.3	0.39	0.26	0.46
30	1.3	3.5	1.8	1.4	---	5.0	1.6	1.7	6.4	0.39	0.27	0.40
31	1.3	---	1.8	3.3	---	3.5	---	1.4	---	0.47	0.24	---
TOTAL	34.36	46.15	84.1	48.93	46.61	190.9	140.8	157.91	42.34	55.93	10.52	11.01
MEAN	1.108	1.538	2.713	1.578	1.665	6.158	4.693	5.094	1.411	1.804	0.339	0.367
MAX	9.1	3.5	18	3.3	7.1	88	31	82	6.4	17	0.47	1.6
MIN	0.02	0.70	1.7	0.83	0.81	1.3	1.2	0.57	0.43	0.39	0.24	0.19
AC-FT	68	92	167	97	92	379	279	313	84	111	21	22

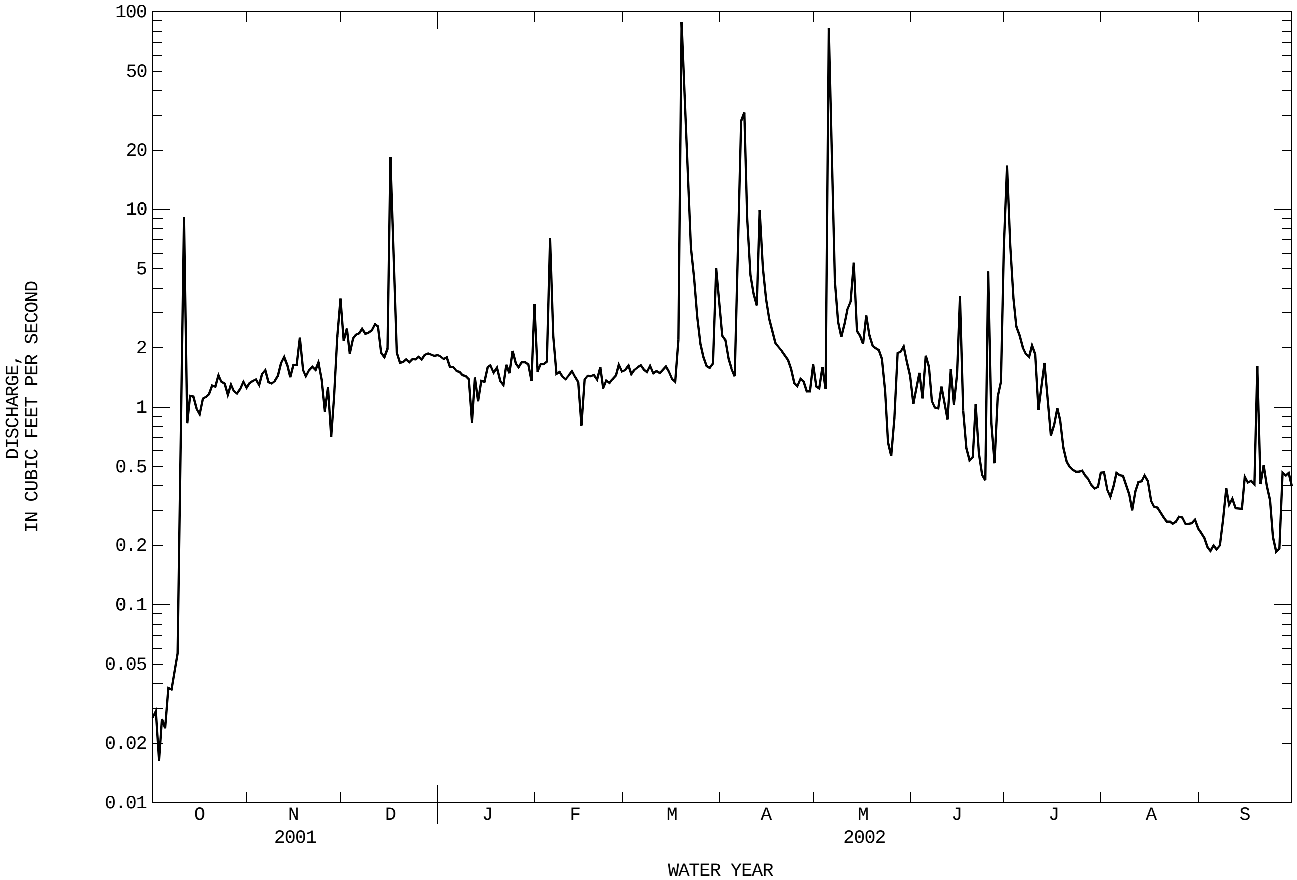
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	30.14	34.25	27.92	13.85	38.94	41.27	40.44	62.62	44.89	8.622	3.744	2.641
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	0.59	0.51	0.000	0.96	0.94	1.00	1.06	0.71	0.46	0.032	0.000	0.024
(WY)	2000	1985	1991	2000	2000	2000	2000	1984	1998	1998	1998	2001

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1980 - 2002h	
ANNUAL TOTAL	10111.85		869.56			
ANNUAL MEAN	27.70		2.382		29.39	
HIGHEST ANNUAL MEAN					106	1982
LOWEST ANNUAL MEAN					0.91	1984
HIGHEST DAILY MEAN	583	Feb 24	88	Mar 19	3180	Apr 27 1990
LOWEST DAILY MEAN	0.00	Sep 1	0.02	Oct 3	0.00	Sep 12 1984
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 7	0.03	Oct 1	0.00	Dec 26 1987
MAXIMUM PEAK FLOW			a618	Mar 19	3810	Apr 27 1990
MAXIMUM PEAK STAGE			a12.22	Mar 19	22.07	Apr 27 1990
INSTANTANEOUS LOW FLOW					0.00	Sep 12 1984
ANNUAL RUNOFF (AC-FT)	20060		1720		21290	
10 PERCENT EXCEEDS	91		2.8		50	
50 PERCENT EXCEEDS	1.5		1.4		1.7	
90 PERCENT EXCEEDS	0.07		0.31		0.48	

e Estimated
h See PERIOD OF RECORD paragraph.
a From floodmark.

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



08046500 Benbrook Lake near Benbrook, TX

LOCATION.--Lat 32°39'02", long 97°26'54", Tarrant County, Hydrologic Unit 12030102, in intake structure of Benbrook Dam on Clear Fork Trinity River, 2.5 mi south of Benbrook, 3.5 mi upstream from Marys Creek and 14.6 mi upstream from mouth.

DRAINAGE AREA.--429 mi^2.

PERIOD OF RECORD.--Sept. 1952 to Sept. 2000, (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to current year. Prior to Oct. 1970, published as "Benbrook Reservoir".

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. 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 9,130 ft long, including a 500-foot uncontrolled off-channel concrete-gravity spillway with a 100-foot notch in center of ogee weir section. The outlet works consist of a 13.0-foot diameter concrete conduit controlled by two 6.5 by 13.0-foot broome-type gates and two 30-inch steel pipes controlled by slide gates. Deliberate impoundment began Sept. 29, 1952. From Aug. 1950 to Sept. 28, 1952, the lake was operated as a detention basin only. The capacity table is based on a survey made in 1945. The lake was built for flood control, navigation and low-flow regulation. Inflow is affected at times by the discharge from flood-detention pools of 12 floodwater-retarding structures with a combined detention capacity of 11,170 acre-ft. These structures control runoff from 37.6 mi^2. Conservation pool storage is 85,650 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam...	747.0
Crest of spillway..	724.0
Crest of notch in spillway...	710.0
Top of conservation storage..	693.3
Crest of intake to wet wells (inverts)...............................	656.0
Lowest gated outlet (invert)...	622.0

COOPERATION.--Capacity Table No. 4 was provided by the Texas Water Development Board, from a Jan. 1998 survey, and was put into use as of Oct. 1, 1999.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 212,200 acre-ft, May 3, 1990, elevation, 717.54 ft; minimum since lake first filled in 1957, 57,990 acre-ft, Sept. 30, 1999, elevation, 685.03 ft.

EXTREMES FOR 2001 WY YEAR.--Maximum contents, 117,400 acre-ft, Mar. 5, elevation, 701.60 ft; minimum contents, 47,730 acre-ft, Oct. 15, elevation, 681.80 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 105,000 acre-ft, Apr. 10, elevation, 698.84 ft; minimum contents, 65,740 acre-ft, Nov. 4, 5, 6, 7, 8, elevation, 688.10 ft.

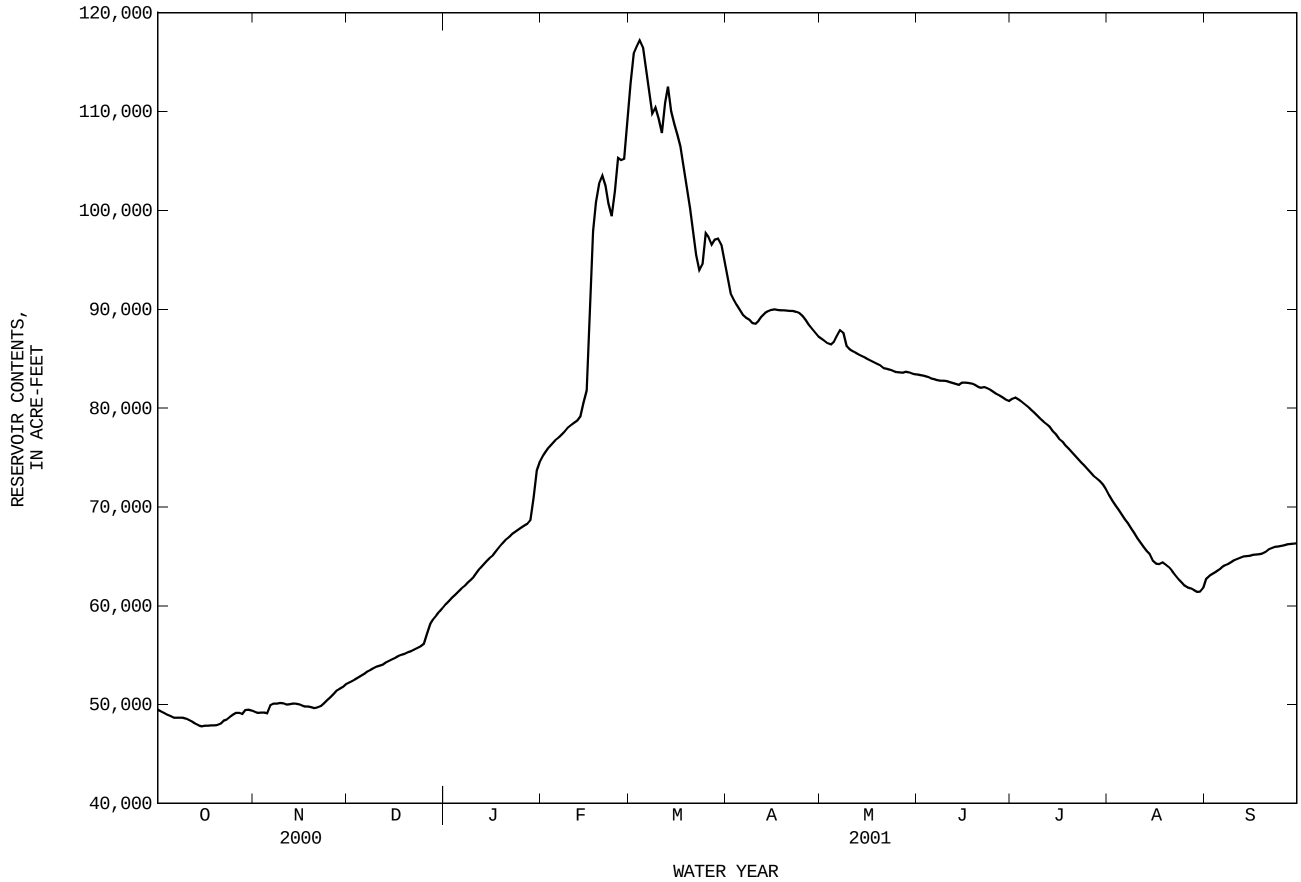
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49510	49280	52210	60180	75130	112800	93280	87020	83390	80940	71180	62740
2	49300	49180	52370	60520	75630	115900	91610	86840	83330	81050	70630	63040
3	49130	49220	52550	60810	76060	116600	90970	86570	83280	80880	70160	63230
4	48970	49200	52740	61120	76410	117200	90470	86450	83160	80670	69710	63420
5	48850	49160	52940	61450	76750	116500	89940	86740	83010	80420	69240	63660
6	48700	49940	53130	61770	77030	114000	89420	87320	82930	80140	68770	63910
7	48680	50110	53340	62040	77340	111700	89120	87910	82840	79830	68340	64090
8	48690	50110	53510	62350	77650	109800	88920	87650	82790	79530	67830	64210
9	48680	50170	53700	62640	78020	110400	88610	86300	82780	79260	67340	64430
10	48590	50130	53860	62970	78260	109300	88550	85950	82750	78940	66840	64610
11	48440	50030	53960	63410	78500	107900	88850	85770	82650	78630	66390	64730
12	48260	50040	54050	63800	78730	110900	89330	85600	82560	e78370	65960	64880
13	48080	50100	54290	64180	79110	112500	89610	85420	82460	e78120	65530	65000
14	47920	50110	54450	64510	80560	110000	89810	85240	82370	e77670	e65230	65040
15	47810	50030	54620	64830	81780	108700	89950	85100	82600	e77330	e64540	65080
16	47870	49930	54760	65110	90020	107600	90020	84920	82590	e76900	64280	65170
17	47880	49830	54930	65510	97940	106500	89950	84750	82560	76620	64220	65210
18	47920	49810	55060	65900	100900	104300	89910	84580	82500	76260	64410	65220
19	47920	49740	55170	66300	102700	102400	89910	84450	82350	75910	64210	65300
20	47950	49670	55340	66640	103500	100200	89890	84300	82160	75560	63930	65440
21	48070	49710	55430	66930	102500	97790	89840	84050	82060	75210	63530	65700
22	48380	49840	55590	67210	100700	95500	89840	83960	82140	74870	63100	65840
23	48490	e50120	55740	67450	99430	93950	89730	83880	82000	74540	62740	65980
24	48740	e50420	55890	67650	101900	94570	89600	83760	81830	74190	62410	66020
25	48990	e50740	56130	67880	105300	97700	89320	83660	81640	73840	62060	66090
26	49180	e51040	57170	68090	105100	97300	88890	83630	81430	73500	61870	66150
27	49170	e51410	58140	68290	105200	96540	88430	83590	81250	73160	61780	66240
28	49040	51560	58650	68650	108700	97060	88030	83670	81060	72910	61610	66250
29	49470	51770	59040	70930	---	97160	87620	83630	80850	72600	61420	66300
30	49500	52040	59420	73670	---	96550	87240	83500	80710	72260	61460	66330
31	49410	---	59780	74540	---	95020	---	83440	---	71790	61840	---
MEAN	48630	50150	55100	65400	88960	105300	89560	85150	82330	76840	65240	64980
MAX	49510	52040	59780	74540	108700	117200	93280	87910	83390	81050	71180	66330
MIN	47810	49160	52210	60180	75130	93950	87240	83440	80710	71790	61420	62740
(+)	682.43	683.40	686.13	690.83	699.69	696.43	694.42	693.39	692.62	690.00	686.82	688.29
(@)	-210	+2630	+7740	+14760	+34160	-13680	-7780	-3800	-2730	-8920	-9950	+4490

CAL YR 2000 MAX 110000 MIN 47810 (@) -4820
WTR YR 2001 MAX 117200 MIN 47810 (@) +16710

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

08046500 Benbrook Lake near Benbrook, TX--Continued



08046500 Benbrook Lake near Benbrook, TX--Continued

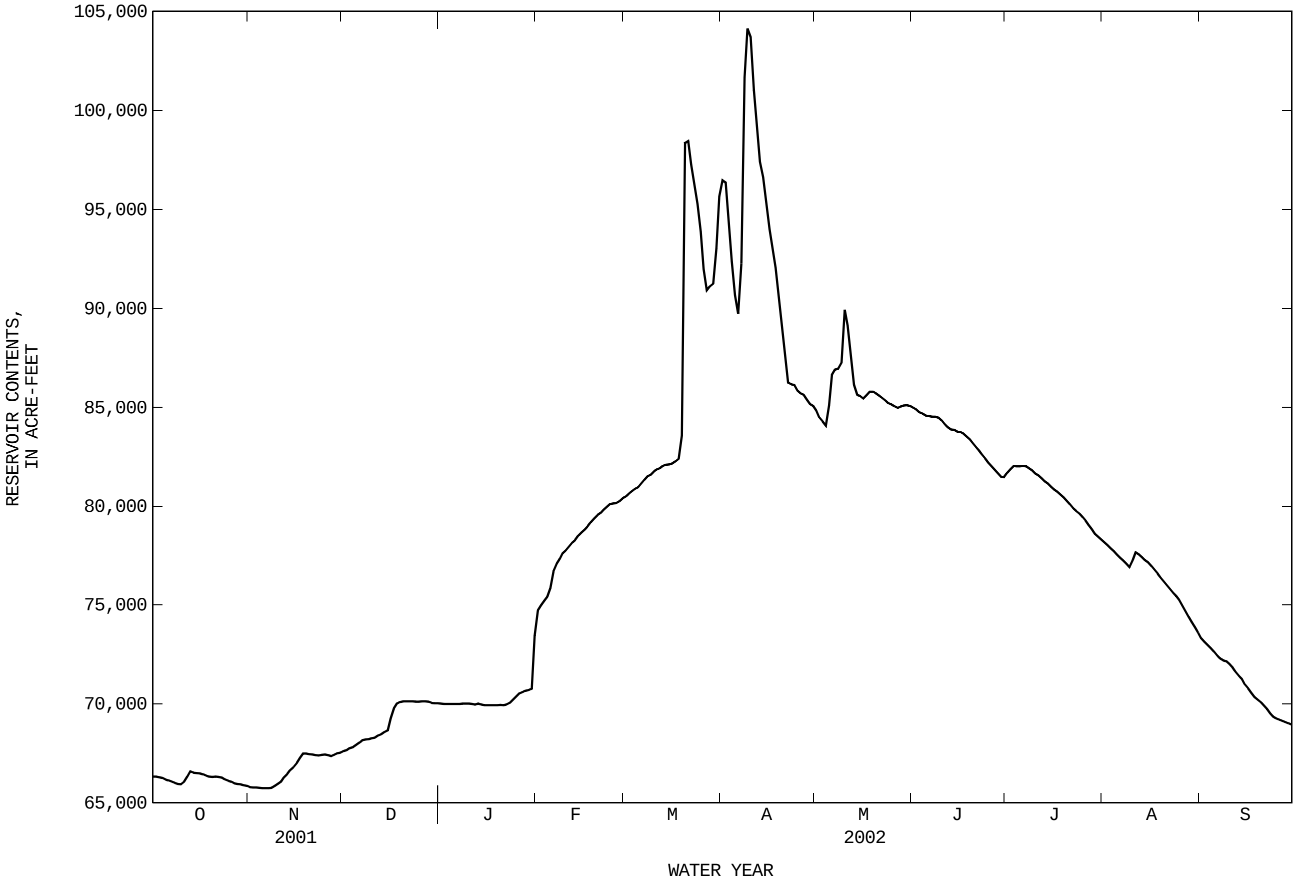
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66340	65790	67620	70010	74710	80480	96470	84820	84960	81680	78180	73320
2	66330	65770	67670	70000	74970	80610	96360	84470	84880	81870	78030	73140
3	66300	65770	67770	70000	75200	80730	94250	84280	84730	82030	77870	72980
4	66260	65760	67820	70000	75400	80870	92380	84070	84660	82020	77720	72820
5	66180	65740	67940	70000	75840	80950	90670	85090	84570	82010	77560	72650
6	66130	65740	68040	70000	76710	81130	89720	86630	84550	82030	77400	72470
7	66080	65750	68170	70000	77080	81330	92260	86900	84530	82010	77250	72300
8	66000	65770	68210	70030	77340	81500	101700	86950	84520	81910	77090	72210
9	65960	65850	68210	70030	77630	81580	104100	87240	84480	81800	76910	72160
10	65940	65960	68270	70020	77770	81740	103700	89930	84320	81640	77220	72020
11	66080	66080	68310	70000	77960	81850	101100	89140	84150	81540	77670	71840
12	66320	66320	68400	69970	78150	81920	99000	87550	83990	81390	77560	71600
13	66590	66470	68460	70010	78290	82040	97420	86120	83870	81260	77420	71420
14	66520	66670	68570	69970	78510	82100	96630	85620	83850	81140	77260	71250
15	66510	66810	68650	69940	78680	82120	95240	85570	83750	80970	77150	70980
16	66490	67000	69250	69940	78830	82170	94010	85440	83740	80830	76980	70790
17	66440	67270	69760	69940	79000	82250	e93020	85600	83670	80720	76780	70550
18	66380	67490	70020	69940	79200	82390	92060	85780	83520	80590	76590	70340
19	66330	67490	70110	69940	79370	e83560	90470	85780	83370	80450	76380	70230
20	66320	67460	70130	69950	79540	e98340	88990	85700	83170	80270	76180	70110
21	66320	67450	70130	69940	79650	98440	87530	85600	82980	80090	75990	69920
22	66310	67410	70130	69960	79810	97280	86230	85480	82800	79900	75800	69740
23	66280	67400	70130	70040	79960	96310	86160	85340	82590	79760	75620	69520
24	66190	67430	70120	70210	80100	95280	86120	85200	82380	79630	75460	69360
25	66120	67440	70120	70380	80130	93880	85830	85140	82200	79460	75250	69250
26	66070	67420	70130	70510	80150	91990	85690	85040	82020	79260	74960	69200
27	65990	67360	70130	70580	80240	90900	85630	84960	81830	79060	74670	69120
28	65960	67420	70120	70670	80370	91110	85380	85040	81650	78840	74410	69070
29	65940	67510	70060	70700	---	91240	85150	85100	81470	78600	74130	69020
30	65890	67540	70030	70760	---	93040	85060	85110	81460	78450	73870	68940
31	65850	---	70030	73450	---	95650	---	85060	---	78320	73590	---
MEAN	66210	66710	69110	70220	78240	86610	92280	85800	83490	80630	76420	70940
MAX	66590	67540	70130	73450	80370	98440	104100	89930	84960	82030	78180	73320
MIN	65850	65740	67620	69940	74710	80480	85060	84070	81460	78320	73590	68940
(+)	688.14	688.68	689.46	690.50	692.53	696.59	693.84	693.84	692.84	691.94	690.55	689.12
(@)	-480	+1690	+2490	+3420	+6920	+15280	-10590	0	-3600	-3140	-4730	-4650

CAL YR 2001 MAX 117200 MIN 60180 (@) +10250
WTR YR 2002 MAX 104100 MIN 65740 (@) +2610

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

08046500 Benbrook Lake near Benbrook, TX--Continued



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^2.

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 NGVD of 1929. 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^3/s (76,070 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1948-52).--Maximum discharge, 82,900 ft^3/s, May 17, 1949, gage height, 28.72 ft from rating curve extended above 11,000 ft^3/s on basis of velocity-area studies and slope-area measurement of 82,900 ft^3/s; no flow at times most years. Maximum stage since at least 1922, that of May 17, 1949.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	15	7.2	5.3	6.0	0.49	0.38	5.3	3.6	1.1	21
2	11	12	15	7.2	4.8	6.3	408	0.31	5.5	2.1	1.0	1.9
3	11	12	15	7.2	4.8	6.7	1110	0.38	5.8	3.0	1.2	1.3
4	12	13	15	6.9	5.1	6.7	1090	0.23	5.8	1.6	0.92	1.3
5	12	12	15	7.4	14	6.6	836	16	7.2	1.8	0.78	1.3
6	12	12	17	7.5	6.7	6.7	707	0.16	6.7	1.6	0.75	1.7
7	12	12	18	7.2	6.2	6.9	859	0.00	5.5	1.5	0.69	2.6
8	12	12	19	6.3	5.3	7.4	298	3.0	6.4	1.4	0.77	1.9
9	12	14	19	6.9	5.4	7.2	0.51	20	5.8	1.5	0.74	1.8
10	13	12	19	7.2	5.1	7.5	630	479	5.6	1.5	51	1.4
11	16	15	20	7.1	5.7	7.8	1100	984	5.9	1.2	1.1	1.3
12	18	13	20	7.6	5.6	8.2	1080	971	6.2	1.2	1.2	1.1
13	15	13	22	8.2	5.7	9.5	1080	602	6.3	1.6	1.3	1.3
14	12	13	19	8.5	5.4	8.7	1090	194	4.2	1.2	1.4	1.6
15	12	15	19	9.1	5.7	7.4	1090	89	3.8	1.1	0.95	1.9
16	12	15	34	8.8	5.9	8.1	1110	41	7.5	1.3	1.2	1.6
17	11	17	9.2	8.6	5.8	8.8	1070	13	3.5	1.3	1.2	1.3
18	11	13	7.2	9.1	5.9	11	1060	6.5	3.2	1.5	1.5	1.2
19	11	12	7.2	8.9	5.8	85	963	5.8	3.9	1.3	1.6	3.3
20	11	13	6.9	8.5	5.4	13	827	5.3	3.3	1.2	2.0	1.4
21	11	13	6.8	8.8	4.9	513	823	4.9	3.6	1.1	1.8	1.3
22	12	13	7.0	7.8	5.2	858	389	11	3.5	0.90	2.4	1.4
23	12	14	6.9	8.8	5.6	844	0.72	5.3	3.5	0.79	3.2	1.2
24	12	14	7.2	11	5.5	839	0.73	5.1	3.6	0.91	8.5	0.62
25	12	14	7.2	5.9	5.7	1050	0.55	5.3	3.4	0.91	49	0.48
26	12	13	7.1	6.3	5.8	1160	0.53	5.2	3.6	0.89	62	0.57
27	11	15	7.1	6.4	6.1	374	0.39	6.5	3.8	1.3	54	0.70
28	11	17	7.1	6.7	6.1	0.46	0.36	5.5	3.8	1.1	53	0.71
29	12	15	7.4	6.8	---	0.42	0.41	5.6	3.7	1.1	51	0.88
30	12	15	7.2	13	---	16	0.41	5.7	7.3	1.0	50	0.98
31	11	---	7.2	57	---	0.52	---	4.9	---	1.1	48	---
MEAN	12.10	13.47	13.22	9.481	5.875	190.0	587.5	112.8	4.907	1.406	14.69	2.035
MAX	18	17	34	57	14	1160	1110	984	7.5	3.6	62	21
MIN	11	11	6.8	5.9	4.8	0.42	0.36	0.00	3.2	0.79	0.69	0.48

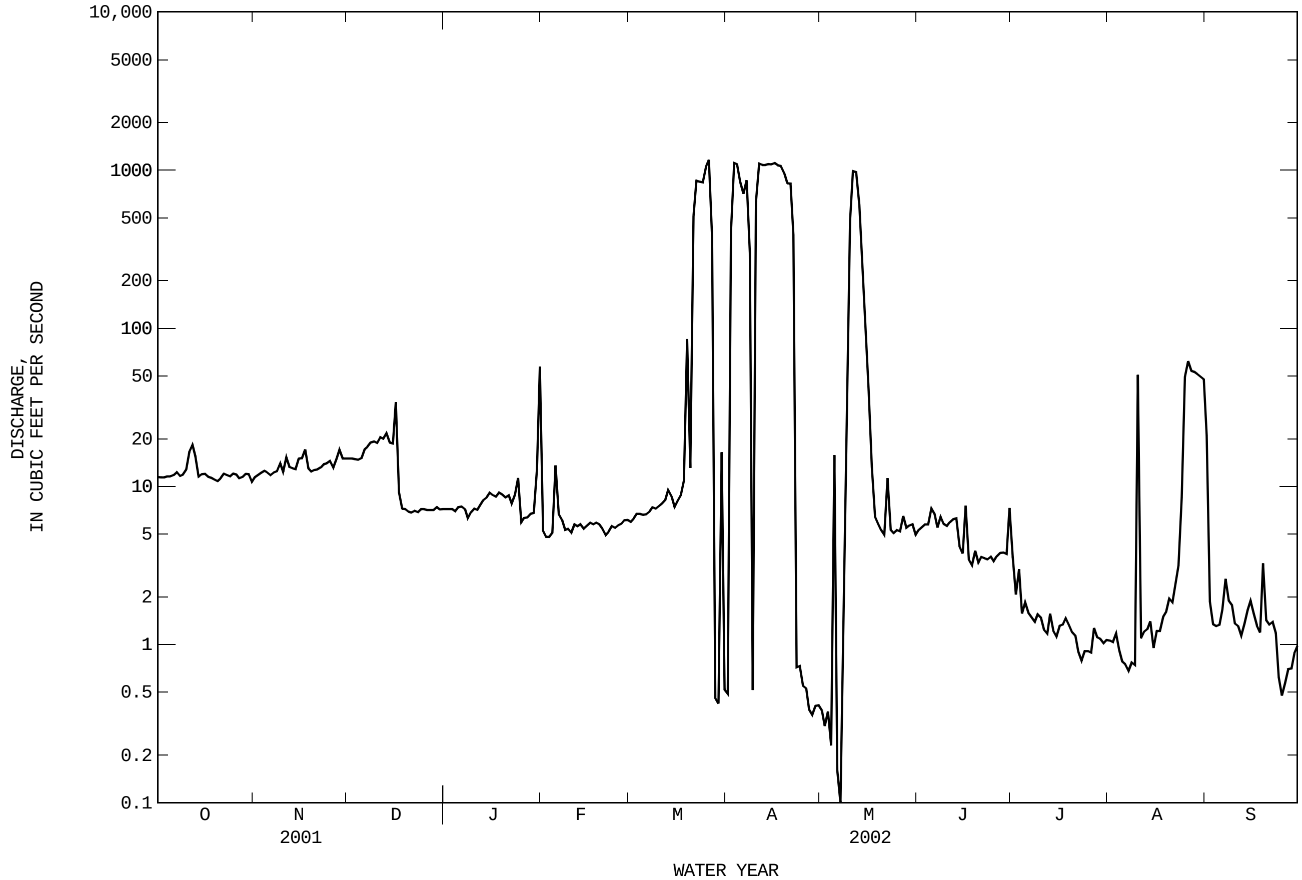
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.90	88.24	56.90	79.34	89.50	187.1	121.7	217.4	206.1	57.01	24.98	17.72
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	0.000	0.053	0.042	0.000	0.000	0.13	0.10	0.000	0.000	0.029	0.000	0.000
(WY)	1953	1971	1954	1953	1953	1953	1959	1959	1953	1953	1953	1953

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002z	
ANNUAL MEAN	138.8		80.46		97.35	
HIGHEST ANNUAL MEAN					514	1992
LOWEST ANNUAL MEAN					0.27	1953
HIGHEST DAILY MEAN	1640	Mar 11	1160	Mar 26	6320	May 3 1990
LOWEST DAILY MEAN	1.5	Jan 2	0.00	May 7	0.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	1.6	Jan 30	0.35	Apr 28	0.00	Oct 1 1952
MAXIMUM PEAK FLOW			2500	Apr 7	6740	May 3 1990
MAXIMUM PEAK STAGE			8.70	Apr 7	14.71	May 3 1990
10 PERCENT EXCEEDS	586		55		196	
50 PERCENT EXCEEDS	16		6.9		6.9	
90 PERCENT EXCEEDS	2.9		0.94		0.10	

z Period of regulated streamflow.

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



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^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 604.97 ft above NGVD of 1929. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

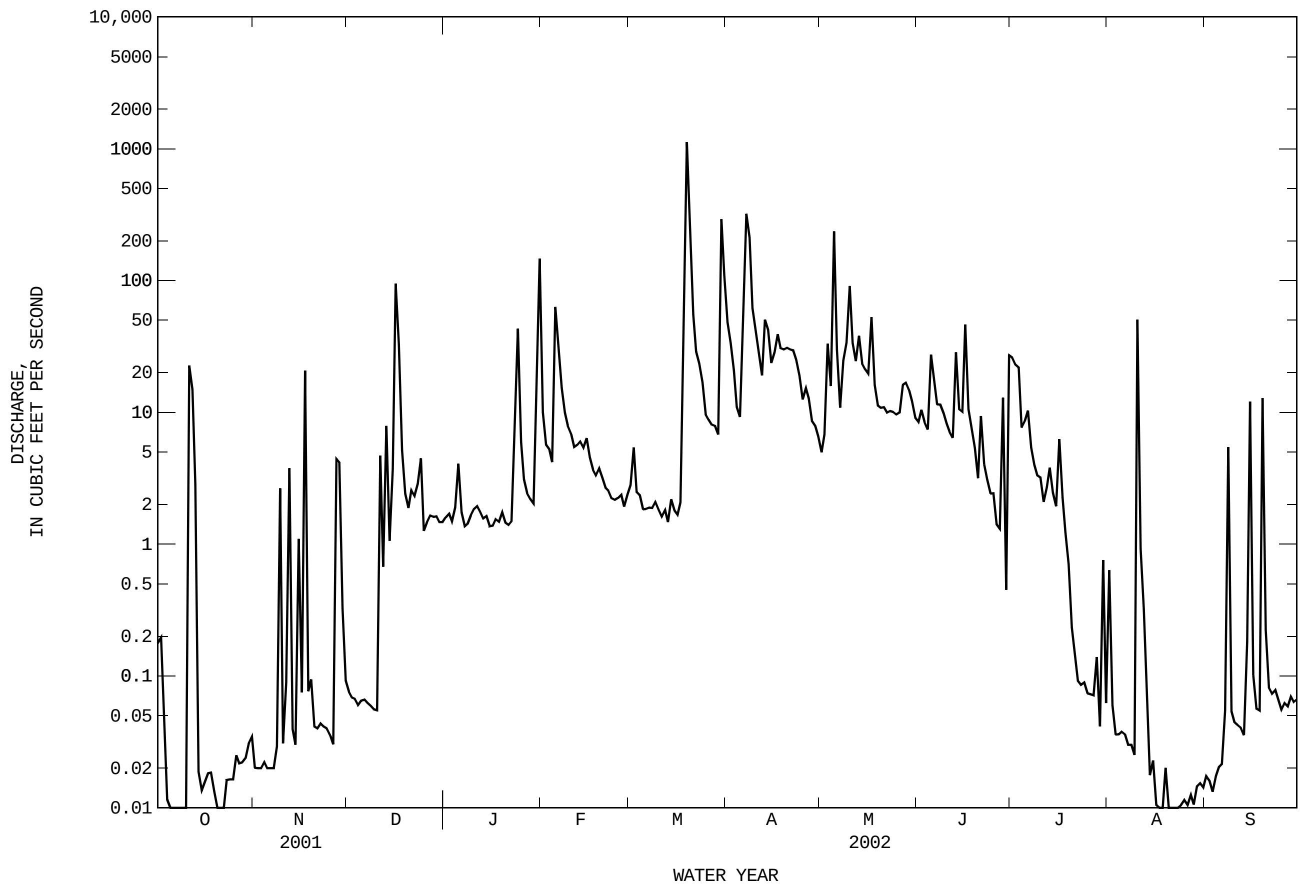
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.18	0.02	0.08	1.6	10	2.8	48	5.0	8.4	26	0.63	0.02
2	0.19	0.02	0.07	1.7	5.7	5.4	34	6.8	10	23	0.06	0.02
3	0.03	0.02	0.07	1.5	5.3	2.5	21	33	8.4	22	0.04	0.01
4	0.01	0.02	0.06	1.9	4.2	2.4	11	16	7.4	7.6	0.04	0.02
5	0.00	0.02	0.07	4.1	63	1.8	9.2	235	27	8.5	0.04	0.02
6	0.00	0.02	0.07	1.7	31	1.8	64	30	18	10	0.04	0.02
7	0.00	0.02	0.06	1.4	15	1.9	320	11	11	5.4	0.03	0.05
8	0.00	0.03	0.06	1.4	9.9	1.9	212	25	11	4.0	0.03	5.5
9	0.00	2.6	0.06	1.7	7.9	2.1	62	34	9.9	3.3	0.03	0.05
10	0.00	0.03	0.05	1.8	6.9	1.8	43	91	8.2	3.2	50	0.04
11	23	0.09	4.7	1.9	5.4	1.6	28	34	7.1	2.1	0.93	0.04
12	15	3.8	0.67	1.8	5.7	1.8	19	25	6.4	2.7	0.32	0.04
13	2.8	0.04	7.9	1.6	6.0	1.5	50	38	29	3.8	0.06	0.04
14	0.02	0.03	1.1	1.6	5.4	2.2	42	23	11	2.4	0.02	0.18
15	0.01	1.1	3.7	1.4	6.4	1.8	24	21	10	1.9	0.02	12
16	0.02	0.07	95	1.4	4.5	1.7	28	20	46	6.3	0.01	0.10
17	0.02	21	33	1.5	3.7	2.1	39	53	11	2.3	0.01	0.06
18	0.02	0.08	5.2	1.5	3.3	17	31	16	7.5	1.2	0.01	0.05
19	0.01	0.09	2.4	1.7	3.7	1120	30	11	5.4	0.71	0.02	13
20	0.01	0.04	1.9	1.5	3.2	188	31	11	3.2	0.23	0.00	0.22
21	0.01	0.04	2.6	1.4	2.7	55	30	11	9.3	0.14	0.00	0.08
22	0.01	0.04	2.3	1.5	2.5	29	30	10	4.0	0.09	0.01	0.07
23	0.02	0.04	2.9	10	2.2	23	25	10	3.1	0.09	0.01	0.08
24	0.02	0.04	4.5	43	2.2	17	19	10	2.4	0.09	0.01	0.07
25	0.02	0.04	1.3	6.0	2.2	9.6	13	9.6	2.4	0.07	0.01	0.06
26	0.03	0.03	1.5	3.1	2.4	8.8	15	9.9	1.4	0.07	0.01	0.06
27	0.02	4.4	1.6	2.4	1.9	8.0	13	16	1.3	0.07	0.01	0.06
28	0.02	4.2	1.6	2.2	2.4	7.9	8.6	17	13	0.14	0.01	0.07
29	0.02	0.33	1.6	2.0	---	6.8	7.9	15	0.45	0.04	0.01	0.06
30	0.03	0.09	1.5	16	---	292	6.5	12	27	0.75	0.02	0.07
31	0.03	---	1.5	147	---	109	---	9.1	---	0.06	0.01	---
TOTAL	41.55	38.39	179.12	269.3	224.7	1928.2	1314.2	868.4	320.25	138.25	52.45	32.16
MEAN	1.340	1.280	5.778	8.687	8.025	62.20	43.81	28.01	10.68	4.460	1.692	1.072
MAX	23	21	95	147	63	1120	320	235	46	26	50	13
MIN	0.00	0.02	0.05	1.4	1.9	1.5	6.5	5.0	0.45	0.04	0.00	0.01
AC-FT	82	76	355	534	446	3820	2610	1720	635	274	104	64

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.962	12.16	11.88	18.29	51.61	53.95	27.82	38.88	40.05	4.500	1.680	1.611
MAX	6.53	32.7	22.5	50.2	181	127	43.8	87.5	130	9.58	5.98	4.33
(WY)	1999	2001	2001	2001	2001	2001	2002	1999	2000	2001	2001	2001
MIN	1.34	1.31	3.73	2.36	6.80	11.1	14.8	9.71	1.33	0.21	0.18	0.12
(WY)	2002	2002	2000	2000	2000	2000	1999	2000	1998	1998	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1998 - 2002	
ANNUAL TOTAL	13959.02		5406.97			
ANNUAL MEAN	38.24		14.81		22.93	
HIGHEST ANNUAL MEAN					42.5	2001
LOWEST ANNUAL MEAN					15.3	2002
HIGHEST DAILY MEAN	1840	Feb 16	1120	Mar 19	2880	Jun 4 2000
LOWEST DAILY MEAN	0.00	Oct 5	0.00	Oct 5	0.00	Aug 21 1998
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 4	0.00	Oct 4	0.00	Oct 4 2001
MAXIMUM PEAK FLOW			4850	Mar 19	20300	Jun 4 2000
MAXIMUM PEAK STAGE			8.14	Mar 19	16.66	Jun 4 2000
ANNUAL RUNOFF (AC-FT)	27690		10720		16610	
10 PERCENT EXCEEDS	90		29		47	
50 PERCENT EXCEEDS	7.9		2.1		4.0	
90 PERCENT EXCEEDS	0.03		0.02		0.07	

08047050 Marys Creek at Benbrook, TX--Continued



08047500 Clear Fork Trinity River at Fort Worth, TX

LOCATION.--Lat 32°43′56″, long 97°21′31″, Tarrant County, Hydrologic Unit 12030102, at Fort Worth pumping station on left bank, 240 ft upstream from the Texas and Pacific Railway Co. bridge in Fort Worth, 830 ft upstream from East West Expressway bridge, 2.5 mi upstream from mouth, 5.0 mi downstream from Marys Creek, and 10.0 mi downstream from Benbrook Dam.

DRAINAGE AREA.--518 mi^2.

PERIOD OF RECORD.--Mar. 1924 to current year.

REVISED RECORDS.--WSP 1392: 1924-25, 1927. WSP 1922: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Datum of gage is 532.91 ft above NGVD of 1929. Prior to Apr. 3, 1970, various nonrecording and recording gages were located within 650 ft of present site at different datums. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since water year 1953, at least 10% of contributing drainage area has been regulated. The city of Fort Worth diverted water from pool at gage during the current year. The Benbrook Water and Sewage Authority diverted water from the river upstream from station during the current year for municipal use.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--28 years (water years 1925-52) prior to regulation by Benbrook Lake, 112 ft^3/s (81,140 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1925-52).--Maximum discharge, 107,000 ft^3/s, May 17, 1949, gage height, 28.20 ft, present datum, from rating curve extended above 16,000 ft^3/s on basis of contracted-opening measurement of 107,000 ft^3/s. No flow at times many years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 25, 1922, reached a stage of 27.5 ft, present datum, discharge, 74,300 ft^3/s, by slope-area measurement of peak flow; data furnished by Fort Worth city engineer. Maximum stage since at least 1900, that of May 17, 1949, at present datum.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.9	18	e16	26	39	155	25	26	179	6.8	31
2	13	10	20	e16	23	47	433	13	23	63	3.3	15
3	13	9.9	26	e16	24	46	1350	97	19	215	3.4	7.6
4	12	10	25	16	24	41	1340	20	19	38	2.9	8.0
5	18	9.9	17	19	e154	39	1180	e778	43	29	2.4	3.7
6	12	9.7	43	18	e124	38	1270	e100	33	33	2.3	3.2
7	11	9.9	22	17	e98	38	3350	e84	24	26	2.5	4.5
8	12	9.0	22	17	e79	39	1250	e61	19	20	2.7	92
9	10	44	21	16	66	38	234	e142	18	16	3.7	63
10	11	20	21	17	60	36	764	e384	16	16	1100	11
11	216	35	42	16	57	37	1420	e418	14	13	53	8.9
12	160	41	41	16	58	37	1400	e458	14	15	31	8.4
13	177	24	56	17	64	38	1500	e478	44	14	18	7.7
14	27	18	34	17	59	37	1420	309	40	14	60	7.3
15	21	30	32	16	53	37	1390	134	19	11	24	38
16	14	45	547	16	50	35	1650	95	156	26	13	19
17	11	108	144	16	51	37	1400	291	27	32	10	9.7
18	10	26	46	17	49	93	1370	54	20	28	8.5	7.3
19	10	16	e29	18	49	960	1310	41	15	14	6.8	98
20	11	14	e24	17	44	380	1190	38	17	8.0	6.4	22
21	11	14	e19	17	40	269	1190	23	17	6.2	5.1	9.8
22	11	14	e17	16	40	411	758	7.3	17	5.8	4.4	8.0
23	11	15	e17	19	41	402	68	35	12	4.9	4.1	7.1
24	11	14	e17	35	40	397	46	32	10	4.1	3.8	5.3
25	9.9	14	e17	22	39	726	49	34	9.3	3.2	4.3	4.2
26	10	14	e17	19	39	1010	102	35	9.6	7.6	24	4.4
27	10	16	e16	18	39	1050	46	40	11	6.1	8.1	4.0
28	10	76	e16	18	39	757	36	45	98	2.9	4.4	3.9
29	9.3	29	e16	18	---	350	30	35	31	3.2	3.0	4.1
30	9.2	19	e16	24	---	1640	38	33	97	10	14	4.5
31	9.8	---	e16	314	---	294	---	31	---	15	31	---
TOTAL	896.2	724.3	1414	854	1529	9398	27739	4370.3	917.9	879.0	1466.9	520.6
MEAN	28.91	24.14	45.61	27.55	54.61	303.2	924.6	141.0	30.60	28.35	47.32	17.35
MAX	216	108	547	314	154	1640	3350	778	156	215	1100	98
MIN	9.2	9.0	16	16	23	35	30	7.3	9.3	2.9	2.3	3.2
AC-FT	1780	1440	2800	1690	3030	18640	55020	8670	1820	1740	2910	1030

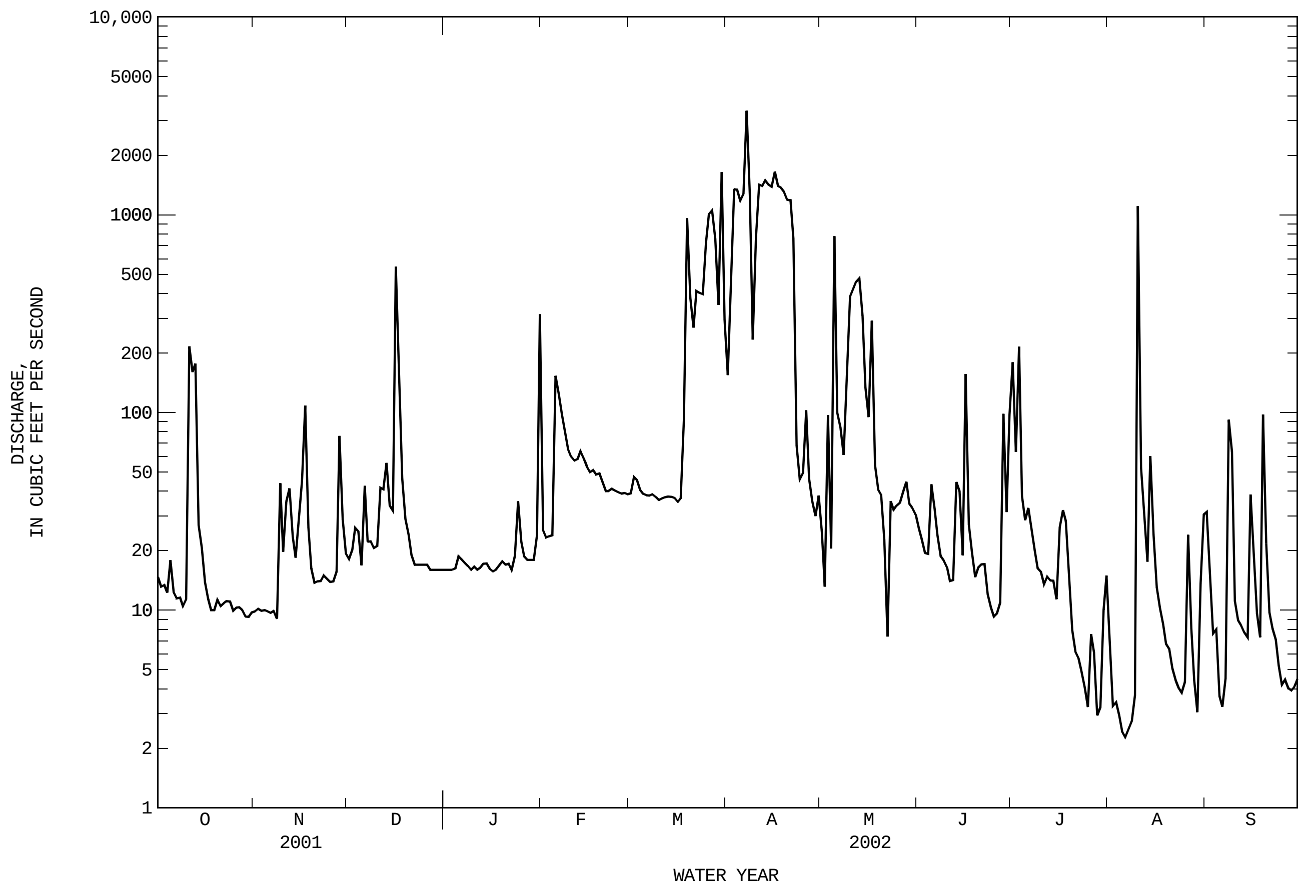
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	56.08	107.5	86.71	109.3	137.7	254.4	187.6	306.5	256.9	72.28	32.43	31.13
MAX	353	1555	1118	2198	1019	1838	1012	3020	2219	1300	247	245
(WY)	1994	1992	1992	1992	1992	1997	1977	1990	1989	1989	1979	1962
MIN	0.000	0.84	1.68	2.28	2.84	0.91	3.12	3.41	0.27	0.75	0.54	0.28
(WY)	1953	1955	1979	1957	1953	1956	1954	1959	1953	1954	1954	1954

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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1953 - 2002z	
ANNUAL TOTAL	73422.2		50709.2			
ANNUAL MEAN	201.2		138.9		136.4	
HIGHEST ANNUAL MEAN					660	1992
LOWEST ANNUAL MEAN					4.55	1954
HIGHEST DAILY MEAN	2720	Feb 16	3350	Apr 7	11000	Mar 11 1990
LOWEST DAILY MEAN	5.7	Jul 28	2.3	Aug 6	0.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	9.7	Oct 28	2.8	Aug 2	0.00	Oct 1 1952
MAXIMUM PEAK FLOW			14600	Apr 7	20900	May 2 1990
MAXIMUM PEAK STAGE			15.07	Apr 7	16.80	May 2 1990
ANNUAL RUNOFF (AC-FT)	145600		100600		98850	
10 PERCENT EXCEEDS	846		382		299	
50 PERCENT EXCEEDS	33		22		16	
90 PERCENT EXCEEDS	13		7.0		1.2	

e Estimated
z Period of regulated streamflow.



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^2.

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^3/s. Datum of gage is 519.24 ft above NGVD of 1929. 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.--Records good except those for estimated daily discharges, which are fair. 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 upstream of 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.

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

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	17	21	25	79	28	225	37	24	290	16	33
2	17	16	20	25	44	35	384	29	22	94	8.8	27
3	17	17	19	24	43	35	1340	160	20	396	5.7	15
4	16	18	21	26	41	32	1320	48	18	82	5.2	12
5	19	13	22	33	471	28	1150	2150	48	52	4.7	11
6	17	12	37	33	186	29	1320	327	37	50	3.6	11
7	16	13	26	28	73	28	4300	187	24	35	2.9	10
8	15	11	19	28	61	29	1830	141	20	29	4.5	251
9	16	29	16	28	61	28	445	300	179	25	5.9	158
10	26	28	16	29	43	25	774	1050	335	21	1620	40
11	516	32	34	28	41	25	1450	1230	144	34	88	26
12	187	39	49	28	43	27	1420	1310	44	26	32	22
13	342	e35	57	28	44	27	1590	1410	64	20	26	20
14	36	e21	41	30	43	27	1640	856	66	19	105	18
15	27	21	30	29	41	26	1870	460	24	16	71	104
16	24	37	868	27	38	24	2390	317	259	44	21	41
17	21	174	245	29	39	25	1940	760	32	51	14	42
18	18	33	44	30	39	199	1640	407	21	50	12	37
19	16	21	35	32	39	4920	1450	372	15	26	9.3	217
20	16	17	30	29	35	2200	1250	302	16	17	7.6	65
21	15	17	29	29	32	1020	1210	149	22	12	6.3	33
22	15	18	29	29	32	1220	873	43	16	e5.1	5.4	25
23	17	19	28	59	32	1110	139	38	14	e4.7	5.3	21
24	19	18	27	259	e32	1050	72	33	10	6.4	5.7	18
25	17	16	25	46	30	1200	89	30	8.8	5.3	5.5	16
26	16	18	24	26	27	1350	154	32	9.7	4.4	13	17
27	16	18	24	22	27	755	78	31	11	7.3	17	18
28	16	93	24	21	27	120	51	46	63	6.7	13	15
29	17	35	e24	20	---	107	44	36	43	5.6	9.7	14
30	17	23	25	54	---	2170	44	31	95	14	8.8	13
31	18	---	25	2060	---	437	---	27	---	23	23	---
TOTAL	1564	879	1934	3194	1743	18336	32482	12349	1704.5	1471.5	2175.9	1350
MEAN	50.45	29.30	62.39	103.0	62.25	591.5	1083	398.4	56.82	47.47	70.19	45.00
MAX	516	174	868	2060	471	4920	4300	2150	335	396	1620	251
MIN	15	11	16	20	27	24	44	27	8.8	4.4	2.9	10
AC-FT	3100	1740	3840	6340	3460	36370	64430	24490	3380	2920	4320	2680

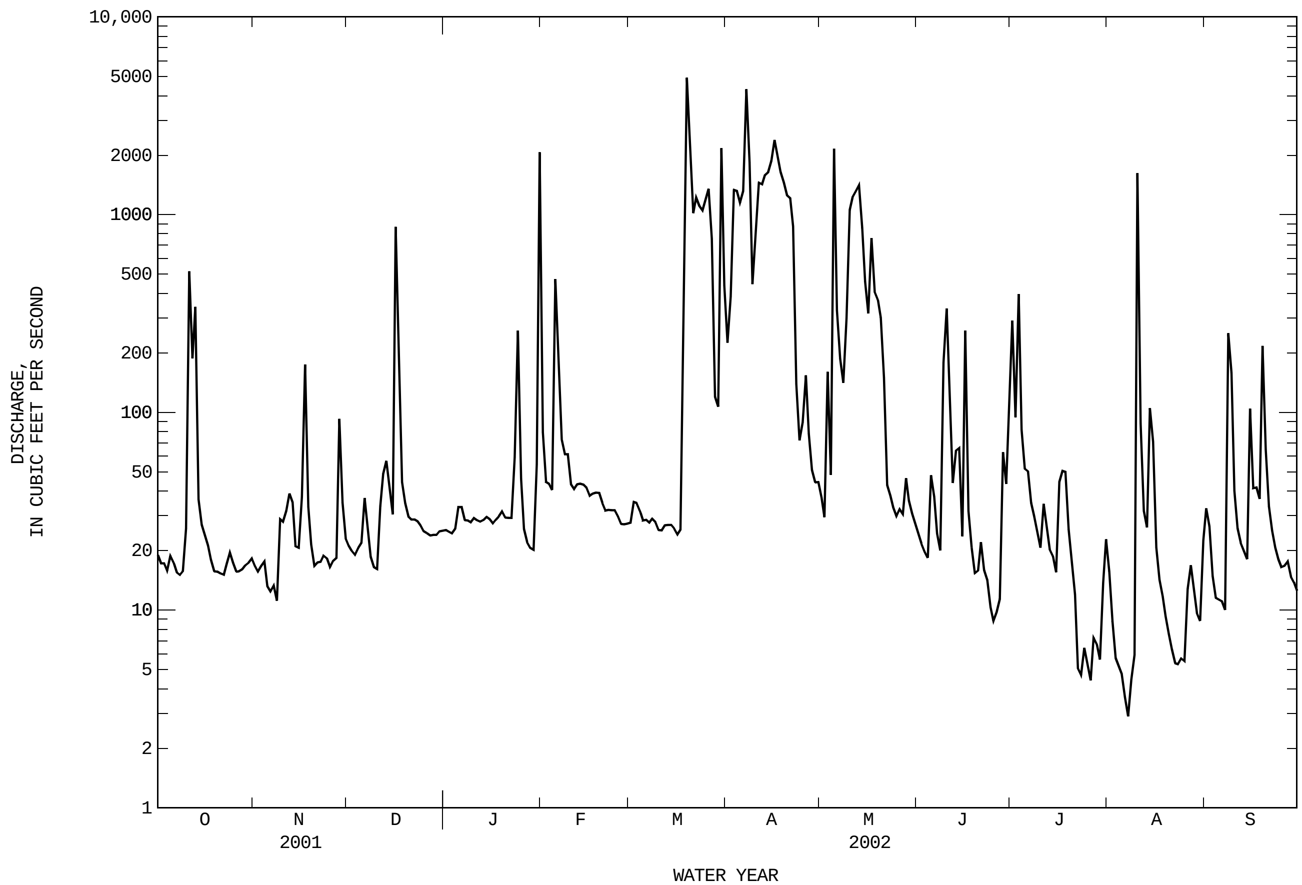
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	284.0	281.2	266.2	243.6	389.5	539.6	609.2	1116	765.5	237.9	114.1	148.7
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	0.12	3.64	5.02	6.08	5.57	4.72	7.71	15.2	5.73	1.33	0.000	0.000
(WY)	1940	1956	1935	1930	1940	1940	1930	1959	1954	1956	1956	1930

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1921 - 2002	
ANNUAL TOTAL	163327.1		79182.9			
ANNUAL MEAN	447.5		216.9		416.1	
HIGHEST ANNUAL MEAN					1823	1990
LOWEST ANNUAL MEAN					15.6	1956
HIGHEST DAILY MEAN	6300	Feb 27	4920	Mar 19	47300	Apr 25 1922
LOWEST DAILY MEAN	8.1	Jul 28	2.9	Aug 7	0.00	Aug 2 1924
ANNUAL SEVEN-DAY MINIMUM	12	Jul 27	4.6	Aug 3	0.00	Jul 24 1925
MAXIMUM PEAK FLOW			16500	Mar 19	85000	Apr 25 1922
MAXIMUM PEAK STAGE			6.37	Mar 19	25.91	May 17 1949
ANNUAL RUNOFF (AC-FT)	324000		157100		301500	
10 PERCENT EXCEEDS	1790		807		1070	
50 PERCENT EXCEEDS	41		29		40	
90 PERCENT EXCEEDS	16		12		6.2	

e Estimated

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



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^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 478.70 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records poor. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	35	64	64	368	72	424	65	78	585	52	12
2	31	33	61	63	164	89	351	63	72	351	41	20
3	28	31	60	63	144	83	1330	190	68	1300	38	17
4	26	28	59	63	133	79	1320	113	63	309	35	14
5	28	34	60	77	760	71	1260	2690	92	185	35	13
6	27	62	102	75	613	69	1550	643	103	281	35	12
7	26	58	79	68	206	68	5270	245	71	117	35	12
8	25	219	65	64	131	68	2690	214	64	96	34	170
9	24	e171	59	62	123	68	972	580	153	87	35	142
10	43	122	58	62	113	65	968	1660	403	87	2360	14
11	e383	171	70	61	106	64	1620	1510	e220	99	530	8.0
12	e277	e245	113	60	102	66	1610	1570	e99	104	108	6.9
13	e446	319	106	59	96	65	1830	1790	105	100	73	6.0
14	e181	76	114	60	95	65	1850	1270	145	94	73	8.9
15	e105	e90	82	60	98	65	2020	715	65	88	165	59
16	e80	e130	1160	59	93	63	2720	427	644	140	144	72
17	e60	e165	478	58	91	65	2290	1340	134	149	152	15
18	65	106	150	59	90	279	1990	755	86	169	72	29
19	60	74	97	63	95	5830	1850	512	76	e79	34	210
20	46	65	85	60	96	4270	1680	447	149	e59	28	135
21	37	65	80	60	90	1270	1660	269	202	54	23	68
22	34	65	78	60	74	1310	1490	137	75	56	19	26
23	34	65	74	85	73	1200	371	107	67	41	18	14
24	40	63	70	392	73	1140	151	100	60	38	17	4.0
25	34	63	69	160	74	1190	148	95	54	35	16	2.3
26	33	63	68	80	72	1290	342	98	99	33	15	2.1
27	29	65	68	70	69	990	163	105	74	33	14	2.1
28	26	142	69	68	71	205	112	151	105	35	15	3.9
29	25	117	68	65	---	169	84	124	150	35	12	4.4
30	29	78	62	74	---	2350	69	94	168	67	8.9	4.5
31	31	---	62	3220	---	846	---	87	---	89	7.7	---
TOTAL	2348	3020	3890	5594	4313	23524	40185	18166	3944	4995	4244.6	1107.1
MEAN	75.74	100.7	125.5	180.5	154.0	758.8	1340	586.0	131.5	161.1	136.9	36.90
MAX	446	319	1160	3220	760	5830	5270	2690	644	1300	2360	210
MIN	24	28	58	58	69	63	69	63	54	33	7.7	2.1
AC-FT	4660	5990	7720	11100	8550	46660	79710	36030	7820	9910	8420	2200

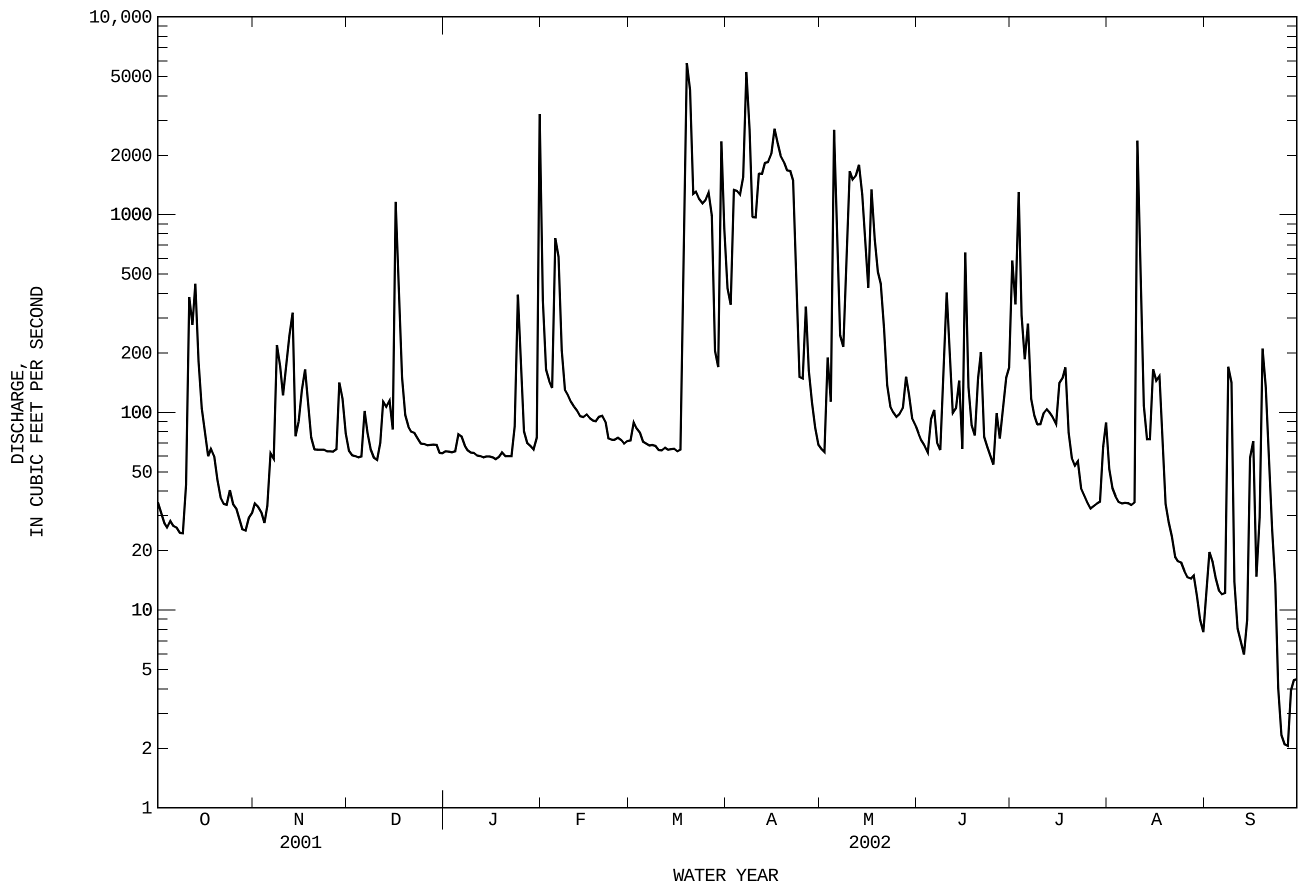
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	430.0	445.5	441.0	320.0	584.6	974.6	690.2	1557	1135	218.9	102.8	85.04
MAX	4881	3878	6459	4067	4288	3655	5668	12540	9448	1654	557	216
(WY)	1982	1982	1992	1992	1997	1998	1990	1990	1989	1982	1995	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1977 - 2002	
ANNUAL TOTAL	196627		115330.7			
ANNUAL MEAN	538.7		316.0		582.0	
HIGHEST ANNUAL MEAN					2071	1992
LOWEST ANNUAL MEAN					40.1	1978
HIGHEST DAILY MEAN	7410	Feb 27	5830	Mar 19	35200	May 3 1990
LOWEST DAILY MEAN	13	Jul 29	2.1	Sep 26	0.72	Sep 7 1998
ANNUAL SEVEN-DAY MINIMUM	16	Jul 27	3.3	Sep 24	0.80	Sep 5 1998
MAXIMUM PEAK FLOW			20300	Mar 19	46600	May 2 1990
MAXIMUM PEAK STAGE			29.91	Mar 19	38.02	May 2 1990
ANNUAL RUNOFF (AC-FT)	390000		228800		421700	
10 PERCENT EXCEEDS	1930		1170		1530	
50 PERCENT EXCEEDS	80		76		55	
90 PERCENT EXCEEDS	24		26		15	

e Estimated

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



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 Sept. 2002 (discontinued).
pH: Oct. 1976 to Sept. 2002 (discontinued).
WATER TEMPERATURE: Oct. 1976 to Sept. 2002 (discontinued).
DISSOLVED OXYGEN: Oct. 1976 to Sept. 2002 (discontinued).

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

REMARKS.--Records poor. 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, 6.4 units, June 16, 2002.
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, 632 microsiemens/cm, Mar. 17; minimum, 135 microsiemens/cm, Aug. 10.
pH: Maximum, 9.0 units, Aug. 16; minimum, 6.4 units, June 16.
WATER TEMPERATURE: Maximum, 33.2°C, July 11, 24, 25; minimum, 5.8°C, Jan. 4.
DISSOLVED OXYGEN: Maximum, 15.3 mg/L, July 10; minimum, 2.7 mg/L, Aug. 10.

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	e439	481	442	465	---	---	e475	441	416	433
2	---	---	e445	474	445	461	---	---	e469	442	365	403
3	---	---	e450	484	450	467	470	462	467	491	386	429
4	---	---	e460	477	446	463	470	463	467	517	491	511
5	---	---	e470	475	442	464	469	465	467	516	502	508
6	---	---	e480	468	439	458	469	465	467	502	396	460
7	---	---	e490	502	458	486	470	455	465	429	393	400
8	---	---	e500	500	470	487	467	451	464	458	395	422
9	---	---	e510	609	415	482	465	442	461	426	397	409
10	---	364	e435	446	427	435	461	441	451	406	399	403
11	393	197	322	473	348	428	473	454	460	436	403	413
12	381	226	329	481	309	402	473	436	446	436	409	422
13	345	226	329	489	405	460	447	416	440	420	414	417
14	349	335	342	503	489	495	433	384	405	433	417	422
15	347	316	329	507	498	502	442	381	401	440	429	436
16	350	316	335	514	470	501	446	229	350	466	439	459
17	380	343	356	504	348	458	335	312	322	465	456	461
18	431	370	386	471	451	463	340	310	323	481	459	472
19	381	359	370	467	455	459	350	325	335	479	464	470
20	400	365	379	491	467	482	393	350	374	477	470	473
21	385	365	376	493	487	490	415	389	402	492	476	482
22	443	374	391	494	488	491	423	356	391	498	488	494
23	460	408	436	494	487	491	400	346	373	501	491	497
24	461	423	447	489	487	488	421	350	393	502	348	448
25	463	411	440	491	485	488	455	373	426	498	455	484
26	461	400	435	491	481	485	373	350	355	475	451	460
27	454	411	437	484	476	480	418	355	368	471	457	462
28	458	411	443	---	---	e483	500	418	474	477	461	471
29	466	421	451	---	---	e480	490	396	441	481	473	477
30	477	428	454	---	---	e478	433	383	407	483	430	479
31	477	439	460	---	---	---	431	381	397	475	159	250
MONTH	---	---	417	---	---	472	---	---	417	517	159	446

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

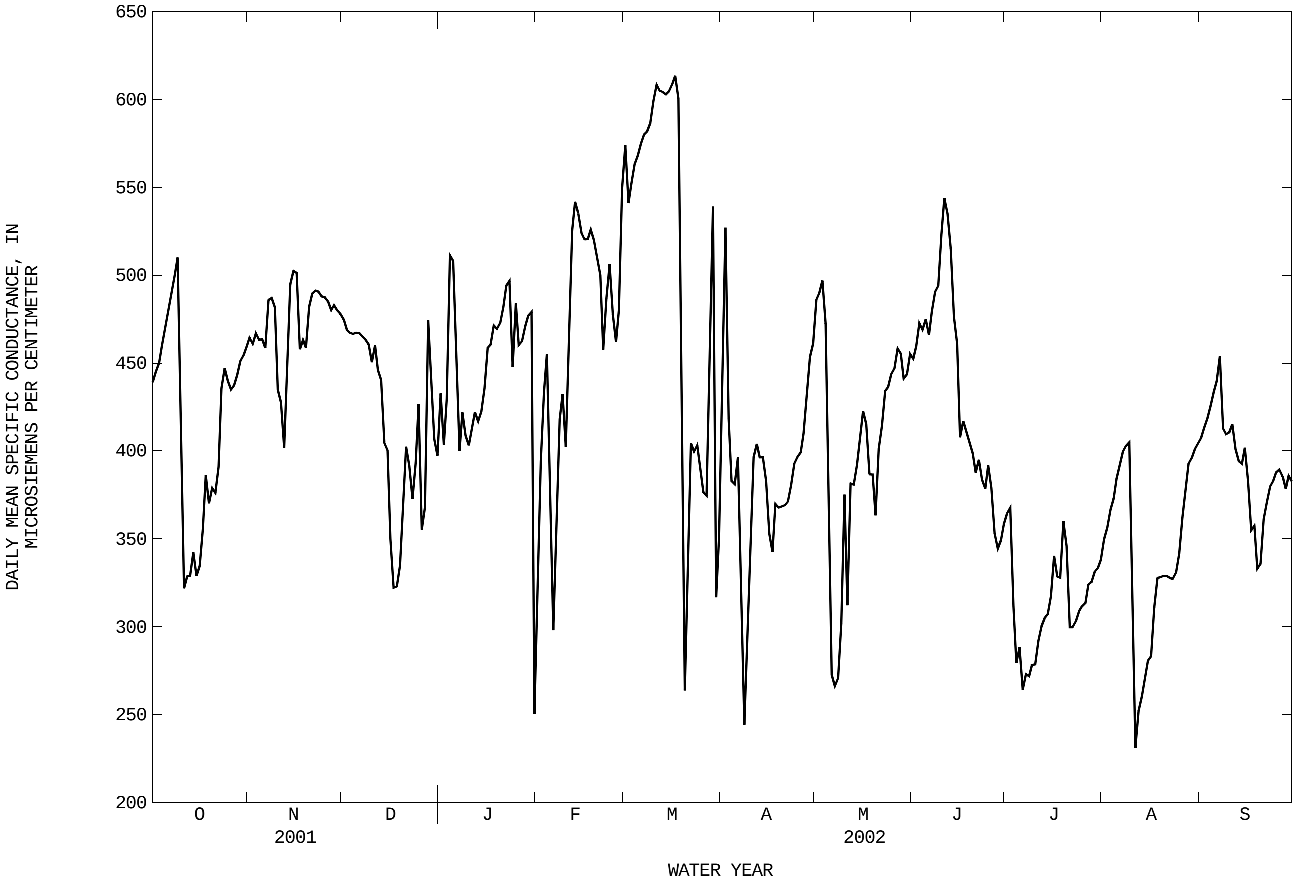
SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	351	255	307	582	559	574	531	381	463	---	---	e486
2	419	333	394	580	531	541	538	508	527	---	---	e490
3	455	419	434	562	543	552	526	353	418	---	---	e497
4	461	449	455	568	554	563	---	---	e383	---	---	e473
5	474	265	366	575	564	568	---	---	e381	---	---	e345
6	335	272	298	581	569	575	---	---	e396	---	---	e273
7	399	335	370	583	578	580	---	---	e339	---	---	e266
8	450	399	418	588	578	582	---	---	e244	336	153	271
9	452	403	432	595	579	587	---	---	e299	346	231	302
10	413	396	402	613	589	599	---	---	e351	418	300	375
11	515	404	476	611	606	609	---	---	e396	384	253	312
12	538	514	526	608	602	605	---	---	e404	392	358	381
13	550	533	542	607	602	604	---	---	e396	398	354	381
14	540	528	535	606	601	603	---	---	e396	402	382	392
15	530	520	524	609	600	605	---	---	e383	422	390	406
16	522	519	521	611	597	609	382	210	353	441	411	423
17	523	519	521	632	610	614	369	319	343	454	321	415
18	535	519	526	631	529	601	379	362	370	415	360	387
19	---	---	e520	576	154	345	381	356	368	399	353	387
20	---	---	e510	339	159	264	379	359	368	392	342	363
21	---	---	e500	396	292	352	377	361	369	423	390	401
22	465	453	458	421	384	405	386	361	371	439	405	414
23	506	464	487	420	391	400	399	362	380	456	415	434
24	523	459	506	416	388	403	---	---	e393	457	420	436
25	499	462	478	403	374	389	---	---	e396	462	426	444
26	467	457	462	388	367	377	---	---	e399	496	431	447
27	528	460	480	399	366	375	---	---	e410	485	434	458
28	560	532	550	550	380	448	---	---	e433	493	439	455
29	---	---	---	550	525	539	---	---	e453	449	434	441
30	---	---	---	532	169	317	---	---	e461	455	433	443
31	---	---	---	398	288	351	---	---	---	476	439	455
MONTH	---	---	464	632	154	501	---	---	388	---	---	402

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	467	441	453	381	346	364	---	---	e350	414	393	407
2	473	440	460	377	360	368	---	---	e356	422	408	413
3	493	457	473	373	211	312	---	---	e366	424	412	418
4	488	447	469	306	268	279	---	---	e373	431	421	426
5	493	463	475	333	239	288	---	---	e384	438	429	434
6	474	458	466	276	226	264	400	386	392	451	434	440
7	491	463	480	289	266	273	405	394	400	461	448	454
8	506	470	490	300	251	272	408	398	403	462	335	413
9	509	473	494	291	265	278	410	395	405	421	387	409
10	538	492	524	299	260	279	407	135	310	425	400	410
11	---	---	e544	317	274	292	252	214	231	425	396	415
12	---	---	e535	317	285	301	---	---	e252	411	383	401
13	534	500	515	317	297	305	---	---	e260	401	385	394
14	506	454	476	316	298	307	---	---	e270	400	377	393
15	495	431	461	335	302	317	307	269	280	407	385	402
16	443	337	408	351	329	340	296	276	283	406	348	383
17	439	406	417	339	313	328	323	290	311	366	345	355
18	438	399	411	338	319	328	333	322	328	364	348	357
19	420	376	405	---	---	e360	339	314	328	366	296	333
20	413	346	398	---	---	e346	343	313	329	359	308	336
21	409	364	388	---	---	e300	343	314	329	370	354	361
22	410	379	395	---	---	e300	342	308	328	381	362	371
23	400	363	383	---	---	e303	336	315	327	388	370	380
24	395	361	379	315	298	309	339	321	331	391	374	383
25	404	370	392	320	302	312	357	329	342	392	381	388
26	402	332	379	324	303	313	372	353	362	394	383	389
27	363	333	353	331	315	324	394	370	379	394	373	386
28	363	296	345	339	315	325	396	389	393	384	368	378
29	363	299	349	340	323	331	401	393	396	389	381	386
30	364	341	358	348	325	333	405	398	401	390	377	383
31	---	---	---	---	---	e338	409	400	404	---	---	---
MONTH	---	---	436	---	---	313	---	---	342	462	296	393

e Estimated

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



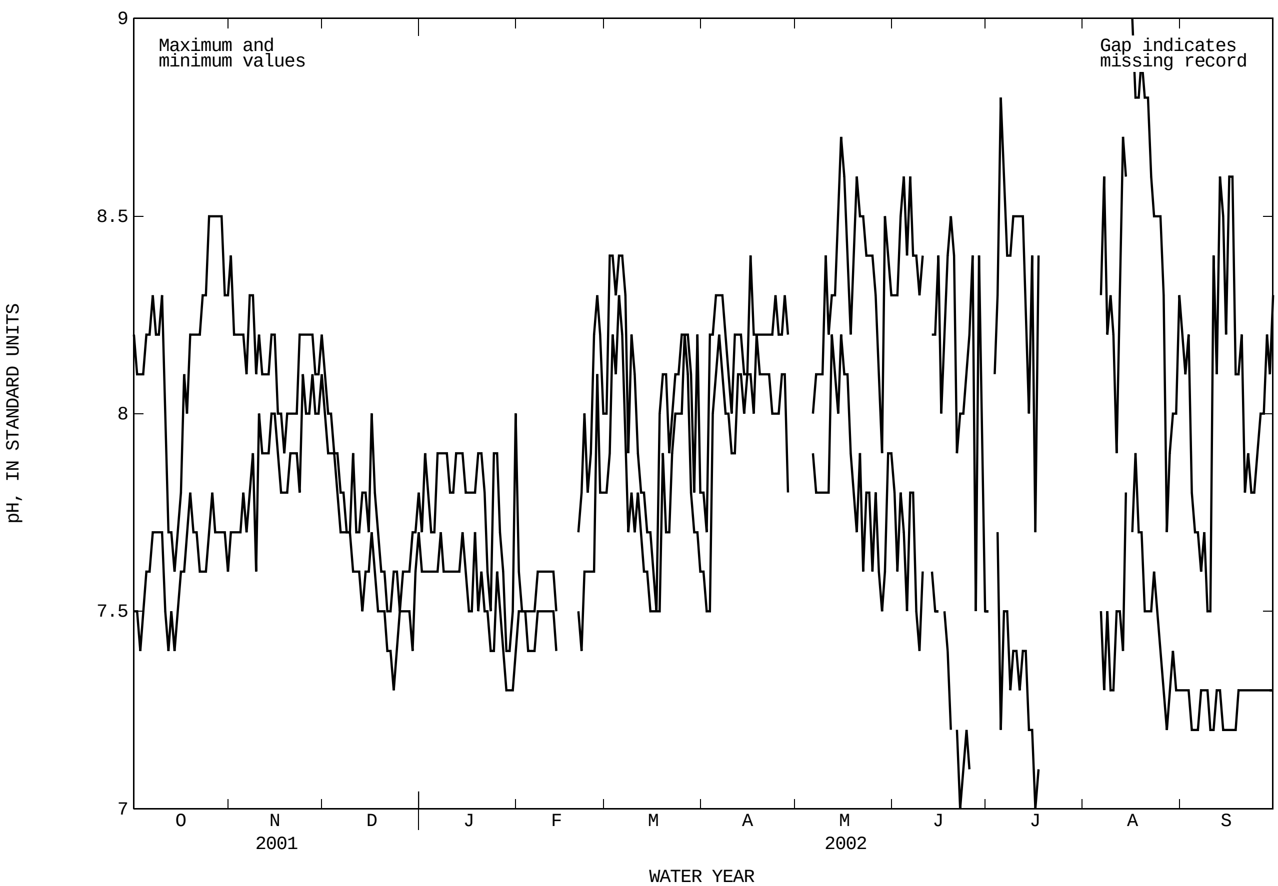
PH, WH, FIELD, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.2	7.5	8.4	7.7	8.1	8.0	7.7	7.6	7.6	7.5	8.0	7.8
2	8.1	7.5	8.2	7.7	8.0	7.9	7.9	7.6	7.5	7.5	8.4	7.9
3	8.1	7.4	8.2	7.7	8.0	7.9	7.8	7.6	7.5	7.5	8.4	8.2
4	8.1	7.5	8.2	7.7	7.9	7.9	7.7	7.6	7.5	7.4	8.3	8.1
5	8.2	7.6	8.2	7.8	7.9	7.8	7.7	7.6	7.5	7.4	8.4	8.3
6	8.2	7.6	8.1	7.7	7.8	7.7	7.9	7.6	7.5	7.4	8.4	8.2
7	8.3	7.7	8.3	7.8	7.8	7.7	7.9	7.7	7.6	7.5	8.3	7.9
8	8.2	7.7	8.3	7.9	7.7	7.7	7.9	7.6	7.6	7.5	7.9	7.7
9	8.2	7.7	8.1	7.6	7.7	7.7	7.9	7.6	7.6	7.5	8.2	7.8
10	8.3	7.7	8.2	8.0	7.9	7.6	7.8	7.6	7.6	7.5	8.1	7.7
11	8.0	7.5	8.1	7.9	7.7	7.6	7.8	7.6	7.6	7.5	7.9	7.8
12	7.7	7.4	8.1	7.9	7.7	7.6	7.9	7.6	7.6	7.5	7.8	7.7
13	7.7	7.5	8.1	7.9	7.8	7.5	7.9	7.6	7.5	7.4	7.8	7.6
14	7.6	7.4	8.2	8.0	7.8	7.6	7.9	7.7	---	---	7.7	7.6
15	7.7	7.5	8.2	8.0	7.7	7.6	7.8	7.6	---	---	7.7	7.5
16	7.8	7.6	8.0	7.9	8.0	7.7	7.8	7.5	---	---	7.6	7.5
17	8.1	7.6	8.0	7.8	7.8	7.6	7.8	7.5	---	---	7.5	7.5
18	8.0	7.7	7.9	7.8	7.7	7.5	7.8	7.7	---	---	8.0	7.5
19	8.2	7.8	8.0	7.8	7.6	7.5	7.9	7.5	---	---	8.1	7.9
20	8.2	7.7	8.0	7.9	7.6	7.5	7.9	7.6	7.7	7.5	8.1	7.7
21	8.2	7.7	8.0	7.9	7.5	7.4	7.8	7.5	7.8	7.4	7.9	7.7
22	8.2	7.6	8.0	7.9	7.5	7.4	7.6	7.5	8.0	7.6	8.0	7.9
23	8.3	7.6	8.2	7.8	7.6	7.3	7.5	7.4	7.8	7.6	8.1	8.0
24	8.3	7.6	8.2	8.1	7.6	7.4	7.9	7.4	7.9	7.6	8.1	8.0
25	8.5	7.7	8.2	8.0	7.5	7.5	7.9	7.6	8.2	7.6	8.2	8.0
26	8.5	7.8	8.2	8.0	7.6	7.5	7.7	7.5	8.3	8.1	8.2	8.2
27	8.5	7.7	8.2	8.1	7.6	7.5	7.6	7.4	8.2	7.8	8.2	8.1
28	8.5	7.7	8.1	8.0	7.6	7.5	7.4	7.3	8.0	7.8	8.1	7.8
29	8.5	7.7	8.1	8.0	7.7	7.4	7.4	7.3	---	---	7.8	7.7
30	8.3	7.7	8.2	8.1	7.7	7.6	7.5	7.3	---	---	8.2	7.7
31	8.3	7.6	---	---	7.8	7.7	8.0	7.4	---	---	7.8	7.6
MONTH	8.5	7.4	8.4	7.6	8.1	7.3	8.0	7.3	---	---	8.4	7.5

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

PH, WH, FIELD, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.8	7.6	---	---	8.3	7.8	7.5	---	---	---	8.2	7.3
2	7.7	7.5	---	---	8.3	7.6	---	---	---	---	8.1	7.3
3	8.2	7.5	---	---	8.5	7.8	8.1	---	---	---	8.2	7.3
4	8.2	8.0	---	---	8.6	7.7	8.3	7.7	---	---	7.8	7.2
5	8.3	8.1	---	---	8.4	7.5	8.8	7.2	---	---	7.7	7.2
6	8.3	8.2	8.0	7.9	8.6	7.8	8.6	7.5	8.3	7.5	7.7	7.2
7	8.3	8.1	8.1	7.8	8.4	7.8	8.4	7.5	8.6	7.3	7.6	7.3
8	8.2	8.0	8.1	7.8	8.4	7.5	8.4	7.3	8.2	7.5	7.7	7.3
9	8.1	8.0	8.1	7.8	8.3	7.4	8.5	7.4	8.3	7.3	7.5	7.3
10	8.0	7.9	8.4	7.8	8.4	7.6	8.5	7.4	8.2	7.3	7.5	7.2
11	8.2	7.9	8.2	7.8	---	---	8.5	7.3	7.9	7.5	8.4	7.2
12	8.2	8.1	8.3	8.2	---	---	8.5	7.4	8.3	7.5	8.1	7.3
13	8.2	8.1	8.3	8.1	8.2	7.6	8.3	7.4	8.7	7.4	8.6	7.3
14	8.1	8.0	8.5	8.0	8.2	7.5	8.0	7.2	8.6	7.8	8.5	7.2
15	8.1	8.1	8.7	8.2	8.4	7.5	8.4	7.2	---	---	8.2	7.2
16	8.4	8.1	8.6	8.1	8.0	---	7.7	7.0	9.0	7.7	8.6	7.2
17	8.2	8.0	8.4	8.1	8.2	7.5	8.4	7.1	8.8	7.9	8.6	7.2
18	8.2	8.2	8.2	7.9	8.4	7.4	---	---	8.8	7.7	8.1	7.2
19	8.2	8.1	8.4	7.8	8.5	7.2	---	---	8.9	7.7	8.1	7.3
20	8.2	8.1	8.6	7.7	8.4	---	---	---	8.8	7.5	8.2	7.3
21	8.2	8.1	8.5	7.9	7.9	7.2	---	---	8.8	7.5	7.8	7.3
22	8.2	8.1	8.5	7.6	8.0	7.0	---	---	8.6	7.5	7.9	7.3
23	8.2	8.0	8.4	7.8	8.0	7.1	---	---	8.5	7.6	7.8	7.3
24	8.3	8.0	8.4	7.8	8.1	7.2	---	---	8.5	7.5	7.8	7.3
25	8.2	8.0	8.4	7.6	8.2	7.1	---	---	8.5	7.4	7.9	7.3
26	8.2	8.1	8.3	7.8	8.4	---	---	---	8.3	7.3	8.0	7.3
27	8.3	8.1	8.1	7.6	7.5	7.0	---	---	7.7	7.2	8.0	7.3
28	8.2	7.8	7.9	7.5	8.4	---	---	---	7.9	7.3	8.2	7.3
29	---	---	8.5	7.6	8.1	7.0	---	---	8.0	7.4	8.1	7.3
30	---	---	8.4	7.9	7.5	---	---	---	8.0	7.3	8.3	7.3
31	---	---	8.3	7.9	---	---	---	---	8.3	7.3	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	8.6	7.2



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

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

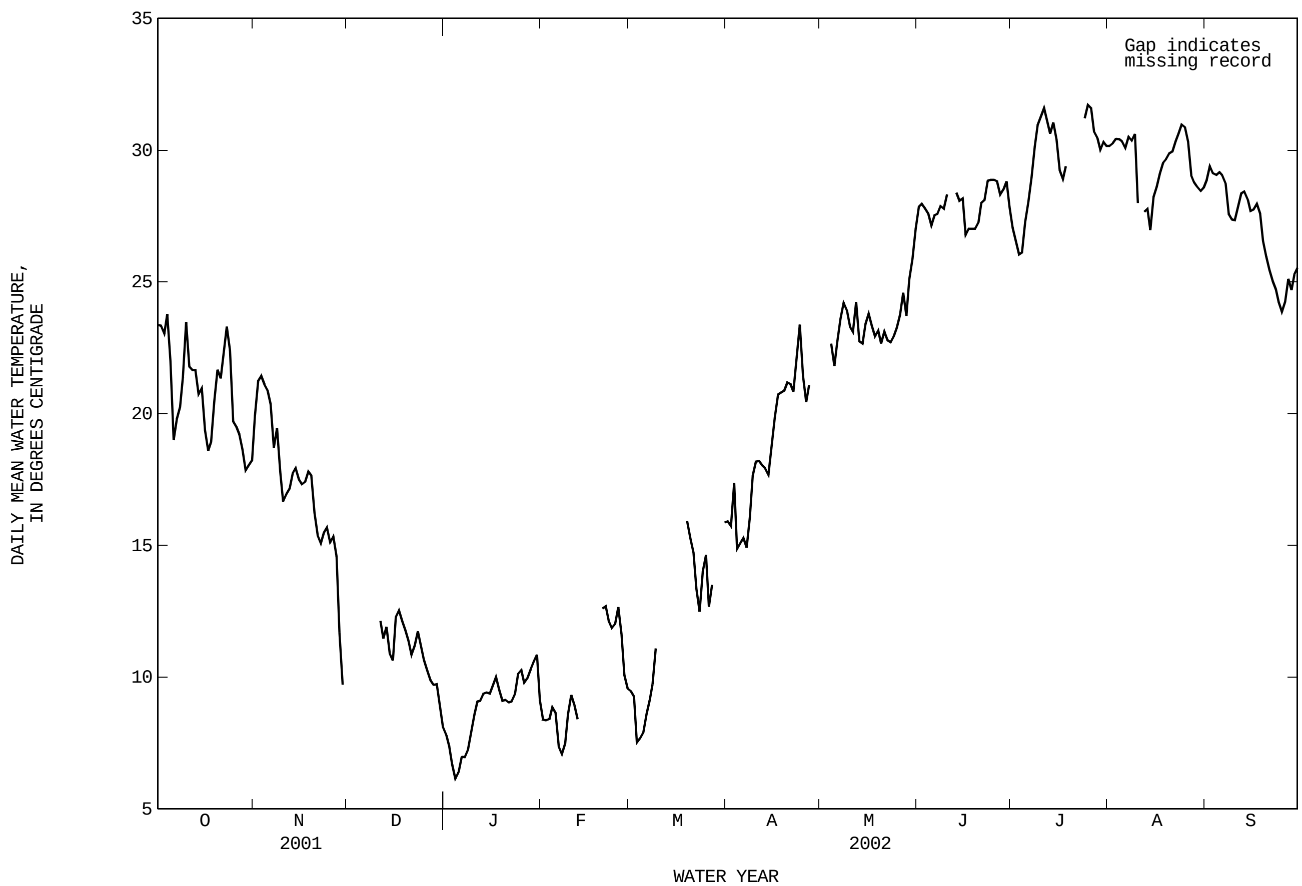
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.9	20.5	23.4	22.9	17.9	19.9	---	---	---	8.0	7.6	7.8
2	26.9	20.8	23.3	23.7	19.8	21.2	---	---	---	7.8	6.7	7.4
3	26.1	20.7	23.1	24.3	19.4	21.4	---	---	---	7.3	5.9	6.7
4	27.2	21.5	23.8	23.7	19.7	21.1	---	---	---	6.6	5.8	6.1
5	23.4	18.8	22.0	23.9	19.2	20.9	---	---	---	6.7	6.1	6.4
6	22.2	16.6	19.0	23.0	18.2	20.4	---	---	---	7.3	6.7	7.0
7	23.7	17.3	19.8	21.5	17.1	18.7	---	---	---	7.2	6.8	7.0
8	22.9	18.7	20.2	21.4	17.3	19.5	---	---	---	7.6	6.9	7.2
9	23.6	20.2	21.4	20.8	15.6	17.8	---	---	---	8.2	7.6	7.9
10	26.7	21.8	23.5	18.4	15.5	16.7	---	---	---	9.1	8.1	8.5
11	23.3	20.4	21.8	17.4	16.4	16.9	12.4	11.4	12.1	9.2	8.9	9.1
12	22.4	21.4	21.7	18.1	16.4	17.1	11.8	11.2	11.5	9.2	9.0	9.1
13	22.0	21.4	21.6	18.9	17.0	17.7	12.1	11.5	11.9	9.8	9.0	9.4
14	21.6	20.1	20.7	19.0	17.1	17.9	11.5	10.3	10.9	9.6	9.3	9.4
15	22.3	19.9	21.0	17.9	17.1	17.5	11.3	10.3	10.6	9.5	9.2	9.4
16	21.4	17.2	19.4	17.6	17.1	17.3	12.7	11.3	12.3	10.1	9.4	9.7
17	21.5	16.0	18.6	17.7	17.1	17.4	12.8	12.2	12.5	10.1	9.9	10.0
18	22.2	16.1	18.9	17.9	17.6	17.8	12.6	11.8	12.1	9.9	9.2	9.5
19	23.7	17.7	20.5	18.0	17.1	17.7	11.9	11.7	11.8	9.3	8.9	9.1
20	25.0	19.5	21.7	17.1	15.9	16.2	11.7	10.9	11.4	9.6	8.9	9.1
21	24.4	19.4	21.3	16.0	15.1	15.4	11.1	10.5	10.9	9.2	8.9	9.0
22	25.1	20.4	22.4	15.2	15.0	15.1	11.8	10.6	11.2	9.2	9.0	9.1
23	26.1	21.7	23.3	16.2	15.2	15.5	11.8	11.5	11.7	9.6	9.2	9.3
24	24.5	20.1	22.4	16.2	15.4	15.7	11.5	10.6	11.2	10.8	9.6	10.1
25	22.5	17.4	19.7	15.5	15.0	15.1	11.0	10.3	10.6	10.5	9.8	10.3
26	22.8	17.2	19.5	15.7	15.0	15.3	10.9	10.0	10.3	10.0	9.6	9.8
27	22.2	17.7	19.2	15.5	13.7	14.6	10.1	9.8	9.9	10.2	9.8	10
28	22.0	16.9	18.6	13.7	9.9	11.7	9.9	9.5	9.7	10.5	10.0	10.3
29	21.1	16.1	17.8	10.4	9.3	9.7	10.0	9.4	9.7	10.7	10.4	10.6
30	21.5	15.5	18.0	---	---	---	9.5	8.5	8.9	12.2	10.7	10.8
31	20.1	16.4	18.2	---	---	---	8.6	8.0	8.1	12.2	8.0	9.1
MONTH	27.2	15.5	20.8	---	---	---	---	---	---	12.2	5.8	8.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.8	8.0	8.4	9.7	9.3	9.5	16.4	15.7	15.9	---	---	---
2	8.9	8.0	8.4	10.1	8.1	9.3	16.2	15.7	15.7	---	---	---
3	8.7	8.1	8.4	8.1	7.2	7.5	18.3	15.2	17.4	25.6	---	---
4	9.1	8.7	8.9	8.1	7.3	7.7	15.3	14.5	14.9	25.6	19.2	22.7
5	9.7	7.7	8.7	8.5	7.4	7.9	15.8	14.4	15.1	24.0	20.3	21.8
6	8.0	6.8	7.4	9.2	8.1	8.6	15.6	14.5	15.3	24.2	21.7	22.7
7	7.5	6.8	7.1	9.4	8.9	9.1	16.2	13.7	14.9	25.0	22.6	23.6
8	8.0	7.0	7.5	10.1	9.4	9.7	17.2	15.3	16.1	25.5	23.2	24.2
9	10.1	7.9	8.6	12.5	10.0	11.1	19.6	16.3	17.7	24.6	21.0	23.9
10	9.9	9.0	9.3	---	---	---	19.6	17.6	18.2	24.9	19.0	23.3
11	9.3	8.3	8.9	---	---	---	19.0	17.4	18.2	24.1	22.1	23.1
12	8.6	8.3	8.4	---	---	---	19.1	17.3	18.0	24.7	23.6	24.2
13	---	---	---	---	---	---	18.4	17.1	17.9	23.6	21.9	22.8
14	---	---	---	---	---	---	18.4	17.0	17.7	23.8	22.1	22.7
15	---	---	---	---	---	---	19.2	18.2	18.7	24.8	22.5	23.4
16	---	---	---	---	---	---	21.1	19.2	19.9	25.4	22.6	23.8
17	---	---	---	---	---	---	21.3	20.1	20.7	24.3	20.5	23.3
18	---	---	---	---	---	---	21.0	20.5	20.8	23.9	22.3	22.9
19	12.9	---	---	16.4	15.4	15.9	21.4	20.5	20.9	24.6	22.3	23.1
20	12.8	12.4	12.6	15.6	14.9	15.3	21.9	20.7	21.2	23.9	21.5	22.7
21	12.9	12.6	12.7	15.2	14.2	14.7	21.4	20.8	21.1	24.2	22.4	23.1
22	12.6	11.9	12.1	14.4	11.9	13.4	21.7	20.2	20.8	24.0	22.0	22.8
23	11.9	11.8	11.9	13.5	11.7	12.5	24.8	20.5	22.2	23.7	22.1	22.7
24	12.3	11.9	12.0	15.3	13.1	14.0	26.0	21.7	23.4	23.8	22.5	22.9
25	13.3	12.1	12.7	15.1	13.5	14.6	21.9	20.9	21.4	25.0	22.5	23.3
26	12.7	10.7	11.6	13.5	12.1	12.7	21.3	19.6	20.4	25.1	23.0	23.7
27	10.7	9.5	10.1	14.4	12.7	13.5	22.5	20.0	21.1	25.5	23.5	24.6
28	9.8	9.3	9.6	---	---	---	---	---	---	24.4	23.2	23.7
29	---	---	---	---	---	---	---	---	---	27.9	23.5	25.1
30	---	---	---	17.2	---	---	---	---	---	26.8	24.9	25.9
31	---	---	---	16.5	15.6	15.9	---	---	---	27.8	26.4	27.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

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

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.7	27.1	27.9	27.7	26.4	27.0	31.8	29.0	30.2	31.1	28.0	28.9
2	29.0	26.9	28.0	27.0	26.0	26.5	31.6	29.0	30.3	31.5	28.2	29.4
3	29.1	27.0	27.8	26.7	24.2	26.0	31.6	29.6	30.4	30.7	28.5	29.1
4	28.9	26.8	27.6	27.0	25.4	26.1	31.9	29.7	30.4	29.8	28.5	29.1
5	28.3	26.3	27.1	29.0	26.5	27.3	31.7	29.8	30.3	29.6	28.6	29.2
6	29.1	26.5	27.5	29.3	26.9	28.0	30.9	29.4	30.1	29.5	28.6	29.1
7	28.6	26.9	27.6	30.2	28.4	29.0	31.7	29.6	30.5	29.1	28.5	28.8
8	29.0	27.0	27.9	31.7	29.4	30.1	31.0	29.9	30.4	28.5	26.5	27.6
9	29.2	26.7	27.8	32.0	30.2	31.0	32.3	29.4	30.6	27.9	26.9	27.4
10	29.3	27.3	28.3	32.2	30.5	31.3	30.7	25.1	28.0	28.0	26.9	27.4
11	---	---	---	33.2	30.2	31.6	---	25.6	---	29.7	26.8	27.8
12	29.6	---	---	32.7	30.3	31.1	29.8	25.9	27.7	29.5	27.5	28.4
13	30.3	27.7	28.4	31.5	30.0	30.6	29.6	26.3	27.8	30.2	27.4	28.4
14	28.7	27.4	28.1	32.8	29.9	31.0	28.3	24.9	27.0	29.9	27.3	28.1
15	29.4	27.4	28.2	31.4	29.7	30.4	29.6	27.6	28.2	28.6	27.1	27.7
16	28.4	25.0	26.8	29.7	28.9	29.2	30.3	27.3	28.6	28.7	27.2	27.7
17	27.8	26.4	27.0	29.7	28.3	28.9	30.5	28.1	29.1	29.3	27.0	28.0
18	28.4	26.4	27.0	30.8	28.3	29.4	31.4	28.0	29.5	28.5	26.9	27.6
19	28.9	26.0	27.0	---	28.4	---	31.2	28.5	29.7	27.5	25.7	26.6
20	29.2	26.2	27.2	---	---	---	31.5	28.6	29.9	27.3	25.0	26.0
21	28.7	27.5	28.0	---	---	---	31.7	28.6	29.9	26.6	24.8	25.5
22	29.0	27.2	28.1	---	---	---	32.6	28.9	30.3	25.5	24.6	25.0
23	30.6	27.8	28.8	32.9	---	---	33.0	29.1	30.6	25.0	24.4	24.7
24	29.9	28.1	28.9	33.2	29.7	31.2	32.8	29.7	31.0	24.5	23.9	24.2
25	30.4	27.8	28.9	33.2	30.5	31.7	32.9	29.8	30.9	24.4	23.5	23.9
26	30.3	28.0	28.8	32.7	30.7	31.6	32.3	29.5	30.3	25.1	23.5	24.2
27	29.1	27.7	28.3	31.9	29.8	30.7	29.6	28.6	29.1	28.2	23.9	25.1
28	29.5	28.1	28.5	31.3	29.7	30.5	29.6	28.3	28.8	26.7	23.9	24.7
29	30.0	28.1	28.8	30.7	29.3	30.0	29.2	28.2	28.6	27.6	23.8	25.3
30	28.4	26.8	27.9	31.5	29.4	30.3	28.8	28.0	28.5	26.9	24.5	25.5
31	---	---	---	31.5	28.8	30.2	30.3	27.9	28.6	---	---	---
MONTH	---	---	---	---	---	---	---	24.9	---	31.5	23.5	27.0



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

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

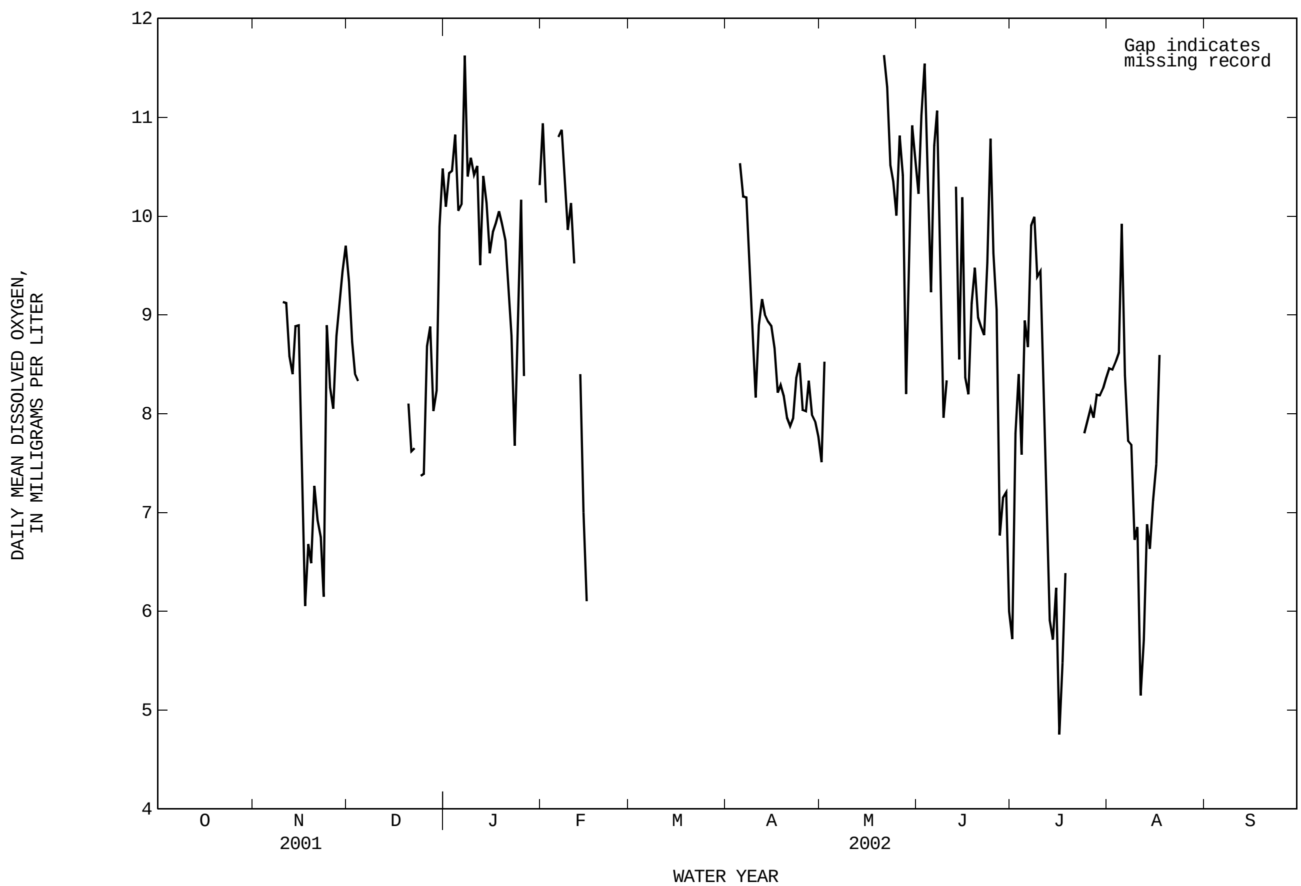
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	9.8	8.7	9.3	10.8	9.3	10.1
2	---	---	---	---	---	---	9.0	8.2	8.7	11.7	9.1	10.4
3	---	---	---	---	---	---	8.7	8.3	8.4	11.5	9.6	10.5
4	---	---	---	---	---	---	8.5	8.2	8.3	11.1	10.5	10.8
5	---	---	---	---	---	---	---	---	---	10.7	9.4	10.1
6	---	---	---	---	---	---	---	---	---	12.0	8.9	10.1
7	---	---	---	---	---	---	---	---	---	12.0	10.4	11.6
8	---	---	---	---	---	---	---	---	---	11.7	9.3	10.4
9	---	---	---	---	---	---	---	---	---	11.6	8.9	10.6
10	---	---	---	10.0	8.5	9.1	---	---	---	11.1	9.7	10.4
11	---	---	---	9.8	8.5	9.1	---	---	---	11.2	9.3	10.5
12	---	---	---	8.9	8.3	8.6	---	---	---	10.7	8.5	9.5
13	---	---	---	9.1	8.0	8.4	---	---	---	11.4	8.9	10.4
14	---	---	---	9.4	8.3	8.9	---	---	---	11.3	9.4	10.1
15	---	---	---	9.2	8.6	8.9	---	---	---	10.5	8.5	9.6
16	---	---	---	8.6	6.1	7.2	---	---	---	10.5	8.8	9.8
17	---	---	---	7.4	4.9	6.1	---	---	---	10.7	8.7	9.9
18	---	---	---	7.3	6.1	6.7	---	---	---	10.4	9.3	10.0
19	---	---	---	7.4	4.8	6.5	---	---	---	10.7	8.5	9.9
20	---	---	---	7.8	6.4	7.3	8.4	7.6	8.1	10.6	8.5	9.8
21	---	---	---	7.3	6.3	6.9	8.2	7.0	7.6	9.9	8.8	9.3
22	---	---	---	7.4	6.0	6.8	8.2	6.9	7.7	9.2	8.2	8.8
23	---	---	---	7.8	5.6	6.1	8.0	---	---	8.5	7.2	7.7
24	---	---	---	9.2	7.8	8.9	8.0	6.4	7.4	11.0	7.1	8.8
25	---	---	---	8.8	7.9	8.3	7.6	7.2	7.4	11.0	8.7	10.2
26	---	---	---	8.8	7.5	8.0	9.1	7.4	8.7	9.0	7.5	8.4
27	---	---	---	9.0	8.4	8.8	9.2	7.7	8.9	---	---	---
28	---	---	---	9.7	8.7	9.1	8.7	7.5	8.0	---	---	---
29	---	---	---	9.8	9.2	9.4	9.8	6.9	8.2	---	---	---
30	---	---	---	10.1	9.3	9.7	10.4	9.1	9.9	---	---	---
31	---	---	---	---	---	---	10.9	10.0	10.5	11.3	4.4	10.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.1	10.6	10.9	---	---	---	---	---	---	8.2	6.9	7.5
2	10.6	9.9	10.1	---	---	---	---	---	---	9.5	7.5	8.5
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	11.8	9.9	10.5	---	---	---
6	11.1	10.3	10.8	---	---	---	10.5	9.9	10.2	---	---	---
7	11.1	10.8	10.9	---	---	---	10.8	9.3	10.2	---	---	---
8	10.8	10.0	10.3	---	---	---	10.0	8.4	9.4	---	---	---
9	10.2	9.5	9.9	---	---	---	8.9	8.4	8.7	---	---	---
10	10.3	9.9	10.1	---	---	---	8.5	7.9	8.2	---	---	---
11	9.9	9.3	9.5	---	---	---	9.4	8.2	8.9	---	---	---
12	---	---	---	---	---	---	9.3	8.9	9.2	---	---	---
13	8.7	7.8	8.4	---	---	---	9.2	8.7	9.0	---	---	---
14	7.8	6.5	7.0	---	---	---	9.2	8.4	8.9	---	---	---
15	6.6	5.4	6.1	---	---	---	9.2	8.6	8.9	---	---	---
16	---	---	---	---	---	---	9.1	8.3	8.7	---	---	---
17	---	---	---	---	---	---	8.6	7.6	8.2	---	---	---
18	---	---	---	---	---	---	8.5	8.0	8.3	---	---	---
19	---	---	---	---	---	---	8.6	7.8	8.2	---	---	---
20	---	---	---	---	---	---	8.3	7.5	8.0	---	---	---
21	---	---	---	---	---	---	8.1	7.6	7.9	12.8	10.3	11.6
22	---	---	---	---	---	---	8.8	7.3	8.0	13.3	10.0	11.3
23	---	---	---	---	---	---	9.3	7.8	8.4	12.0	9.2	10.5
24	---	---	---	---	---	---	9.5	7.6	8.5	11.6	9.3	10.4
25	---	---	---	---	---	---	9.2	7.5	8.0	12.0	8.2	10.0
26	---	---	---	---	---	---	8.6	7.3	8.0	12.6	8.5	10.8
27	---	---	---	---	---	---	9.1	7.5	8.3	11.6	8.7	10.4
28	---	---	---	---	---	---	8.6	7.5	8.0	9.4	7.1	8.2
29	---	---	---	---	---	---	8.7	7.2	7.9	11.4	7.6	9.2
30	---	---	---	---	---	---	8.4	7.2	7.8	12.1	9.3	10.9
31	---	---	---	---	---	---	---	---	---	11.8	9.6	10.6
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

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

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.7	8.0	10.2	8.3	4.8	5.7	9.2	8.0	8.5	---	---	---
2	13.3	7.9	11.0	9.8	5.4	7.8	9.2	8.1	8.4	---	---	---
3	14.6	9.0	11.5	9.1	7.6	8.4	9.3	8.2	8.5	---	---	---
4	13.8	6.9	10.5	9.4	6.8	7.6	9.1	8.3	8.6	---	---	---
5	11.7	6.5	9.2	12.0	5.9	8.9	13.4	8.5	9.9	---	---	---
6	13.9	8.1	10.7	11.2	6.7	8.7	11.3	5.3	8.4	---	---	---
7	14.4	9.1	11.1	13.1	7.9	9.9	12.0	3.6	7.7	---	---	---
8	13.5	5.2	9.6	13.1	6.8	10	10.1	5.3	7.7	---	---	---
9	12.5	4.2	8.0	13.6	5.7	9.4	12.5	2.8	6.7	---	---	---
10	10.2	5.9	8.3	15.3	5.1	9.4	10.3	2.7	6.8	---	---	---
11	---	---	---	11.3	4.7	8.3	6.6	3.3	5.1	---	---	---
12	12.7	---	---	10.6	4.9	6.8	8.0	4.2	5.7	---	---	---
13	11.9	9.0	10.3	8.4	4.7	5.9	10.9	3.9	6.9	---	---	---
14	9.8	7.3	8.5	9.3	4.5	5.7	9.2	4.4	6.6	---	---	---
15	13.4	7.0	10.2	10.2	4.0	6.2	10.8	5.2	7.1	---	---	---
16	12.9	6.8	8.4	6.8	3.8	4.7	10.7	4.3	7.5	---	---	---
17	9.8	6.7	8.2	10.3	3.7	5.5	10.9	6.0	8.6	---	---	---
18	12.6	7.0	9.1	8.3	4.1	6.4	---	---	---	---	---	---
19	14.8	6.4	9.5	---	---	---	---	---	---	---	---	---
20	13.8	6.6	9.0	---	---	---	---	---	---	---	---	---
21	11.1	6.9	8.9	---	---	---	---	---	---	---	---	---
22	11.9	6.3	8.8	---	---	---	---	---	---	---	---	---
23	14.9	6.2	9.5	---	---	---	---	---	---	---	---	---
24	14.3	7.9	10.8	8.3	7.3	7.8	---	---	---	---	---	---
25	13.4	6.6	9.6	8.4	7.4	7.9	---	---	---	---	---	---
26	13.2	6.7	9.0	8.5	7.6	8.1	---	---	---	---	---	---
27	7.8	5.9	6.8	8.7	7.4	8.0	---	---	---	---	---	---
28	11.6	5.9	7.1	8.7	7.7	8.2	---	---	---	---	---	---
29	10.5	4.8	7.2	8.7	7.6	8.2	---	---	---	---	---	---
30	10.6	4.1	6.0	9.1	7.8	8.3	---	---	---	---	---	---
31	---	---	---	9.0	7.9	8.4	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---



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^2.

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^3/s at 21.96 ft: Peak discharge WY 2000, 10,600 ft^3/s.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 589.93 ft above NGVD of 1929 (Tarrant County Public Works Department reference mark). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.39	2.3	0.50	0.22	174	3.7	69	9.4	7.8	79	0.00	0.00
2	0.42	2.3	0.38	0.23	58	5.5	38	7.9	6.6	52	0.00	0.00
3	0.56	2.5	0.23	0.21	28	5.1	24	65	6.0	158	0.00	0.00
4	0.56	2.6	1.7	0.17	17	3.7	19	30	5.7	56	0.00	0.00
5	1.0	2.6	2.5	0.36	146	3.5	17	668	5.6	10	0.00	0.00
6	1.7	2.5	2.0	1.3	328	3.5	59	105	5.2	6.0	0.00	0.00
7	3.6	2.5	3.7	0.47	117	3.4	1650	41	4.8	4.3	0.00	0.00
8	2.8	2.6	1.3	0.22	62	3.8	1170	23	4.5	3.2	1.6	16
9	1.8	4.0	0.53	2.5	35	4.3	113	18	4.2	2.6	1.1	3.2
10	1.4	2.7	0.23	0.31	20	3.4	69	2090	4.2	1.3	435	0.00
11	58	2.6	0.17	0.26	13	3.1	56	144	3.7	0.75	92	0.00
12	15	14	4.7	0.42	12	3.6	44	84	3.3	0.80	8.0	0.00
13	141	6.4	3.7	0.20	9.5	3.7	69	84	3.2	2.6	3.1	0.00
14	13	2.4	12	0.10	8.7	3.7	86	65	4.8	2.7	0.79	0.00
15	3.5	1.4	3.5	0.11	8.1	4.0	51	41	3.4	0.53	23	0.00
16	1.1	14	271	0.12	7.2	3.9	37	30	45	0.92	1.7	0.00
17	0.08	8.8	107	0.23	6.4	3.8	42	195	7.5	3.1	0.00	0.00
18	0.11	4.8	32	0.23	5.8	126	31	99	4.0	2.2	0.00	0.00
19	0.28	1.5	10	0.34	5.8	2790	25	47	3.3	1.2	0.00	2.0
20	0.26	0.28	5.3	0.15	4.8	1920	23	26	2.6	0.28	0.00	1.7
21	0.44	0.34	3.7	0.10	4.2	109	21	20	2.2	0.05	0.00	0.00
22	1.7	1.7	3.1	0.08	4.2	57	19	16	1.5	0.01	0.00	0.00
23	1.7	1.7	2.2	0.12	3.9	37	17	14	0.81	0.00	0.00	0.00
24	1.4	0.96	1.6	44	3.4	29	15	13	0.66	0.00	0.00	0.00
25	1.2	0.52	0.81	31	3.5	23	13	12	0.50	0.00	0.00	0.00
26	1.2	0.74	0.69	5.0	3.3	18	31	13	0.46	0.00	0.00	0.00
27	0.92	1.5	0.43	2.8	3.0	16	17	12	9.9	0.00	0.00	0.00
28	0.75	10	0.46	1.6	3.4	14	13	45	22	0.00	0.00	0.00
29	0.65	13	0.89	1.2	---	14	11	37	24	0.00	0.00	0.00
30	0.59	2.7	0.34	0.83	---	644	14	16	14	0.00	0.00	0.00
31	1.2	---	0.24	2100	---	234	---	9.8	---	0.00	0.00	---
TOTAL	258.31	115.94	476.90	2194.88	1095.2	6096.7	3863	4080.1	211.43	387.54	566.29	22.90
MEAN	8.333	3.865	15.38	70.80	39.11	196.7	128.8	131.6	7.048	12.50	18.27	0.763
MAX	141	14	271	2100	328	2790	1650	2090	45	158	435	16
MIN	0.08	0.28	0.17	0.08	3.0	3.1	11	7.9	0.46	0.00	0.00	0.00
AC-FT	512	230	946	4350	2170	12090	7660	8090	419	769	1120	45

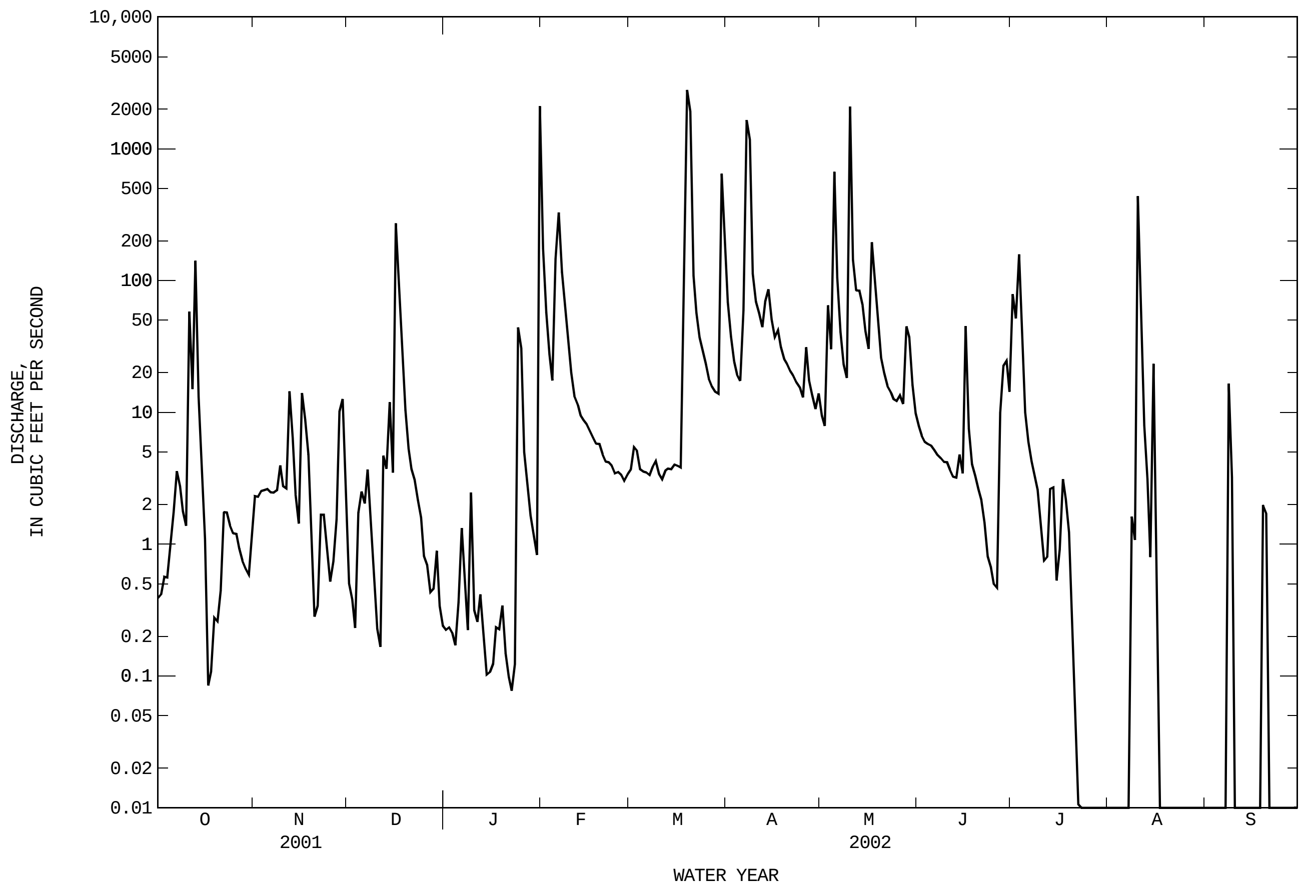
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	30.08	16.15	42.98	28.01	64.01	69.13	57.07	71.37	45.14	5.706	7.384	4.439
MAX	240	52.1	367	117	165	195	233	339	296	14.3	37.7	15.5
(WY)	1992	1995	1992	1992	1997	2002	1990	1990	2000	1993	2001	2001
MIN	0.68	0.34	0.72	0.83	1.32	1.13	2.70	0.59	0.19	0.000	0.000	0.000
(WY)	1990	2000	1991	1996	1996	1996	1996	1996	1998	1998	1998	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1990 - 2002	
ANNUAL TOTAL	13234.69		19369.19			
ANNUAL MEAN	36.26		53.07		36.65	
HIGHEST ANNUAL MEAN					92.6	1992
LOWEST ANNUAL MEAN					1.37	1996
HIGHEST DAILY MEAN	2280	Feb 16	2790	Mar 19	7330	Jun 4 2000
LOWEST DAILY MEAN	0.00	Jul 21	0.00	Jul 23	0.00	Aug 18 1990
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 21	0.00	Jul 23	0.00	Aug 25 1990
MAXIMUM PEAK FLOW			8830	Mar 19	c11400	Dec 20 1991
MAXIMUM PEAK STAGE			19.74	Mar 19	21.96	Dec 20 1991
ANNUAL RUNOFF (AC-FT)	26250		38420		26550	
10 PERCENT EXCEEDS	75		60		47	
50 PERCENT EXCEEDS	5.6		3.2		3.4	
90 PERCENT EXCEEDS	0.11		0.00		0.00	

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

08048970 Village Creek at Everman, TX--Continued



08048970 Village Creek at Everman, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1989 to current year.
BIOCHEMICAL DATA: Oct. 1989 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Oct. 1989 to Sept. 1990.
pH: Oct. 1989 to Sept. 1990.
WATER TEMPERATURE: Oct. 1989 to Sept. 1990.
DISSOLVED OXYGEN: Oct. 1989 to Sept. 1990.

INSTRUMENTATION.--Water-quality monitor Oct. 1989 to Sept. 1990.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,000 microsiemens/cm, on several days during Jan. and May 1990; minimum, 129 microsiemens/cm, May 3, 1990.
pH: Maximum, 9.1 units, Jan. 13, 1990; minimum, 7.0 units, Nov. 22, 1989.
WATER TEMPERATURE: Maximum, 34.5°C, July 11, 1990; minimum, 0.5°C, Dec. 22, 1989.
DISSOLVED OXYGEN: Maximum, 20.8 mg/L, Feb. 25, 1990; minimum, 2.4 mg/L, Nov. 8, 1989.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV													
08...	0910	2.4	614	8.0	16.0	6.7	69	<2.0	190	4	59.6	9.58	53.5
FEB													
13...	0940	9.7	655	8.2	7.0	12.6	105	<2.0	250	30	83.2	9.39	47.7
MAR													
21...	0930	110	393	8.1	12.5	9.4	89	5.3	150	22	49.6	5.60	23.4
MAY													
07...	1015	41	500	8.0	23.5	7.2	87	4.2	170	30	57.3	7.51	33.3
JUN													
04...	0930	6.0	795	8.0	25.0	6.4	80	2.5	250	49	76.1	15.2	66.8
AUG													
28...	1320	E1.0	552	8.1	29.5	7.1	94	3.3	130	28	38.7	7.87	56.8

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
NOV													
08...	2	37	4.63	1	222	184	56.4	47.7	.4	6.2	--	348	--
FEB													
13...	1	29	4.45	2	259	216	78.0	38.5	.3	8.2	--	407	--
MAR													
21...	.8	25	4.81	<1	152	127	37.5	17.1	.3	9.86	252	227	50
MAY													
07...	1	29	5.22	2	170	144	51.2	26.4	.3	9.54	291	280	32
JUN													
04...	2	36	3.31	1	246	204	111	55.9	.4	5.98	512	458	27
AUG													
28...	2	48	5.31	1	120	101	61.8	58.0	.4	5.90	308	295	<10

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,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)	ORTHO-PHOS-PHATE, 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)
NOV													
08...	--	<.008	E.04	<.04	--	.28	--	--	<.06	.02	.067	--	--
FEB													
13...	1.66	.009	1.67	<.04	--	.35	--	--	.100	.09	.267	--	--
MAR													
21...	.76	.020	.78	.07	.65	.72	--	--	.174	.14	.442	10.0	3
MAY													
07...	.60	.021	.62	E.03	--	.53	--	--	.11	.10	.297	--	2
JUN													
04...	.31	.009	.32	<.04	--	.29	--	--	<.06	<.02	--	5.4	--
AUG													
28...	--	<.008	<.05	<.04	--	.43	.62	E.05	E.04	<.02	--	6.8	--

08048970 Village Creek at Everman, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	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)
NOV													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
21...	.19	2n	46	<.06	<.04	<.8	.33	2.4	26	E.04	5.9	<.01	1.0
MAY													
07...	.20	E2	52	<.06	<.04	<.8	.35	2.0	12	E.04	2.1	<.01	1.1
JUN													
04...	--	--	--	--	--	--	--	--	<10	--	E.9n	--	--
AUG													
28...	--	--	--	--	--	--	--	--	56	--	25.7	<.01	--

Date	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)
NOV					
08...	--	--	--	--	--
FEB					
13...	--	--	--	--	--
MAR					
21...	1.31	E1	<1	2	.81
MAY					
07...	2.19	<2	<1	3	.80
JUN					
04...	--	--	--	--	--
AUG					
28...	--	--	--	--	--

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
n -- Below the NDV

08049200 Lake Arlington at Arlington, TX

LOCATION.--Lat 32°42'58", long 97°11'32", Tarrant County, Hydrologic Unit 12030102, 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^2.

PERIOD OF RECORD.--
CHEMICAL DATA: Jan. 1964 to June 2002 (discountinued).
BIOCHEMICAL DATA: Jan. 1964 to June 2002 (discountinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

324304097113601 -- Lk Arlington Site AC

Date	Time	RESER-VOIR STORAGE (AC-FT) (00054)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	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)
FEB													
07...	1321	39100	.41	1.00	285	8.2	12.0	9.8	92	100	11	35.4	3.44
07...	1326	--	--	10.0	283	8.0	11.0	9.3	85	--	--	--	--
07...	1332	--	--	20.0	279	8.0	10.5	9.2	83	--	--	--	--
07...	1338	--	--	30.0	279	8.0	10.0	9.0	81	--	--	--	--
07...	1344	--	--	40.0	260	7.8	10.0	6.7	60	--	--	--	--
07...	1351	--	--	45.0	250	7.7	10.0	6.0	54	91	9	31.7	2.95
MAR													
28...	1248	38900	.55	1.00	270	7.9	17.0	10.8	114	100	13	36.2	3.38
28...	1253	--	--	10.0	270	7.9	17.0	10.8	114	--	--	--	--
28...	1257	--	--	20.0	270	7.8	16.5	10.5	110	--	--	--	--
28...	1302	--	--	30.0	270	7.8	16.0	9.9	103	--	--	--	--
28...	1306	--	--	44.0	270	7.7	15.5	9.0	92	110	14	36.6	3.41
JUN													
25...	1043	36900	1.46	1.00	295	8.5	31.5	8.6	119	100	11	34.9	4.30
25...	1048	--	--	10.0	292	8.6	30.5	8.8	120	--	--	--	--
25...	1054	--	--	20.0	317	7.4	27.5	.8	10	--	--	--	--
25...	1100	--	--	30.0	332	7.4	24.0	2.0	24	--	--	--	--
25...	1105	--	--	42.0	341	7.5	22.5	.2	2	130	--	45.3	4.34

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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
07...	13.2	.6	21	3.91	--	--	91	28.5	10.8	.2	3.8	155	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	11.2	.5	20	3.76	<1	100	83	23.9	10.5	.2	5.0	140	.34
MAR													
28...	13.2	.6	21	4.05	<1	111	92	25.9	10.0	.2	4.3	153	.27
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	13.3	.6	21	4.06	<1	112	92	26.0	10.1	.2	4.4	155	.27
JUN													
25...	16.2	.7	24	4.34	3	109	95	29.4	13.5	.2	1.2	161	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	15.0	.6	19	4.23	<1	164	135	18.9	12.4	.2	8.5	195	--

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

324304097113601 -- Lk Arlington Site AC

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)	ORTHO-PHOS-PHATE, 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										
07...	E.006	.26	E.03	--	.36	<.06	E.01	--	<10	E1.8b
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--
07...	.009	.35	.16	.45	.61	.06	.04	.132	E10	8.6
MAR										
28...	.015	.29	.08	.43	.51	E.05	.05	.156	E8	E1.5n
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--
28...	.017	.29	.13	.41	.54	E.05	.05	.150	E10	3.4
JUN										
25...	<.008	<.05	<.04	--	.34	<.06	<.02	--	<10	<2.0
25...	<.008	<.05	<.04	--	.32	<.06	<.02	--	<10	7.5
25...	<.008	E.04	<.04	--	.32	<.06	<.02	--	35	37.3
25...	--	--	--	--	--	--	--	--	--	--
25...	<.008	<.05	.91	.50	1.4	.35	.29	.892	1900	1620

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)
FEB							
07...	1359	1.00	284	8.2	12.0	10.0	94
07...	1401	10.0	285	8.0	11.0	9.3	85
07...	1403	20.0	280	8.0	10.5	9.0	81
07...	1405	34.0	280	8.0	10.0	8.8	79
MAR							
28...	1318	1.00	270	8.0	17.5	9.4	101
28...	1322	10.0	270	7.9	17.0	8.6	91
28...	1327	30.0	270	7.9	16.5	8.4	88
28...	1332	30.0	270	7.8	16.0	8.3	86
28...	1338	36.0	271	7.7	15.5	9.0	92
JUN							
25...	1114	1.00	295	8.6	31.0	7.5	103
25...	1116	10.0	292	8.5	30.5	7.5	102
25...	1119	20.0	318	7.5	27.5	.3	4
25...	1121	31.0	329	7.5	24.5	.2	2

324253097121801 -- Lk Arlington Site BC

Date	Time	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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								
07...	1414	.30	1.00	282	8.2	12.0	10.1	95
07...	1416	--	10.0	282	8.2	12.0	10.0	94
07...	1419	--	20.0	279	8.0	10.5	9.0	81
07...	1421	--	30.0	251	7.8	10.0	7.3	65
07...	1425	--	38.0	271	7.8	9.5	7.9	70
MAR								
28...	1353	.49	1.00	271	7.8	17.0	8.1	86
28...	1355	--	10.0	270	7.8	17.0	8.0	85
28...	1358	--	20.0	270	7.8	16.0	7.8	81
28...	1400	--	30.0	270	7.8	15.5	7.6	78
28...	1402	--	39.0	271	7.7	15.5	6.9	71
JUN								
25...	1130	.98	1.00	295	8.6	31.5	7.3	101
25...	1132	--	10.0	297	8.3	30.0	6.4	86
25...	1134	--	20.0	312	7.5	28.0	1.4	18
25...	1137	--	30.0	337	7.4	24.0	.2	2
25...	1140	--	37.0	337	7.5	23.0	.2	2

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

324301097123301 -- Lk Arlington Site BL

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB							
07...	1435	1.00	283	8.2	12.5	10.2	97
07...	1437	10.0	278	8.0	10.5	9.1	82
07...	1440	20.0	278	8.0	10.0	8.9	80
07...	1443	33.0	267	7.9	10.0	8.2	73
MAR							
28...	1415	1.00	270	7.8	16.5	9.0	94
28...	1418	10.0	270	7.8	16.5	10.4	109
28...	1421	20.0	270	7.8	16.0	10.4	108
28...	1424	29.0	271	7.7	15.5	9.5	97
JUN							
25...	1151	1.00	293	8.6	31.5	7.7	106
25...	1155	10.0	295	8.5	30.5	7.0	95
25...	1159	20.0	312	7.5	28.0	1.6	21
25...	1202	30.0	333	7.4	25.5	.2	2

324257097130301 -- Lk Arlington Site CC

Date	Time	TRANSPARENCY (SECCHI DISK) (M) (00078)	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB								
07...	1452	.24	1.00	278	8.0	14.5	9.0	89
07...	1454	--	10.0	277	8.0	13.5	9.0	87
07...	1456	--	25.0	278	8.0	13.5	9.0	87
MAR								
28...	1436	.40	1.00	271	7.8	17.5	9.3	100
28...	1439	--	10.0	271	7.8	17.0	9.2	97
28...	1442	--	20.0	271	7.8	17.0	9.2	97
JUN								
25...	1213	.85	1.00	296	8.4	32.0	6.5	91
25...	1216	--	10.0	297	8.4	32.0	6.4	89
25...	1219	--	21.0	296	8.4	32.0	6.4	89

324228097130301 -- Lk Arlington Site DC

Date	Time	TRANSPARENCY (SECCHI DISK) (M) (00078)	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB								
07...	1504	.27	1.00	280	8.0	12.5	9.0	85
07...	1506	--	10.0	281	8.0	10.5	9.1	82
07...	1508	--	22.0	278	8.0	10.5	8.8	80
MAR								
28...	1457	.40	1.00	271	7.8	17.0	10.4	110
28...	1500	--	10.0	270	7.7	15.5	9.5	97
28...	1503	--	21.0	271	7.7	15.5	9.4	96
JUN								
25...	1229	1.07	1.00	294	8.6	31.5	7.6	105
25...	1232	--	10.0	297	8.4	30.5	6.5	88
25...	1235	--	20.0	304	7.7	29.0	3.5	46

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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 UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (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													
07...	1521	1.00	288	8.3	13.5	10.0	97	100	14	35.8	3.49	13.3	.6
07...	1526	10.0	288	8.1	10.5	9.8	89	--	--	--	--	--	--
07...	1531	20.0	285	8.0	9.0	9.7	85	--	--	--	--	--	--
07...	1536	26.0	285	8.0	9.0	9.9	86	100	11	34.8	3.53	14.1	.6
MAR													
28...	1519	1.00	274	7.9	16.5	9.2	96	110	13	36.6	3.46	13.3	.6
28...	1524	10.0	272	7.8	15.5	8.7	89	--	--	--	--	--	--
28...	1528	25.0	277	7.7	15.0	7.8	79	110	13	36.9	3.50	13.2	.6
JUN													
25...	1250	1.00	292	8.7	31.5	6.9	95	100	12	34.9	4.30	16.0	.7
25...	1258	10.0	290	8.5	30.0	7.0	94	--	--	--	--	--	--
25...	1305	23.0	307	7.4	28.0	.2	3	110	8	38.2	4.16	15.3	.6

324143097132201 -- Lk Arlington Site EC

Date	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
07...	21	3.94	1	108	90	28.7	10.9	.2	3.6	155	--	E.007	.25
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	22	3.88	<1	110	92	28.9	12.9	.2	4.7	159	.37	.011	.38
MAR													
28...	21	4.14	<1	113	84	26.4	10.3	.2	4.8	156	.31	.013	.33
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	20	4.18	<1	114	99	26.4	10.2	.2	5.1	158	.30	.032	.33
JUN													
25...	24	4.27	4	106	94	25.8	15.1	.2	1.3	158	--	<.008	<.05
25...	--	--	--	--	--	--	--	--	--	--	--	<.008	<.05
25...	22	4.11	<1	128	105	27.0	13.3	.3	3.0	169	--	E.004	<.05

324143097132201 -- Lk Arlington Site EC

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)	ORTHO-PHOS-PHATE, 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								
07...	.04	.36	.40	<.06	.02	.064	50	8.6
07...	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--
07...	E.03	--	.41	E.04	.04	.126	<10	3.4
MAR								
28...	.07	.42	.49	.07	.06	.172	11	E1.8b
28...	--	--	--	--	--	--	--	--
28...	.13	.44	.56	E.05	.06	.181	11	E2.1b
JUN								
25...	<.04	--	.34	<.06	<.02	--	<10	E.8
25...	<.04	--	.33	<.06	<.02	--	<10	13.3
25...	.11	.34	.45	<.06	<.02	--	11	430

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

324133097130601 -- Lk Arlington Site EL

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB							
07...	1541	1.00	287	8.3	13.0	10.4	100
07...	1543	10.0	287	8.1	10.5	9.8	89
07...	1545	20.0	286	7.9	8.5	9.5	82
MAR							
28...	1533	1.00	275	7.9	16.5	9.9	104
28...	1536	10.0	276	7.9	16.5	9.9	104
28...	1540	19.0	275	7.9	16.5	9.1	95
JUN							
25...	1316	1.00	295	8.6	32.0	6.7	93
25...	1319	10.0	297	8.4	30.0	5.2	70
25...	1321	17.0	313	7.4	28.0	.5	7

324041097134601 -- Lk Arlington Site FC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
FEB													
07...	1556	1.00	289	8.4	13.0	10.6	102	--	--	--	--	--	--
07...	1601	10.0	282	7.9	8.0	10.2	87	--	--	--	--	--	--
07...	1607	16.0	281	7.8	7.0	10.5	87	--	--	--	--	--	--
MAR													
28...	1558	1.00	281	7.9	16.5	10.1	106	110	16	38.3	3.65	13.7	.6
28...	1603	10.0	283	7.8	15.5	9.6	99	--	--	--	--	--	--
28...	1608	15.0	283	7.8	15.5	9.7	100	110	14	38.0	3.64	13.7	.6
JUN													
25...	1337	1.00	294	8.6	32.0	10.4	145	110	11	35.0	4.30	16.0	.7
25...	1344	14.0	266	7.7	28.5	7.1	93	97	12	32.8	3.55	13.3	.6

324041097134601 -- Lk Arlington Site FC

Date	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
FEB													
07...	--	--	1	109	92	--	--	--	--	--	--	E.005	.24
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	<1	E117	97	--	--	--	--	--	.66	.021	.68
MAR													
28...	20	4.21	<1	116	96	27.1	10.5	.2	5.0	161	.32	.017	.34
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	21	4.25	<1	116	96	27.3	10.6	.2	5.1	162	.33	.017	.35
JUN													
25...	24	4.31	3	109	94	29.1	13.6	.2	1.3	160	--	<.008	<.05
25...	22	3.98	<1	E102	85	24.3	12.3	.2	2.5	145	.22	.019	.24

08049200 Lake Arlington at Arlington, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

324041097134601 -- Lk Arlington Site FC

Date	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
FEB								
07...	<.04	--	.35	E.03	E.01	--	--	--
07...	--	--	--	--	--	--	--	--
07...	.07	.49	.56	.11	.10	.319	--	--
MAR								
28...	.07	.43	.50	E.06	.06	.169	14	3.2
28...	--	--	--	--	--	--	--	--
28...	.08	.45	.53	E.05	.06	.172	13	4.8
JUN								
25...	<.04	--	.34	<.06	<.02	--	<10	E1.4
25...	.07	.39	.46	<.06	<.02	--	<10	34.4

Remark codes used in this report:
- < -- Less than
- E -- Estimated value

Value qualifier codes used in this report:
- b -- Value was extrapolated below
- n -- Below the NDV

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^2.

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 NGVD of 1929. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

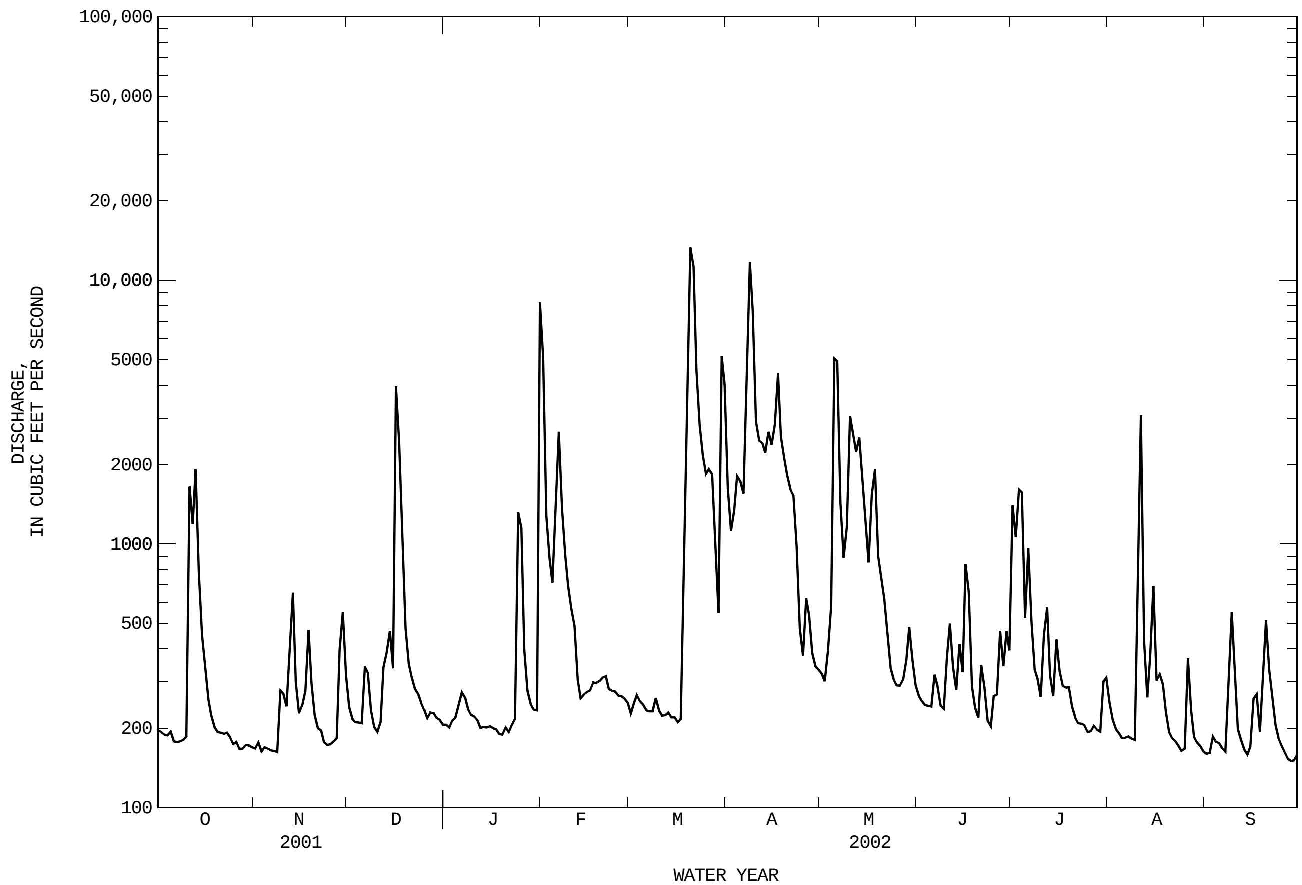
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	196	167	240	206	5100	227	1630	321	265	1400	250	160
2	193	176	217	201	1280	249	1120	301	254	1060	215	161
3	189	163	211	213	883	267	1340	393	245	1610	198	186
4	188	169	210	220	714	253	1810	582	243	1570	191	177
5	194	167	209	245	1480	245	1730	5040	242	525	183	175
6	178	165	343	273	2660	234	1550	4930	319	965	184	168
7	177	164	326	261	1360	232	4880	1430	290	509	186	163
8	178	162	234	237	906	232	11700	887	244	333	182	278
9	180	278	202	225	693	260	7630	1160	237	307	180	552
10	186	270	194	221	569	234	2920	3060	375	263	1020	345
11	1650	242	211	214	489	223	2470	2640	499	452	3070	198
12	1190	407	341	200	306	224	2410	2240	340	574	428	180
13	1920	652	388	202	260	229	2220	2530	279	318	261	166
14	779	299	467	201	268	220	2660	1780	417	264	375	159
15	452	228	337	203	274	220	2380	1210	326	434	691	170
16	344	244	3960	200	278	211	2840	851	836	329	303	258
17	257	277	2430	198	298	217	4420	1540	658	289	320	268
18	223	471	936	190	296	896	2550	1920	288	285	292	194
19	202	297	479	189	301	4730	2130	898	238	286	231	299
20	193	224	352	201	311	13300	1810	752	219	241	194	513
21	192	200	313	193	314	11300	1610	618	348	219	183	333
22	190	196	283	205	282	4560	1530	447	286	209	178	259
23	192	177	270	217	277	2830	983	337	214	208	172	205
24	185	173	249	1320	276	2170	478	307	204	205	164	184
25	174	174	235	1150	266	1840	377	291	264	193	167	172
26	177	178	218	397	264	1920	621	290	268	195	368	162
27	167	183	229	277	259	1840	538	306	468	204	234	153
28	167	398	228	247	250	950	384	363	344	197	186	150
29	173	551	218	235	---	547	343	484	466	194	176	151
30	172	317	215	234	---	5160	333	363	394	300	171	159
31	169	---	206	8240	---	4040	---	291	---	310	163	---
TOTAL	11027	7769	14951	17015	20914	60060	69397	38562	10070	14448	11116	6698
MEAN	355.7	259.0	482.3	548.9	746.9	1937	2313	1244	335.7	466.1	358.6	223.3
MAX	1920	652	3960	8240	5100	13300	11700	5040	836	1610	3070	552
MIN	167	162	194	189	250	211	333	290	204	193	163	150
AC-FT	21870	15410	29660	33750	41480	119100	137600	76490	19970	28660	22050	13290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	500.4	457.0	489.5	456.1	685.5	860.2	863.1	1599	1075	393.4	249.4	326.0
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1925 - 2002	
ANNUAL TOTAL	350661		282027			
ANNUAL MEAN	960.7		772.7		665.3	
HIGHEST ANNUAL MEAN					2629	1992
LOWEST ANNUAL MEAN					79.3	1956
HIGHEST DAILY MEAN	10500	Feb 16	13300	Mar 20	48900	May 3 1990
LOWEST DAILY MEAN	147	Jul 30	150	Sep 28	4.5	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	154	Aug 5	162	Sep 24	7.3	Jun 17 1925
MAXIMUM PEAK FLOW			14200	Mar 20	64400	May 3 1990
MAXIMUM PEAK STAGE			26.57	Mar 20	33.88	May 3 1990
ANNUAL RUNOFF (AC-FT)	695500		559400		482000	
10 PERCENT EXCEEDS	2770		1870		1580	
50 PERCENT EXCEEDS	337		273		185	
90 PERCENT EXCEEDS	171		177		49	

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



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

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Datum of gage is 405.42 ft above NGVD of 1929.

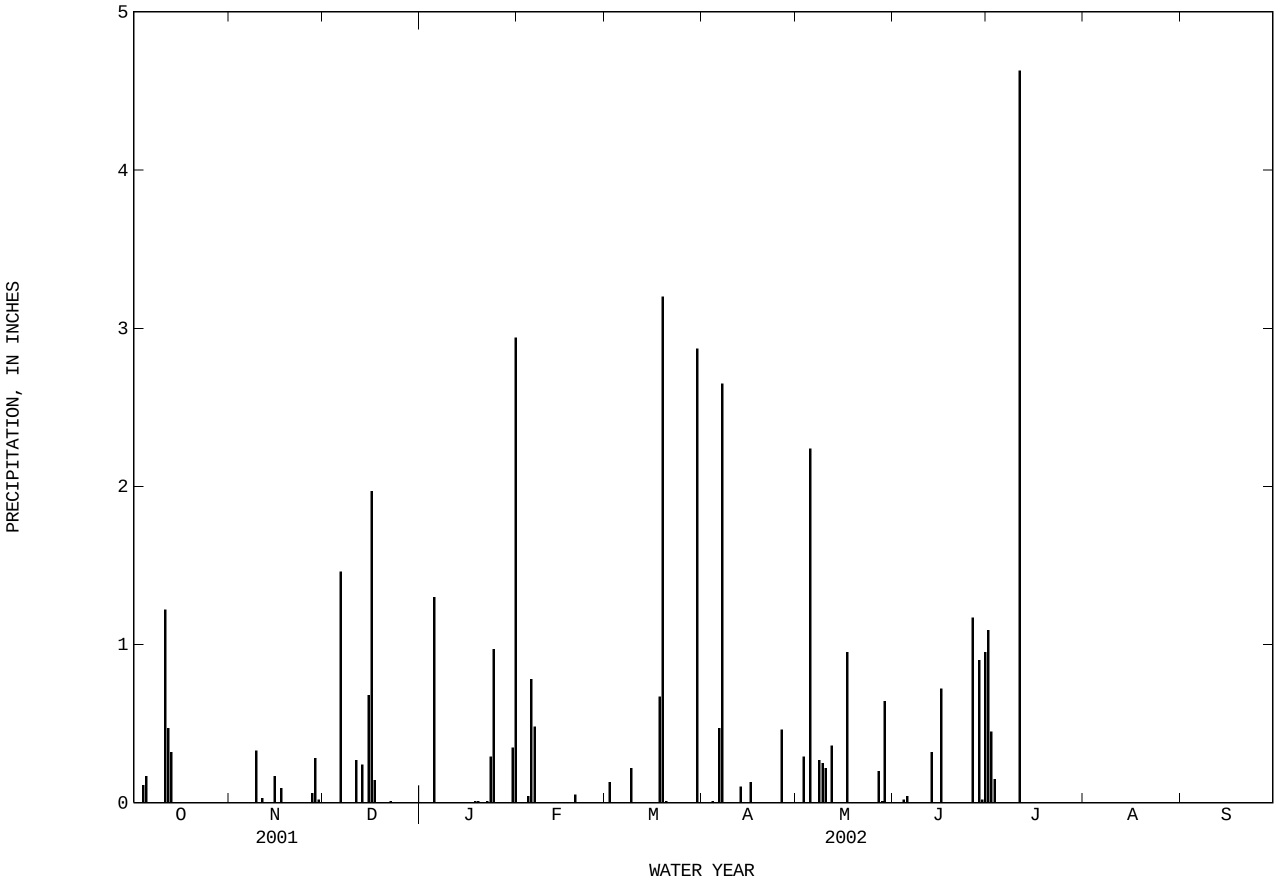
REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 4.63 inches, July 11.

PRECIPITATION FROM DCP, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.09	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.45	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.15	0.00	0.00
4	0.11	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.02	0.00	0.00	0.00
5	0.17	0.00	0.00	1.30	0.78	0.00	0.00	2.24	0.04	0.00	0.00	0.00
6	0.00	0.00	1.46	0.00	0.48	0.00	0.47	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	2.65	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00
9	0.00	0.33	0.00	0.00	0.00	0.22	0.00	0.25	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00
11	1.22	0.03	0.27	0.00	0.00	0.00	0.00	0.00	0.00	4.63	0.00	0.00
12	0.47	0.00	0.00	0.00	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00
13	0.32	0.00	0.24	0.00	0.00	0.00	0.10	0.00	0.32	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.17	0.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	1.97	0.00	0.00	0.00	0.13	0.00	0.72	0.00	0.00	0.00
17	0.00	0.09	0.14	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.01	0.00	0.67	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.01	0.05	3.20	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.00	1.17	0.00	0.00	0.00
27	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
28	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.01	0.90	0.00	0.00	0.00
29	0.00	0.02	0.00	0.00	---	0.00	0.00	0.64	0.02	0.00	0.00	0.00
30	0.00	0.00	0.00	0.35	---	2.87	0.00	0.00	0.95	0.00	0.00	0.00
31	0.00	---	0.00	2.94	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	2.29	0.98	4.77	5.88	1.35	7.10	3.82	5.43	4.14	6.32	0.00	0.00

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



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℃, Aug. 8, 1982; minimum, 3.0℃, Jan. 9, 1973.
DISSOLVED OXYGEN: Maximum, 15.9 mg/L, Feb. 27, 2002; minimum, 0.0 mg/L, on several days during period of record.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 982 microsiemens/cm, Oct. 7; minimum, 161 microsiemens/cm, May 5.
pH: Maximum, 8.5 units, Feb. 26, 27, Sept. 18; minimum, 7.3 units, Oct. 11, 12, Aug. 10.
WATER TEMPERATURE: Maximum, 32.9℃, July 25; minimum, 7.9℃, Feb. 6.
DISSOLVED OXYGEN: Maximum, 15.9 mg/L, Feb. 27; minimum, 2.2 mg/L, June 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV													
07...	1100	186	747	7.8	21.5	7.3	84	2.6	170	57	54.1	8.29	75.5
MAR													
26...	0930	1990	457	7.6	14.0	9.0	89	2.2	170	33	57.8	5.98	26.1
APR													
30...	0955	350	720	7.8	24.5	6.9	86	2.2	230	61	76.9	8.98	60.5
JUN													
26...	0945	209	713	7.6	28.0	5.8	77	2.4	180	48	58.2	8.03	64.2
JUL													
18...	1050	298	708	7.6	27.5	6.5	85	2.5	190	54	60.3	8.82	67.9
SEP													
05...	1015	194	726	7.3	30.0	5.7	76	4.2	160	29	53.5	7.40	74.6

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
NOV													
07...	3	47	10.7	<1	137	114	66.9	78.0	.7	8.8	429	13.2	.033
MAR													
26...	.9	25	4.37	1	164	136	44.9	25.1	.4	6.4	262	2.07	.023
APR													
30...	2	36	6.90	1	202	168	78.6	53.9	.3	8.7	442	9.98	.020
JUN													
26...	2	42	8.68	<1	159	131	64.2	58.1	.6	7.9	402	11.7	.043
JUL													
18...	2	43	8.79	<1	162	134	60.9	66.4	.7	8.7	403	8.83	.024
SEP													
05...	3	48	10.3	<1	165	136	58.6	73.6	.7	9.9	418	10.2	.045

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)
NOV							
07...	13.3	E.04	--	1.0	1.36	<.02	--
MAR							
26...	2.10	.09	.44	.53	.11	.11	.340
APR							
30...	10.0	<.04	--	.80	.80	.72	2.21
JUN							
26...	11.7	.04	.74	.78	.59	.58	1.79
JUL							
18...	8.86	<.04	--	.79	.52	.54	1.64
SEP							
05...	10.2	E.03	--	.96	1.21	1.14	3.48

Remark codes used in this report:
< -- Less than
E -- Estimated value

SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	940	840	884	800	724	771	731	614	677	816	732	769
2	915	849	885	826	780	800	812	676	751	797	723	758
3	886	817	847	851	793	820	859	740	801	797	724	753
4	911	823	869	827	792	812	807	745	774	762	694	727
5	935	886	909	862	805	831	762	715	741	840	736	789
6	968	927	944	847	748	799	801	670	769	853	770	806
7	982	931	950	762	707	735	766	557	674	847	719	791
8	966	920	940	794	713	755	727	662	696	787	707	739
9	942	887	915	845	621	751	794	680	738	765	701	738
10	887	852	870	820	750	791	849	724	786	851	764	807
11	865	361	569	829	655	762	817	718	781	828	776	801
12	459	346	410	780	655	723	742	677	715	851	791	820
13	493	313	367	708	473	551	762	547	672	877	806	840
14	486	331	427	547	476	503	698	589	661	908	816	860
15	---	482	e496	687	547	637	670	600	631	855	780	815
16	594	---	e570	729	640	694	600	212	289	811	749	777
17	672	581	625	721	685	698	315	257	285	880	776	836
18	769	605	702	802	634	723	407	281	349	860	822	841
19	823	697	760	634	549	570	520	396	466	881	819	843
20	853	773	813	696	585	656	607	509	576	892	842	863
21	856	792	829	730	630	680	697	605	661	895	821	859
22	869	766	821	857	730	802	745	687	715	865	811	843
23	824	758	788	832	778	800	762	695	731	822	769	801
24	769	725	751	811	759	783	785	695	742	791	477	635
25	829	752	789	811	754	782	778	694	731	560	516	539
26	858	793	825	772	729	745	775	679	728	638	521	585
27	869	823	846	768	720	741	742	680	709	727	638	692
28	869	810	828	726	600	678	735	661	700	809	700	770
29	894	811	851	715	616	661	773	695	731	803	755	780
30	852	735	791	629	589	614	815	708	762	786	750	768
31	755	712	734	---	---	---	836	739	783	770	178	264
MONTH	---	---	761	862	473	722	859	212	672	908	178	758

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

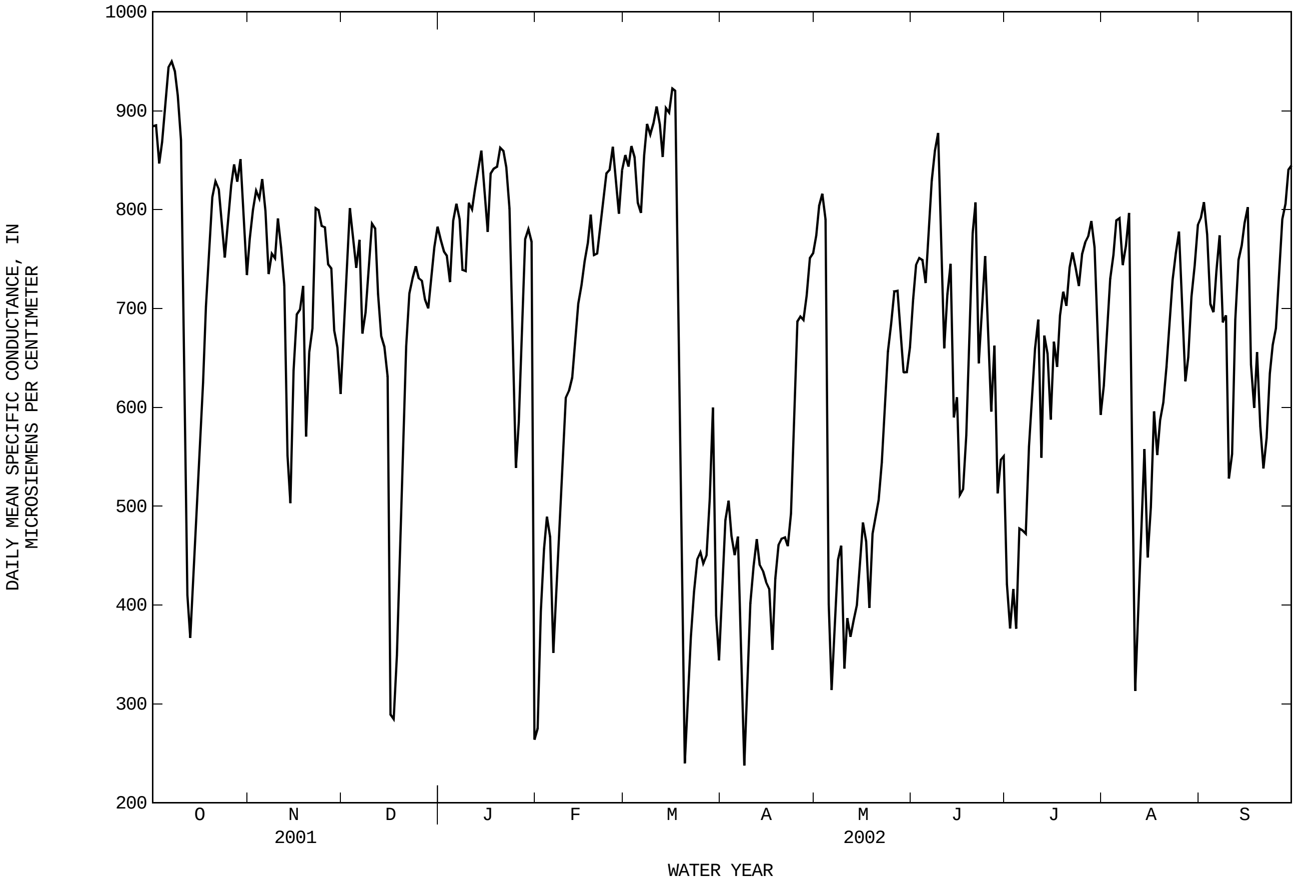
SPECIFIC CONDUCTANCE, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	348	198	275	881	833	855	441	380	421	795	746	774
2	420	348	394	883	813	844	511	441	486	828	781	804
3	491	408	457	918	819	864	551	427	506	836	787	816
4	518	456	489	895	799	853	535	425	470	846	724	790
5	508	418	469	838	767	807	459	438	451	724	161	401
6	418	331	351	824	766	797	501	446	469	355	286	314
7	449	364	420	900	805	855	482	216	372	405	355	385
8	515	442	490	912	860	887	273	213	238	478	392	446
9	587	498	550	894	859	876	369	273	316	495	406	460
10	652	564	610	915	857	887	429	369	402	406	277	335
11	645	595	617	946	873	904	457	429	439	404	353	387
12	655	617	630	918	849	886	519	431	467	383	348	368
13	683	643	667	878	825	853	457	430	441	400	362	385
14	727	683	705	946	855	903	447	414	435	419	379	400
15	740	709	723	913	884	898	434	415	424	462	416	443
16	767	719	748	956	890	922	438	325	416	507	448	483
17	783	744	767	942	899	920	400	246	355	508	410	464
18	829	754	795	931	533	772	447	393	427	425	361	397
19	780	716	754	751	195	467	473	447	461	494	425	472
20	788	719	756	268	218	240	474	455	467	510	458	489
21	821	754	781	322	261	296	484	448	468	528	481	506
22	844	766	806	391	322	368	468	447	459	585	505	545
23	868	807	837	439	391	414	537	451	492	629	573	607
24	866	806	840	454	438	446	655	537	601	682	623	656
25	898	817	864	462	439	453	705	653	686	701	652	684
26	877	774	831	452	425	442	720	642	692	746	682	717
27	838	765	796	463	427	450	711	668	689	758	662	718
28	887	796	840	555	449	507	755	672	713	694	657	675
29	---	---	---	641	555	600	764	737	751	674	591	635
30	---	---	---	639	290	389	774	738	756	659	604	636
31	---	---	---	380	311	344	---	---	---	682	624	661
MONTH	898	198	652	956	195	677	774	213	492	846	161	544

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	735	671	710	500	332	421	654	582	622	797	783	791
2	767	707	744	428	313	376	715	593	673	825	790	808
3	776	707	751	493	344	416	751	701	730	804	738	775
4	779	697	749	401	342	376	771	736	754	738	695	705
5	754	696	726	552	398	477	825	758	789	720	683	696
6	---	---	e786	555	399	476	813	758	791	756	720	738
7	---	---	e829	533	399	472	758	733	744	---	756	e774
8	---	---	e860	593	529	560	786	738	763	813	526	686
9	---	---	e878	646	576	610	812	776	796	782	549	693
10	---	---	e781	690	621	660	811	317	613	558	498	528
11	727	633	659	748	327	689	459	272	313	592	500	553
12	---	---	e715	693	327	549	459	330	406	747	592	689
13	---	---	e745	735	603	673	517	454	497	760	739	749
14	---	---	e590	682	503	654	610	405	558	773	753	764
15	---	---	e610	709	348	587	554	363	448	808	761	787
16	---	---	e511	708	568	666	517	452	499	848	745	803
17	---	---	e517	674	594	641	650	514	596	745	603	644
18	610	520	572	736	666	693	607	525	552	618	591	599
19	728	603	683	759	679	717	614	551	587	705	601	656
20	802	716	777	728	683	703	641	551	605	733	498	581
21	851	759	807	768	683	741	675	606	642	571	503	538
22	845	605	645	780	724	757	722	658	689	586	548	569
23	740	630	700	760	717	741	742	718	729	665	568	634
24	794	697	753	745	705	723	772	736	756	721	616	663
25	749	454	690	787	732	755	793	758	778	699	659	680
26	696	454	596	789	755	767	794	527	697	774	698	739
27	786	523	662	799	757	772	701	478	626	806	771	791
28	568	372	513	815	768	788	677	631	651	817	786	806
29	614	366	547	774	740	762	729	677	712	858	810	840
30	586	441	551	759	470	669	772	724	743	864	832	844
31	---	---	---	671	470	592	791	772	784	---	---	---
MONTH	---	---	689	815	313	628	825	272	650	---	498	704

e Estimated

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



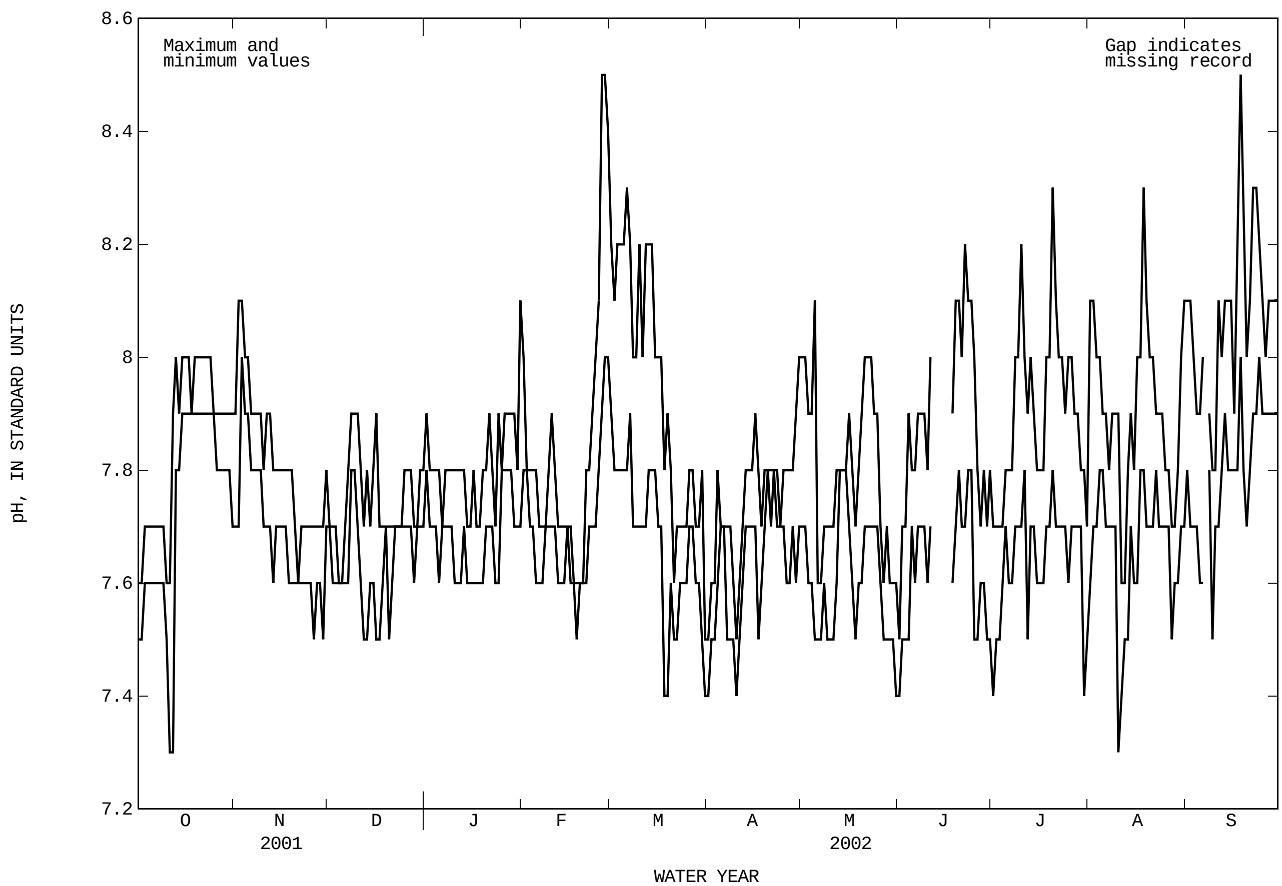
PH, WH, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.5	7.9	7.7	7.7	7.7	7.9	7.8	8.0	7.8	8.2	7.9
2	7.6	7.5	8.1	7.7	7.7	7.6	7.8	7.7	7.8	7.8	8.1	7.8
3	7.7	7.6	8.1	8.0	7.7	7.6	7.8	7.7	7.8	7.7	8.2	7.8
4	7.7	7.6	8.0	7.9	7.6	7.6	7.8	7.7	7.8	7.7	8.2	7.8
5	7.7	7.6	8.0	7.9	7.6	7.6	7.8	7.6	7.8	7.6	8.2	7.8
6	7.7	7.6	7.9	7.8	7.7	7.6	7.7	7.7	7.7	7.6	8.3	7.8
7	7.7	7.6	7.9	7.8	7.8	7.6	7.8	7.7	7.7	7.6	8.2	7.9
8	7.7	7.6	7.9	7.8	7.9	7.8	7.8	7.7	7.7	7.7	8.0	7.7
9	7.7	7.6	7.9	7.8	7.9	7.8	7.8	7.7	7.8	7.7	8.0	7.7
10	7.6	7.5	7.8	7.7	7.9	7.7	7.8	7.6	7.9	7.7	8.2	7.7
11	7.6	7.3	7.9	7.7	7.8	7.6	7.8	7.6	7.8	7.7	8.0	7.7
12	7.9	7.3	7.9	7.7	7.7	7.5	7.8	7.6	7.7	7.6	8.2	7.7
13	8.0	7.8	7.8	7.6	7.8	7.5	7.8	7.7	7.7	7.6	8.2	7.8
14	7.9	7.8	7.8	7.7	7.7	7.6	7.7	7.6	7.7	7.6	8.2	7.8
15	8.0	7.9	7.8	7.7	7.8	7.6	7.7	7.6	7.7	7.7	8.0	7.8
16	8.0	7.9	7.8	7.7	7.9	7.5	7.8	7.6	7.7	7.6	8.0	7.7
17	8.0	7.9	7.8	7.7	7.7	7.5	7.7	7.6	7.6	7.6	8.0	7.7
18	7.9	7.9	7.8	7.6	7.7	7.6	7.7	7.6	7.6	7.5	7.8	7.4
19	8.0	7.9	7.8	7.6	7.7	7.7	7.8	7.6	7.6	7.6	7.9	7.4
20	8.0	7.9	7.7	7.6	7.7	7.5	7.8	7.7	7.6	7.6	7.8	7.6
21	8.0	7.9	7.6	7.6	7.7	7.6	7.9	7.7	7.8	7.6	7.6	7.5
22	8.0	7.9	7.7	7.6	7.7	7.7	7.8	7.7	7.8	7.7	7.7	7.5
23	8.0	7.9	7.7	7.6	7.7	7.7	7.7	7.6	7.9	7.7	7.7	7.6
24	8.0	7.9	7.7	7.6	7.7	7.7	7.9	7.6	8.0	7.7	7.7	7.6
25	7.9	7.9	7.7	7.6	7.8	7.7	7.8	7.8	8.1	7.8	7.7	7.6
26	7.9	7.8	7.7	7.5	7.8	7.7	7.9	7.8	8.5	7.9	7.8	7.7
27	7.9	7.8	7.7	7.6	7.8	7.7	7.9	7.8	8.5	8.0	7.8	7.7
28	7.9	7.8	7.7	7.6	7.7	7.6	7.9	7.8	8.4	8.0	7.7	7.6
29	7.9	7.8	7.7	7.5	7.7	7.7	7.9	7.7	---	---	7.7	7.6
30	7.9	7.8	7.8	7.7	7.8	7.7	7.8	7.7	---	---	7.8	7.5
31	7.9	7.7	---	---	7.8	7.7	8.1	7.7	---	---	7.5	7.4
MONTH	8.0	7.3	8.1	7.5	7.9	7.5	8.1	7.6	8.5	7.5	8.3	7.4

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

PH, WH, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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



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

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

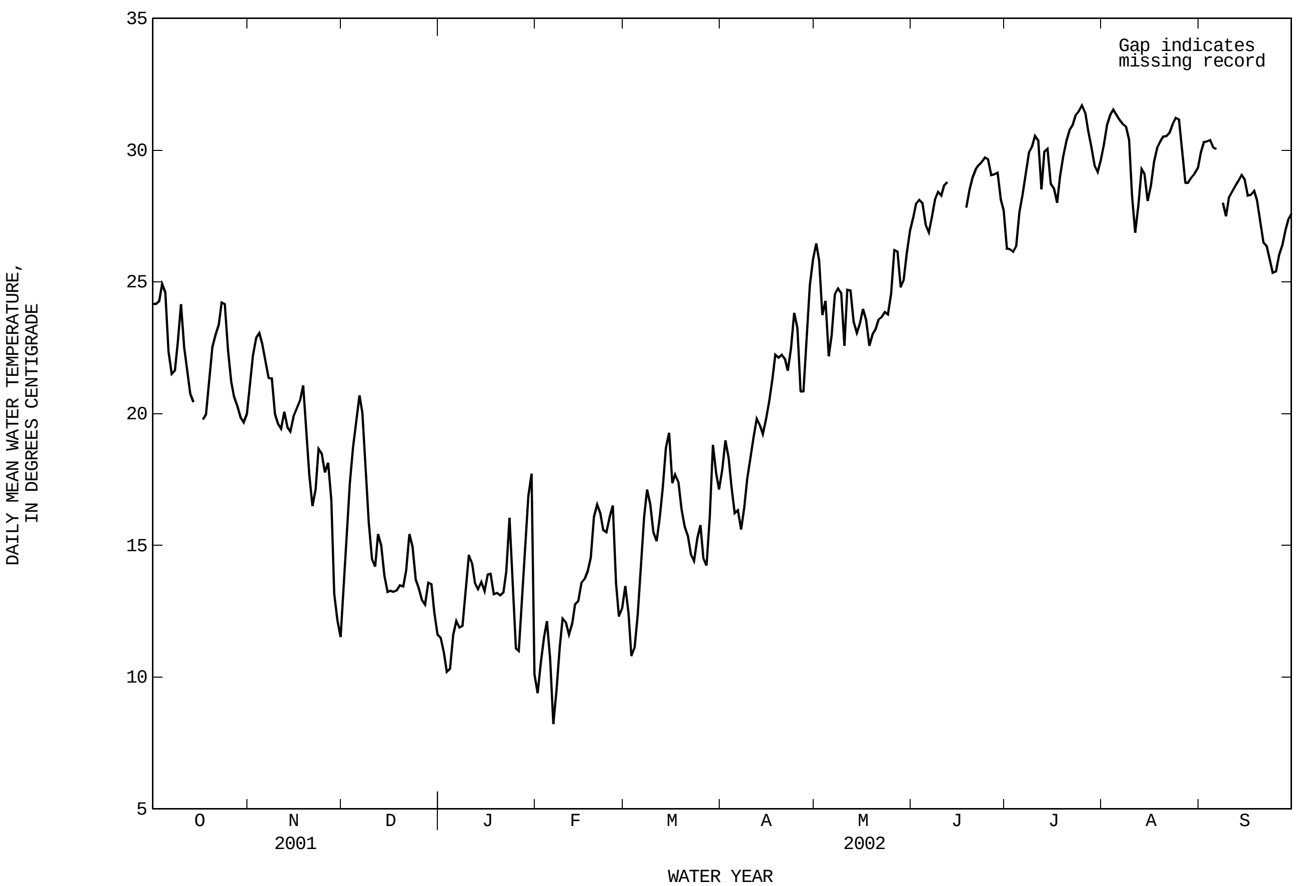
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.3	23.2	24.2	22.0	20.3	21.1	14.7	12.5	13.7	12.0	11.0	11.5
2	25.2	23.3	24.2	22.9	21.6	22.2	16.8	14.3	15.7	11.4	10.5	10.9
3	25.0	23.5	24.3	23.7	22.1	22.9	18.0	16.6	17.4	10.9	9.3	10.2
4	26.0	24.0	24.9	23.7	22.6	23.1	19.5	17.9	18.7	10.9	9.7	10.3
5	25.3	23.2	24.6	23.4	22.0	22.7	20.3	19.2	19.8	12.2	10.8	11.6
6	23.2	21.5	22.4	22.6	21.4	22.0	21.2	20.3	20.7	12.9	11.6	12.1
7	22.4	20.7	21.5	21.9	20.7	21.4	20.6	19.4	20.0	12.5	11.2	11.9
8	22.3	21.0	21.6	22.2	20.5	21.3	19.4	16.5	18.0	13.0	11.0	11.9
9	23.5	22.1	22.7	21.5	18.6	20.0	16.5	15.0	15.9	14.5	12.3	13.4
10	25.2	23.4	24.2	19.9	19.3	19.6	15.0	13.8	14.5	15.1	14.1	14.6
11	24.7	21.0	22.5	19.6	18.9	19.4	14.5	13.9	14.2	15.0	13.9	14.3
12	22.2	20.9	21.6	20.8	18.8	20.1	16.6	13.9	15.4	14.2	13.0	13.6
13	21.6	20.0	20.8	20.4	19.0	19.5	16.8	13.1	15.0	14.1	12.6	13.3
14	21.4	19.6	20.4	19.6	19.0	19.3	14.9	13.1	13.9	14.4	13.0	13.6
15	---	19.1	---	20.2	19.6	19.9	14.3	12.7	13.2	13.9	12.5	13.3
16	20.9	---	---	20.6	19.7	20.2	14.5	12.7	13.3	14.8	13.1	13.9
17	20.6	18.9	19.8	21.0	19.8	20.5	13.7	13.0	13.2	14.4	13.4	13.9
18	21.0	19.0	20.0	21.4	20.6	21.1	13.9	12.7	13.3	13.4	13.0	13.1
19	22.3	20.2	21.1	20.6	18.1	19.3	14.1	12.8	13.5	13.9	12.6	13.2
20	23.6	21.7	22.5	18.3	16.9	17.7	13.9	13.0	13.4	13.9	12.5	13.1
21	23.8	22.4	23.0	17.0	15.9	16.5	14.6	13.6	14.1	14.1	12.3	13.2
22	24.2	22.5	23.4	18.0	16.3	17.1	16.3	14.6	15.4	15.0	13.2	14.0
23	25.2	23.6	24.2	19.5	17.8	18.7	15.4	14.0	14.9	17.0	14.9	16.0
24	24.8	23.4	24.2	19.0	18.0	18.5	14.1	13.2	13.7	16.8	11.0	13.7
25	23.4	21.6	22.4	18.3	17.1	17.8	14.0	13.0	13.4	11.7	10.6	11.1
26	21.9	20.5	21.2	19.0	17.4	18.1	13.5	12.5	12.9	12.2	9.7	11.0
27	21.4	20.1	20.6	18.3	15.2	16.7	13.5	12.1	12.8	13.5	11.8	12.7
28	21.1	19.7	20.3	15.2	11.8	13.2	14.3	12.9	13.6	15.8	13.3	14.6
29	20.4	19.3	19.9	13.0	11.1	12.2	14.0	12.9	13.5	18.0	15.4	16.9
30	20.5	18.7	19.7	12.5	10.9	11.5	12.9	11.9	12.4	18.1	16.6	17.7
31	20.5	19.3	20.0	---	---	---	12.1	11.2	11.6	16.6	8.9	10.1
MONTH	---	---	---	23.7	10.9	19.1	21.2	11.2	14.9	18.1	8.9	13.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.1	8.9	9.4	13.9	13.1	13.5	18.7	17.1	17.9	27.9	25.2	26.5
2	11.0	10.1	10.6	13.9	10.7	12.4	19.8	18.4	19.0	27.1	24.6	25.8
3	12.1	10.7	11.5	11.8	10.0	10.8	18.9	17.5	18.3	24.6	22.6	23.7
4	12.6	11.6	12.1	12.4	10.0	11.1	17.6	15.8	17.2	25.6	23.2	24.3
5	12.4	8.8	10.7	13.9	11.3	12.4	17.0	15.7	16.2	24.8	20.4	22.2
6	8.8	7.9	8.2	15.6	12.9	14.2	16.5	15.8	16.3	24.0	21.8	23.0
7	10.4	8.5	9.5	17.2	15.0	16.1	16.0	15.3	15.6	25.1	24.0	24.5
8	12.0	10.1	11.1	17.6	16.6	17.1	17.2	15.8	16.4	25.3	24.4	24.7
9	13.2	11.2	12.2	17.5	15.4	16.6	18.1	17.2	17.5	24.9	24.2	24.6
10	12.7	11.4	12.1	16.6	14.5	15.5	19.0	17.8	18.3	24.2	21.2	22.6
11	12.3	10.6	11.6	15.5	14.9	15.2	19.7	18.5	19.1	25.5	23.7	24.7
12	12.9	11.0	12.0	17.7	15.0	16.1	20.1	19.4	19.8	24.9	24.1	24.7
13	13.5	12.0	12.8	18.6	16.0	17.2	20.0	19.1	19.6	24.1	22.8	23.5
14	13.4	12.1	12.9	20.2	17.5	18.7	19.5	19.0	19.2	23.7	22.5	23.1
15	14.2	13.0	13.6	19.9	18.0	19.3	20.4	19.1	19.8	24.4	22.7	23.4
16	14.5	12.8	13.7	18.0	16.9	17.4	20.9	20.1	20.5	24.9	23.2	24.0
17	14.7	13.2	14.0	18.7	17.0	17.7	22.0	20.4	21.3	24.6	22.5	23.5
18	14.9	14.2	14.5	18.3	15.6	17.4	22.5	21.9	22.2	23.6	21.6	22.6
19	17.1	14.9	16.1	17.8	15.8	16.4	22.3	21.8	22.1	24.1	22.2	23.0
20	17.5	15.7	16.5	16.1	15.4	15.7	22.8	21.8	22.2	24.4	22.2	23.2
21	16.7	15.6	16.2	15.6	15.0	15.3	22.3	21.6	22.1	24.9	22.5	23.6
22	16.6	14.7	15.6	15.5	14.2	14.7	22.4	21.0	21.6	24.6	22.7	23.7
23	16.5	14.5	15.5	14.7	14.0	14.4	23.9	21.4	22.5	24.7	23.1	23.9
24	17.2	15.0	16.1	16.0	14.4	15.3	25.1	22.7	23.8	24.2	23.4	23.8
25	17.4	15.3	16.5	16.2	14.9	15.8	24.5	22.4	23.3	26.4	23.1	24.6
26	15.3	12.3	13.6	15.1	14.0	14.5	22.4	20.2	20.8	27.6	24.9	26.2
27	13.4	11.4	12.3	14.8	13.7	14.2	22.1	19.9	20.9	27.1	25.3	26.1
28	13.7	11.6	12.6	17.7	14.4	16.1	24.8	21.7	23.1	25.3	24.3	24.8
29	---	---	---	20.2	17.5	18.8	26.5	23.5	24.9	26.4	23.9	25.1
30	---	---	---	20.1	16.7	17.7	26.8	24.9	25.9	27.5	24.8	26.1
31	---	---	---	17.4	16.8	17.1	---	---	---	28.3	25.7	26.9
MONTH	17.5	7.9	13.0	20.2	10.0	15.6	26.8	15.3	20.2	28.3	20.4	24.3

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

WATER TEMPERATURE, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.6	26.1	27.4	26.5	25.8	26.3	31.6	28.9	30.2	31.1	28.9	29.9
2	29.4	26.6	28.0	26.7	25.9	26.2	32.4	29.7	31.0	31.6	29.3	30.3
3	29.1	27.0	28.1	26.6	25.7	26.2	32.6	30.3	31.3	31.3	29.5	30.3
4	28.9	26.9	28.0	27.4	25.4	26.4	32.6	30.7	31.5	31.2	29.7	30.4
5	28.4	26.4	27.2	28.9	26.6	27.6	32.3	30.5	31.4	31.1	29.2	30.1
6	27.7	26.0	26.9	29.0	27.8	28.3	32.3	30.2	31.2	31.0	29.3	30.0
7	28.8	26.1	27.4	30.5	28.0	29.1	32.2	29.9	31.0	---	---	---
8	28.9	27.3	28.1	31.2	28.8	29.9	31.7	30.1	30.9	29.2	27.2	28.0
9	29.8	27.4	28.4	31.7	28.7	30.1	31.5	29.3	30.4	28.1	27.2	27.5
10	29.1	27.6	28.3	31.8	29.2	30.5	30.7	25.7	28.3	29.0	27.2	28.2
11	29.7	27.9	28.7	32.1	25.7	30.4	27.6	26.1	26.9	29.7	27.4	28.4
12	30.3	27.9	28.8	30.9	25.7	28.5	29.4	26.7	27.9	29.1	28.1	28.6
13	---	---	---	31.2	28.7	29.9	30.6	28.1	29.3	29.7	28.0	28.8
14	---	---	---	31.4	28.9	30.1	29.9	28.3	29.1	30.1	28.2	29.1
15	---	---	---	29.4	26.9	28.7	28.8	27.2	28.1	29.5	28.3	28.9
16	---	---	---	29.1	28.1	28.6	30.0	27.5	28.6	28.9	27.7	28.3
17	28.4	---	---	28.7	27.3	28.0	30.7	28.5	29.6	29.2	27.3	28.3
18	29.3	26.5	27.8	30.0	27.9	29.0	31.2	29.0	30.1	29.3	27.7	28.5
19	29.8	27.3	28.5	31.2	28.4	29.8	31.4	29.3	30.3	28.7	27.5	28.1
20	30.4	27.8	29.0	31.9	29.0	30.3	31.7	29.5	30.5	28.1	26.6	27.3
21	30.2	28.5	29.2	32.0	29.7	30.8	31.6	29.7	30.5	27.5	25.4	26.5
22	30.8	28.4	29.4	32.2	30.0	30.9	31.8	29.8	30.7	27.3	25.5	26.4
23	30.8	28.2	29.6	32.7	30.4	31.3	32.3	30.1	31.0	26.8	24.9	25.8
24	30.8	28.6	29.7	32.6	30.7	31.5	32.4	30.3	31.2	26.3	24.4	25.3
25	30.9	28.1	29.7	32.9	30.9	31.7	32.3	30.4	31.2	26.6	24.4	25.4
26	30.2	28.5	29.1	32.6	30.6	31.4	30.9	28.5	29.9	27.4	25.0	26.0
27	30.6	28.0	29.1	31.7	29.9	30.8	30.1	27.3	28.8	27.9	25.2	26.4
28	30.2	28.3	29.2	31.2	29.3	30.1	29.9	28.1	28.8	28.3	26.0	27.0
29	29.2	26.6	28.1	30.1	29.1	29.4	30.0	28.2	29.0	28.7	26.4	27.4
30	28.1	26.5	27.7	30.2	28.0	29.2	30.2	28.2	29.1	28.8	26.8	27.6
31	---	---	---	30.9	28.5	29.6	30.5	28.2	29.3	---	---	---
MONTH	---	---	---	32.9	25.4	29.4	32.6	25.7	29.9	---	---	---



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

OXYGEN DISSOLVED, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

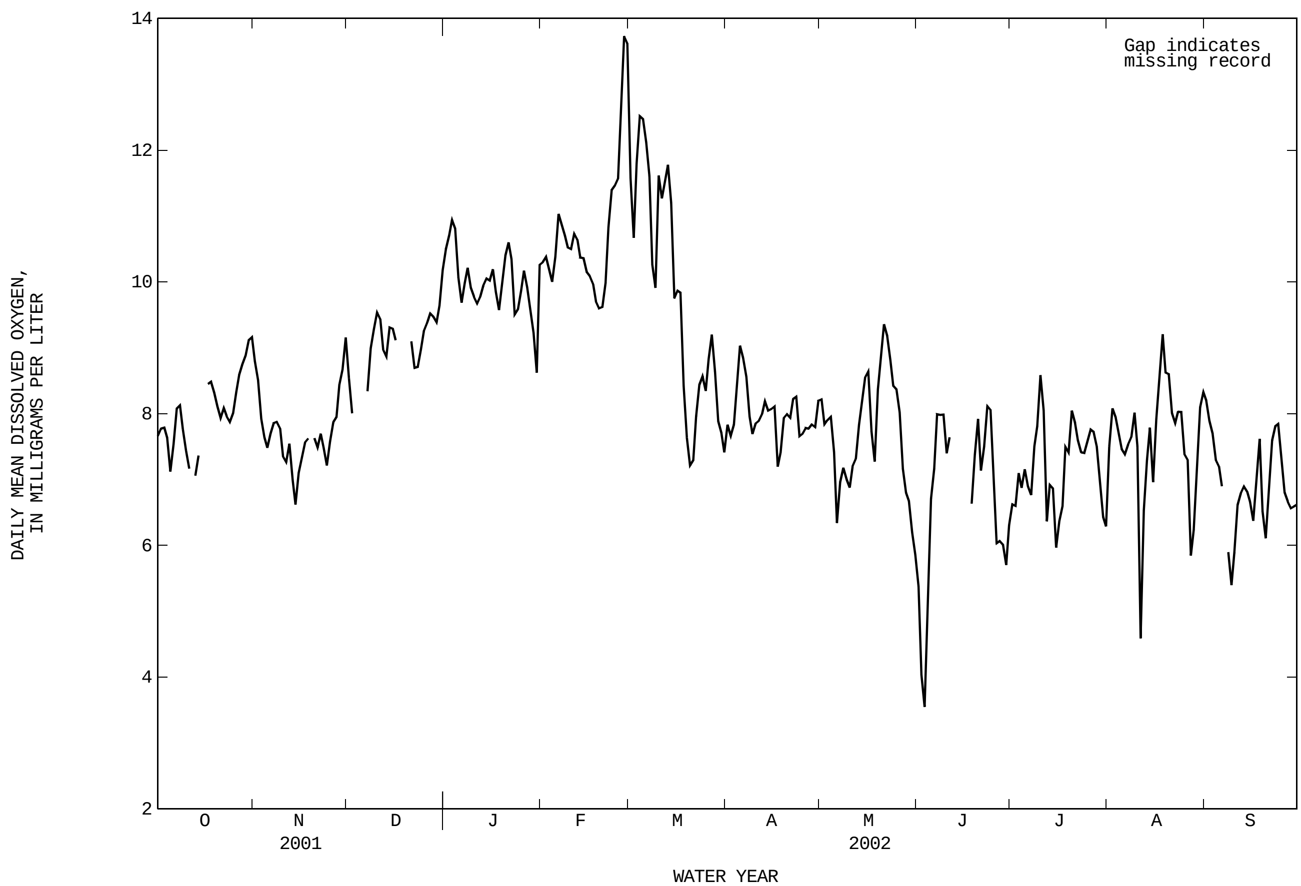
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.3	7.1	7.7	9.6	8.2	8.8	8.8	8.4	8.5	11.2	10.2	10.5
2	8.5	7.3	7.8	9.1	8.1	8.5	8.4	7.7	8.0	11.2	10.4	10.7
3	8.5	7.2	7.8	8.6	7.4	7.9	---	---	---	11.7	10.4	10.9
4	8.2	7.1	7.6	8.3	7.1	7.6	---	---	---	11.8	9.9	10.8
5	7.5	6.9	7.1	8.1	7.0	7.5	---	---	---	11.0	9.4	10.1
6	8.3	7.0	7.5	8.4	7.2	7.7	---	---	---	10.3	9.2	9.7
7	8.7	7.6	8.1	8.5	7.4	7.9	8.7	7.8	8.3	10.7	9.4	10
8	8.7	7.7	8.1	8.5	7.4	7.9	9.6	8.5	9.0	10.7	9.7	10.2
9	8.2	7.5	7.8	8.4	7.4	7.8	9.8	8.8	9.3	10.4	9.3	9.9
10	8.0	7.0	7.4	7.6	6.9	7.4	9.9	9.3	9.5	10.5	9.1	9.8
11	8.8	6.2	7.2	7.8	6.6	7.3	9.6	9.3	9.4	10.4	9.2	9.7
12	---	---	---	7.7	7.3	7.5	9.3	8.6	9.0	10.5	9.2	9.8
13	7.8	6.6	7.1	7.4	6.5	7.0	9.5	8.4	8.9	10.7	9.4	9.9
14	7.6	6.8	7.4	6.8	6.5	6.6	9.5	9.1	9.3	10.8	9.5	10.1
15	---	---	---	7.4	6.8	7.1	9.5	9.1	9.3	10.7	9.5	10.0
16	---	---	---	7.5	7.2	7.3	9.3	8.8	9.1	11.1	9.6	10.2
17	9.0	8.1	8.4	8.0	7.1	7.6	---	---	---	10.3	9.6	9.9
18	8.8	8.2	8.5	7.8	7.4	7.6	---	---	---	9.9	9.3	9.6
19	8.8	7.9	8.3	---	---	---	---	---	---	11.0	9.2	10.0
20	8.7	7.6	8.1	7.9	7.4	7.6	---	---	---	11.2	9.8	10.4
21	8.6	7.4	7.9	7.9	7.1	7.5	9.3	8.9	9.1	11.7	10.0	10.6
22	8.8	7.6	8.1	8.0	7.5	7.7	9.0	8.5	8.7	11.1	9.8	10.3
23	8.7	7.4	8.0	7.8	7.3	7.5	9.1	8.4	8.7	10.1	9.1	9.5
24	8.7	7.2	7.9	7.6	6.9	7.2	9.3	8.7	9.0	10.4	8.6	9.6
25	8.7	7.5	8.0	8.2	7.2	7.6	9.5	9.0	9.2	10.0	9.6	9.9
26	9.1	7.7	8.3	8.7	7.3	7.9	9.6	9.1	9.4	10.5	9.7	10.2
27	9.2	8.1	8.6	8.3	7.6	7.9	9.9	9.3	9.5	10.3	9.5	9.9
28	9.4	8.2	8.7	9.0	7.9	8.4	9.7	9.2	9.5	10.1	9.0	9.6
29	9.5	8.4	8.9	9.2	8.2	8.7	9.8	9.0	9.4	9.8	8.6	9.2
30	9.9	8.5	9.1	9.4	8.8	9.2	10.1	9.3	9.6	9.1	8.3	8.6
31	10.0	8.6	9.2	---	---	---	10.8	9.8	10.2	11.0	8.5	10.3
MONTH	---	---	---	---	---	---	---	---	---	11.8	8.3	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.6	10.0	10.3	13.8	10.4	11.6	7.9	7.8	7.8	9.6	7.2	8.2
2	10.5	10.1	10.4	12.3	9.3	10.7	7.8	7.6	7.7	8.9	7.0	7.8
3	10.5	9.9	10.2	13.3	10.5	11.8	8.1	7.7	7.8	8.5	7.3	7.9
4	10.2	9.8	10.0	14.2	11.0	12.5	9.0	8.1	8.3	9.0	7.2	8.0
5	10.9	9.7	10.4	14.0	10.8	12.5	9.1	9.0	9.0	9.0	6.1	7.4
6	11.3	10.8	11.0	13.8	10.4	12.1	9.0	8.8	8.8	6.7	6.2	6.3
7	11.2	10.6	10.9	13.4	9.8	11.6	8.9	8.2	8.6	7.1	6.7	7.0
8	11.0	10.4	10.7	11.7	9.4	10.3	8.4	7.7	8.0	7.3	7.1	7.2
9	10.7	10.3	10.5	11.9	8.4	9.9	7.9	7.6	7.7	7.2	6.9	7.0
10	10.6	10.3	10.5	14.5	9.5	11.6	7.9	7.8	7.8	7.6	6.6	6.9
11	11.0	10.5	10.7	12.6	10.0	11.3	8.0	7.8	7.9	7.4	6.9	7.2
12	10.8	10.5	10.6	14.6	9.4	11.5	8.3	7.7	8.0	7.6	7.2	7.3
13	10.6	10.1	10.4	14.4	9.7	11.8	8.3	8.1	8.2	8.0	7.6	7.8
14	10.6	10.1	10.4	13.8	9.1	11.2	8.2	7.8	8.0	8.5	8.0	8.2
15	10.4	9.9	10.2	11.2	8.3	9.8	8.2	7.9	8.1	9.3	8.0	8.5
16	10.4	9.9	10.1	11.9	8.2	9.9	8.2	7.9	8.1	9.5	8.0	8.6
17	10.3	9.6	10	11.5	8.4	9.8	7.9	6.7	7.2	8.6	7.1	7.7
18	10.1	9.4	9.7	10.0	7.1	8.4	7.8	7.1	7.4	7.9	6.8	7.3
19	10.0	9.2	9.6	8.2	6.6	7.6	8.1	7.8	7.9	9.4	7.7	8.4
20	10.1	9.1	9.6	8.0	6.9	7.2	8.1	7.9	8.0	9.9	8.0	8.8
21	10.9	9.2	10	7.5	7.1	7.3	8.0	7.9	7.9	10.9	8.3	9.4
22	11.8	10.1	10.8	8.3	7.4	8.0	8.4	8.0	8.2	10.3	8.2	9.2
23	12.6	10.3	11.4	8.7	8.3	8.4	8.4	7.9	8.3	10.0	7.8	8.8
24	12.9	10.3	11.5	8.8	8.4	8.6	7.9	7.4	7.7	9.1	7.7	8.4
25	13.4	10.0	11.6	8.5	8.3	8.3	8.4	7.1	7.7	9.6	7.5	8.4
26	15.3	10.8	12.8	9.1	8.5	8.8	8.1	7.6	7.8	9.1	7.2	8.0
27	15.9	11.8	13.7	9.3	9.1	9.2	8.2	7.4	7.8	8.1	6.7	7.2
28	15.5	11.7	13.6	9.2	8.0	8.6	8.2	7.5	7.8	7.4	6.4	6.8
29	---	---	---	8.0	7.5	7.9	8.8	7.1	7.8	7.1	6.4	6.7
30	---	---	---	9.0	7.2	7.7	9.4	7.3	8.2	6.7	5.7	6.2
31	---	---	---	7.8	7.2	7.4	---	---	---	6.5	5.3	5.9
MONTH	15.9	9.1	10.8	14.6	6.6	9.8	9.4	6.7	8.0	10.9	5.3	7.7

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

OXYGEN DISSOLVED, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.1	4.6	5.4	7.6	6.1	6.6	9.4	6.2	7.5	9.7	7.0	8.2
2	5.5	2.8	4.0	7.4	6.1	6.6	9.7	6.8	8.1	9.4	6.8	7.9
3	5.0	2.9	3.5	7.5	6.5	7.1	9.2	6.8	7.9	9.1	6.4	7.7
4	8.2	2.2	5.3	7.1	6.5	6.9	8.7	6.8	7.7	8.5	6.3	7.3
5	7.5	6.1	6.7	7.7	6.8	7.2	8.3	6.8	7.5	8.5	6.2	7.2
6	8.0	6.6	7.2	7.3	6.6	6.9	8.2	6.8	7.4	7.9	5.9	6.9
7	9.6	6.9	8.0	7.4	6.4	6.8	8.5	7.0	7.5	---	5.9	---
8	9.2	7.0	8.0	8.9	6.7	7.5	8.6	6.9	7.6	6.4	5.5	5.9
9	9.3	6.9	8.0	9.2	6.9	7.8	8.8	7.4	8.0	5.9	5.2	5.4
10	8.2	6.7	7.4	10.8	7.0	8.6	8.3	5.3	7.5	6.4	5.4	5.9
11	9.4	6.5	7.6	9.5	6.9	8.1	5.7	2.6	4.6	8.2	5.7	6.6
12	---	---	---	8.1	5.3	6.4	7.0	5.7	6.5	7.7	5.8	6.8
13	---	---	---	8.2	6.0	6.9	8.0	6.9	7.3	8.1	5.9	6.9
14	---	---	---	7.5	6.3	6.9	8.6	7.3	7.8	8.0	5.8	6.8
15	---	---	---	7.0	5.4	6.0	7.9	6.5	7.0	7.7	5.8	6.7
16	---	---	---	7.4	5.5	6.4	9.6	6.8	7.9	7.1	5.8	6.4
17	---	---	---	7.4	5.9	6.6	9.5	7.8	8.6	8.4	6.1	7.0
18	7.7	6.0	6.6	8.5	6.7	7.5	10.7	8.1	9.2	9.5	6.3	7.6
19	9.1	6.3	7.4	8.8	6.5	7.4	9.9	7.5	8.6	7.9	5.9	6.5
20	9.5	6.7	7.9	10.4	6.5	8.0	9.8	7.4	8.6	7.0	5.6	6.1
21	8.2	6.5	7.1	9.6	6.4	7.9	8.9	7.0	8.0	8.0	6.1	6.8
22	9.6	6.0	7.5	9.0	6.5	7.6	8.7	6.9	7.9	9.3	6.5	7.6
23	10.0	6.7	8.1	8.8	6.3	7.4	9.0	7.2	8.0	9.4	6.6	7.8
24	9.8	6.6	8.1	8.7	6.3	7.4	8.9	7.2	8.0	8.8	6.9	7.8
25	8.6	4.4	7.1	9.1	6.5	7.6	8.1	6.7	7.4	8.0	6.7	7.3
26	7.7	4.1	6.0	9.5	6.6	7.8	8.1	7.0	7.3	7.3	6.3	6.8
27	6.4	5.7	6.1	9.1	6.6	7.7	7.1	4.9	5.8	7.4	6.1	6.7
28	6.9	5.5	6.0	8.7	6.6	7.5	6.6	5.9	6.2	7.3	6.0	6.6
29	6.0	5.2	5.7	7.4	6.5	7.0	8.1	6.5	7.2	7.3	6.1	6.6
30	7.4	5.5	6.3	7.1	5.0	6.4	9.4	6.9	8.1	7.4	6.0	6.6
31	---	---	---	7.1	5.0	6.3	9.9	7.2	8.3	---	---	---
MONTH	---	---	---	10.8	5.0	7.2	10.7	2.6	7.6	---	5.2	---



08049580 Mountain Creek near Venus, TX

LOCATION.--Lat 32°29’27", long 97°07’22", Johnson County, Hydrologic Unit 12030102, on right bank on upstream 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^2.

PERIOD OF RECORD.--Oct. 1985 to Sept. 1987, Oct. 1987 to Sept. 2001 (peaks above base discharge), Oct. 2001 to current year.
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 NGVD of 1929. 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	11	0.00	2.8	0.53	0.66	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.09	0.00	0.07	0.45	0.29	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	66	0.13	46	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	0.08	23	0.00	0.00
5	0.00	0.00	0.00	0.00	189	0.00	0.00	366	0.05	2.4	0.00	0.00
6	0.00	0.00	0.00	0.00	122	0.00	0.03	27	0.03	0.52	0.00	0.00
7	0.00	0.00	0.00	0.00	24	0.00	148	4.6	0.0	0.11	0.00	0.00
8	0.00	0.00	0.00	0.00	1.1	0.00	365	1.9	0.00	0.02	0.00	0.00
9	0.00	0.00	0.00	0.00	0.03	0.00	16	1.4	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	4.5	137	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	2.8	12	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	2.0	2.5	0.00	0.00	0.00	0.00
13	45	0.00	0.00	0.00	0.00	0.00	1.7	2.3	0.00	0.00	0.00	0.00
14	0.16	0.00	0.00	0.00	0.00	0.00	5.2	1.9	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	3.0	1.3	0.00	0.00	0.00	0.00
16	0.00	0.00	654	0.00	0.00	0.00	20	0.93	0.00	0.00	0.00	0.00
17	0.00	0.00	75	0.00	0.00	0.00	95	0.94	0.00	0.00	0.00	0.00
18	0.00	0.00	1.3	0.00	0.00	0.00	7.0	0.93	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	127	2.7	0.75	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	333	1.6	0.58	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	9.4	1.2	0.49	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.12	0.94	0.38	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.35	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.03	0.00	0.00	0.70	0.31	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.03	0.00	0.00	0.50	0.27	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.22	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	1.5	0.21	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	1.1	0.38	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.81	3.6	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	382	0.65	3.0	0.00	0.00	0.00	0.00
31	0.00	---	0.00	711	---	92	---	1.3	---	0.00	0.00	---
TOTAL	45.16	0.00	730.30	711.06	347.22	943.52	686.53	656.52	1.24	72.05	0.00	0.00
MEAN	1.457	0.000	23.56	22.94	12.40	30.44	22.88	21.18	0.041	2.324	0.000	0.000
MAX	45	0.00	654	711	189	382	365	366	0.66	46	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00
AC-FT	90	0.00	1450	1410	689	1870	1360	1300	2.5	143	0.00	0.00

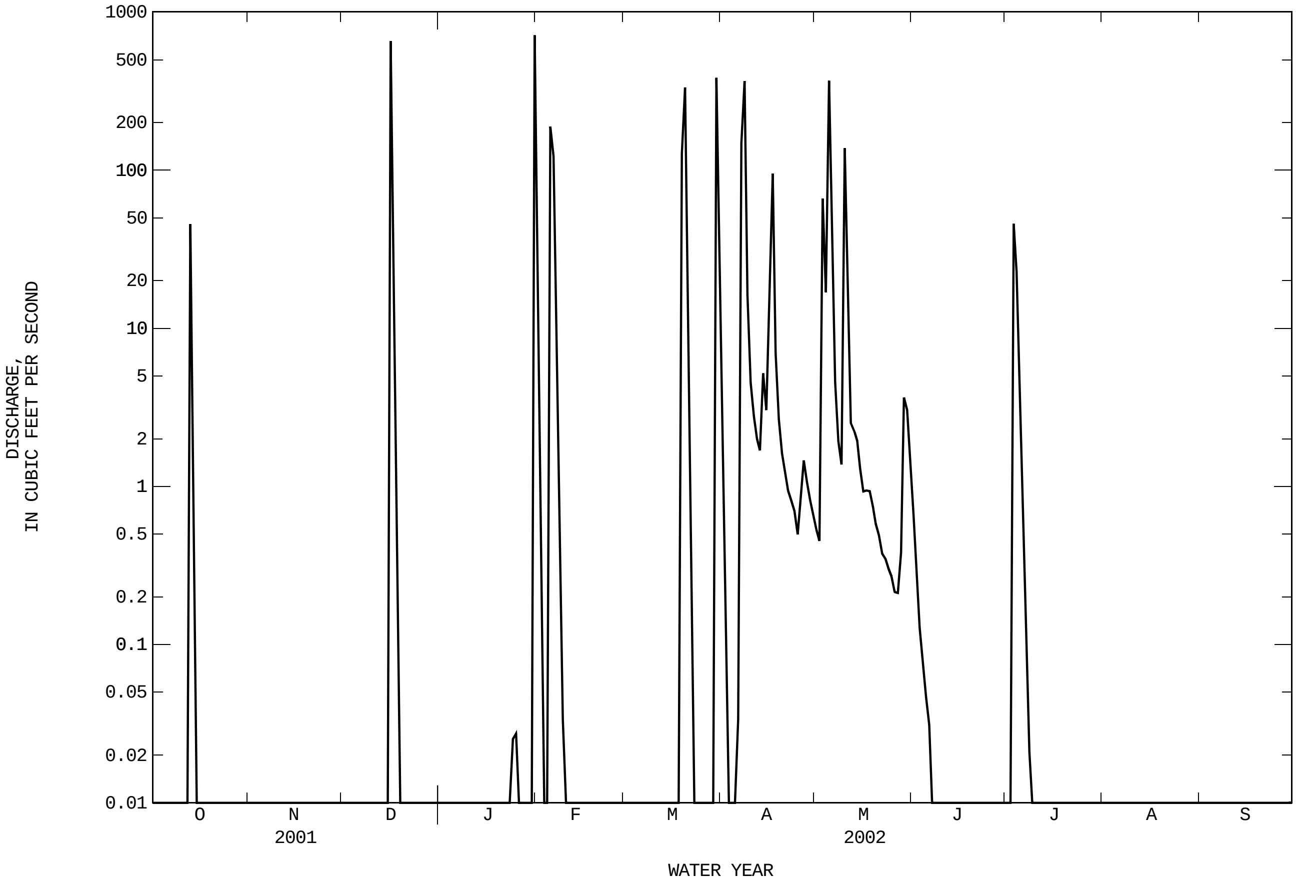
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.51	9.183	32.59	11.30	30.19	21.07	23.92	23.16	15.80	1.084	3.083	3.525
MAX	140	29.9	144	34.7	148	66.8	80.7	71.8	54.0	8.77	24.0	29.8
(WY)	1992	1999	1992	1992	1997	1995	1997	1995	1995	1991	1991	1991
MIN	0.000	0.000	0.000	0.005	0.074	0.032	0.010	0.041	0.000	0.000	0.000	0.000
(WY)	1991	1994	1991	1994	1995	1996	1994	1998	1996	1993	1986	1987

SUMMARY STATISTICS	FOR 2002 WATER YEAR		WATER YEARS 1986 - 2002h	
ANNUAL TOTAL	4193.60			
ANNUAL MEAN	11.49		15.84	
HIGHEST ANNUAL MEAN			43.1	1992
LOWEST ANNUAL MEAN			1.84	1994
HIGHEST DAILY MEAN	711	Jan 31	3340	May 17 1989
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1 1985
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1	0.00	Oct 1 1985
MAXIMUM PEAK FLOW	2420	Mar 4		
MAXIMUM PEAK STAGE	10.53	Mar 4		
ANNUAL RUNOFF (AC-FT)	8320		11470	
10 PERCENT EXCEEDS	2.6		19	
50 PERCENT EXCEEDS	0.00		0.01	
90 PERCENT EXCEEDS	0.00		0.00	

h See PERIOD OF RECORD paragraph.

08049580 Mountain Creek near Venus, TX--Continued



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. No flow at times.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

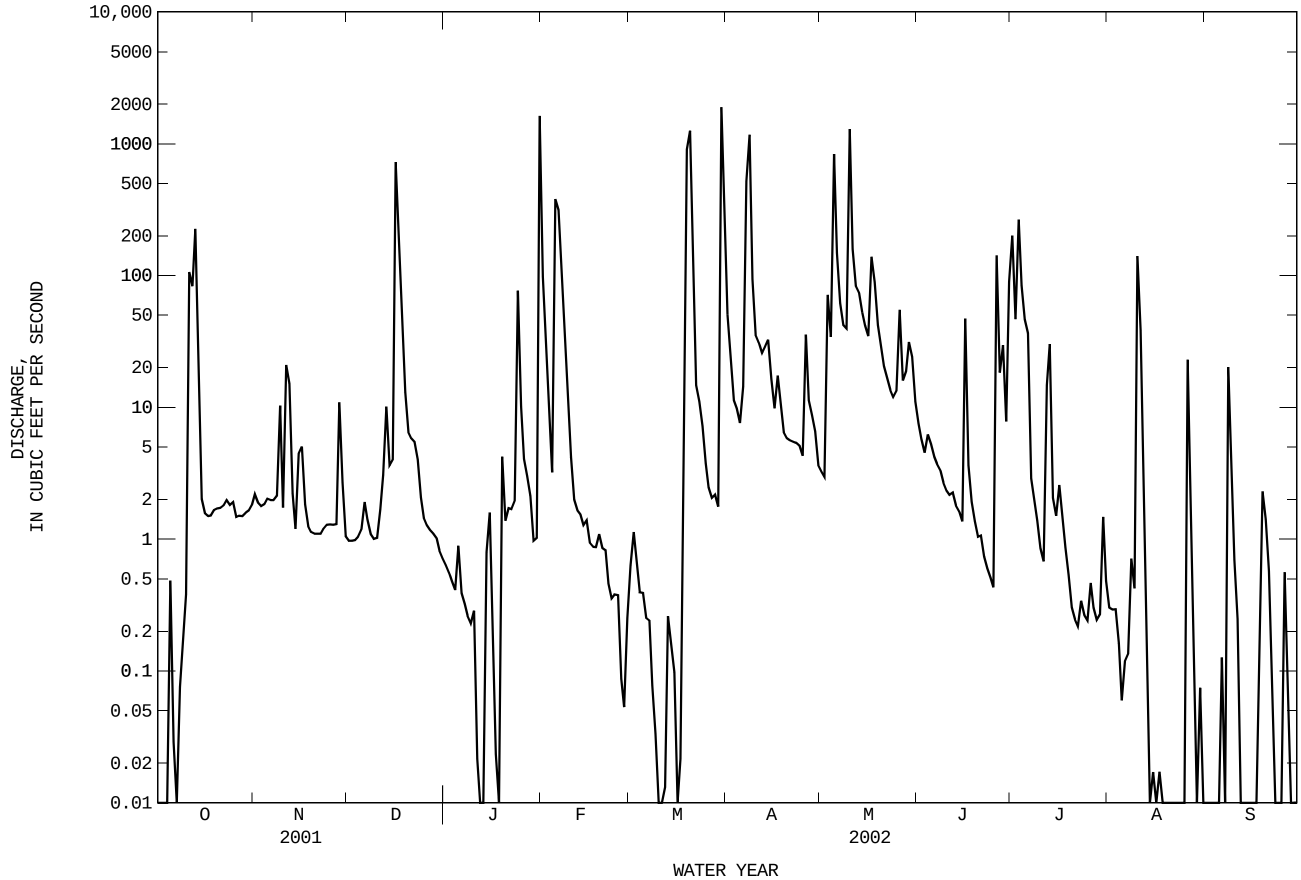
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	2.2	0.97	0.64	98	0.63	50	3.3	7.5	201	0.30	0.00
2	0.00	1.9	0.97	0.56	24	1.1	22	3.0	5.7	47	0.29	0.00
3	0.00	1.8	0.98	0.48	8.9	0.68	11	71	4.5	264	0.29	0.00
4	0.00	1.8	1.0	0.41	3.2	0.40	9.8	34	6.2	84	0.16	0.00
5	0.48	2.0	1.2	0.89	379	0.39	7.6	835	5.3	46	0.06	0.00
6	0.03	2.0	1.9	0.39	314	0.25	14	148	4.2	36	0.12	0.13
7	0.00	2.0	1.4	0.32	91	0.24	520	62	3.7	2.9	0.13	0.00
8	0.08	2.1	1.1	0.26	31	0.08	1160	42	3.3	2.0	0.71	20
9	0.16	10	1.0	0.23	13	0.03	93	40	2.7	1.4	0.42	4.6
10	0.38	1.7	1.0	0.29	4.2	0.00	35	1290	2.3	0.85	140	0.69
11	106	21	1.7	0.02	2.0	0.00	31	159	2.2	0.68	38	0.25
12	83	15	3.1	0.00	1.7	0.01	26	84	2.2	15	1.4	0.00
13	226	2.2	10	0.00	1.5	0.26	29	75	1.8	30	0.17	0.00
14	17	1.2	3.6	0.80	1.3	0.16	33	53	1.6	2.1	0.00	0.00
15	2.0	4.4	4.0	1.6	1.4	0.10	16	42	1.4	1.5	0.02	0.00
16	1.6	5.0	726	0.27	0.94	0.00	9.8	35	47	2.6	0.00	0.00
17	1.5	1.8	189	0.02	0.87	0.02	17	139	3.6	1.4	0.02	0.00
18	1.5	1.3	38	0.00	0.87	9.5	11	89	1.9	0.87	0.00	0.13
19	1.7	1.1	13	4.2	1.1	905	6.5	42	1.4	0.54	0.00	2.3
20	1.7	1.1	6.5	1.4	0.86	1250	5.8	30	1.0	0.30	0.00	1.4
21	1.7	1.1	5.8	1.7	0.82	79	5.6	21	1.1	0.25	0.00	0.57
22	1.8	1.1	5.5	1.7	0.46	15	5.5	17	0.73	0.22	0.00	0.08
23	2.0	1.2	4.0	1.9	0.35	11	5.4	14	0.60	0.34	0.00	0.00
24	1.8	1.3	2.1	77	0.38	7.2	5.1	12	0.51	0.27	0.00	0.00
25	1.9	1.3	1.5	10	0.38	3.8	4.3	13	0.43	0.24	0.00	0.0
26	1.5	1.3	1.3	4.1	0.09	2.5	36	55	142	0.47	23	0.56
27	1.5	1.3	1.2	3.0	0.05	2.1	11	16	18	0.30	1.9	0.10
28	1.5	11	1.1	2.1	0.25	2.2	8.8	19	30	0.24	0.08	0.0
29	1.6	2.7	1.0	0.97	---	1.8	6.6	31	7.8	0.27	0.00	0.00
30	1.6	1.1	0.82	1.0	---	1880	3.6	24	89	1.5	0.07	0.00
31	1.8	---	0.71	1620	---	317	---	11	---	0.48	0.00	---
TOTAL	461.83	105.0	1031.45	1736.25	981.62	4490.45	2199.4	3509.3	399.67	744.72	207.14	30.81
MEAN	14.90	3.500	33.27	56.01	35.06	144.9	73.31	113.2	13.32	24.02	6.682	1.027
MAX	226	21	726	1620	379	1880	1160	1290	142	264	140	20
MIN	0.00	1.1	0.71	0.00	0.05	0.00	3.6	3.0	0.43	0.22	0.00	0.00
AC-FT	916	208	2050	3440	1950	8910	4360	6960	793	1480	411	61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.65	10.15	19.87	9.144	25.32	31.21	38.27	51.12	29.93	5.000	3.640	6.221
MAX	272	164	326	64.5	173	184	174	378	300	57.1	55.9	67.4
(WY)	1992	2001	1992	1992	1997	1977	1990	1989	1986	1975	2001	1973
MIN	0.000	0.000	0.000	0.000	0.014	0.13	0.40	0.074	0.030	0.000	0.000	0.000
(WY)	1964	1961	1964	1981	1981	1963	1978	1962	1963	1964	1961	1971

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002	
ANNUAL TOTAL	12246.85		15897.64			
ANNUAL MEAN	33.55		43.56		20.59	
HIGHEST ANNUAL MEAN					82.2	1992
LOWEST ANNUAL MEAN					1.34	1978
HIGHEST DAILY MEAN	2010	Feb 16	1880	Mar 30	7900	May 17 1989
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1 1960
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Aug 18	0.00	Oct 15 1960
MAXIMUM PEAK FLOW			3480	Mar 30	22800	May 17 1989
MAXIMUM PEAK STAGE			23.23	Mar 30	33.77	May 17 1989
ANNUAL RUNOFF (AC-FT)	24290		31530		14910	
10 PERCENT EXCEEDS	28		54		15	
50 PERCENT EXCEEDS	1.5		1.7		0.29	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08049700 Walnut Creek near Mansfield, TX--Continued



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^2.

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 NGVD of 1929 (U.S. Army Corps of Engineers benchmark). 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 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 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, 191,200 acre-ft, May 10, elevation, 523.86 ft; minimum contents, 170,100 acre-ft, Sept. 30, elevation, 521.08 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

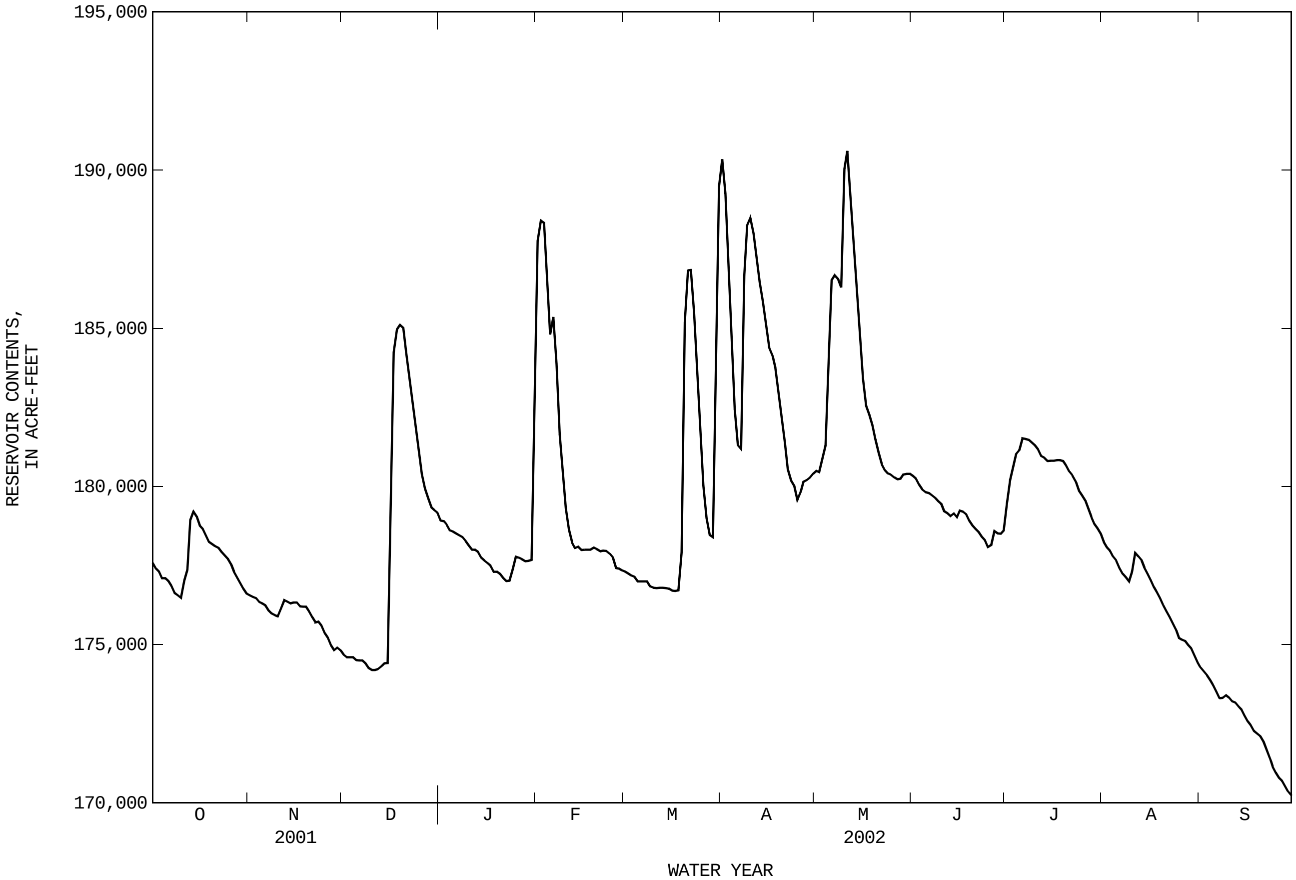
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177600	176600	174700	178900	187800	177300	190300	180500	180300	179500	178200	174300
2	177400	176500	174600	178900	188400	177200	189300	180400	180200	180200	178100	174100
3	177300	176500	174600	178800	188300	177200	186800	180900	180100	180600	178000	174000
4	177100	176300	174600	178600	186500	177100	184700	181300	179900	181000	177800	173900
5	177100	176300	174500	178600	184800	177000	182500	183900	179800	181100	177700	173700
6	177000	176200	174500	178500	185400	177000	181300	186500	179800	181500	177400	173500
7	176800	176100	174500	178400	183900	177000	181200	186700	179700	181500	177200	173300
8	176600	176000	174400	178400	181600	177000	186700	186600	179700	181500	177100	173300
9	176600	175900	174300	178300	180500	176800	188200	186300	179500	181400	177000	173400
10	176500	175900	174200	178100	179300	176800	188500	190000	179400	181300	177300	173300
11	177000	176100	174200	178000	178600	176800	188000	190600	179200	181200	177900	173200
12	177400	176400	174200	178000	178200	176800	187200	189200	179200	181000	177800	173200
13	178900	176400	174300	177900	178000	176800	186500	187900	179100	180900	177700	173000
14	179200	176300	174400	177700	178100	176800	185800	186500	179100	e180800	177400	172900
15	179100	176300	174400	177700	178000	176800	185200	184900	179000	e180800	177200	172800
16	178800	176300	179400	177600	178000	176700	184400	183400	179200	e180800	177000	172600
17	178600	176200	184200	177500	178000	176700	184200	182500	179200	180800	176800	172400
18	178500	176200	184900	177300	178000	176700	183800	182300	179100	180800	176600	172300
19	178200	176200	185100	177300	178100	177900	183000	181900	178900	180800	176500	172200
20	178200	176100	185000	177200	178000	185200	182200	181500	178800	180700	176200	172100
21	178100	175900	184200	177100	177900	186800	181400	181100	178700	180500	176100	171900
22	178000	175700	183500	177000	178000	186800	180500	180700	178600	180400	175900	171700
23	177900	175700	182800	177000	178000	185500	180200	180500	178400	180200	175700	171400
24	177800	175600	182000	177400	177900	183700	180000	180400	178300	179900	175500	171100
25	177700	175400	181200	177800	177800	181800	179600	180400	178100	179700	175200	171000
26	177500	175200	180400	177700	177400	180000	179800	180300	178100	179600	175100	170800
27	177300	175000	179900	177700	177400	179000	180100	180200	178600	179300	175100	170700
28	177100	174800	179600	177600	177300	178500	180200	180200	178500	179000	175000	170500
29	176900	174900	179300	177600	---	178400	180300	180400	178500	178800	174900	170300
30	176800	174800	179300	177700	---	184200	180400	180400	178600	178700	174700	170200
31	176600	---	179200	183700	---	189500	---	180400	---	178500	174400	---
MEAN	177600	175900	178300	178100	180300	179400	183700	183200	179100	180400	176600	172400
MAX	179200	176600	185100	183700	188400	189500	190300	190600	180300	181500	178200	174300
MIN	176500	174800	174200	177000	177300	176700	179600	180200	178100	178500	174400	170200
(+)	521.96	521.72	522.30	522.89	522.06	523.65	522.46	522.46	522.22	522.21	521.66	521.09
(@)	0	-1800	+4400	+4500	-6400	+12200	-9100	0	-1800	-100	-4100	-4200

CAL YR 2001 MAX 208100 MIN 172100 (@) +4000
WTR YR 2002 MAX 190600 MIN 170200 (@) -6400

e Estimated

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

08049800 Joe Pool Lake near Duncanville, TX--Continued



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^2.

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 NGVD of 1929. Prior to Oct. 21, 1960, nonrecording 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 x 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, 22,870 acre-ft, Jan. 31, elevation, 457.78 ft; minimum contents, 19,000 acre-ft, Sept. 18, elevation, 456.28 ft.

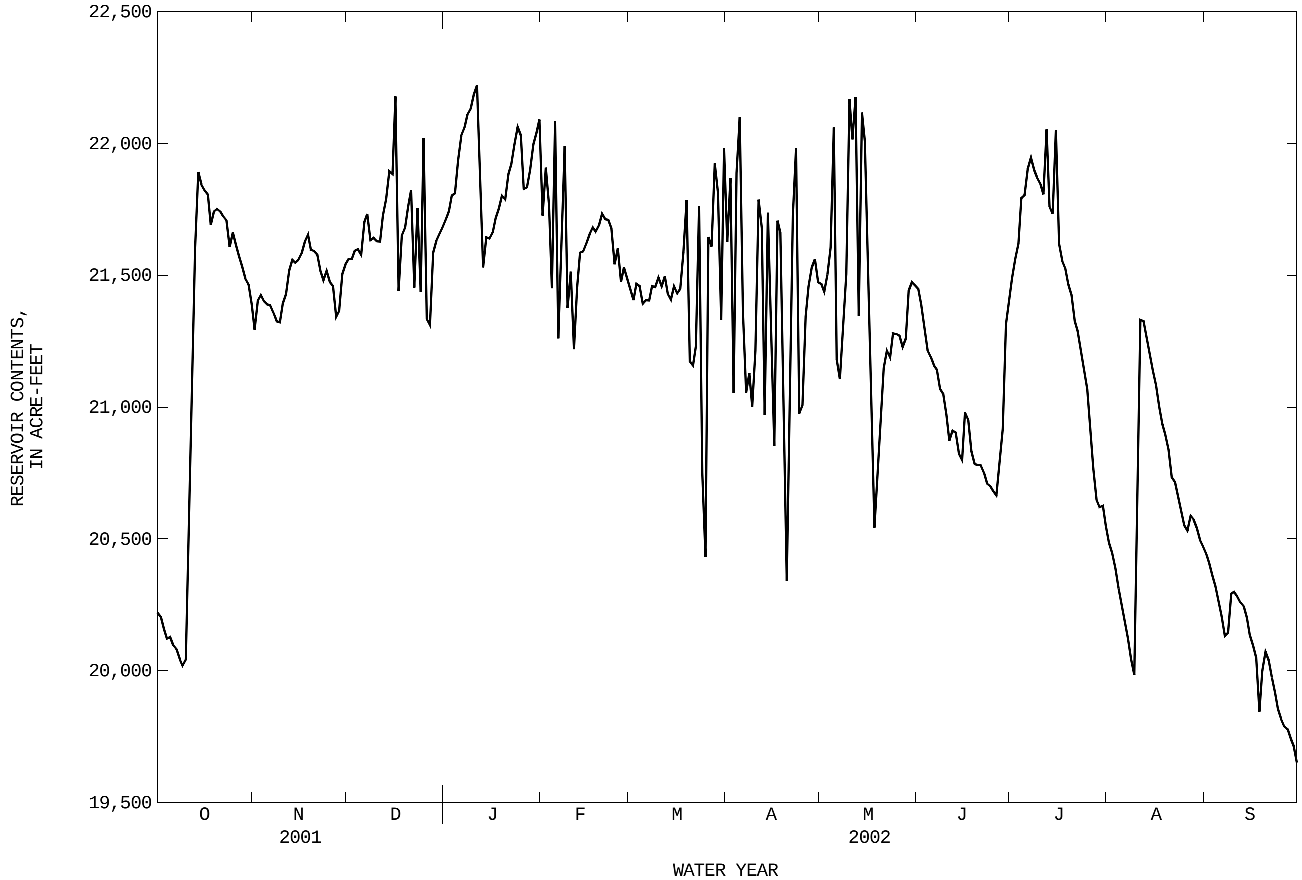
RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20220	21290	21560	21710	21730	21440	21630	21470	21450	21490	20480	20450
2	20200	21400	21560	21740	21910	21410	21870	21440	21390	21560	20440	20410
3	20160	21420	21590	21800	21770	21470	21050	21500	21300	21620	20390	20360
4	20120	21400	21600	21810	21450	21460	21890	21610	21220	21790	20310	20320
5	20130	21390	21580	21940	22080	21390	22100	22060	21190	21800	20250	20260
6	20100	21390	21700	22030	21260	21410	21360	21180	21160	21900	20190	20210
7	20080	21360	21730	22060	21690	21400	21050	21110	21140	21950	20120	20130
8	20040	21330	21630	22110	21990	21460	21130	21300	21070	21900	20040	20140
9	20020	21320	21640	22130	21380	21460	21000	21500	21050	21870	19980	20290
10	20040	21390	21630	22190	21510	21490	21210	22170	20970	21850	20470	20300
11	20410	21430	21630	22220	21220	21460	21790	22020	20870	21810	21330	20280
12	20820	21520	21730	21940	21460	21500	21680	22180	20910	22050	21330	20260
13	21600	21560	21790	21530	21590	21430	20970	21340	20900	21760	21260	20240
14	21890	21550	21900	21640	21590	21410	21740	22120	20820	21730	21210	20200
15	21840	21560	21880	21640	21620	21460	21280	22010	20800	22050	21140	20130
16	21820	21580	22180	21660	21660	21430	20850	21500	20980	21620	21080	20100
17	21810	21630	21440	21720	21680	21450	21710	21000	20950	21550	21000	20050
18	21690	21650	21650	21750	21670	21590	21660	20540	20830	21530	20930	19840
19	21740	21600	21680	21800	21690	21790	20850	20750	20780	21460	20900	20000
20	21750	21590	21760	21790	21730	21170	20340	20960	20780	21420	20840	20070
21	21740	21580	21820	21880	21710	21160	20950	21150	20780	21330	20730	20040
22	21720	21520	21450	21920	21710	21230	21730	21220	20750	21290	20720	19970
23	21710	21480	21760	22000	21680	21760	21980	21190	20710	21220	20670	19920
24	21610	21520	21440	22060	21540	20750	20980	21280	20700	21140	20610	19850
25	21660	21470	22020	22030	21600	20430	21000	21280	20680	21070	20550	19820
26	21610	21460	21330	21830	21470	21650	21340	21270	20670	20900	20530	19790
27	21570	21340	21310	21830	21530	21610	21460	21230	20780	20770	20590	19780
28	21530	21360	21590	21900	21490	21920	21530	21260	20920	20650	20570	19740
29	21490	21500	21630	22000	---	21810	21560	21440	21320	20620	20540	19710
30	21470	21540	21650	22040	---	21330	21470	21470	21390	20620	20500	19650
31	21390	---	21680	22090	---	21980	---	21460	---	20550	20470	---
MEAN	21100	21470	21660	21900	21620	21440	21370	21420	20980	21450	20650	20080
MAX	21890	21650	22180	22220	22080	21980	22100	22180	21450	22050	21330	20450
MIN	20020	21290	21310	21530	21220	20430	20340	20540	20670	20550	19980	19650
(+)	457.23	457.28	457.34	457.49	457.26	457.45	457.26	457.26	457.23	456.91	456.88	456.54
(@)	+1160	+150	+140	+410	-600	+490	-510	-10	-70	-840	-80	-820

CAL YR 2001 MAX 22380 MIN 17850 (@) +580
WTR YR 2002 MAX 22220 MIN 19650 (@) -580

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

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



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 Company. bridge, 1.5 mi downstream from Mountain Creek Lake Dam, and 4.4 mi east of Grand Prairie.

DRAINAGE AREA.--298 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 404.31 ft above NGVD of 1929. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

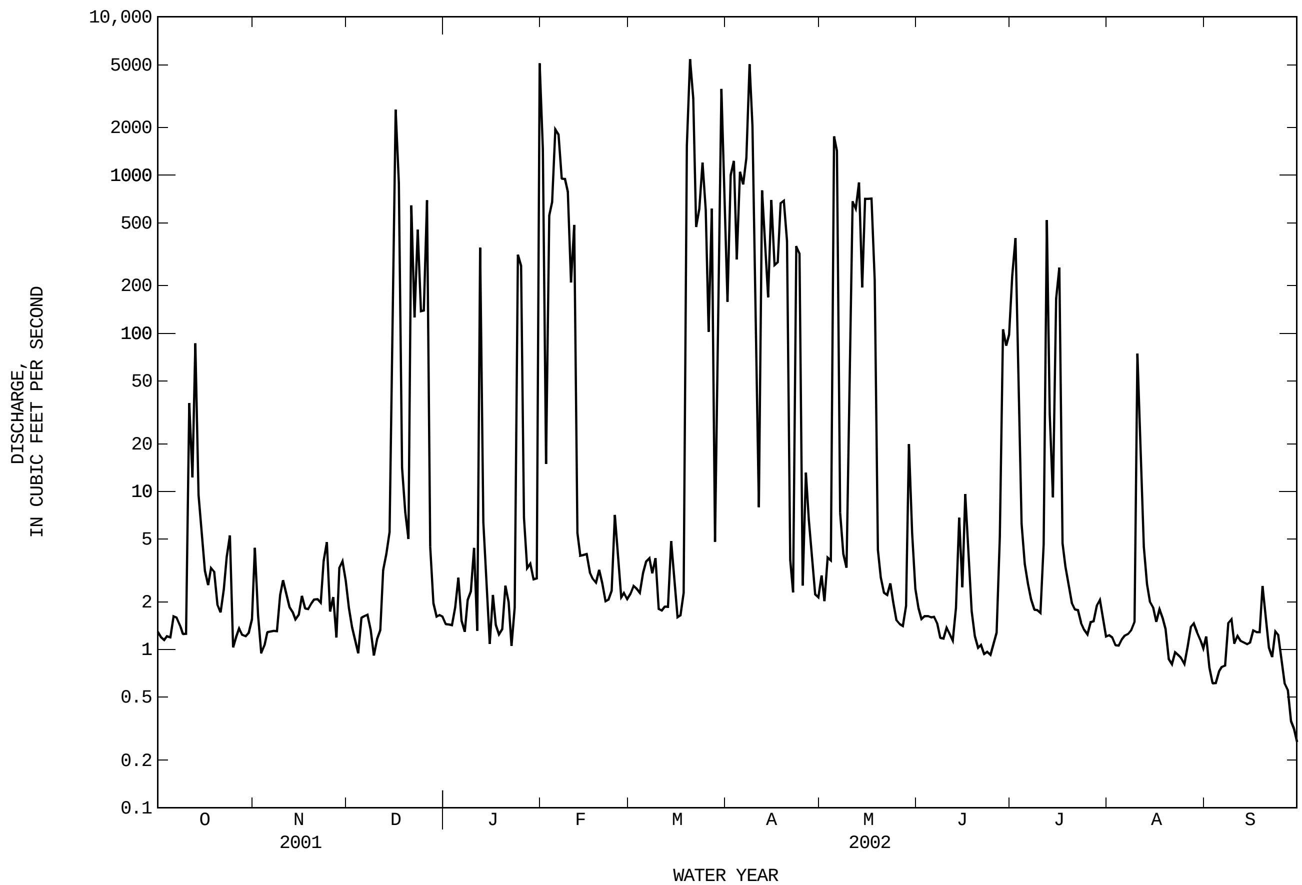
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	4.4	1.8	1.4	1460	2.2	158	2.9	1.8	233	1.2	1.2
2	1.2	1.6	1.4	1.4	15	2.5	998	2.0	1.6	400	1.2	0.77
3	1.1	0.95	1.1	1.4	555	2.4	1230	3.8	1.6	23	1.1	0.61
4	1.2	1.1	0.95	1.8	674	2.3	293	3.7	1.6	6.3	1.1	0.61
5	1.2	1.3	1.6	2.8	1950	3.0	1050	1760	1.6	3.5	1.2	0.72
6	1.6	1.3	1.6	1.5	1810	3.6	875	1420	1.6	2.6	1.2	0.78
7	1.6	1.3	1.7	1.3	950	3.8	1290	7.3	1.5	2.1	1.3	0.79
8	1.4	1.3	1.3	2.1	947	3.0	5010	4.0	1.2	1.8	1.3	1.5
9	1.3	2.2	0.92	2.3	784	3.8	2050	3.3	1.2	1.8	1.5	1.6
10	1.3	2.7	1.2	4.4	209	1.8	61	17	1.4	1.7	74	1.1
11	36	2.3	1.3	1.3	484	1.8	7.9	683	1.3	4.6	20	1.2
12	12	1.9	3.2	347	5.5	1.9	801	615	1.1	518	4.5	1.1
13	86	1.7	4.0	6.4	3.9	1.9	362	899	1.8	31	2.6	1.1
14	9.5	1.5	5.5	2.4	4.0	4.9	168	195	6.8	9.2	2.0	1.1
15	5.4	1.7	223	1.1	4.0	2.8	694	710	2.5	165	1.9	1.1
16	3.1	2.2	2590	2.2	3.1	1.6	270	707	9.6	261	1.5	1.3
17	2.6	1.8	891	1.4	2.8	1.6	282	713	4.0	4.7	1.8	1.3
18	3.3	1.8	14	1.2	2.6	2.3	662	217	1.8	3.4	1.6	1.3
19	3.1	1.9	7.4	1.3	3.2	1530	687	4.3	1.2	2.6	1.3	2.5
20	1.9	2.1	5.0	2.5	2.6	5410	384	2.9	1.0	2.0	0.87	1.6
21	1.7	2.1	642	2.0	2.0	3060	3.7	2.3	1.1	1.8	0.81	1.0
22	2.4	2.0	126	1.1	2.1	470	2.3	2.2	0.94	1.8	0.96	0.90
23	3.9	3.7	452	1.8	2.4	614	355	2.6	0.96	1.5	0.93	1.3
24	5.3	4.8	138	313	7.1	1200	320	2.0	0.93	1.3	0.88	1.2
25	1.0	1.7	139	266	3.9	602	2.5	1.5	1.1	1.2	0.81	0.85
26	1.2	2.1	692	6.8	2.1	102	13	1.4	1.3	1.5	1.0	0.61
27	1.4	1.2	4.5	3.3	2.3	612	6.7	1.4	5.2	1.5	1.4	0.56
28	1.2	3.3	2.0	3.5	2.1	4.8	3.8	1.9	106	1.9	1.5	0.35
29	1.2	3.6	1.6	2.8	---	535	2.2	20	83	2.1	1.3	0.32
30	1.3	2.7	1.6	2.8	---	3500	2.1	5.4	98	1.5	1.2	0.26
31	1.6	---	1.6	5090	---	956	---	2.4	---	1.2	1.0	---
TOTAL	198.3	64.25	5958.27	6080.3	9893.7	18643.0	18044.2	8013.3	344.73	1694.6	134.96	30.63
MEAN	6.397	2.142	192.2	196.1	353.3	601.4	601.5	258.5	11.49	54.66	4.354	1.021
MAX	86	4.8	2590	5090	1950	5410	5010	1760	106	518	74	2.5
MIN	1.0	0.95	0.92	1.1	2.0	1.6	2.1	1.4	0.93	1.2	0.81	0.26
AC-FT	393	127	11820	12060	19620	36980	35790	15890	684	3360	268	61

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	67.75	66.99	105.7	103.3	171.3	233.2	217.1	285.5	145.8	32.98	9.008	23.00
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	0.22	0.30	0.26	0.11	0.17	0.30	0.91	0.68	0.50	0.21	0.16	0.36
(WY)	1989	1964	1976	1976	1964	1976	1987	1984	1971	1972	1972	1972

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002	
ANNUAL TOTAL	80611.96		69100.24			
ANNUAL MEAN	220.9		189.3		121.5	
HIGHEST ANNUAL MEAN					506	1992
LOWEST ANNUAL MEAN					4.39	1988
HIGHEST DAILY MEAN	8570	Feb 16	5410	Mar 20	24700	May 7 1969
LOWEST DAILY MEAN	0.15	May 25	0.26	Sep 30	0.00	Jan 25 1964
ANNUAL SEVEN-DAY MINIMUM	0.49	Jul 17	0.59	Sep 24	0.02	Dec 23 1983
MAXIMUM PEAK FLOW			8430	Jan 31	38100	Apr 19 1976
MAXIMUM PEAK STAGE			19.93	Jan 31	25.12	Dec 20 1991
ANNUAL RUNOFF (AC-FT)	159900		137100		88040	
10 PERCENT EXCEEDS	840		626		127	
50 PERCENT EXCEEDS	2.0		2.2		1.3	
90 PERCENT EXCEEDS	0.58		1.1		0.34	

08050100 Mountain Creek at Grand Prairie, TX--Continued



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^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 700.00 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

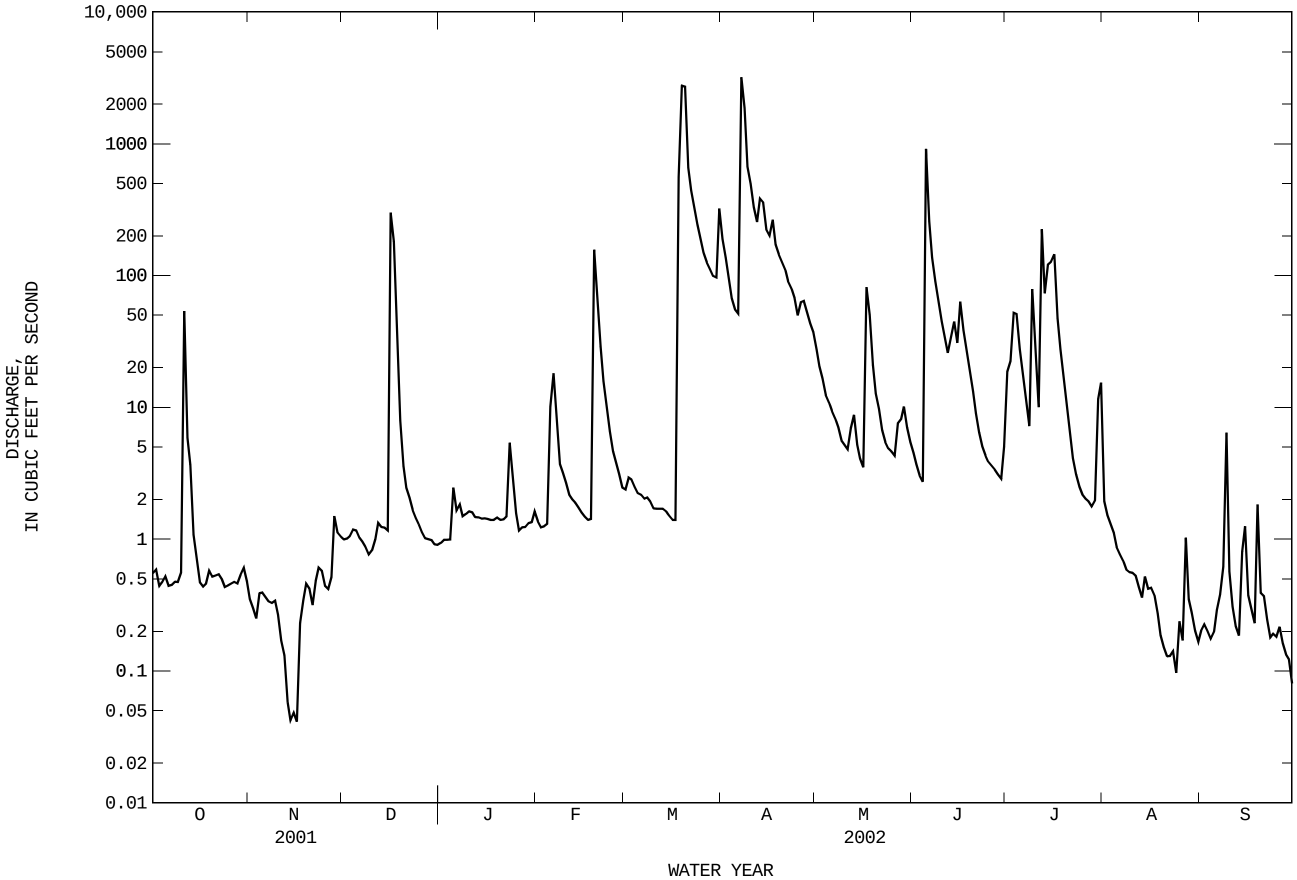
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.55	0.35	0.99	0.94	1.4	2.4	189	27	4.5	19	1.9	0.20
2	0.59	0.30	1.0	0.99	1.2	2.9	137	20	3.7	22	1.5	0.23
3	0.44	0.25	1.1	0.99	1.3	2.8	93	16	3.0	52	1.3	0.20
4	0.47	0.39	1.2	0.99	1.3	2.5	67	12	2.7	51	1.1	0.18
5	0.52	0.39	1.2	2.5	10	2.2	55	11	914	28	0.87	0.20
6	0.44	0.36	1.0	1.6	18	2.2	51	9.4	259	17	0.77	0.29
7	0.45	0.34	0.96	1.8	8.1	2.0	3190	8.3	137	11	0.69	0.38
8	0.48	0.33	0.87	1.5	3.7	2.1	1870	7.0	90	7.2	0.59	0.62
9	0.47	0.34	0.77	1.5	3.2	1.9	669	5.6	64	79	0.56	6.4
10	0.56	0.27	0.82	1.6	2.7	1.7	497	5.2	45	25	0.56	0.57
11	54	0.17	1.00	1.6	2.2	1.7	328	4.8	35	10	0.53	0.31
12	5.9	0.13	1.3	1.5	2.0	1.7	256	6.9	26	224	0.43	0.22
13	3.7	0.06	1.2	1.5	1.9	1.7	383	8.7	34	73	0.36	0.19
14	1.1	0.04	1.2	1.4	1.7	1.6	359	5.2	45	121	0.52	0.80
15	0.72	0.05	1.2	1.4	1.6	1.5	224	4.1	31	128	0.42	1.2
16	0.47	0.04	299	1.4	1.5	1.4	201	3.5	63	145	0.43	0.37
17	0.44	0.23	182	1.4	1.4	1.4	265	82	38	48	0.38	0.29
18	0.46	0.34	33	1.4	1.4	557	171	50	28	28	0.27	0.23
19	0.58	0.46	7.9	1.5	156	2760	145	21	19	17	0.19	1.8
20	0.52	0.42	3.6	1.4	74	2720	128	13	13	11	0.15	0.39
21	0.53	0.32	2.5	1.4	29	658	112	9.7	9.0	6.7	0.13	0.37
22	0.54	0.48	2.1	1.5	16	444	90	6.7	6.4	4.1	0.13	0.25
23	0.50	0.61	1.7	5.4	10	324	81	5.4	5.0	3.1	0.14	0.18
24	0.43	0.57	1.4	2.8	6.6	241	68	4.9	4.3	2.5	0.10	0.19
25	0.45	0.44	1.3	1.6	4.6	189	50	4.6	3.8	2.2	0.24	0.18
26	0.46	0.42	1.1	1.2	3.8	148	63	4.3	3.6	2.0	0.17	0.22
27	0.47	0.51	1.0	1.2	3.1	126	64	7.5	3.4	1.9	1.0	0.16
28	0.46	1.5	1.0	1.2	2.5	112	53	8.1	3.1	1.8	0.35	0.13
29	0.53	1.1	0.98	1.3	---	99	43	10	2.9	2.0	0.27	0.12
30	0.60	1.0	0.92	1.3	---	96	37	7.0	5.0	12	0.20	0.08
31	0.48	---	0.91	1.6	---	323	---	5.4	---	15	0.17	---
TOTAL	78.31	12.21	556.22	49.41	370.2	8830.7	9939	394.3	1901.4	1169.5	16.42	16.95
MEAN	2.526	0.407	17.94	1.594	13.22	284.9	331.3	12.72	63.38	37.73	0.530	0.565
MAX	54	1.5	299	5.4	156	2760	3190	82	914	224	1.9	6.4
MIN	0.43	0.04	0.77	0.94	1.2	1.4	37	3.5	2.7	1.8	0.10	0.08
AC-FT	155	24	1100	98	734	17520	19710	782	3770	2320	33	34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	52.15	78.09	130.3	85.95	177.2	191.1	157.6	271.8	129.6	16.76	3.618	29.70
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	0.098	0.28	2.25	0.46	0.52	6.54	2.76	0.73	2.61	0.61	0.000	0.031
(WY)	2000	2000	2000	2000	2000	1986	2000	2000	1996	1998	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1986 - 2002	
ANNUAL TOTAL	47454.13		23334.62			
ANNUAL MEAN	130.0		63.93		109.9	
HIGHEST ANNUAL MEAN					277	1990
LOWEST ANNUAL MEAN					3.12	2000
HIGHEST DAILY MEAN	4450	Feb 16	3190	Apr 7	12500	May 2 1990
LOWEST DAILY MEAN	0.04	Nov 14	0.04	Nov 14	0.00	Aug 2 1988
ANNUAL SEVEN-DAY MINIMUM	0.10	Nov 11	0.10	Nov 11	0.00	Aug 2 1988
MAXIMUM PEAK FLOW			9130	Mar 20	24000	May 16 1989
MAXIMUM PEAK STAGE			17.57	Mar 20	25.33	May 16 1989
ANNUAL RUNOFF (AC-FT)	94130		46280		79650	
10 PERCENT EXCEEDS	266		123		215	
50 PERCENT EXCEEDS	3.9		1.7		8.9	
90 PERCENT EXCEEDS	0.44		0.27		0.60	

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



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^2.

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 NGVD of 1929. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

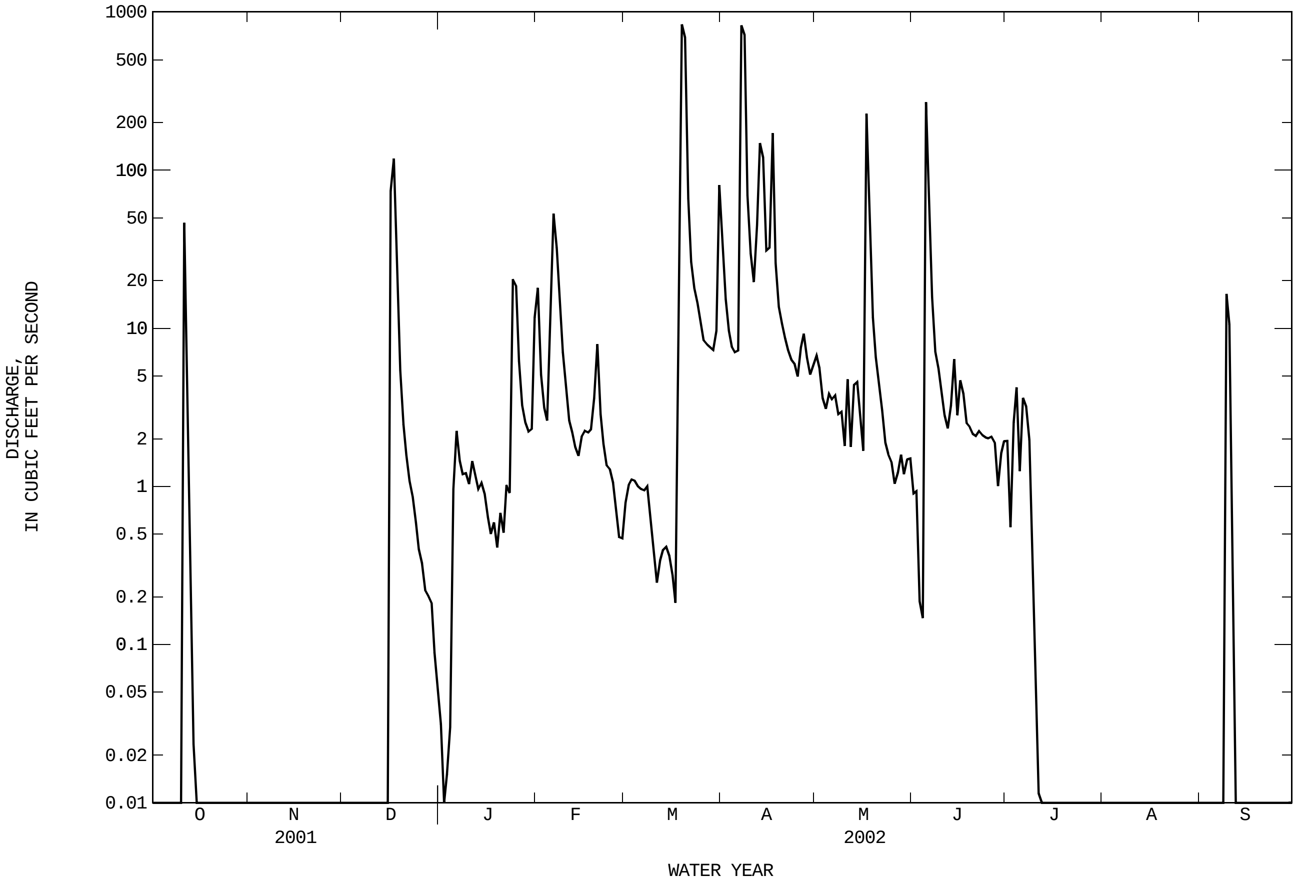
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.03	18	0.79	31	6.7	0.90	1.9	0.00	0.00
2	0.00	0.00	0.00	0.0	5.1	1.0	15	5.6	0.93	0.55	0.00	0.00
3	0.00	0.00	0.00	0.02	3.1	1.1	9.6	3.6	0.19	2.5	0.00	0.00
4	0.00	0.00	0.00	0.03	2.6	1.1	7.7	3.1	0.15	4.2	0.00	0.00
5	0.00	0.00	0.00	0.96	15	1.0	7.1	3.9	269	1.2	0.00	0.00
6	0.00	0.00	0.00	2.2	53	0.96	7.2	3.6	70	3.6	0.00	0.00
7	0.00	0.00	0.00	1.4	32	0.94	821	3.8	16	3.2	0.00	0.00
8	0.00	0.00	0.0	1.2	13	1.00	715	2.9	7.1	2.0	0.00	0.00
9	0.00	0.00	0.00	1.2	7.1	0.64	69	3.0	5.6	0.53	0.00	17
10	0.00	0.00	0.00	1.0	4.3	0.38	30	1.8	3.8	0.12	0.00	11
11	46	0.00	0.00	1.4	2.6	0.25	20	4.8	2.8	0.01	0.00	0.44
12	6.8	0.00	0.00	1.2	2.2	0.34	45	1.8	2.3	0.00	0.00	0.00
13	1.4	0.00	0.00	0.96	1.8	0.40	148	4.4	3.3	0.00	0.00	0.00
14	0.02	0.00	0.00	1.0	1.6	0.41	120	4.6	6.4	0.00	0.00	0.00
15	0.00	0.00	0.00	0.89	2.1	0.36	31	2.8	2.8	0.00	0.00	0.00
16	0.00	0.00	74	0.64	2.2	0.27	32	1.7	4.7	0.00	0.00	0.00
17	0.00	0.00	118	0.50	2.2	0.18	171	227	3.8	0.00	0.00	0.00
18	0.00	0.00	18	0.59	2.3	56	26	58	2.5	0.00	0.00	0.00
19	0.00	0.00	5.4	0.41	3.6	832	14	12	2.4	0.00	0.00	0.00
20	0.00	0.00	2.5	0.68	7.9	687	11	6.6	2.1	0.00	0.00	0.00
21	0.00	0.00	1.6	0.51	2.9	66	8.6	4.5	2.1	0.00	0.00	0.00
22	0.00	0.00	1.1	1.0	1.9	26	7.3	3.0	2.2	0.00	0.00	0.00
23	0.00	0.00	0.86	0.91	1.4	18	6.3	1.9	2.1	0.00	0.00	0.00
24	0.00	0.00	0.59	20	1.3	14	6.0	1.6	2.0	0.00	0.00	0.00
25	0.00	0.00	0.40	19	1.1	11	4.9	1.4	2.0	0.00	0.00	0.00
26	0.00	0.00	0.33	6.2	0.68	8.4	7.6	1.0	2.1	0.00	0.00	0.00
27	0.00	0.00	0.22	3.3	0.48	7.9	9.3	1.2	1.9	0.00	0.00	0.00
28	0.00	0.00	0.20	2.5	0.47	7.6	6.5	1.6	1.0	0.00	0.00	0.00
29	0.00	0.00	0.18	2.2	---	7.3	5.1	1.2	1.6	0.00	0.00	0.00
30	0.00	0.00	0.09	2.3	---	9.6	5.8	1.5	1.9	0.00	0.00	0.00
31	0.00	---	0.05	12	---	80	---	1.5	---	0.00	0.00	---
TOTAL	54.22	0.00	223.52	86.23	191.93	1841.92	2398.0	382.1	425.67	19.81	0.00	28.44
MEAN	1.749	0.000	7.210	2.782	6.855	59.42	79.93	12.33	14.19	0.639	0.000	0.948
MAX	46	0.00	118	20	53	832	821	227	269	4.2	0.00	17
MIN	0.00	0.00	0.00	0.00	0.47	0.18	4.9	1.0	0.15	0.00	0.00	0.00
AC-FT	108	0.00	443	171	381	3650	4760	758	844	39	0.00	56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	20.79	15.66	37.83	18.74	33.70	38.46	42.54	53.88	27.62	20.83	0.964	5.766
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	0.000	0.000	0.000	0.10	0.000	0.67	0.000	0.059	0.000	0.000	0.000	0.000
(WY)	1988	1990	1999	2000	1999	1999	1999	1996	1996	1988	1986	1995

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1986 - 2002	
ANNUAL TOTAL	7318.65		5651.84			
ANNUAL MEAN	20.05		15.48		26.38	
HIGHEST ANNUAL MEAN					72.7	1992
LOWEST ANNUAL MEAN					1.77	1999
HIGHEST DAILY MEAN	937	Feb 24	832	Mar 19	5410	Jul 11 1994
LOWEST DAILY MEAN	0.00	Apr 18	0.00	Oct 1	0.00	Oct 1 1985
ANNUAL SEVEN-DAY MINIMUM	0.00	May 12	0.00	Oct 1	0.00	Oct 1 1985
MAXIMUM PEAK FLOW			3260	Apr 7	13300	Jul 10 1994
MAXIMUM PEAK STAGE			13.44	Apr 7	14.94	Jul 10 1994
ANNUAL RUNOFF (AC-FT)	14520		11210		19110	
10 PERCENT EXCEEDS	34		15		26	
50 PERCENT EXCEEDS	0.00		0.59		1.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08050800 Timber Creek near Collinsville, TX--Continued



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, and 6.5 mi southeast from Post Office in Collinsville.

DRAINAGE AREA.--29.2 mi^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation or diversions. No flow many days most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	5.1	e25	1.5	27	0.47	0.02	0.00	0.00	0.00
2	0.00	0.00	0.00	e5.4	e9.3	e1.6	8.6	0.40	0.01	0.00	0.00	0.00
3	0.00	0.00	0.00	e5.1	6.0	e1.8	4.4	0.35	0.0	0.00	0.00	0.00
4	0.00	0.00	0.00	e4.9	4.5	e1.9	2.7	0.28	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	5.9	9.5	e1.7	2.1	0.25	1.3	0.00	0.00	0.00
6	0.00	0.00	0.00	7.4	e51	1.8	1.9	0.26	3.6	0.00	0.00	0.00
7	0.00	0.00	0.00	e8.4	e39	1.7	397	0.27	0.99	0.00	0.00	0.00
8	0.00	0.00	0.00	8.3	e20	1.5	644	0.25	0.47	0.00	0.00	0.00
9	0.00	0.00	0.00	7.2	12	e1.5	25	0.27	0.34	0.00	0.00	0.00
10	0.00	0.00	0.00	6.7	e8.2	e1.3	8.5	0.25	0.21	0.00	0.00	0.00
11	166	0.00	0.00	6.3	e4.8	1.4	4.7	0.26	0.15	0.00	0.00	0.00
12	23	0.00	0.00	e5.9	e4.2	1.2	3.2	0.23	0.08	0.00	0.00	0.00
13	320	0.00	0.00	e6.2	e3.8	1.2	37	0.21	0.02	16	0.00	0.00
14	2.0	0.00	0.00	e5.9	e3.5	1.2	68	0.15	0.41	2.1	0.00	0.00
15	0.06	0.00	0.00	e6.1	e3.1	1.2	10	0.07	0.53	0.47	0.00	0.00
16	0.00	0.00	123	6.0	e3.1	1.2	15	0.01	0.70	14	0.00	0.00
17	0.00	0.00	156	5.6	e2.9	1.1	693	227	1.4	197	0.00	0.00
18	0.00	0.00	23	5.3	2.8	116	22	28	0.45	30	0.00	0.00
19	0.00	0.00	12	e5.3	192	1400	7.4	3.6	0.27	3.5	0.00	0.00
20	0.00	0.00	8.7	e4.0	e32	e1260	4.0	1.3	0.12	0.85	0.00	0.00
21	0.00	0.00	6.9	e3.7	8.4	e23	2.7	0.57	0.07	0.34	0.00	0.00
22	0.00	0.00	6.3	3.3	e4.5	e8.3	1.7	0.48	0.0	0.14	0.00	0.00
23	0.00	0.00	6.0	3.4	e3.4	e6.1	1.1	0.39	0.00	0.07	0.00	0.00
24	0.00	0.00	5.8	e22	2.9	4.6	0.83	0.25	0.00	0.03	0.00	0.00
25	0.00	0.00	5.8	e24	e2.4	3.5	0.66	0.17	0.00	0.02	0.00	0.00
26	0.00	0.00	5.4	e13	e1.9	e2.5	0.55	0.13	0.00	0.0	0.00	0.00
27	0.00	0.00	5.6	e9.8	e1.7	e2.0	0.97	0.13	0.00	0.00	0.00	0.00
28	0.00	0.00	5.2	8.6	e1.5	1.8	0.95	0.18	0.00	0.00	0.00	0.00
29	0.00	0.00	5.5	8.1	---	1.7	0.70	0.13	0.00	0.00	0.00	0.00
30	0.00	0.00	5.5	8.5	---	15	0.56	0.08	0.00	0.00	0.00	0.00
31	0.00	---	5.1	e369	---	574	---	0.02	---	0.00	0.00	---
TOTAL	511.06	0.00	385.80	594.4	463.4	3443.3	1996.22	266.41	11.14	264.52	0.00	0.00
MEAN	16.49	0.000	12.45	19.17	16.55	111.1	66.54	8.594	0.371	8.533	0.000	0.000
MAX	320	0.00	156	369	192	1400	693	227	3.6	197	0.00	0.00
MIN	0.00	0.00	0.00	3.3	1.5	1.1	0.55	0.01	0.00	0.00	0.00	0.00
AC-FT	1010	0.00	765	1180	919	6830	3960	528	22	525	0.00	0.00

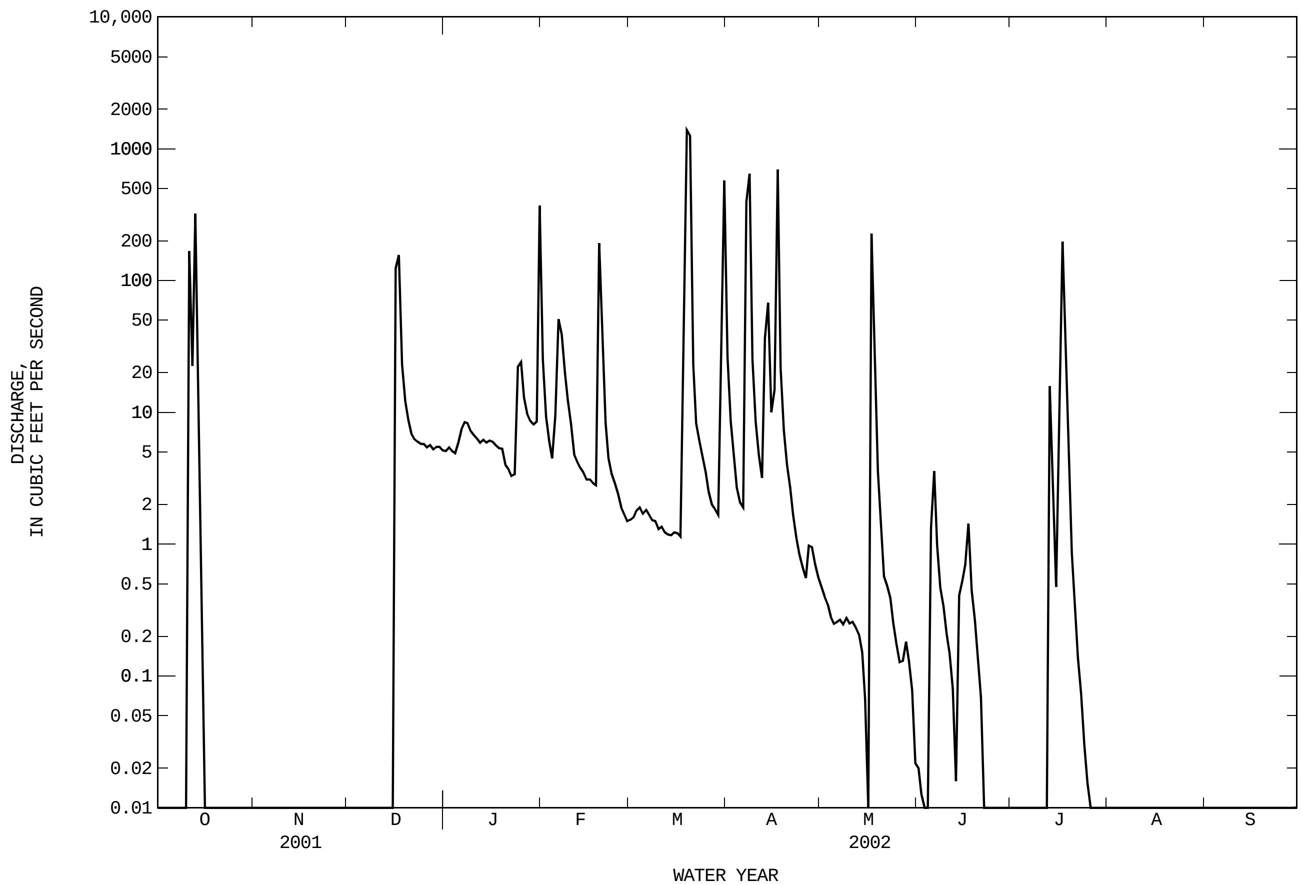
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	17.30	39.23	23.47	18.01	33.10	41.87	25.78	20.90	5.626	4.534	0.615	1.927
MAX	107	204	66.0	108	118	111	66.5	86.5	28.3	36.7	4.72	9.54
(WY)	1994	1997	1998	1998	2001	2002	2002	1995	1993	1994	1994	1994
MIN	0.000	0.000	0.40	0.000	0.000	1.25	0.15	0.000	0.000	0.000	0.000	0.000
(WY)	1993	1996	2000	2000	1996	1999	1998	1996	1996	1993	1993	1997

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1993 - 2002	
ANNUAL TOTAL	7811.41		7936.25			
ANNUAL MEAN	21.40		21.74		19.27	
HIGHEST ANNUAL MEAN					38.3	1997
LOWEST ANNUAL MEAN					1.88	1996
HIGHEST DAILY MEAN	1180	Feb 16	1400	Mar 19	2580	Oct 19 1993
LOWEST DAILY MEAN	0.00	May 23	0.00	Oct 1	0.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 8	0.00	Oct 1	0.00	Oct 1 1992
MAXIMUM PEAK FLOW			3350	Mar 20	7640	Oct 19 1993
MAXIMUM PEAK STAGE			20.63	Mar 20	23.32	Oct 19 1993
ANNUAL RUNOFF (AC-FT)	15490		15740		13960	
10 PERCENT EXCEEDS	16		13		10	
50 PERCENT EXCEEDS	0.00		0.18		0.03	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08050840 Range Creek near Collinsville, TX--Continued



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^2.

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. Datum of gage is NGVD of 1929. Satellite telemeter at station.

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, 890,800 acre-ft, Apr. 10, elevation, 635.46 ft; minimum contents, 747,000 acre-ft, Dec. 11, 14, elevation, 630.65 ft.

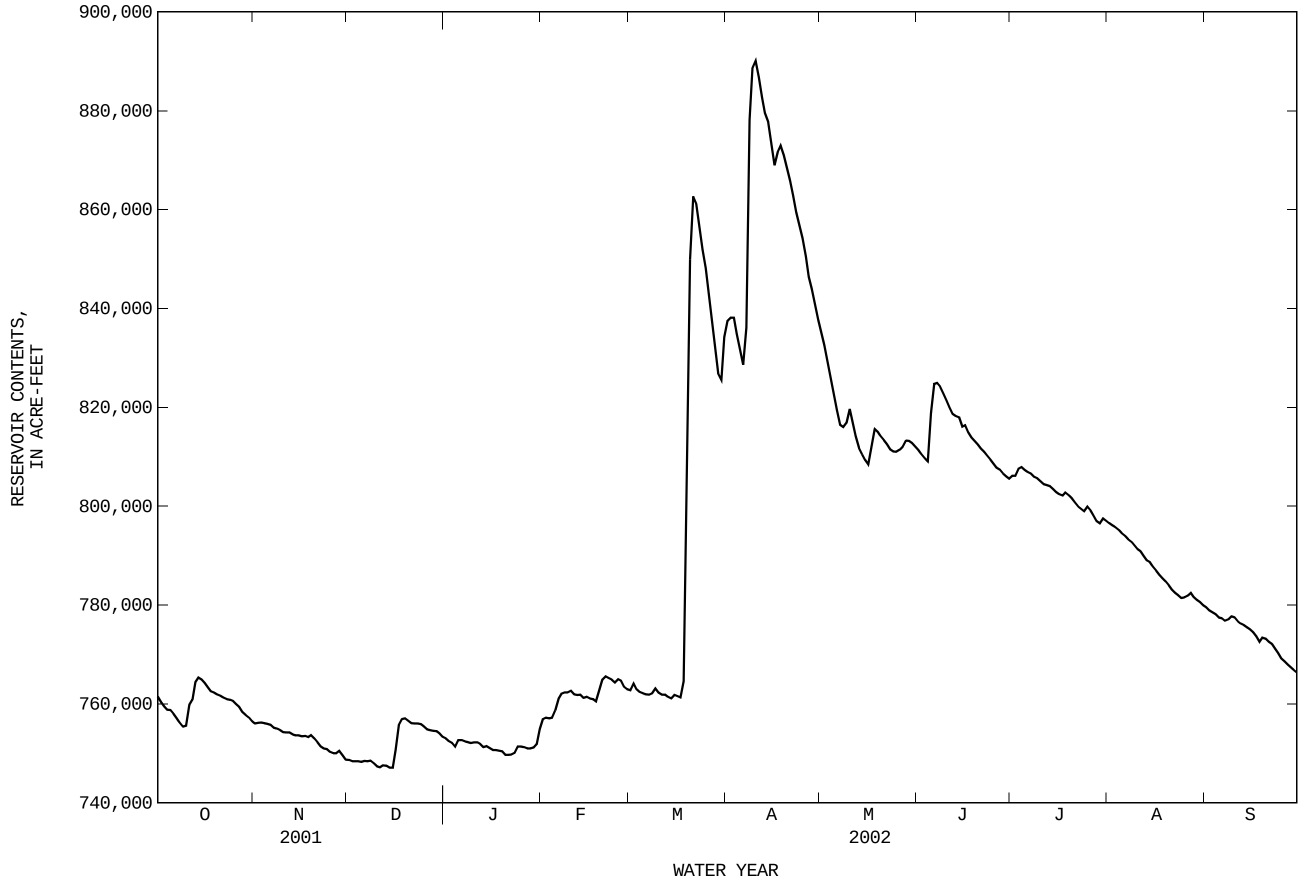
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	761500	756000	748700	753000	756900	762700	837500	834900	811300	806200	796600	779500
2	760400	756200	748400	752400	757200	764100	838200	832400	810500	806200	796100	778900
3	759500	756300	748400	752100	757100	763000	838100	829200	809700	807600	795700	778500
4	758800	756100	748400	751300	757200	762400	834900	826100	809000	807900	795200	778100
5	758800	756000	748300	752600	758700	762100	831600	822700	818900	807300	794600	777500
6	758000	755800	748400	752700	761000	762000	828600	819400	824700	806900	794000	777300
7	757100	755200	748400	752400	762100	761900	836100	816400	824900	806600	793300	776800
8	756100	755000	748500	752300	762300	762100	878200	816000	824200	805900	792800	777100
9	755400	754700	748000	752100	762300	763100	888600	816900	822800	805600	792000	777700
10	755600	754300	747400	752200	762600	762300	890100	819600	821400	805100	791300	777500
11	759800	754200	747200	752200	761900	761900	886800	817100	820000	804500	790900	776800
12	760800	754200	747500	751900	761800	761900	882700	814100	818700	804300	789900	776200
13	764400	753900	747500	751300	761800	761400	879500	811800	818200	804100	789000	775900
14	765300	753600	747100	751400	761200	761100	877800	810500	817900	803500	788700	775400
15	764900	753600	747100	751100	761400	761800	873400	809400	816000	802900	787700	775100
16	764200	753400	750800	750600	761100	761600	869000	808500	816400	802400	786900	774500
17	763300	753500	755700	750700	760900	761300	871600	812200	814900	802100	786100	773700
18	762500	753200	756900	750500	760500	764600	872900	815600	813900	802800	785300	772600
19	762300	753700	757000	750400	762700	798200	871000	815000	813100	802300	784800	773400
20	761800	753000	756600	749700	764900	849900	868300	814100	812400	801600	784000	773200
21	761600	752200	756100	749700	765600	862700	865700	813400	811700	800700	783100	772500
22	761200	751400	756000	749800	765200	861300	862900	812500	811000	800000	782500	772100
23	760900	751000	756000	750100	764900	856800	859400	811500	810200	799500	782000	771100
24	760900	750900	755900	751400	764300	852000	856700	811100	809400	799000	781400	770300
25	760600	750300	755400	751400	765000	848200	854000	811000	808600	799900	781500	769200
26	759900	750000	754800	751200	764600	842700	850500	811400	807800	799100	781800	768600
27	759400	750000	754600	751000	763500	837100	846400	812000	807400	798200	782500	767900
28	758300	750500	754500	751000	762900	831700	843800	813300	806600	797000	781600	767400
29	757800	749600	754500	751200	---	826900	840700	813200	806100	796500	781000	766800
30	757300	748700	754000	751900	---	825600	837500	812800	805600	797500	780600	766300
31	756500	---	753300	754800	---	834300	---	812000	---	797100	780000	---
MEAN	760200	753200	751700	751500	761800	795100	859100	816000	814100	802600	787500	773900
MAX	765300	756300	757000	754800	765600	862700	890100	834900	824900	807900	796600	779500
MIN	755400	748700	747100	749700	756900	761100	828600	808500	805600	796500	780000	766300
(+)	630.99	630.71	630.88	630.93	631.22	633.65	633.76	632.91	632.70	632.41	631.82	631.34
(@)	-6900	-7800	+4600	+1500	+8100	+71400	+3200	-25500	-6400	-8500	-17100	-13700

CAL YR 2001 MAX 868900 MIN 552200 (@) +201800
WTR YR 2002 MAX 890100 MIN 747100 (@) +2900

(+) 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

LOCATION.--Lat 33°20’10", long 97°10’45", Denton County, Hydrologic Unit 12030103, at the downstream side near right end of bridge on county road, 1,350 ft downstream from Duck Creek, 1.1 mi upstream from Gulf, Colorado, and Santa Fe Railway Company bridge, and 1.8 mi south of Sanger.

DRAINAGE AREA.--295 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Mar. 1949 to current year.

REVISED RECORDS.--WSP 1512: 1950, 1955. WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 582.23 ft above NGVD of 1929. Prior to Apr. 18, 1975, water-stage recorder at datum 5.00 ft higher. Apr. 18, 1975 to June 9, 1988, at site 950 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--Records fair. Since 1980, at least 10% of contributing drainage area has been affected at times by discharge from the flood-detention pools of 51 floodwater-retarding structure. These structures control runoff from 149 mi^2 in the Clear Creek watershed. There are no known diversions above station. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--31 years (water years 1950-80), 74.3 ft^3/s (53,830 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1950-80).--Maximum discharge, 18,200 ft^3/s, Sept. 13, 1950, gage height, 29.80 ft, at site and datum then in use; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1880, 36.5 ft in May 1908, from information by Gulf, Colorado, and Santa Fe Railway Company. Flood in May 1935 reached a stage of 34.0 ft, from information by Texas Department of Transportation. Both peaks referenced to present site and datum.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.13	2.7	5.6	5.7	8.0	7.8	718	50	21	16	8.3	0.17
2	e0.13	3.3	5.2	5.7	7.3	8.9	300	40	19	39	6.7	0.15
3	e0.12	3.6	5.1	5.3	7.2	9.1	140	35	18	51	5.2	0.12
4	0.12	3.6	5.1	4.7	7.4	8.5	87	31	16	50	4.3	0.11
5	e0.11	3.7	5.9	9.2	15	8.3	66	31	1050	41	3.9	0.10
6	e0.11	3.7	6.0	10	19	8.3	58	31	450	30	3.5	0.12
7	e0.12	3.8	5.7	8.5	19	8.2	634	29	165	23	3.1	0.13
8	e0.12	3.8	5.5	7.3	15	8.0	3780	30	81	19	2.9	0.24
9	0.16	3.7	5.3	7.1	12	7.8	1330	28	51	16	2.7	0.59
10	0.30	3.7	4.9	7.3	10	7.0	936	246	37	14	2.7	0.33
11	e16	3.6	5.4	6.7	9.2	6.9	709	71	29	12	2.6	0.31
12	e12	4.1	6.4	6.4	8.8	7.3	451	39	24	12	2.2	0.23
13	e9.0	4.3	7.2	6.5	8.7	7.5	250	33	25	15	2.1	0.19
14	e6.0	4.6	6.8	5.7	8.5	7.6	679	30	46	30	1.9	0.16
15	2.9	5.7	6.6	5.5	8.4	7.7	325	27	35	48	1.8	0.20
16	1.4	10	e44	5.4	8.4	7.2	199	28	28	26	1.4	0.20
17	0.86	17	e90	5.4	8.4	7.2	388	88	28	26	1.2	0.20
18	0.64	7.4	24	5.7	8.6	8.2	328	53	23	19	1.1	0.18
19	0.64	6.6	12	5.9	12	1760	175	35	19	16	0.92	0.30
20	0.69	5.5	8.9	6.3	42	3440	129	27	16	13	0.83	0.25
21	1.2	5.2	7.5	6.5	18	1330	105	24	15	12	0.65	0.20
22	1.2	5.0	7.1	6.9	12	926	85	22	14	11	0.52	0.18
23	1.5	4.8	6.6	7.3	10	739	72	21	13	9.2	0.42	0.16
24	1.7	4.5	6.1	13	9.6	468	66	21	12	10	0.30	0.15
25	1.9	4.2	6.0	9.7	8.9	305	56	21	11	13	0.26	0.15
26	1.7	4.4	6.1	8.4	7.6	164	49	33	11	7.1	0.36	0.15
27	1.5	3.8	6.2	7.6	6.9	81	49	32	11	6.5	1.6	0.15
28	1.4	4.6	6.4	7.3	7.1	58	51	36	10	5.6	0.80	0.13
29	1.7	5.8	6.3	7.4	---	49	45	34	10	5.6	0.40	0.12
30	2.1	6.0	5.8	7.6	---	53	52	28	11	14	0.30	0.12
31	2.5	---	5.7	10	---	1100	---	24	---	12	0.21	---
TOTAL	69.95	152.7	335.4	222.0	323.0	10614.5	12312	1278	2299	622.0	65.17	5.79
MEAN	2.256	5.090	10.82	7.161	11.54	342.4	410.4	41.23	76.63	20.06	2.102	0.193
MAX	16	17	90	13	42	3440	3780	246	1050	51	8.3	0.59
MIN	0.11	2.7	4.9	4.7	6.9	6.9	45	21	10	5.6	0.21	0.10
AC-FT	139	303	665	440	641	21050	24420	2530	4560	1230	129	11

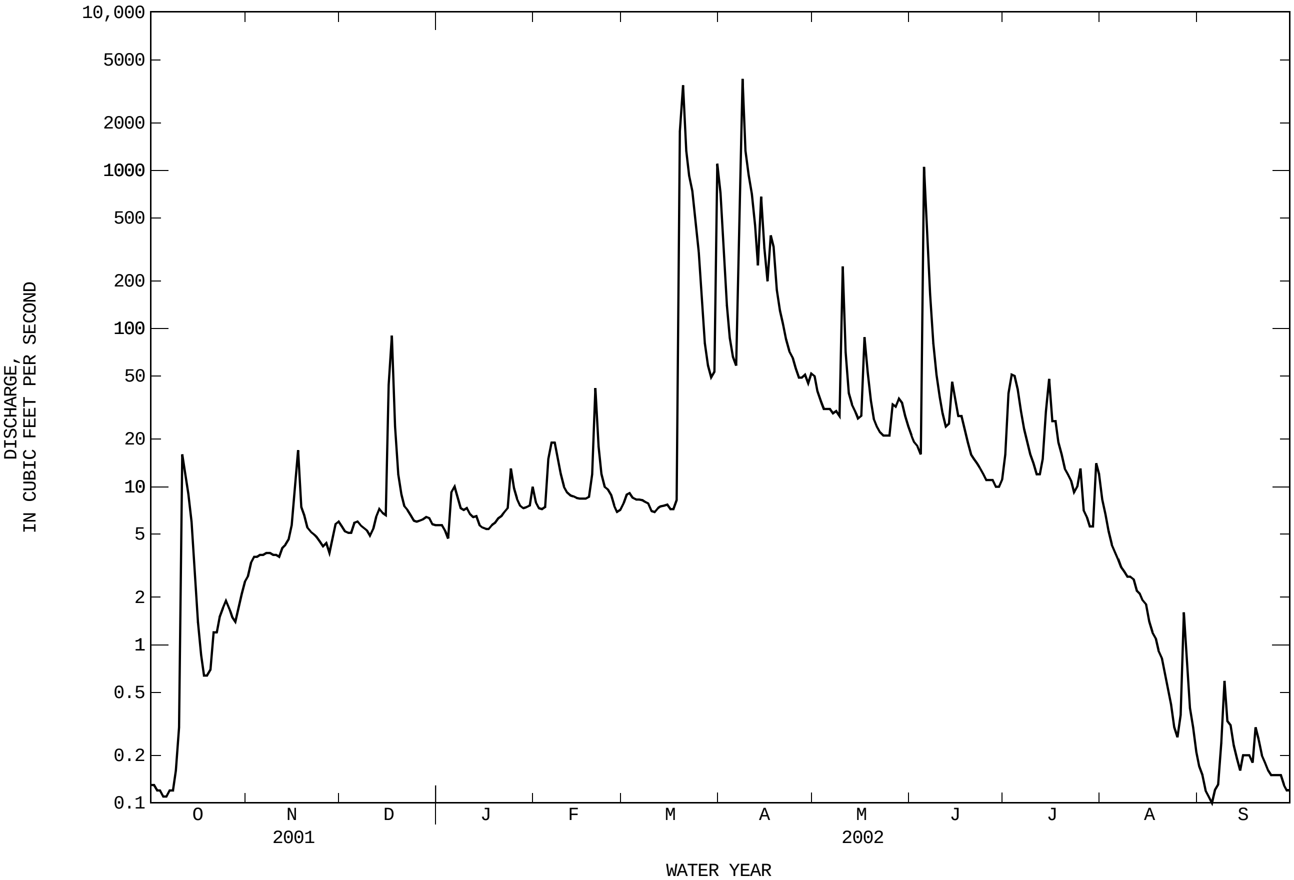
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	179.7	89.40	129.6	87.83	203.6	226.1	199.9	335.4	213.3	29.53	8.133	25.29
MAX	2739	526	1157	421	1112	719	1811	1764	1307	174	68.5	155
(WY)	1982	1995	1992	1992	2001	1990	1990	1990	1989	1982	1995	1986
MIN	0.000	0.000	0.30	0.022	1.64	14.8	10.1	4.60	0.11	0.002	0.000	0.000
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1988	1983

08051500 Clear Creek near Sanger, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1981 - 2002z	
ANNUAL TOTAL	67749.98		28299.51			
ANNUAL MEAN	185.6		77.53		143.7	
HIGHEST ANNUAL MEAN					476	1982
LOWEST ANNUAL MEAN					2.64	2000
HIGHEST DAILY MEAN	6460	Feb 16	3780	Apr 8	39700	Oct 13 1981
LOWEST DAILY MEAN	0.11	Aug 25	0.10	Sep 5	0.00	Oct 12 1980
ANNUAL SEVEN-DAY MINIMUM	0.12	Oct 2	0.12	Oct 2	0.00	Aug 2 1981
MAXIMUM PEAK FLOW			6280	Apr 8	104000	Oct 13 1981
MAXIMUM PEAK STAGE			21.36	Apr 8	35.70	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	134400		56130		104100	
10 PERCENT EXCEEDS	355		81		254	
50 PERCENT EXCEEDS	14		7.6		22	
90 PERCENT EXCEEDS	0.45		0.26		0.01	

e Estimated
z Period of regulated streamflow.



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 daily mean, 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 2001 TO SEPTEMBER 2002

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, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	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)	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)
NOV 06...	1030	3.5	718	7.9	16.6	7.8	81	232	63.4	59.1	--	<.008	E.03
DEC 06...	1015	6.0	700	8.1	15.1	8.2	82	244	64.7	41.4	--	<.008	E.02
JAN 08...	1130	7.3	639	8.3	4.4	13.4	105	218	63.3	35.7	--	<.008	.16
FEB 14...	1030	8.4	639	8.6	6.1	12.9	105	210	--	36.2	--	<.008	E.04
MAR 14...	1000	7.3	606	8.1	14.8	10.5	107	225	64.0	40.5	--	<.008	<.05
APR 11...	1430	691	270	8.0	17.5	9.4	99	116	11.4	5.57	.51	.026	.53
MAY 16...	0900	25	615	8.1	21.9	8.4	98	221	48.8	34.2	--	<.008	.11
JUN 13...	1000	21	583	7.7	27.5	7.6	99	199	42.1	32.5	--	<.008	.11
JUL 11...	1030	13	564	7.9	28.8	7.6	99	184	43.0	35.7	--	<.008	.08
AUG 07...	1030	3.3	657	7.6	27.7	6.8	89	182	53.5	57.9	--	E.006	E.04

Date	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)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
NOV 06...	<.04	--	--	.37	.022	<.02	--	4.5	1.0	.12	13	<.002	<.004
DEC 06...	<.04	--	--	.24	.020	<.02	--	2.9	1.1	.41	25	<.002	<.004
JAN 08...	<.04	.31	--	.15	.013	<.02	--	1.8	.5	.57	29	<.006	<.006
FEB 14...	<.04	--	--	.23	.014	<.02	--	2.9	.6	.32	14	<.006	<.006
MAR 14...	<.04	--	--	.22	.019	<.02	--	2.3	.9	1.2	63	<.006	<.006
APR 11...	.05	1.4	.81	.86	.19	.05	.147	7.0	6.9	612	328	<.006	<.006
MAY 16...	<.04	.37	--	.27	.024	<.02	--	2.9	.7	3.8	57	<.006	<.006
JUN 13...	<.04	.51	--	.40	.030	<.02	--	3.5	1.2	4.3	76	<.006	<.006
JUL 11...	<.04	.44	--	.37	.031	<.02	--	2.7	1.0	2.1	59	--	--
AUG 07...	E.03	--	--	.32	.032	<.02	--	2.6	.8	.91	102	--	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)
NOV 06...	<.002	<.005	.008	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.002
DEC 06...	<.002	<.005	<.007	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006
JAN 08...	<.004	<.005	.009	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	<.006
FEB 14...	<.004	<.005	1.05	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.072
MAR 14...	<.004	<.005	.194	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.013
APR 11...	.008	<.005	.094	<.050	<.010	<.002	<.041	<.020	E.003n	<.006	<.018	<.003	E.007
MAY 16...	<.004	<.005	.047	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.009
JUN 13...	<.004	<.005	.078	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.014
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	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 SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
NOV 06...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006	<.002
DEC 06...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006	<.002
JAN 08...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006	<.002
FEB 14...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.013	<.006	<.002
MAR 14...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.002n	<.006	<.002
APR 11...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.009n	<.006	<.002
MAY 16...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.012n	<.006	<.002
JUN 13...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.024	<.006	<.002
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	--	--	--	--	--	--	--	--	--	--	--	--	--

Date	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE 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)	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)
NOV 06...	<.007	<.003	<.007	<.006	<.002	<.010	<.011	.02	<.010	<.011	<.02	<.004	<.011
DEC 06...	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004	<.011
JAN 08...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
FEB 14...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
MAR 14...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
APR 11...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
MAY 16...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	.02	<.010	<.011	<.02	<.004	<.005
JUN 13...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)
NOV						
06...	<.02	<.034	<.02	<.005	<.002	<.009
DEC						
06...	<.02	<.034	<.02	<.005	<.002	<.009
JAN						
08...	.13	<.034	<.02	<.005	<.002	<.009
FEB						
14...	.05	<.034	<.02	<.005	<.002	<.009
MAR						
14...	E.07	<.034	<.02	<.005	<.002	<.009
APR						
11...	.02	<.034	<.02	<.005	<.002	<.009
MAY						
16...	E.05	<.034	<.02	<.005	<.002	<.009
JUN						
13...	.05	<.034	<.02	<.005	<.002	<.009
JUL						
11...	--	--	--	--	--	--
AUG						
07...	--	--	--	--	--	--

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
n -- Below the NDV

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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-l: 1969.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 534.76 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are several small diversions above station for irrigation. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	0.33	0.38	0.13	634	4.6	487	2.1	0.67	0.94	0.09	0.31
2	0.04	0.34	0.51	0.06	247	5.9	241	1.9	0.40	1.2	0.05	0.50
3	0.07	0.40	0.55	0.06	174	5.0	182	2.0	0.34	1.3	0.00	0.05
4	0.11	0.35	0.40	0.08	100	3.9	118	2.8	0.23	1.5	0.03	0.11
5	0.14	0.29	0.36	0.29	164	2.8	82	2.4	2.2	0.83	0.00	0.35
6	0.06	0.35	0.31	0.45	367	1.4	55	2.8	32	0.45	0.00	0.21
7	0.05	0.39	0.30	0.56	208	0.61	557	2.4	12	0.23	0.0	0.07
8	0.23	0.26	0.43	0.58	107	0.44	1690	2.1	4.7	0.08	0.02	0.58
9	0.02	0.25	0.46	0.40	61	0.55	539	1.9	2.3	0.07	0.04	1.4
10	0.68	0.26	0.55	0.42	31	0.82	349	200	1.2	0.12	0.00	1.9
11	27	0.12	0.88	0.64	17	0.89	214	91	0.71	0.10	0.00	1.5
12	e73	0.11	1.4	0.52	12	0.73	140	35	0.44	0.0	0.00	1.1
13	e1300	0.06	1.8	0.48	10	0.64	129	20	0.26	0.21	0.03	0.83
14	e372	0.06	1.8	0.33	8.6	0.65	180	15	0.43	0.48	0.02	0.77
15	e161	0.03	2.0	0.46	7.4	1.1	96	11	0.35	27	0.05	0.61
16	e82	0.01	39	0.36	6.2	1.3	50	9.8	0.81	8.7	0.08	0.46
17	e31	0.00	138	0.39	4.2	1.0	25	157	1.5	4.1	0.07	0.49
18	e15	0.02	62	0.36	1.8	25	15	150	1.5	2.2	0.16	0.23
19	e9.3	0.03	32	0.43	1.4	1780	12	65	0.86	2.0	0.01	0.27
20	e7.8	0.00	16	0.52	12	3180	9.6	35	0.41	1.9	0.03	0.33
21	e6.7	0.03	11	0.38	10	770	8.2	20	0.20	0.53	0.02	0.23
22	e6.1	0.05	9.5	0.44	8.9	543	7.0	15	0.11	0.19	0.02	0.13
23	e4.6	0.07	7.8	0.76	8.3	465	6.2	13	0.04	0.15	0.01	0.04
24	4.5	0.07	6.4	80	7.1	415	5.1	11	0.03	0.08	0.02	0.0
25	2.2	0.04	5.4	114	6.6	363	2.6	10	0.04	0.04	0.05	0.00
26	0.46	0.01	4.2	30	5.7	314	2.2	9.2	0.12	0.04	0.26	0.0
27	0.05	0.02	2.1	15	5.0	186	2.1	6.9	0.23	0.14	0.39	0.00
28	0.00	0.23	0.63	11	3.6	146	1.8	3.1	0.25	0.03	1.1	0.00
29	0.13	0.46	0.30	8.5	---	122	1.6	2.3	0.27	0.00	0.95	0.00
30	0.43	0.52	0.26	7.3	---	1380	2.2	1.6	0.40	0.00	0.54	0.04
31	0.42	---	0.21	1130	---	1500	---	1.2	---	0.00	0.48	---
TOTAL	2105.12	5.16	346.93	1404.90	2228.8	11221.33	5209.6	902.5	65.00	54.61	4.52	12.51
MEAN	67.91	0.172	11.19	45.32	79.60	362.0	173.7	29.11	2.167	1.762	0.146	0.417
MAX	1300	0.52	138	1130	634	3180	1690	200	32	27	1.1	1.9
MIN	0.00	0.00	0.21	0.06	1.4	0.44	1.6	1.2	0.03	0.00	0.00	0.00
AC-FT	4180	10	688	2790	4420	22260	10330	1790	129	108	9.0	25

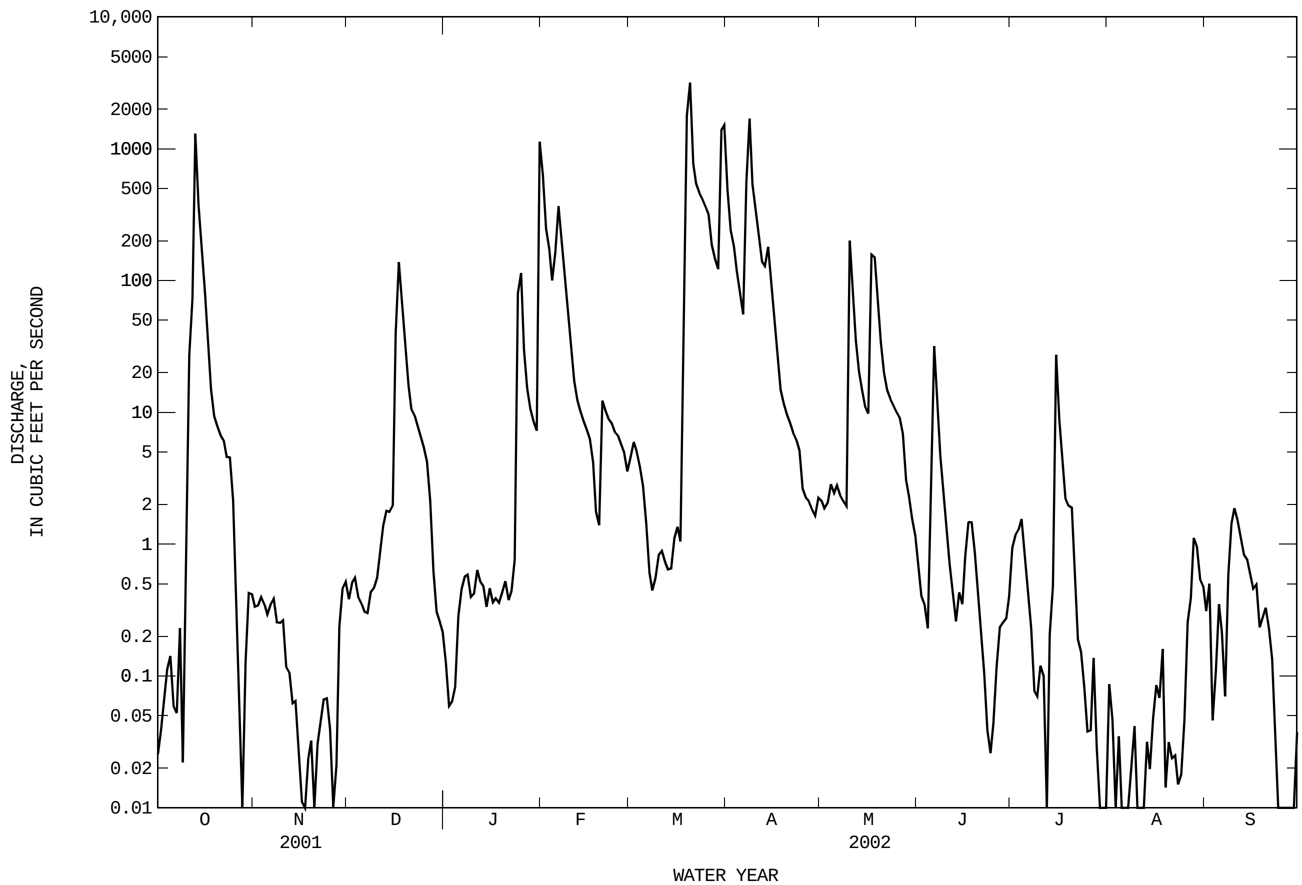
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.86	61.89	51.27	26.66	67.00	61.57	69.22	115.7	46.80	17.85	2.133	28.76
MAX	641	530	398	208	400	362	677	897	286	540	28.5	258
(WY)	1982	1997	1992	1998	2001	2002	1957	1982	1989	1994	1966	1964
MIN	0.000	0.000	0.000	0.000	0.000	0.026	0.10	0.000	0.000	0.000	0.000	0.000
(WY)	1957	1959	1959	1959	1959	1963	1959	1959	1956	1956	1956	1956

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1956 - 2002h	
ANNUAL TOTAL	23662.25		23560.98			
ANNUAL MEAN	64.83		64.55		50.44	
HIGHEST ANNUAL MEAN					178	1982
LOWEST ANNUAL MEAN					2.24	1959
HIGHEST DAILY MEAN	2500	Feb 16	3180	Mar 20	11600	Jul 11 1994
LOWEST DAILY MEAN	0.00	May 1	0.00	Oct 28	0.00	Jun 1 1956
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 5	0.01	Sep 23	0.00	Jun 1 1956
MAXIMUM PEAK FLOW			8000	Mar 20	36200	Jul 11 1994
MAXIMUM PEAK STAGE			17.40	Mar 20	18.27	Jul 11 1994
ANNUAL RUNOFF (AC-FT)	46930		46730		36540	
10 PERCENT EXCEEDS	169		133		83	
50 PERCENT EXCEEDS	0.56		0.77		0.61	
90 PERCENT EXCEEDS	0.00		0.03		0.00	

e Estimated
h See PERIOD OF RECORD paragraph.

08052700 Little Elm Creek near Aubrey, TX--Continued



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^2.

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 NGVD of 1929. Prior to May 17, 1955, nonrecording gage at site 4,000 ft upstream at same datum. 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 32,888 ft long, including a 560-ft uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 1, l954, 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. 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 1965 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, 749,300 acre-ft, Apr. 14, 15, 16, elevation, 525.51 ft; minimum contents, 488,600 acre-ft, Jan. 22, elevation, 516.30 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

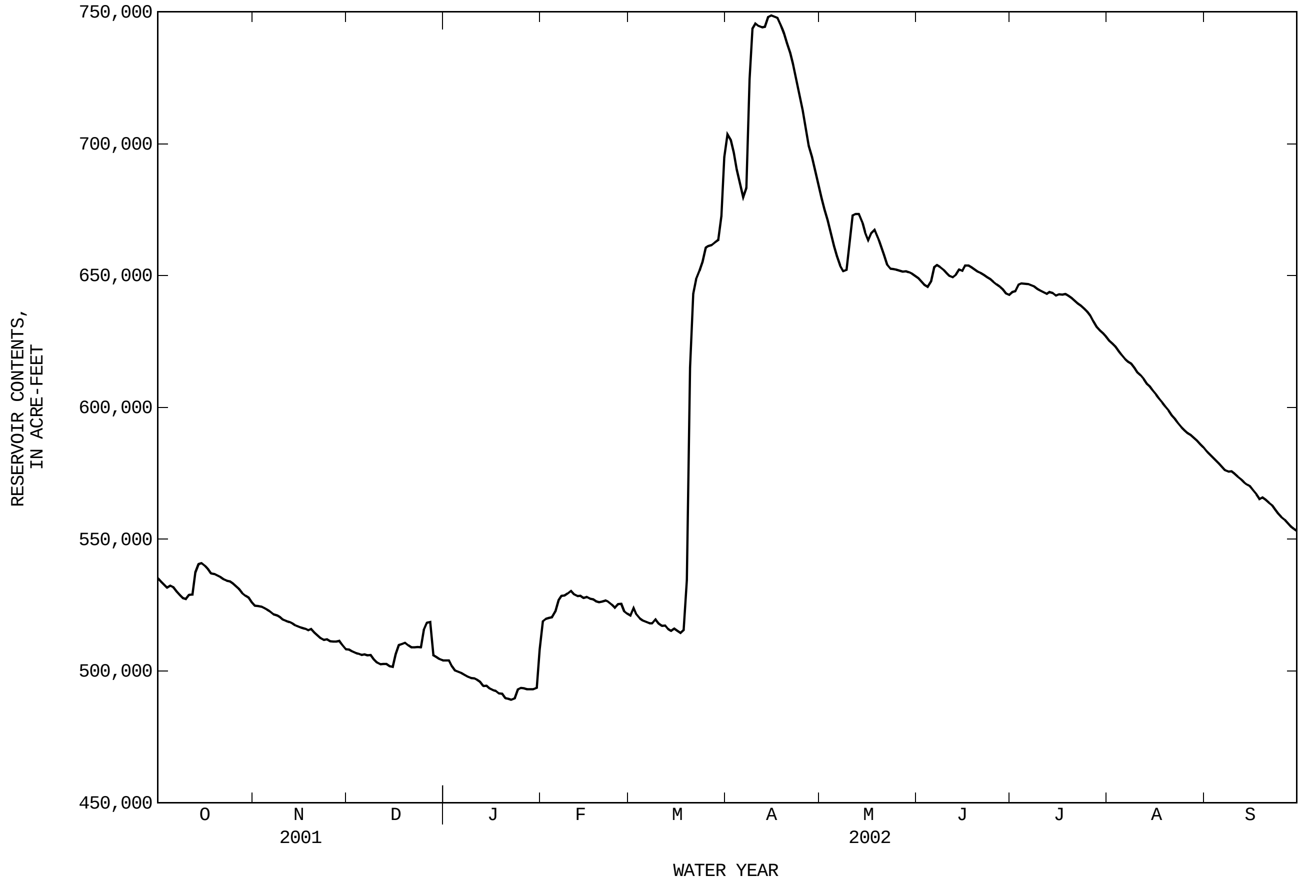
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	535100	524700	508100	e504000	518800	521000	703600	679300	648900	643700	625300	583500
2	533800	524600	507400	e504000	519800	523900	701600	675100	647700	644100	624200	582300
3	532600	524400	506900	e501800	520200	521300	696400	671000	646400	646500	622900	581100
4	531500	523800	506500	e500100	520400	519900	690100	666000	645700	647000	621300	579900
5	532200	523200	506000	e499600	522400	519000	684800	661100	647600	646900	619900	578700
6	531600	522400	506300	e499100	526700	518600	679700	657300	653100	646800	618300	577500
7	530100	521500	505900	e498400	528500	518100	683300	653800	653900	646300	617300	576100
8	528800	521100	506100	497900	528600	518100	724500	651600	653100	645800	616500	575600
9	527700	520400	504300	497300	529300	519500	743500	652100	652300	645000	614900	575800
10	527400	519400	503200	497200	530400	517900	745600	663400	650900	644200	613300	574900
11	528900	518900	502500	496600	529000	517100	744600	672800	649800	643600	612200	573800
12	529000	518600	502700	495900	528400	517200	744200	673400	649400	643000	610700	572800
13	537400	518000	502600	494300	528500	515800	744400	673400	650300	643700	608900	571600
14	540600	517200	501800	494400	527600	515100	748100	670400	652200	643300	607900	570600
15	540900	516700	501500	493300	528000	516000	748600	666500	651800	642500	606200	570000
16	539900	516300	506300	492700	527400	515100	748200	663400	653800	642900	604800	568500
17	538600	516000	509800	492400	527100	514400	747600	666200	653800	642700	603100	567000
18	537000	515300	510100	491500	526500	515500	745200	667400	653000	643000	601600	565100
19	536700	515900	510700	491300	526100	534500	742100	664500	652200	642300	600100	565700
20	536200	514500	509600	489700	526300	615100	738100	661300	651400	641400	598700	565000
21	535500	513400	509000	489500	526700	643100	734500	657800	650900	640400	596900	563800
22	534800	512400	509000	489000	526200	648600	730000	654000	650100	639400	595500	562900
23	534200	511700	e509000	489500	525200	651700	724100	652600	649400	638500	594000	561200
24	534000	512000	e509000	492900	524000	655200	718600	652400	648600	637400	592500	559800
25	533100	e511300	e515500	493500	525400	660500	712700	652200	647600	636200	591300	558400
26	532000	e511200	e518300	493400	525500	661200	705500	651800	646700	634600	590200	557400
27	531000	e511100	e518500	493100	522700	661600	699200	651500	645800	632600	589500	556100
28	529400	511400	e506000	493000	521700	662500	695000	651700	644700	630500	588500	554700
29	528600	509700	e505200	493000	---	663400	689700	651300	643100	629200	587400	553900
30	527700	508200	e504500	493500	---	672700	684500	650600	642700	628000	586000	553000
31	525900	---	e504000	508100	---	694900	---	649800	---	626900	584800	---
MEAN	533000	516800	507300	495500	525600	572500	719900	660800	649600	640600	604700	568600
MAX	540900	524700	518500	508100	530400	694900	748600	679300	653900	647000	625300	583500
MIN	525900	508200	501500	489000	518800	514400	679700	649800	642700	626900	584800	553000
(+)	517.80	517.10	516.93	517.09	517.64	523.78	523.44	522.29	522.06	521.52	520.05	518.86
(@)	-11000	-17700	-4200	+4100	+13600	+173200	-10400	-34700	-7100	-15800	-42100	-31800

CAL YR 2001 MAX 793500 MIN 447900 (@) +57600
WTR YR 2002 MAX 748600 MIN 489000 (@) +16100

e Estimated

(+) 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

LOCATION.--Lat 33°02’44", long 96°57’39", Denton County, Hydrologic Unit 12030103, on left bank at downstream edge of highway right-of-way, 90 ft to left of left end of bridge on State Highway 121, 1.8 mi east of Lewisville, 1.9 mi downstream from Lewisville Lake, 8.3 mi upstream from Denton Creek, and 28.2 mi upstream from mouth.

DRAINAGE AREA.--1,673 mi^2.

PERIOD OF RECORD.--Mar. 1949 to current year.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 432.39 ft above NGVD of 1929 (U.S. Army Corps of Engineers benchmark). Prior to Jan. 6, 1950, nonrecording gage 0.6 mi upstream at datum 3.26 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since Nov. 1954, at least 10% of contributing drainage area has been regulated. Most of low flow is used by the city of Dallas for municipal supply (see Elm Fork Trinity River near Carrollton (station 08055500).

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1950-54) prior to regulation, 402 ft^3/s (291,200 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1950-54).--Maximum discharge, 21,700 ft^3/s, Sept. 15, 1950, gage height, 30.75 ft; no flow June 14, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1907, 33.8 ft in 1908, present site and datum, from information by local resident.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	348	277	244	218	183	230	1610	4120	431	396	377	303
2	336	277	245	232	214	245	3730	4080	429	348	363	301
3	226	277	243	246	164	210	4220	4120	396	341	359	306
4	240	266	243	235	164	190	4400	4110	286	315	368	327
5	294	257	258	226	239	200	4820	3860	259	304	377	342
6	269	242	254	237	215	200	4910	3170	350	303	375	366
7	267	228	221	244	176	217	4960	2690	660	302	381	363
8	265	224	220	252	142	223	2220	1280	871	311	381	378
9	266	220	230	267	118	213	991	497	866	307	381	341
10	265	214	241	307	137	213	2720	1100	859	290	380	297
11	262	208	255	338	216	213	4590	2150	747	307	346	294
12	251	197	262	312	222	213	4820	2180	427	387	320	294
13	263	209	245	273	173	215	4460	2010	393	310	311	289
14	182	229	234	245	139	222	3010	1660	278	302	315	282
15	212	226	224	247	147	227	3600	1650	288	303	306	277
16	238	176	461	288	147	226	4020	1640	327	301	302	283
17	246	178	181	306	164	226	4050	1710	312	302	340	288
18	243	179	170	283	318	250	4000	1660	310	301	365	292
19	223	175	183	258	461	999	3960	1640	310	297	364	302
20	205	171	192	248	151	1530	3870	1630	309	296	363	296
21	206	169	206	212	139	561	3830	1630	306	297	367	294
22	208	170	205	184	161	1490	3930	1100	305	293	370	293
23	231	172	203	192	208	2300	4370	481	301	302	371	283
24	250	173	202	235	219	2390	4790	462	300	311	359	285
25	248	216	211	149	217	2540	4800	450	300	320	376	307
26	244	321	219	143	216	2890	4720	451	341	312	394	323
27	244	329	231	143	217	2740	4290	448	382	351	360	314
28	247	283	247	143	217	2580	4160	448	371	376	312	306
29	272	247	246	143	---	2960	4160	449	362	455	300	161
30	284	246	232	141	---	2690	4150	437	368	462	300	86
31	271	---	219	1090	---	703	---	435	---	397	301	---
TOTAL	7806	6756	7227	8037	5484	30306	118161	53748	12444	10199	10884	8873
MEAN	251.8	225.2	233.1	259.3	195.9	977.6	3939	1734	414.8	329.0	351.1	295.8
MAX	348	329	461	1090	461	2960	4960	4120	871	462	394	378
MIN	182	169	170	141	118	190	991	435	259	290	300	86
AC-FT	15480	13400	14330	15940	10880	60110	234400	106600	24680	20230	21590	17600

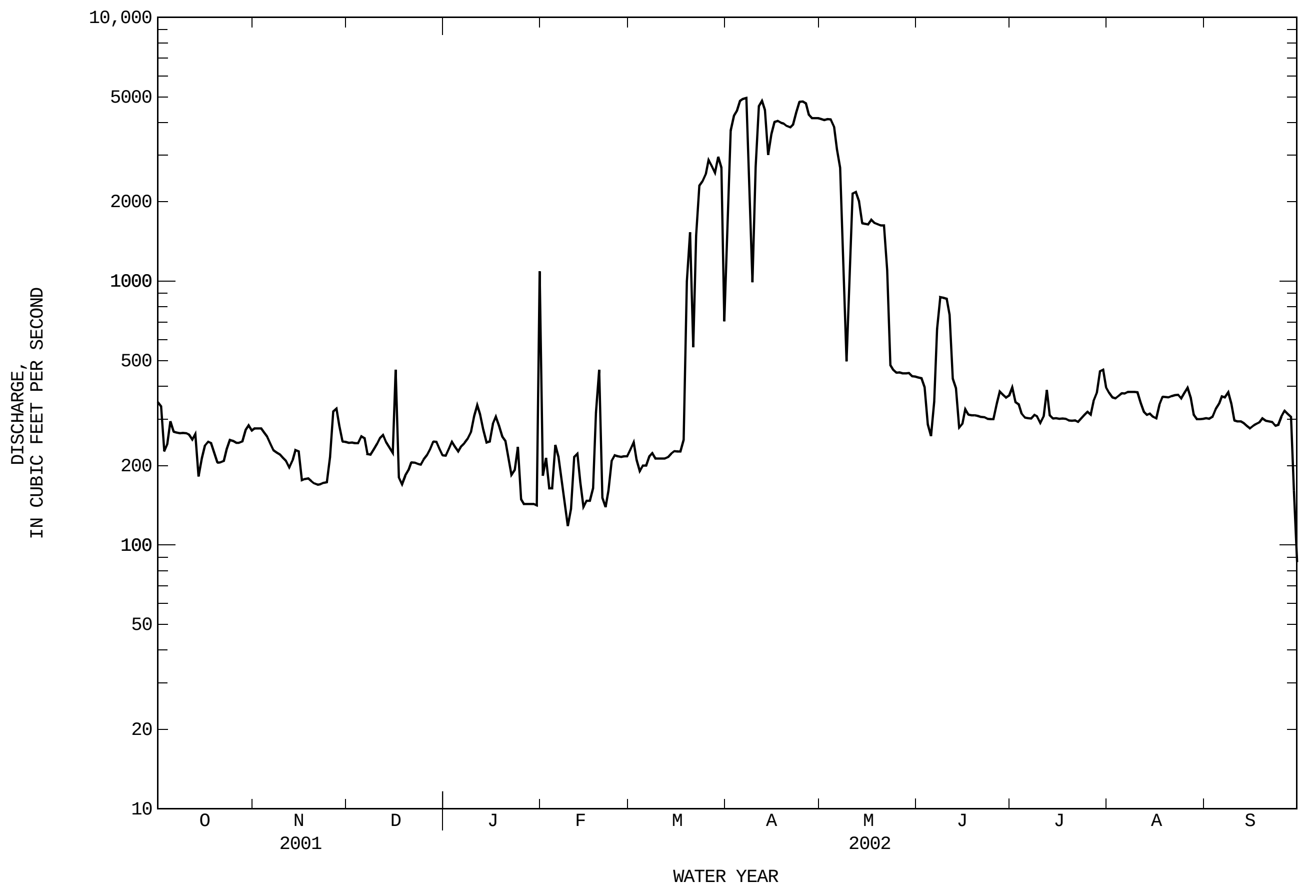
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	409.3	625.6	642.5	512.2	613.2	905.3	878.6	1318	1312	805.6	480.4	339.7
MAX	3628	6300	4681	5267	4611	4218	3939	8391	5222	4479	4101	2480
(WY)	1982	1982	1982	1992	1992	1997	2002	1990	1957	1989	1982	1962
MIN	23.1	37.3	35.0	15.2	23.6	37.7	14.0	84.4	109	157	54.7	65.0
(WY)	1959	1955	1955	1955	1955	1955	1989	1981	1955	1961	1963	1958

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

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002z	
ANNUAL TOTAL	282847		279925			
ANNUAL MEAN	774.9		766.9		737.3	
HIGHEST ANNUAL MEAN					3062	1982
LOWEST ANNUAL MEAN					94.2	1955
HIGHEST DAILY MEAN	4200	Apr 22	4960	Apr 7	19000	May 4 1990
LOWEST DAILY MEAN	27	Feb 10	86	Sep 30	0.00	Oct 20 1993
ANNUAL SEVEN-DAY MINIMUM	34	Feb 6	157	Jan 24	0.29	Nov 3 1983
MAXIMUM PEAK FLOW			5120	Apr 7	19600	May 4 1990
MAXIMUM PEAK STAGE			21.66	Apr 7	30.15	May 4 1990
ANNUAL RUNOFF (AC-FT)	561000		555200		534100	
10 PERCENT EXCEEDS	2620		2700		3040	
50 PERCENT EXCEEDS	329		300		226	
90 PERCENT EXCEEDS	131		184		80	

z Period of regulated streamflow.



08053500 Denton Creek near Justin, TX

LOCATION.--Lat 33°07'08", long 97°17'25", Denton County, Hydrologic Unit 12030104, on right bank at downstream side of bridge on Farm Road 156, 100 ft upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.2 mi north of Justin, 3.0 mi upstream from Olivers Creek, 12.9 mi upstream from Harriet Creek, and 32.9 mi upstream from Grapevine Dam.

DRAINAGE AREA.--400 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1949 to current year.

REVISED RECORDS.--WSP 1732: 1950(M). WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 606.66 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since installation of gage, at least 10% of contributing drainage has been affected at times by discharge from the flood detention pools of 84 floodwater-retarding structures. These structures control runoff from 197 mi^2 in the Denton Creek watershed. No known diversions. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1935 was the highest since 1908 and reached a stage of 20.6 ft at site about 1,500 ft upstream, from information by local resident. Flood in May 1908 reached a stage about 1.0 ft higher than flood in May 1935, from information by local residents.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.0	0.0	3.8	8.5	13	9.6	520	78	39	28	e14	e0.02
2	e0.0	0.0	3.4	8.5	11	10	259	53	36	47	e13	e0.02
3	e0.0	0.0	3.2	8.5	10	11	150	48	34	71	e12	e0.01
4	0.0	0.0	3.3	8.5	9.7	12	91	52	33	230	e11	e0.01
5	0.0	0.0	3.5	10	23	12	71	51	651	138	e10.5	e0.01
6	0.0	0.0	3.5	12	35	11	63	47	1030	82	e8.3	e0.0
7	0.0	0.0	3.4	14	23	11	360	41	362	48	e6.6	e0.16
8	0.0	0.0	3.1	12	18	11	3380	41	202	34	e6.1	e0.25
9	0.0	0.0	2.6	11	14	10	1260	41	129	25	e5.6	e0.33
10	0.0	0.0	2.5	10	12	9.9	636	1900	84	22	e7.6	e0.31
11	0.0	0.0	2.7	10	11	9.8	413	661	57	21	e6.8	e0.26
12	2.5	0.0	3.6	10	10	9.4	300	293	43	23	e5.9	e0.19
13	3.3	0.0	4.1	10	10	9.6	242	180	37	46	e4.5	e0.11
14	1.5	0.0	5.2	10	10	9.9	561	124	48	37	e3.5	e0.10
15	0.60	0.0	4.8	10	10	9.9	383	91	41	21	e2.9	e0.08
16	0.25	0.0	114	10	10	9.7	248	71	47	21	e1.4	e0.05
17	0.02	1.5	156	9.8	10	9.8	237	287	51	25	e0.97	e0.04
18	0.0	1.7	71	9.6	10	47	232	315	33	23	e0.60	e0.04
19	0.0	1.7	22	10	28	2690	156	140	27	e21	e0.32	e3.0
20	0.0	1.1	12	10	40	4200	121	100	24	e20	e0.18	e2.8
21	0.0	0.83	11	10	29	1070	102	68	22	e19	e0.09	e2.5
22	0.0	0.76	10	11	16	523	87	53	22	e18	e0.03	e2.4
23	0.0	0.84	9.8	11	12	310	74	46	21	e17	0.01	e2.2
24	0.0	0.92	9.4	12	11	232	67	42	21	e16	e0.01	e2.0
25	0.0	1.0	8.8	16	10	169	58	40	21	e16	e0.01	e1.7
26	0.0	1.2	8.8	14	9.4	113	53	80	20	e15	e0.08	e1.3
27	0.0	1.4	8.8	12	9.2	82	53	92	20	e14	e0.20	e0.80
28	0.0	2.0	9.0	11	9.3	68	53	70	20	e13	e0.16	e0.40
29	0.0	2.0	9.0	11	---	60	50	65	20	e12	e0.11	e0.20
30	0.0	3.4	8.8	10	---	82	60	53	20	e11	e0.08	e0.08
31	0.0	---	8.6	18	---	646	---	45	---	e15	e0.04	---
TOTAL	8.17	20.35	529.7	338.4	423.6	10467.6	10340	5268	3215	1149	122.59	21.37
MEAN	0.264	0.678	17.09	10.92	15.13	337.7	344.7	169.9	107.2	37.06	3.955	0.712
MAX	3.3	3.4	156	18	40	4200	3380	1900	1030	230	14	3.0
MIN	0.00	0.00	2.5	8.5	9.2	9.4	50	40	20	11	0.01	0.00
AC-FT	16	40	1050	671	840	20760	20510	10450	6380	2280	243	42

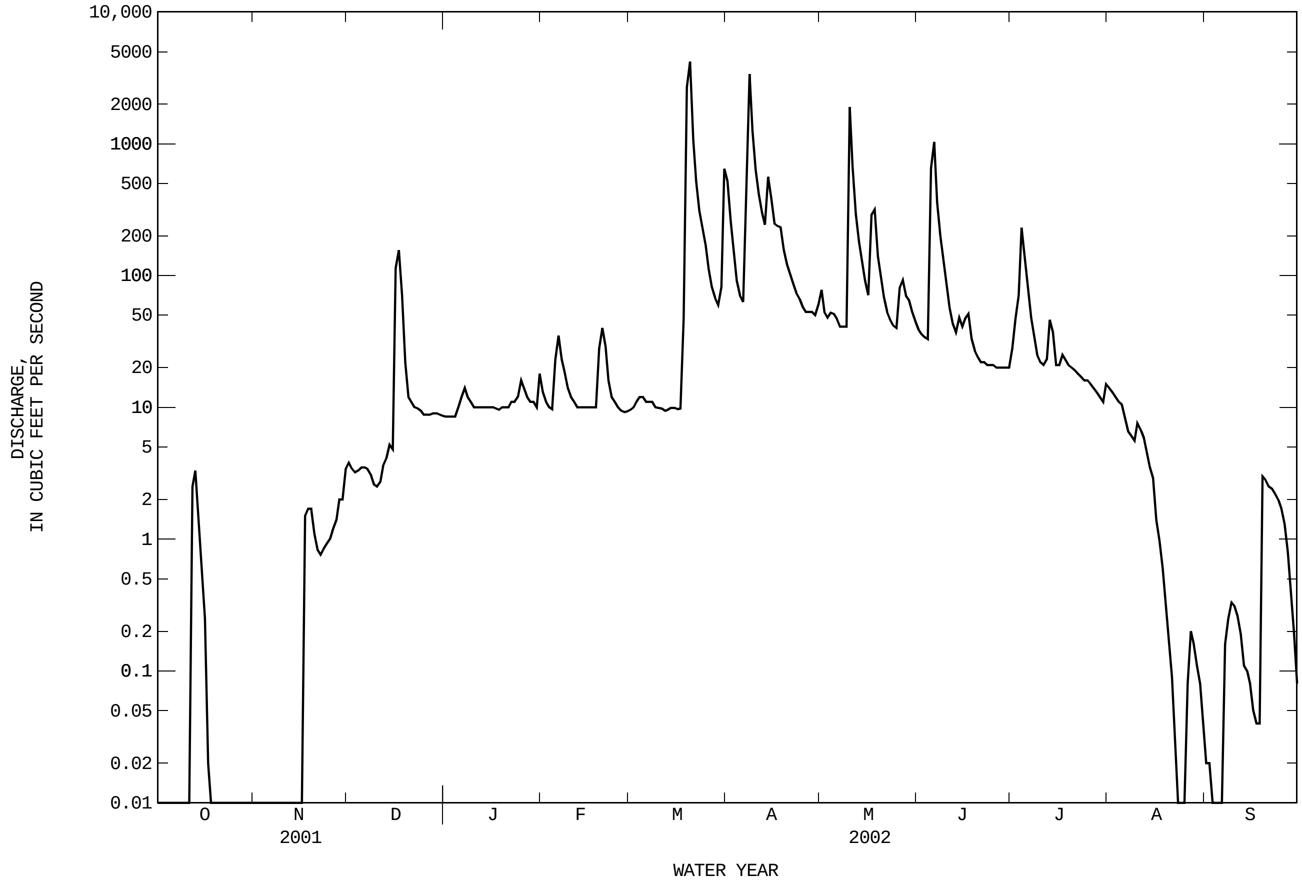
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	116.8	85.07	74.59	54.46	120.8	144.1	172.9	299.9	160.8	36.20	8.860	44.45
MAX	2828	817	1321	437	1236	598	2095	2036	1815	438	91.5	714
(WY)	1982	1965	1992	1992	2001	1998	1990	1982	1989	1950	1973	1962
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.00	0.000	0.000	0.000	0.000
(WY)	1952	1952	1952	1953	1953	1953	1955	1959	1953	1952	1952	1952

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1950 - 2002	
ANNUAL TOTAL	69315.87		31903.78			
ANNUAL MEAN	189.9		87.41		109.8	
HIGHEST ANNUAL MEAN					577	1982
LOWEST ANNUAL MEAN					2.76	1956
HIGHEST DAILY MEAN	6880	Feb 24	4200	Mar 20	18600	Oct 14 1981
LOWEST DAILY MEAN	0.00	Aug 1	0.00	Oct 1	0.00	Oct 1 1949
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 1	0.00	Oct 1	0.00	Oct 14 1949
MAXIMUM PEAK FLOW			8250	Mar 19	34700	Oct 13 1981
MAXIMUM PEAK STAGE			15.51	Mar 19	18.68	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	137500		63280		79520	
10 PERCENT EXCEEDS	338		144		160	
50 PERCENT EXCEEDS	14		10		12	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08053500 Denton Creek near Justin, TX--Continued



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 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR													
06...	1000	10	813	7.7	7.7	11.7	101	--	260	60	78.6	16.0	58.1
APR													
11...	1050	418	375	8.0	18.0	7.8	84	2.5	160	23	54.1	5.00	11.2
MAY													
15...	0915	94	482	8.0	19.5	7.7	85	<2.0	200	19	69.2	6.26	17.6
AUG													
13...	1230	3.5	693	7.5	28.0	5.5	71	<2.0	240	62	67.7	16.1	46.0

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
MAR													
06...	2	32	3.01	2	242	203	82.1	84.7	.3	2.19	470	447	<10
APR													
11...	.4	13	3.89	1	159	132	22.4	17.0	.2	10.5	224	205	165
MAY													
15...	.5	16	3.52	2	215	179	33.8	21.2	.2	10.3	284	271	36
AUG													
13...	1	29	3.81	1	210	173	94.0	49.1	.3	10.3	424	391	11

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. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
MAR													
06...	--	<.008	E.04	<.04	.24	.016	<.02	--	63.0r	<1	.14	<2	85
APR													
11...	--	E.007	.24	<.04	.45	.043	.03	.098	9.6	1	.14	2	70
MAY													
15...	.37	.015	.39	E.02	.46	.043	E.01	--	6.3	1	.15	2	81
AUG													
13...	--	<.008	<.05	<.04	.42	.012	<.02	--	5.1	<1	E.04	3	107

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)
MAR													
06...	<.06	<.04	<.8	.30	1.0	<10	<.08	9.6	<.01	2.3	1.36	<2	<1
APR													
11...	<.06	<.04	<.8	.25	1.5	E7	<.08	2.1	--	1.3	1.90	<2	<1
MAY													
15...	<.06	<.04	<.8	.33	1.5	<10	<.08	9.8	<.01	1.8	2.12	<2	<1
AUG													
13...	<.06	<.04	<.8	.20	1.2	<10	<.08	4.7	<.01	2.8	1.05	<2	<1

08053500 Denton Creek near Justin, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
MAR		
06...	1	4.22
APR		
11...	<1	1.95
MAY		
15...	1	2.21
AUG		
13...	1	1.90

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
r -- Value verified by rerun, same method

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^2.

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1997 to current year.
BIOCHEMICAL DATA: Oct. 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR													
06...	1200	2.3	570	7.7	10.5	11.3	104	--	210	11	74.4	5.31	32.9
APR													
16...	1045	40	485	7.9	21.5	7.0	81	<2.0	200	29	75.1	4.06	19.4
MAY													
15...	1145	15	481	7.9	20.5	7.8	88	<2.0	190	11	67.5	4.24	22.3
AUG													
13...	1020	4.7	340	7.2	27.0	7.3	93	2.3	110	13	41.1	2.81	20.5

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
MAR													
06...	1	25	2.44	2	236	197	48.1	30.9	.3	2.37	326	316	<10
APR													
16...	.6	17	2.92	2	210	175	31.1	16.4	.3	7.97	299	264	12
MAY													
15...	.7	20	2.53	<1	213	176	32.3	21.5	.4	5.55	277	262	19
AUG													
13...	.8	27	4.13	1	122	100	22.8	22.8	.3	7.83	198	185	28

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. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
MAR													
06...	--	<.008	.25	<.04	.20	.005	<.02	5.2	1	.14	<2	79	<.06
APR													
16...	--	E.006	.39	<.04	.44	.012	<.02	6.5	2	.26	M	82	<.06
MAY													
15...	--	E.005	.21	<.04	.28	.009	<.02	3.9	2	.14	E1	79	<.06
AUG													
13...	.47	.025	.49	<.04	.37	.024	E.01	6.6	3	.10	E2	57	<.06

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)
MAR													
06...	<.04	<.8	.25	1.2	<10	E.07	16.2	<.01	1.7	1.12	<2	<1	1r
APR													
16...	<.04	<.8	.30	1.6	<10	<.08	3.0	--	.9	.56	<2	<1	2
MAY													
15...	<.04	<.8	.28	1.0	<10	E.05	9.2	<.01	1.1	1.70	<2	<1	<1
AUG													
13...	<.04	<.8	.18	1.6	<10	<.08	6.2	<.01	1.8	1.06	<2	<1	<1

08053800 Elizabeth Creek at State Highway 114 near Roanoke, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
MAR	
06...	1.02
APR	
16...	.95
MAY	
15...	.79
AUG	
13...	.28

Remark codes used in this report:
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

Value qualifier codes used in this report:
- r -- Value verified by rerun, same method

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^2.

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 NGVD of 1929. Prior to May 16, 1953, nonrecording gage at site 1,000 ft upstream at present 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 12,850 ft long, including a 500-foot uncontrolled off-channel concrete-gravity spillway with an ogee weir section. The dam was completed in June 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^2 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, 215,600 acre-ft, May 12, elevation, 539.50 ft; minimum contents, 139,100 acre-ft, Jan. 21, elevation, 528.79 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152300	146600	141400	141900	144500	144100	192300	209800	186600	182700	178900	169800
2	152000	146400	141300	141800	144500	144500	192700	209800	186400	182800	178600	169600
3	151800	146300	141200	141500	144500	144100	192400	210100	186100	183500	178300	169200
4	151500	146200	141000	141300	144400	143900	191900	210300	185900	184200	178000	168900
5	151400	146000	140900	141300	144900	143700	191300	211000	185800	184600	177600	168600
6	151000	145800	140900	141300	145800	143500	190900	211600	187400	184700	177400	168300
7	150600	145600	140900	141100	e146200	143500	192900	211300	188200	184700	177100	167900
8	150300	145400	140800	140900	e146300	143500	204700	211000	188100	184700	176700	167700
9	150100	145200	140400	140800	146500	143500	211500	210800	187700	184600	176400	167800
10	150000	145000	140200	140700	146400	143200	213500	211800	187100	184400	176200	167600
11	150200	144800	140100	140700	146200	143100	213200	214900	186400	184200	176200	167300
12	150200	144700	140100	140600	146100	143000	212500	215300	185700	183900	175800	167100
13	150800	144500	140100	140400	146100	142800	212400	214300	185200	183900	175600	166700
14	150600	144400	140000	140300	145900	142700	213800	211600	185400	183800	175200	166400
15	150500	144200	139900	140100	145900	142700	214500	208700	185200	183500	174900	166200
16	150100	144100	141200	140000	145700	142500	214700	205900	185600	183300	174500	165900
17	149900	144000	142900	139900	145600	142300	214900	203900	185600	183200	174200	165500
18	149600	144000	143500	139700	145500	142500	215100	202300	185400	183100	173900	165100
19	149400	143900	143700	139700	145500	146600	215000	199800	185100	182900	173500	165000
20	149200	143600	143700	139400	145400	177100	214700	197000	184900	182600	173200	164800
21	149100	143400	143500	139300	145500	190200	214400	194100	184700	182300	172900	164500
22	148900	143100	143500	139200	145400	192500	213900	191200	184400	182000	172500	164200
23	148700	143000	143300	139400	145200	193300	213400	188300	184200	181800	172200	163700
24	148600	142800	143200	140000	145100	193800	213000	186600	183900	181400	171900	163300
25	148300	142500	143100	140100	145100	194300	212300	186000	183700	181200	171500	163000
26	148000	142300	142900	140000	145000	193000	211600	186200	183400	180800	171200	162800
27	147800	142100	142700	139900	144500	191500	211000	186200	183100	180400	171300	162300
28	147400	142100	142600	139900	144300	190200	210700	186500	182800	180000	171100	162000
29	147200	141800	142500	139800	---	189000	210200	186800	182500	179600	170800	161200
30	147000	141600	142300	139900	---	189300	209900	186800	182400	179600	170500	160300
31	146800	---	142100	143100	---	190900	---	186700	---	179300	170100	---

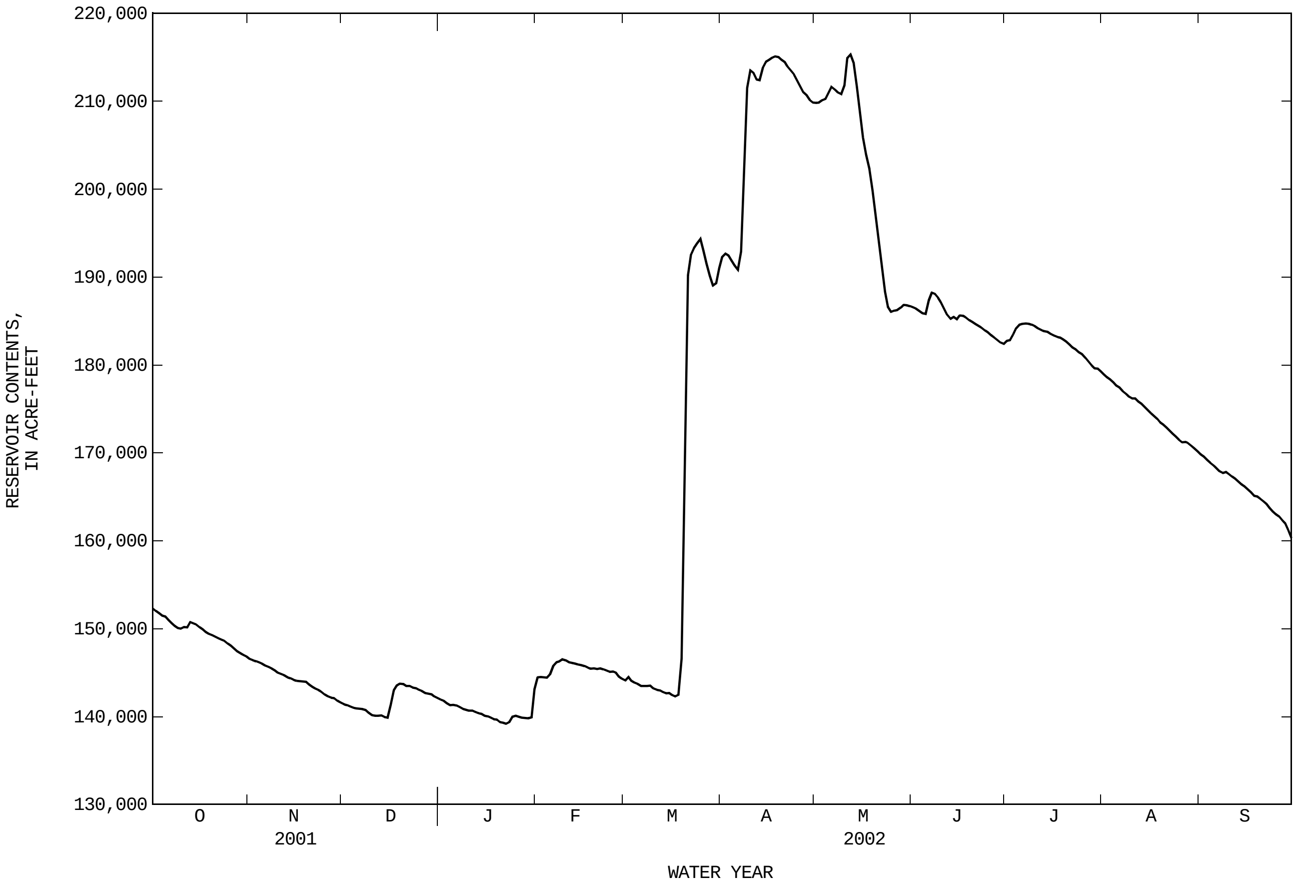
08054500 Grapevine Lake near Grapevine, TX--Continued

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	149700	144200	141800	140500	145400	161600	207800	201500	185300	182700	174500	165800
MAX	152300	146600	143700	143100	146500	194300	215100	215300	188200	184700	178900	169800
MIN	146800	141600	139900	139200	144300	142300	190900	186000	182400	179300	170100	160300
(+)	530.03	529.18	529.26	529.42	529.61	536.33	538.79	535.76	535.17	534.75	533.47	532.05
(@)	-5700	-5200	+500	+1000	+1200	+46600	+19000	-23200	-4300	-3100	-9200	-9800

CAL YR 2001 MAX 305300 MIN 139900 (@) -9100
WTR YR 2002 MAX 215300 MIN 139200 (@) +7800

e Estimated

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



08054500 Grapevine Lake near Grapevine, TX--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Datum of gage is NGVD of 1929.

REMARKS.--Records fair.

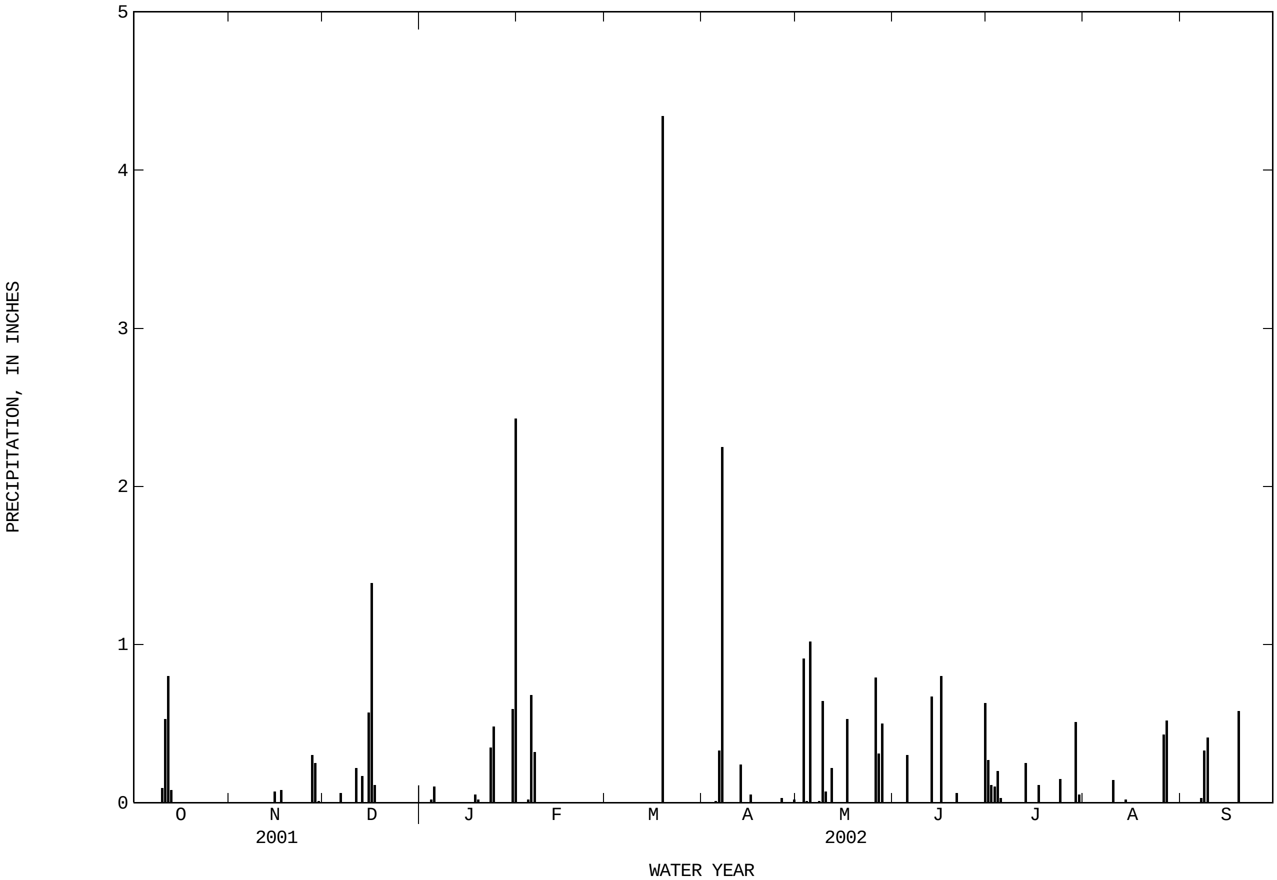
EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.43 inches, Jan. 31.

PRECIPITATION from dcp, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	---	e0.00	0.00	0.00	0.27	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	---	e0.00	0.00	0.00	0.11	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	---	e0.00	0.91	0.00	0.10	0.00	0.00
4	0.00	0.00	0.00	0.02	0.02	---	e0.00	0.01	0.00	0.20	0.00	0.00
5	0.00	0.00	0.00	0.10	0.68	e0.00	0.01	1.02	0.30	0.03	0.00	0.00
6	0.00	0.00	0.06	0.00	0.32	e0.00	0.33	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	e0.00	2.25	0.00	0.00	0.00	0.00	0.03
8	0.00	0.00	0.00	0.00	e0.00	---	0.00	0.01	0.00	0.00	0.00	0.33
9	0.00	0.00	0.00	0.00	e0.00	---	e0.00	0.64	0.00	0.00	0.00	0.41
10	0.09	0.00	0.00	0.00	e0.00	---	e0.00	0.07	0.00	0.00	0.14	0.00
11	0.53	0.00	0.22	0.00	e0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00
12	0.80	0.00	0.00	0.00	e0.00	e0.00	0.00	0.22	0.00	0.00	0.00	0.00
13	0.08	0.00	0.17	0.00	e0.00	e0.00	0.24	0.00	0.67	0.25	0.00	0.00
14	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.02	0.00
15	0.00	0.07	0.57	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	1.39	0.00	e0.00	e0.00	0.05	0.00	0.80	0.00	0.00	0.00
17	0.00	0.08	0.11	0.00	e0.00	---	0.00	0.53	0.00	0.11	0.00	0.00
18	0.00	0.00	0.00	0.05	e0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.02	e0.00	4.34	0.00	0.00	0.00	0.00	0.00	0.58
20	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	e0.00	---	0.00	0.00	0.06	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.35	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.48	e0.00	---	0.00	0.00	0.00	0.15	0.00	0.00
25	0.00	0.00	0.00	0.00	e0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	e0.00	---	0.03	0.79	0.00	0.00	0.43	0.00
27	0.00	0.30	0.00	0.00	e0.00	e0.00	0.00	0.31	0.00	0.00	0.52	0.00
28	0.00	0.25	0.00	0.00	e0.00	e0.00	0.00	0.50	0.00	0.00	0.00	0.00
29	0.00	0.01	0.00	0.00	---	---	0.00	0.00	0.00	0.51	0.00	0.00
30	0.00	0.00	0.00	0.59	---	---	0.02	0.00	0.63	0.05	0.00	0.00
31	0.00	---	0.00	2.43	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	1.50	0.71	2.52	4.04	1.02	---	2.93	5.01	2.46	1.78	1.11	1.35

e Estimated

08054500 Grapevine Lake near Grapevine, TX--Continued



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 2001 TO SEPTEMBER 2002

325822097030401 -- Grapevine Lk Site AC

Date	Time	RESER-VOIR STORAGE (AC-FT) (00054)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
MAR													
06...	1153	144000	.61	1.00	365	8.4	9.0	11.0	97	1	E1k	130	19
MAR													
06-06	1153	--	--	--	--	--	--	--	--	--	--	--	--
06...	1157	--	--	10.0	365	8.3	9.0	10.9	97	--	--	--	--
06...	1202	--	--	20.0	366	8.4	8.5	11.0	96	--	--	--	--
06...	1206	--	--	30.0	366	8.4	8.5	11.0	96	--	--	--	--
06...	1210	--	--	40.0	366	8.4	8.5	11.0	96	--	--	--	--
06...	1215	--	--	49.0	367	8.3	8.5	10.8	94	--	--	130	15
MAY													
15...	1015	209000	.76	1.00	344	8.0	22.0	7.3	85	E2k	E2k	130	20
MAY													
15-15	1015	--	--	--	--	--	--	--	--	--	--	--	--
15...	1019	--	--	10.0	345	8.0	22.0	7.3	85	--	--	--	--
15...	1024	--	--	20.0	345	8.0	22.0	7.3	85	--	--	--	--
15...	1029	--	--	30.0	345	8.0	22.0	7.3	85	--	--	--	--
15...	1033	--	--	40.0	345	8.0	22.0	7.2	84	--	--	--	--
15...	1037	--	--	50.0	346	7.6	20.5	4.9	55	--	--	--	--
15...	1042	--	--	57.0	344	7.4	19.5	3.9	43	--	--	130	20
AUG													
14...	1152	175000	1.22	1.00	340	7.5	28.0	3.9	51	--	--	120	13
AUG													
14-14	1152	--	--	--	--	--	--	--	--	--	--	--	--
14...	1156	--	--	10.0	340	7.5	28.0	3.8	50	--	--	--	--
14...	1200	--	--	20.0	343	7.4	27.5	3.2	42	--	--	--	--
14...	1204	--	--	30.0	346	7.2	27.5	1.9	25	--	--	--	--
14...	1209	--	--	40.0	371	7.1	25.0	.2	2	--	--	--	--
14...	1214	--	--	52.0	374	7.0	24.5	.2	2	--	--	130	2

325822097030401 -- Grapevine Lk Site AC

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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
MAR													
06...	42.4	5.94	21.0	.8	25	4.21	1	134	115	35.3	22.5	.3	2.5
MAR													
06-06	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	42.3	5.95	21.2	.8	25	4.13	2	136	112	35.2	22.8	.3	2.4
MAY													
15...	42.8	5.02	17.7	.7	22	4.04	1	129	107	28.7	18.6	.3	4.3
MAY													
15-15	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	42.8	5.14	18.2	.7	23	4.02	<1	132	109	29.2	18.5	.3	5.3
AUG													
14...	37.8	5.28	18.1	.7	24	4.97	<1	126	104	27.2	20.5	.3	4.2
AUG													
14-14	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	45.3	5.29	17.5	.7	21	5.00	1	160	132	19.8	19.2	.2	7.9

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

325822097030401 -- Grapevine Lk Site AC

Date	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	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)	ORTHO- PHOS- PHATE, 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)	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)
MAR													
06...	202	E.004	.32	<.04	--	.35	.005	<.02	--	<10	<2.0	--	--
MAR													
06-06	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	205	E.004	.32	<.04	--	.33	.005	<.02	--	<10	<2.0	--	--
MAY													
15...	188	<.008	.58	<.04	--	.37	.022	E.01	--	<10	<2.0	.2	.1
MAY													
15-15	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<.008	.58	<.04	--	.38	.022	E.01	--	<10	E1.2n	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	192	<.008	.70	<.04	--	.32	.038	.03	.095	<10	E1.9b	--	--
AUG													
14...	180	<.008	<.05	<.04	--	.33	.005	<.02	--	<10	E2.9	<.2	<.2
AUG													
14-14	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<.008	<.05	E.03	--	.36	.006	<.02	--	E7	19.3	--	--
14...	--	<.008	<.05	.06	.34	.41	.006	<.02	--	15	135	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	203	<.008	<.05	.61	.37	.98	.113	.10	.304	517	1470	--	--

325822097030401 -- Grapevine Lk Site AC

Date	TOLUENE TOTAL (UG/L) (34010)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
MAR													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
06-06	--	--	--	<.006	<.006	<.004	<.005	.258	<.050	<.010	<.002	<.041	<.020
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
15...	.6	.6	3.6	--	--	--	--	--	--	--	--	--	--
MAY													
15-15	--	--	--	<.006	<.006	<.004	<.005	.482	<.050	<.010	<.002	<.041	<.020
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	<.2	<.2	2.5	--	--	--	--	--	--	--	--	--	--
AUG													
14-14	--	--	--	<.006	<.006	<.004	<.005	.450	<.050	<.010	<.002	<.041	<.020
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

325822097030401 -- Grapevine Lk Site AC

Date	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)
MAR													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
06-06	<.005	<.006	<.018	<.003	E.020	.008	<.005	<.02	<.002	<.009	<.005	<.003	<.004
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
15-15	<.005	<.006	<.018	<.003	E.044	.031	<.005	<.02	<.002	<.009	<.005	<.003	<.004
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14-14	<.005	<.006	<.018	<.003	E.051	.009	<.005	<.02	<.002	<.009	<.005	<.003	<.004
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

325822097030401 -- Grapevine 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- BUZIN 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' DDE 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)
MAR													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
06-06	<.035	<.027	E.010n	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
15-15	<.035	<.027	.022	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
14-14	<.035	<.027	.031	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

325822097030401 -- Grapevine 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)
MAR											
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
06-06	<.010	<.011	<.02	<.004	.149	E.01n	<.034	<.02	<.005	<.002	<.009
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
MAY											
15...	--	--	--	--	--	--	--	--	--	--	--
MAY											
15-15	<.010	<.011	<.02	<.004	.239	E.05	<.034	<.02	<.005	<.002	<.009
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14...	--	--	--	--	--	--	--	--	--	--	--
AUG											
14-14	<.010	<.011	<.02	<.004	.213	.03	<.034	<.02	<.005	<.002	<.009
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--

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 (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR							
06...	1230	1.00	365	8.3	9.0	10.9	97
06...	1233	10.0	365	8.3	8.5	10.9	95
06...	1237	20.0	365	8.3	8.5	11.0	96
06...	1240	30.0	365	8.6	8.5	10.9	95
06...	1244	37.0	366	8.7	8.5	10.9	95
MAY							
15...	1054	1.00	344	8.0	22.0	7.3	85
15...	1056	10.0	344	8.0	22.0	7.2	84
15...	1058	20.0	344	8.0	22.0	7.2	84
15...	1100	30.0	345	8.0	22.0	7.2	84
15...	1103	40.0	345	7.9	21.5	6.9	80
15...	1106	48.0	344	7.8	21.5	6.3	73
AUG							
14...	1226	1.00	340	7.5	28.0	3.7	48
14...	1229	10.0	341	7.4	28.0	3.3	43
14...	1232	20.0	342	7.4	27.5	2.8	36
14...	1235	30.0	345	7.3	27.5	2.6	34
14...	1238	42.0	373	7.1	25.0	.2	2

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

325930097053801 -- Grapevine Lk Site BC

Date	Time	TRANSPARENCY (SECCHI DISK) (M) (00078)	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
MAR													
06...	1303	.61	1.00	364	8.4	9.0	11.2	99	1	E4k	130	17	42.0
06...	1307	--	10.0	365	8.4	8.5	11.2	98	--	--	--	--	--
06...	1312	--	20.0	364	8.4	8.5	11.1	97	--	--	--	--	--
06...	1317	--	30.0	365	8.4	8.5	11.1	97	--	--	--	--	--
06...	1322	--	42.0	365	8.4	8.5	11.1	97	--	--	130	33	41.5
MAY													
15...	1126	.73	1.00	348	8.2	22.5	7.5	88	<1k	E3k	130	18	43.9
15...	1131	--	10.0	347	8.2	22.5	7.5	88	--	--	--	--	--
15...	1135	--	20.0	348	8.1	22.5	7.5	88	--	--	--	--	--
15...	1139	--	30.0	347	8.1	22.5	7.6	89	--	--	--	--	--
15...	1143	--	40.0	346	8.1	22.5	7.5	88	--	--	--	--	--
15...	1148	--	50.0	349	7.4	20.5	3.2	36	--	--	130	19	43.4
AUG													
14...	1256	1.16	1.00	328	8.1	29.0	5.1	68	--	--	110	17	36.7
14...	1301	--	10.0	329	8.0	29.0	4.8	64	--	--	--	--	--
14...	1306	--	20.0	329	7.9	29.0	4.8	64	--	--	--	--	--
14...	1312	--	30.0	332	7.7	28.5	4.2	56	--	--	--	--	--
14...	1318	--	43.0	371	7.0	25.5	.2	3	--	--	130	--	44.8

325930097053801 -- Grapevine Lk Site BC

Date	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)
MAR													
06...	5.90	21.1	.8	25	4.19	2	133	112	35.5	22.9	.3	2.3	203
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
06...	5.84	21.0	.8	26	4.19	<1	116	116	35.5	22.0	.3	2.1	191
MAY													
15...	5.09	17.9	.7	22	4.10	1	136	112	28.6	18.8	.2	3.9	192
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	5.15	17.9	.7	22	4.29	<1	E134	110	28.5	18.7	.3	5.6	193
AUG													
14...	5.58	19.8	.8	26	5.02	1	116	97	27.6	21.3	.3	4.0	178
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	5.38	17.6	.7	21	4.96	1	162	133	17.5	20.2	.2	8.3	204

325930097053801 -- Grapevine Lk Site BC

Date	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR											
06...	--	E.004	.30	<.04	--	.33	.005	<.02	--	<10	<2.0
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
06...	--	E.004	.29	<.04	--	.30	.007	<.02	--	<10	<2.0
MAY											
15...	--	<.008	.51	<.04	--	.37	.016	E.01	--	<10	<2.0
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--
15...	--	<.008	.53	<.04	--	.33	.016	<.02	--	<10	<2.0
15...	.63	.031	.66	E.02	--	.39	.039	.03	.095	<10	E3.0b
AUG											
14...	--	<.008	<.05	<.04	--	.32	.005	<.02	--	<10	E1.2
14...	--	--	--	--	--	--	--	--	--	--	--
14...	--	<.008	<.05	<.04	--	.32	.006	<.02	--	<10	E2.0
14...	--	<.008	<.05	<.04	--	.33	.006	<.02	--	<10	21.3
14...	--	<.008	<.05	1.03	.41	1.4	.19	.19	.586	923	1230

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

325933097081401 -- Grapevine Lk Site CC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
MAR													
06...	1347	1.00	367	8.5	10.0	11.6	105	--	E.004	.29	<.04	.33	.004
06...	1352	6.00	377	8.5	10.0	11.5	104	--	<.008	.29	<.04	.31	.006
MAY													
15...	1208	1.00	359	8.5	23.5	9.2	110	.25	.011	.27	<.04	.38	.008
15...	1214	12.0	357	8.3	23.0	7.7	91	.36	.009	.37	<.04	.35	.007
AUG													
14...	1333	1.00	324	8.1	29.0	5.5	73	--	<.008	<.05	<.04	.33	.007
14...	1338	10.0	324	8.0	29.0	5.2	69	--	<.008	<.05	<.04	.33	.006

325933097081401 -- Grapevine Lk Site CC

Date	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR			
06...	<.02	<10	E2.0b
06...	<.02	<10	3.2
MAY			
15...	<.02	E6	E1.7b
15...	<.02	<10	E1.2n
AUG			
14...	<.02	<10	<2.0
14...	<.02	<10	<2.0

330106097094601 -- Grapevine Lk Site DC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
MAR													
06...	1412	1.00	389	8.5	10.5	11.6	106	--	E.004	.29	<.04	.32	.005
06...	1417	7.00	387	8.5	10.5	11.5	106	--	<.008	.23	<.04	.31	.006
MAY													
15...	1238	1.00	364	8.1	23.0	7.1	84	.35	.023	.38	E.02	.43	.018
15...	1243	10.0	358	8.1	23.0	7.1	84	--	--	--	--	--	--
15...	1248	15.0	356	8.1	23.0	7.1	84	.38	.021	.40	<.04	.42	.014
AUG													
14...	1357	1.00	326	8.4	29.5	7.1	96	--	<.008	<.05	<.04	.35	.009
14...	1402	10.0	331	8.1	29.5	5.3	71	--	<.008	<.05	<.04	.34	.006

330106097094601 -- Grapevine Lk Site DC

Date	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR				
06...	<.02	--	<10	E2.3b
06...	.02	.074	<10	E1.0n
MAY				
15...	E.01	--	<10	E1.9b
15...	--	--	--	--
15...	<.02	--	<10	E2.5b
AUG				
14...	<.02	--	<10	<2.0
14...	<.02	--	<10	<2.0

08054500 Grapevine Lake near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

330207097103701 -- Grapevine Lk Site EC

Date	Time	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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)
MAR													
06...	1438	.18	1.00	401	8.5	12.0	11.5	109	E2k	E13k	140	19	45.5
06...	1449	--	4.00	406	8.5	12.0	11.3	107	--	--	140	18	46.0
MAY													
15...	1311	.24	1.00	351	7.9	23.0	8.0	95	E20k	E16k	140	10	48.1
15...	1317	--	9.00	353	8.0	23.5	8.1	97	--	--	140	19	48.1
AUG													
14...	1419	.21	1.00	332	8.4	29.5	6.9	93	--	--	110	14	34.2
14...	1425	--	9.00	330	8.2	29.0	6.7	89	--	--	110	15	33.9

330207097103701 -- Grapevine Lk Site EC

Date	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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
MAR													
06...	6.34	24.0	.9	27	4.09	2	142	123	38.6	25.2	.3	1.9	220
06...	6.40	24.2	.9	26	4.13	2	145	124	39.0	25.4	.3	2.0	223
MAY													
15...	4.79	15.6	.6	19	4.16	1	156	130	23.9	17.1	.3	4.6	198
15...	4.84	16.0	.6	19	4.18	<1	148	122	24.6	17.3	.3	4.3	194
AUG													
14...	5.45	20.0	.8	28	5.18	2	110	94	29.7	23.3	.3	5.4	180
14...	5.41	19.3	.8	27	5.08	1	110	91	29.2	21.9	.3	5.2	175

330207097103701 -- Grapevine Lk Site EC

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,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
MAR										
06...	--	E.004	.39	<.04	--	.32	.008	<.02	<10	E2.6b
06...	--	E.006	.44	<.04	--	.33	.007	<.02	<10	E1.9b
MAY										
15...	.38	.027	.40	.06	.38	.44	.023	<.02	<10	10.6
15...	.37	.027	.40	.05	.42	.48	.022	E.01	<10	10.8
AUG										
14...	--	<.008	<.05	<.04	--	.34	.008	<.02	<10	<2.0
14...	--	<.008	<.05	<.04	--	.34	.006	<.02	<10	<2.0

Remark codes used in this report:
- < -- Less than
- E -- Estimated value

Value qualifier codes used in this report:
- b -- Value was extrapolated below
- k -- Counts outside acceptable range
- n -- Below the NDV

THIS PAGE IS INTENTIONALLY BLANK

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^2.

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1997 to current year.
BIOCHEMICAL DATA: Oct. 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, DIS-SOLVED (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)
MAR 06...	1340	63	373	8.0	9.0	11.5	102	120	12	40.5	5.72	20.3	.8
MAY 15...	1000	--	350	8.1	21.5	9.5	109	130	18	42.6	5.09	18.5	.7
AUG 14...	1200	99	354	7.4	27.0	5.7	72	120	10	40.6	5.39	20.0	.8

Date	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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, NITRITE DIS-SOLVED (MG/L AS N) (00613)
MAR 06...	25	4.01	2	134	112	35.5	22.2	.3	2.08	218	200	<10	E.004
MAY 15...	23	4.13	<1	133	110	28.9	18.2	.2	4.54	198	190	<10	<.008
AUG 14...	25	4.83	<1	138	114	25.5	21.0	.3	5.19	198	191	<10	E.005

Date	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)	ORTHO-PHOS-PHATE, 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)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)
MAR 06...	.31	<.04	--	.29	.006	<.02	--	6.5	<1	.23	M	52	<.06
MAY 15...	.59	<.04	--	.34	.026	E.01	--	5.4	<1	.16	2	53	<.06
AUG 14...	E.03	.19	.39	.58	.030	.02	.061	5.4	2	.06	5	50	<.06

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)
MAR 06...	<.04	<.8	.17	1.5	<10	E.06	1.1	E.01n	4.0	1.32	<2	<1	2
MAY 15...	<.04	<.8	.17	1.3	<10	<.08	.7	<.01	1.8	1.87	<2	<1	<1
AUG 14...	<.04	<.8	.22	.7	17	E.07	426	<.01	1.8	.99	<2	<1	2

08055000 Denton Creek near Grapevine, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
MAR	
06...	1.25
MAY	
15...	1.08
AUG	
14...	.77

Remark codes used in this report:
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

Value qualifier codes used in this report:
- n -- Below the NDV

08055500 Elm Fork Trinity River near Carrollton, TX

LOCATION.--Lat 32°57′57", long 96°56′39", Dallas County, Hydrologic Unit 12030103, on Sandy Lake Road 350 ft upstream on right bank at TXU Electric Co. pump station. Prior to July 7, 1999 located near left bank at downstream side of bridge on Sandy Lake Road, 40 ft upstream from Carrollton Dam, 0.3 mi downstream from Denton Creek, 1.0 mi upstream from St. Louis Southwestern Railway Lines bridge, 2.3 mi northwest of Carrollton, and 18.2 mi upstream from mouth.

DRAINAGE AREA.--2,459 mi^2

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1907 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to Nov. 1923, published as "near Dallas".

REVISED RECORDS.--WSP 788: 1924. WSP 1148: Drainage area at former site. WSP 1632: 1908(M). WSP 1922: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 431.40 ft above NGVD of 1929. Prior to Nov. 1923, nonrecording gage at site 15.5 mi downstream at different datum. Nov. 1, 1923, to Nov. 13, 1934, nonrecording gage, and Nov. 14, 1934, to July 6, 1938, water-stage recorder at present site and datum. July 7, 1938, to Apr. 14, 1939, nonrecording gage at site 9.3 mi downstream at datum 22.94 ft lower. Apr. 15, 1939 to Sept. 30, 1955, water-stage recorder at site 8.5 mi downstream at datum 22.94 ft lower. Oct. 1, 1955, to Sept. 30, 1987, water-stage recorder at present site and at datum 2.00 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good, except those for Sept. 10-21, which are poor. Since water year 1954, at least 10% of contributing drainage area has been regulated. The city of Dallas diverts water from the pool at gage and from the river 14 mi downstream for municipal use. A wastewater treatment plant returns water to the river below the station. TXU Electric Co. diverts water from the pool at gage into North Lake for cooling water at their electric generating plant. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--47 years (water years 1908-54), 818 ft^3/s (592,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1908-54).--Maximum gage height, about 19 ft May 25, 1908, present site and datum, from information by local resident; estimated discharge, 145,000 ft^3/s, at site 8.5 mi downstream, from information by U.S. Army Corps of Engineers; maximum gage height subsequent to 1908, 16.5 ft, Apr. 26, 1942, present site and datum, from observation by National Weather Service; discharge at site 8.5 mi downstream, 90,700 ft^3/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1866 reached about the same stage as flood of May 25, 1908.

DISCHARGE FROM DCP, in CFS, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	180	169	101	62	250	106	2030	4220	331	539	202	177
2	254	137	90	56	276	214	3880	4200	319	503	172	163
3	170	172	78	98	100	132	4120	4470	237	459	179	117
4	179	201	73	58	77	80	4280	4320	169	123	173	107
5	188	173	62	84	623	72	4590	4490	177	183	195	142
6	154	122	260	98	513	98	4720	3660	226	104	178	131
7	141	164	89	87	185	95	6980	3270	586	2.8	193	163
8	98	106	66	67	88	119	3060	1660	996	146	213	328
9	112	127	73	58	14	155	1180	589	1040	123	172	279
10	104	130	78	111	3.8	127	3080	1510	960	112	288	141
11	159	143	69	156	90	110	4770	2590	870	163	276	137
12	123	113	162	160	82	120	4960	2790	537	328	186	139
13	781	93	157	114	25	67	4880	3210	526	252	181	105
14	145	146	148	92	3.4	101	3260	3230	302	182	183	114
15	120	200	95	59	0.00	127	3680	3250	127	179	196	128
16	154	154	1690	107	0.00	118	4150	3210	471	204	137	142
17	142	143	161	124	0.00	98	4310	3590	214	188	137	135
18	141	151	96	136	141	649	4230	3340	201	197	234	102
19	154	150	94	123	514	5900	4220	3120	192	150	208	178
20	116	109	78	139	31	2690	4220	3100	190	159	234	182
21	121	98	133	216	0.59	491	4210	3090	164	164	174	135
22	73	133	90	288	0.00	1710	4250	2690	172	126	203	142
23	92	140	60	279	0.17	2500	4560	1720	135	128	168	80
24	164	147	69	648	8.1	2540	4840	1130	156	143	131	59
25	124	128	72	109	56	2970	4910	592	175	140	170	133
26	110	172	109	137	61	3700	4990	542	197	105	216	143
27	126	219	64	119	78	3510	4720	360	206	144	320	153
28	122	290	74	42	82	3380	4520	448	219	208	219	172
29	109	122	103	39	---	3660	4460	636	279	245	151	157
30	159	83	106	19	---	4010	4330	386	275	365	152	174
31	154	---	62	3600	---	1050	---	336	---	234	149	---
TOTAL	4969	4435	4662	7485	3302.06	40699	126390	75749	10649	6298.8	5990	4458
MEAN	160.3	147.8	150.4	241.5	117.9	1313	4213	2444	355.0	203.2	193.2	148.6
MAX	781	290	1690	3600	623	5900	6980	4490	1040	539	320	328
MIN	73	83	60	19	0.00	67	1180	336	127	2.8	131	59
AC-FT	9860	8800	9250	14850	6550	80730	250700	150200	21120	12490	11880	8840

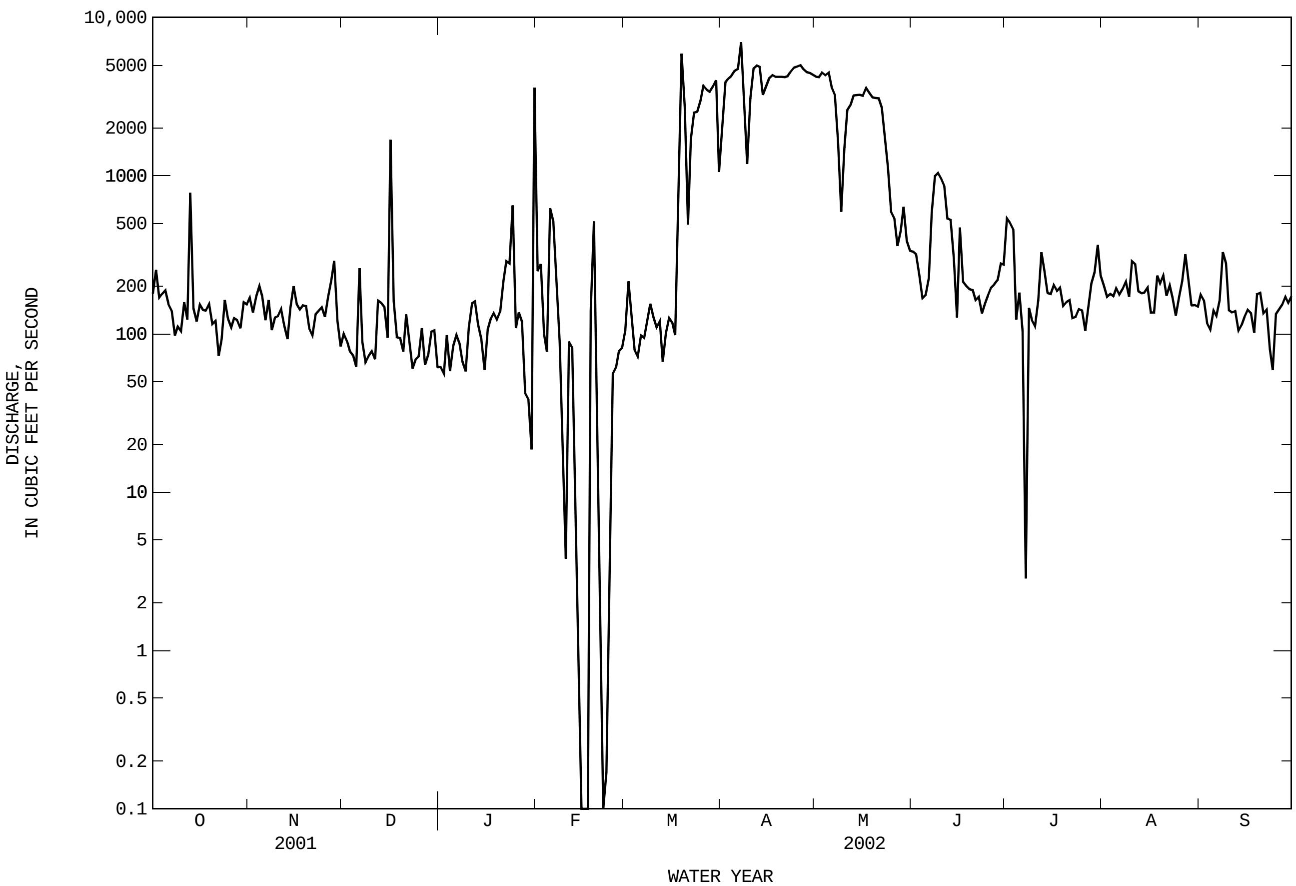
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	407.4	715.9	798.4	609.2	743.4	1121	1128	1569	1569	895.9	507.3	286.1
MAX	3554	8830	6785	6614	5868	5655	4782	10920	6757	6224	6003	3406
(WY)	1982	1982	1982	1992	1992	1997	1995	1990	1990	1989	1982	1962
MIN	27.8	4.21	0.78	0.80	2.06	3.30	43.5	38.4	80.0	94.9	58.2	14.8
(WY)	1981	1957	1978	1957	1957	1957	1955	1980	1959	1979	1979	1985

08055500 Elm Fork Trinity River near Carrollton, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1955 - 2002z	
ANNUAL TOTAL	365286.9		295086.86			
ANNUAL MEAN	1001		808.5		862.8	
HIGHEST ANNUAL MEAN					4289	1982
LOWEST ANNUAL MEAN					76.0	1978
HIGHEST DAILY MEAN	5760	Mar 24	6980	Apr 7	25300	May 5 1990
LOWEST DAILY MEAN	0.00	Feb 18	0.00	Feb 15	0.00	Dec 2 1954
ANNUAL SEVEN-DAY MINIMUM	36	Jan 7	22	Feb 20	0.00	Jan 7 1959
MAXIMUM PEAK FLOW			9990	Mar 19	33000	Sep 21 1964
MAXIMUM PEAK STAGE			9.69	Mar 19	13.48	May 5 1990
ANNUAL RUNOFF (AC-FT)	724500		585300		625000	
10 PERCENT EXCEEDS	4200		3590		3840	
50 PERCENT EXCEEDS	197		163		149	
90 PERCENT EXCEEDS	73		73		38	

z Period of regulated streamflow.



08055500 Elm Fork Trinity River near Carrollton, TX--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemtry. Datum of gage is 431.40 ft above NGVD of 1929.

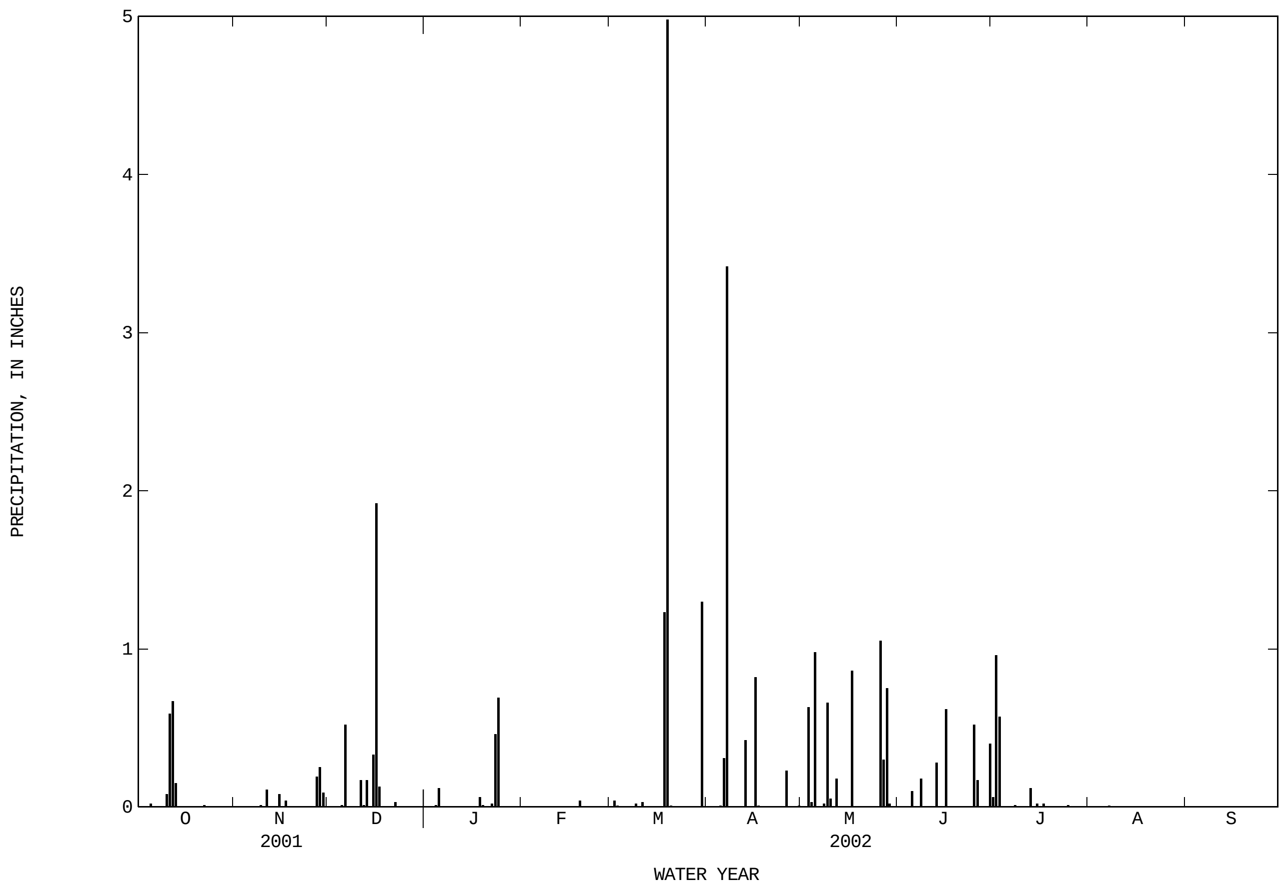
REMARKS.--Records fair.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 4.985 inches, Mar. 19.

PRECIPITATION DCP, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.06	0.00	0.00
2	0.00	0.00	0.00	0.00	---	0.04	0.00	0.00	0.00	0.96	0.00	0.00
3	0.00	0.00	0.00	0.00	---	0.01	0.00	0.63	0.00	0.57	0.00	0.00
4	0.00	0.00	0.00	0.01	---	0.00	0.00	0.03	0.00	0.00	0.00	0.00
5	0.02	0.00	0.01	0.12	---	0.00	0.01	0.98	0.10	0.00	0.00	0.00
6	0.00	0.00	0.52	0.00	---	0.00	0.31	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	---	0.00	3.42	0.00	0.00	0.00	0.01	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.18	0.01	0.00	0.00
9	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.66	0.00	0.00	0.00	0.00
10	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
11	0.59	0.11	0.17	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
12	0.67	0.00	0.01	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00
13	0.15	0.00	0.17	0.00	0.00	0.00	0.42	0.00	0.28	0.12	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.08	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
16	0.00	0.00	1.92	0.00	0.00	0.00	0.82	0.00	0.62	0.00	0.00	0.00
17	0.00	0.04	0.13	0.00	0.00	0.00	0.01	0.86	0.00	0.02	0.00	0.00
18	0.00	0.00	0.00	0.06	0.00	1.23	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.01	0.04	4.98	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.52	0.01	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.23	1.05	0.17	0.00	0.00	0.00
27	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00
28	0.00	0.25	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00
29	0.00	0.09	0.00	0.00	---	0.00	0.00	0.02	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	---	---	1.30	0.01	0.00	0.40	0.00	0.00	0.00
31	0.00	---	0.00	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	1.52	0.77	3.29	---	---	7.62	5.23	5.53	2.27	1.77	0.01	0.00

08055500 Elm Fork Trinity River near Carrollton, TX--Continued



08056000 Elm Fork Trinity River at Frasier Dam, Dallas, TX

LOCATION.--Lat 32°50'31", long 96°53'23", Dallas County, Hydrologic Unit 12030103, on right bank of dam, 0.7 mi downstream of Spur 482, and 4.4 mi northeast of city hall in Irving, Texas.

DRAINAGE AREA.--2,557 mi^2.

PERIOD OF RECORD.--Apr. 1999 to current year (elevations only).

GAGE.--Water-stage recorder and a concrete weir. Datum of gage is NGVD of 1929. 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.

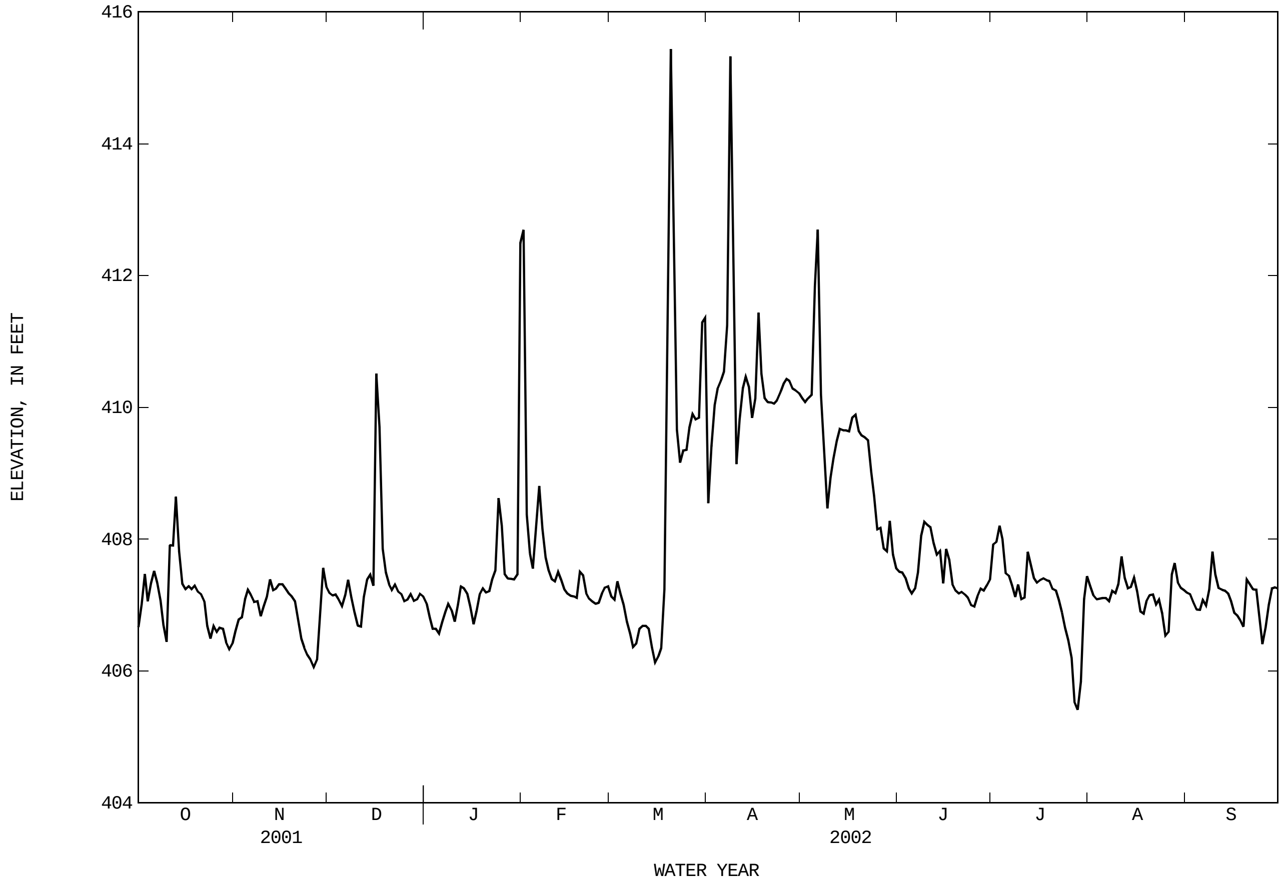
COOPERATION.--Maintained in cooperation with City of Dallas Water Utilities.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 416.02 ft, Mar. 20; minimum elevation, 405.23 ft, July 27.

ELEVATION FROM DCP, in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406.66	406.60	407.19	407.03	412.69	407.13	408.54	410.14	407.50	407.92	407.28	407.18
2	407.01	406.77	407.14	406.81	408.37	407.08	409.41	410.08	407.50	407.95	407.14	407.16
3	407.47	406.81	407.16	406.64	407.78	407.36	410.03	410.14	407.41	408.20	407.09	407.04
4	407.06	407.09	407.08	406.64	407.55	407.17	410.28	410.19	407.26	408.00	407.10	406.93
5	407.33	407.23	406.98	406.57	408.13	407.00	410.39	411.83	407.17	407.48	407.11	406.93
6	407.51	407.15	407.15	406.74	408.81	406.74	410.54	412.69	407.25	407.45	407.11	407.08
7	407.33	407.05	407.38	406.90	408.15	406.56	411.24	410.19	407.50	407.30	407.06	406.99
8	407.07	407.06	407.12	407.02	407.72	406.36	415.32	409.42	408.05	407.12	407.21	407.24
9	406.70	406.83	406.89	406.93	407.53	406.42	412.97	408.46	408.26	407.31	407.18	407.81
10	406.44	406.98	406.69	406.75	407.39	406.64	409.14	408.94	408.21	407.09	407.32	407.46
11	407.91	407.12	406.67	407.00	407.36	406.69	409.82	409.22	408.18	407.11	407.74	407.26
12	407.90	407.39	407.12	407.28	407.50	406.69	410.29	409.48	407.93	407.80	407.41	407.23
13	408.64	407.22	407.38	407.25	407.39	406.64	410.46	409.67	407.76	407.62	407.25	407.22
14	407.81	407.25	407.46	407.17	407.24	406.36	410.31	409.65	407.82	407.41	407.27	407.18
15	407.33	407.31	407.29	406.97	407.18	406.12	409.84	409.65	407.33	407.34	407.41	407.06
16	407.24	407.31	410.51	406.71	407.14	406.22	410.13	409.64	407.85	407.38	407.20	406.89
17	407.29	407.25	409.70	406.90	407.13	406.34	411.43	409.85	407.68	407.40	406.90	406.84
18	407.24	407.17	407.86	407.16	407.11	407.24	410.51	409.89	407.31	407.38	406.87	406.76
19	407.30	407.13	407.49	407.25	407.50	410.04	410.14	409.64	407.22	407.36	407.06	406.67
20	407.20	407.06	407.31	407.19	407.45	415.43	410.08	409.57	407.17	407.24	407.15	407.39
21	407.17	406.78	407.23	407.21	407.18	413.54	410.07	409.55	407.20	407.22	407.16	407.32
22	407.06	406.48	407.31	407.39	407.10	409.66	410.06	409.50	407.16	407.08	407.01	407.24
23	406.68	406.35	407.20	407.53	407.05	409.16	410.11	409.02	407.11	406.88	407.08	407.23
24	406.49	406.24	407.17	408.62	407.02	409.35	410.22	408.65	406.99	406.65	406.87	406.83
25	406.68	406.17	407.06	408.20	407.03	409.35	410.35	408.14	406.98	406.45	406.54	406.41
26	406.59	406.06	407.08	407.47	407.17	409.69	410.43	408.17	407.13	406.20	406.59	406.66
27	406.65	406.17	407.16	407.40	407.26	409.90	410.40	407.86	407.25	405.53	407.46	407.00
28	406.64	406.88	407.06	407.40	407.28	409.81	410.28	407.82	407.22	405.41	407.64	407.25
29	406.44	407.56	407.09	407.39	---	409.84	410.25	408.28	407.30	405.84	407.34	407.27
30	406.33	407.28	407.17	407.46	---	411.28	410.21	407.76	407.39	407.09	407.26	407.25
31	406.42	---	407.13	412.49	---	411.35	---	407.56	---	407.44	407.22	---
MEAN	407.08	406.93	407.36	407.34	407.65	408.36	410.44	409.38	407.47	407.15	407.16	407.09
MAX	408.64	407.56	410.51	412.49	412.69	415.43	415.32	412.69	408.26	408.20	407.74	407.81
MIN	406.33	406.06	406.67	406.57	407.02	406.12	408.54	407.56	406.98	405.41	406.54	406.41

08056000 Elm Fork Trinity River at Frasier Dam, Dallas, TX--Continued



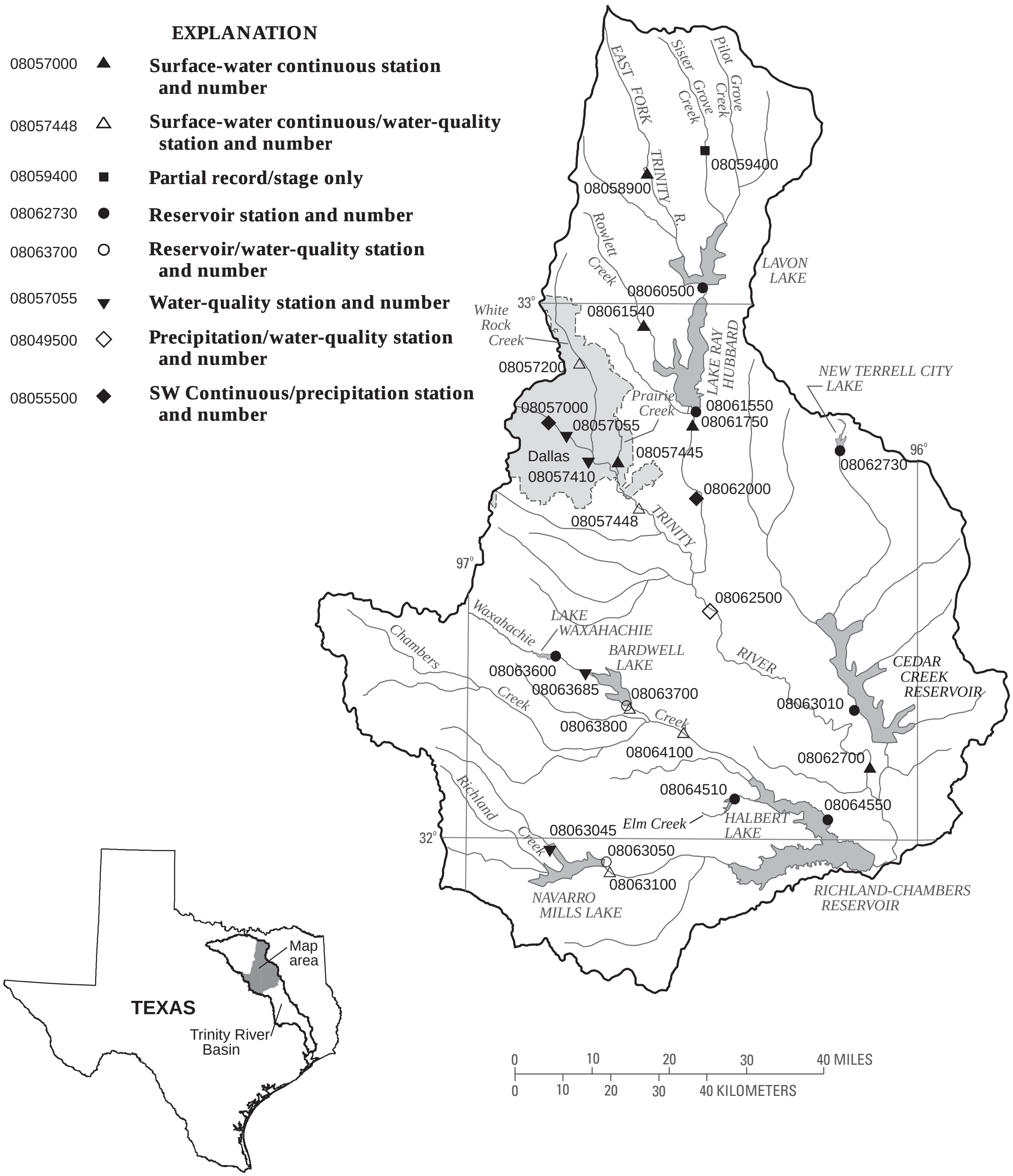


Figure 4.--Map showing location of gaging stations in the second section of the Trinity River Basin

08057000 Trinity River at Dallas, TX

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^2.

WATER-DISCHARGE RECORDS

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. WDR TX-73-1: 1972.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 368.02 ft above NGVD of 1929. 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.--Records good except those for estimated daily discharges, which are fair. Since 1914, at least 10% of contributing drainage area as been regulated. 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 DISHARGE FOR PERIOD PRIOR TO REGULATION.--10 years (water years 1904-13), 1,047 ft^3/s (758,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1903-13).--Maximum discharge, 184,000 ft^3/s May 25, 1908 (gage height, 52.6 ft), from rating curve extended above 109,000 ft^3/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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447	443	529	482	18500	569	6310	4250	787	2610	580	506
2	445	450	494	465	6700	562	4400	4140	763	2780	505	492
3	451	447	482	474	2820	651	5370	4280	716	2760	475	508
4	443	451	486	481	2000	615	5470	4640	661	3210	471	485
5	546	463	473	507	3420	567	5950	9500	612	1140	466	487
6	503	456	518	523	6590	548	6210	14500	686	1190	469	489
7	456	435	712	521	4340	542	8030	8370	769	967	459	484
8	441	433	541	501	2680	542	24300	4740	1030	642	481	646
9	442	479	473	492	2090	584	20800	2880	1260	657	486	1140
10	440	534	459	487	1000	551	e9470	4130	1300	e577	1800	799
11	2260	529	464	478	1390	537	6030	5280	1490	e678	3900	564
12	2580	629	574	576	776	530	6740	5110	1180	2820	1250	520
13	3650	795	681	686	742	536	e6850	6120	920	1030	648	506
14	2250	571	828	481	679	533	6610	5110	1190	677	619	492
15	763	525	694	468	646	522	5970	4740	808	795	1150	487
16	612	550	5560	459	623	508	5820	4460	1620	1020	700	527
17	563	522	10700	458	610	505	8990	5040	1580	875	601	549
18	520	633	5250	464	600	1250	8260	6140	740	680	610	504
19	517	561	1430	472	697	5530	6800	4300	618	639	569	653
20	500	489	738	485	740	26100	6030	3710	572	553	541	872
21	483	466	706	477	604	24700	5210	3560	618	524	540	667
22	474	461	1140	526	573	12500	4980	3380	667	497	517	574
23	465	451	657	617	557	6840	4920	2600	543	497	518	540
24	458	445	949	2780	554	6230	5000	1930	506	491	495	492
25	448	440	510	3220	551	5260	4650	1330	544	480	497	470
26	444	450	1000	924	548	4530	5050	1330	539	480	595	467
27	442	457	652	618	564	5290	5030	1130	835	484	1110	460
28	447	639	489	584	571	4500	4670	1150	934	481	833	470
29	458	904	488	564	---	3960	4420	1880	1250	475	583	483
30	454	628	482	588	---	10100	4340	1240	902	614	531	485
31	444	---	484	11300	---	13000	---	873	---	679	513	---
TOTAL	23846	15736	39643	32158	62165	139192	212680	131843	26640	32002	23512	16818
MEAN	769.2	524.5	1279	1037	2220	4490	7089	4253	888.0	1032	758.5	560.6
MAX	3650	904	10700	11300	18500	26100	24300	14500	1620	3210	3900	1140
MIN	440	433	459	458	548	505	4340	873	506	475	459	460
AC-FT	47300	31210	78630	63790	123300	276100	421900	261500	52840	63480	46640	33360

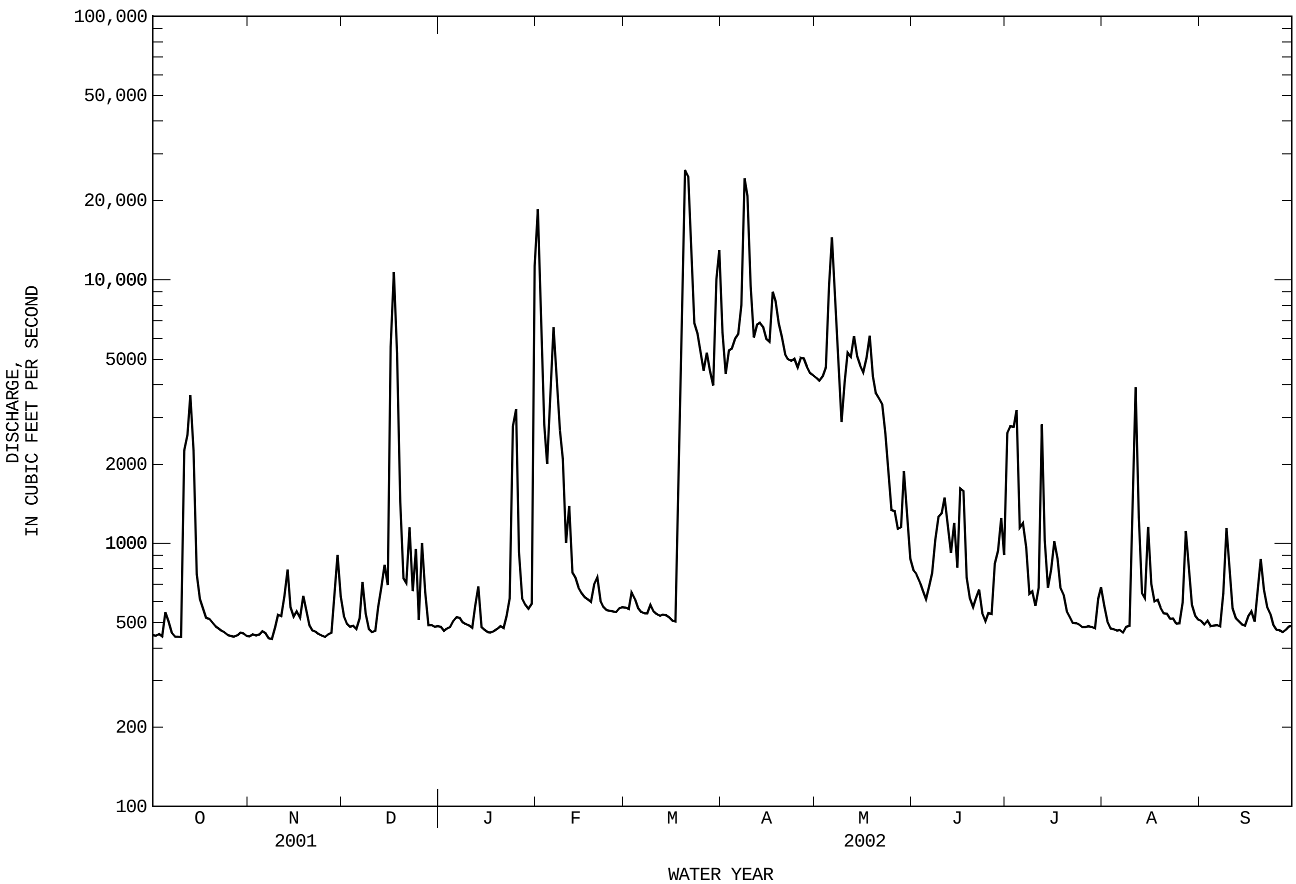
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2002hz, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1178	1317	1478	1338	2043	2414	2598	3863	2978	1239	705.1	790.8
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1931 - 2002hz	
ANNUAL TOTAL	838392		756235			
ANNUAL MEAN	2297		2072		1826	
HIGHEST ANNUAL MEAN					7154	1982
LOWEST ANNUAL MEAN					115	1956
HIGHEST DAILY MEAN	22900	Feb 17	26100	Mar 20	103000	Apr 26 1942
LOWEST DAILY MEAN	418	Aug 2	433	Nov 8	10	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	424	Aug 2	447	Oct 26	26	Apr 12 1935
MAXIMUM PEAK FLOW			32400	Mar 20	111000	Apr 26 1942
MAXIMUM PEAK STAGE			38.94	Mar 20	47.10	May 3 1990
ANNUAL RUNOFF (AC-FT)	1663000		1500000		1323000	
10 PERCENT EXCEEDS	6540		5490		5230	
50 PERCENT EXCEEDS	682		618		435	
90 PERCENT EXCEEDS	447		464		114	

e Estimated
h See PERIOD OF RECORD paragraph.
z Period of regulated streamflow.



08057000 Trinity River at Dallas, TX--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records fair.

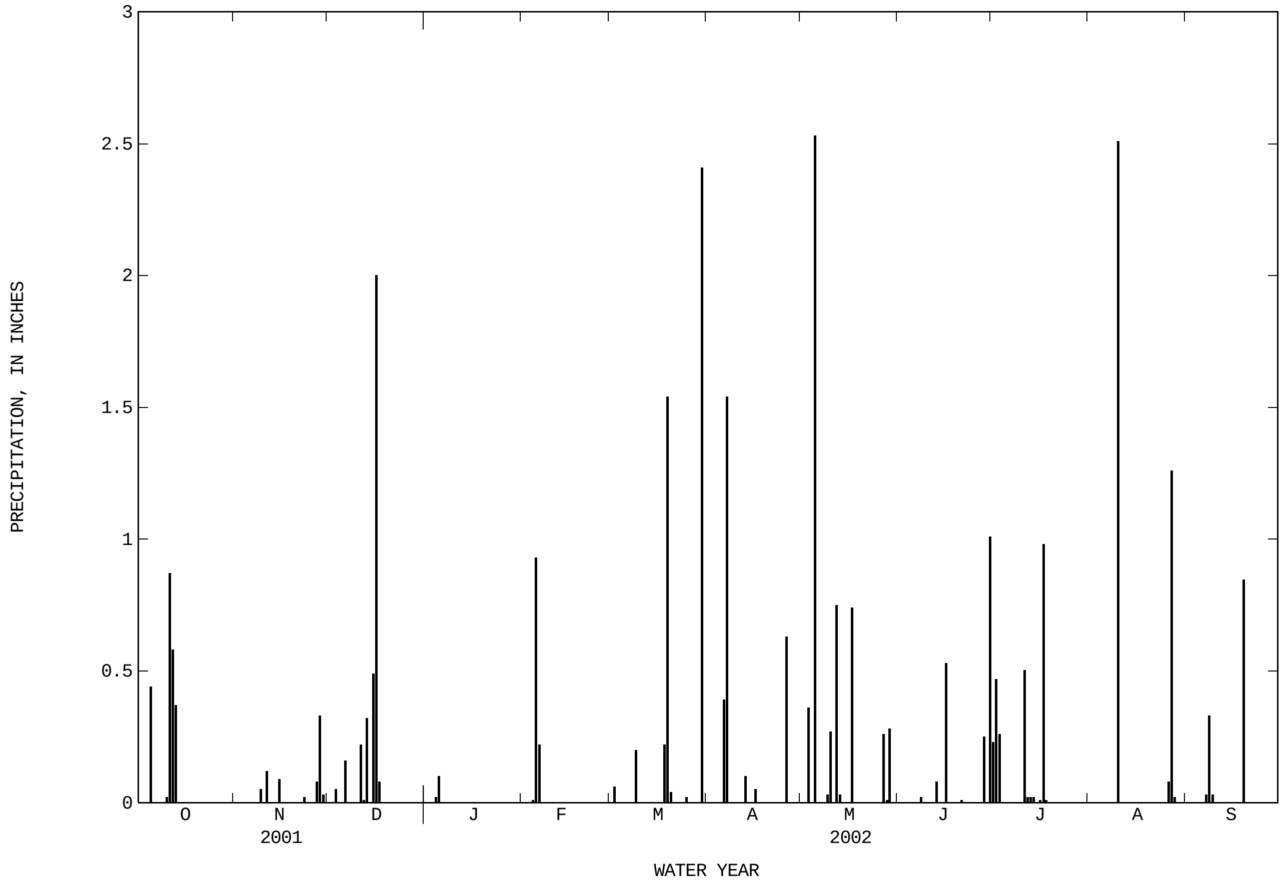
EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.526 inches, May 5.

PRECIPITATION FROM DCP, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.23	0.00	0.00
2	0.00	0.00	0.00	0.00	e0.00	0.06	0.00	0.00	0.00	0.47	0.00	0.00
3	0.00	0.00	0.05	0.00	---	0.00	0.00	0.36	0.00	0.26	0.00	0.00
4	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.44	0.00	0.00	0.10	0.93	0.00	0.00	2.53	0.00	0.00	0.00	0.00
6	0.00	0.00	0.16	0.00	0.22	0.00	0.39	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	1.54	0.00	0.00	0.00	0.00	0.03
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.33
9	0.00	0.05	0.00	0.00	0.00	0.20	0.00	0.03	0.00	0.00	0.00	0.03
10	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	2.51	0.00
11	0.87	0.12	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00
12	0.58	0.00	0.01	0.00	0.00	0.00	0.00	0.75	0.00	0.02	0.00	0.00
13	0.37	0.00	0.32	0.00	0.00	0.00	0.10	0.03	0.08	0.02	0.00	0.00
14	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
15	0.00	0.09	0.49	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	2.00	e0.00	0.00	0.00	0.05	0.00	0.53	0.01	0.00	0.00
17	0.00	0.00	0.08	e0.00	0.00	0.00	0.00	0.74	0.00	0.98	0.00	0.00
18	0.00	0.00	0.00	---	0.00	0.22	0.00	0.00	0.00	0.01	0.00	0.00
19	0.00	0.00	0.00	---	0.00	1.54	0.00	0.00	0.00	0.00	0.00	0.85
20	0.00	0.00	0.00	e0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
22	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.02	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	---	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	e0.00	0.00	0.00	0.63	0.00	0.00	0.00	0.08	0.00
27	0.00	0.08	0.00	e0.00	0.00	0.00	0.00	0.26	0.00	0.00	1.26	0.00
28	0.00	0.33	0.00	e0.00	0.00	0.00	0.00	0.01	0.25	0.00	0.02	0.00
29	0.00	0.03	0.00	---	---	0.00	0.00	0.28	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	---	---	2.41	0.00	0.00	1.01	0.00	0.00	0.00
31	0.00	---	0.00	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	2.28	0.72	3.33	---	---	4.49	2.71	5.26	1.90	2.52	3.87	1.24

e Estimated

08057000 Trinity River at Dallas, TX--Continued



08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX

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 poor. 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, 5.3 units, Feb. 1, 2002.
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, 873 microsiemens/cm, Mar. 17; minimum, 214 microsiemens/cm, Feb. 6.
pH: Maximum, 8.4 units, Jan. 24; minimum, 5.3 units, Feb. 1.
WATER TEMPERATURE: Maximum, 32.4°C, July 25; minimum, 8.4°C, Feb. 1.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Aug. 17, 18; minimum, 5.2 mg/L, Aug. 11.

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	792	767	776	750	735	742	690	656	676	778	754	765
2	793	762	771	780	740	760	758	685	725	777	738	759
3	804	780	790	787	775	782	762	726	745	766	735	750
4	791	766	779	788	780	784	787	737	755	769	751	761
5	791	319	697	791	753	772	788	761	772	768	742	754
6	723	673	694	767	751	756	777	726	758	798	752	771
7	766	701	734	793	767	782	763	636	708	794	772	784
8	773	755	764	770	757	764	721	636	698	---	---	---
9	778	761	770	770	742	752	747	703	727	---	---	---
10	784	760	776	805	687	749	759	729	744	---	---	---
11	776	338	534	786	708	764	759	680	745	---	---	---
12	---	---	---	775	665	722	766	729	748	---	---	---
13	---	---	---	760	617	707	734	540	656	---	---	---
14	---	---	---	624	606	614	623	538	576	---	---	---
15	---	---	---	655	617	634	631	231	567	---	---	---
16	614	535	575	725	655	694	---	---	---	809	776	795
17	627	605	611	759	718	737	---	---	---	794	759	773
18	656	625	644	794	751	765	---	---	---	795	768	780
19	699	642	673	814	710	766	---	---	---	802	771	788
20	716	667	687	710	661	676	633	535	593	816	768	785
21	743	716	730	748	678	718	690	515	632	815	781	796
22	738	716	728	752	721	738	684	515	579	782	745	764
23	741	700	719	803	751	776	730	532	673	746	589	712
24	746	711	729	808	774	792	698	534	584	645	429	536
25	726	699	712	787	772	780	752	698	730	486	413	449
26	755	713	727	798	771	785	740	501	563	553	470	510
27	768	753	758	780	753	765	737	513	647	662	553	614
28	790	768	785	766	653	725	746	714	730	698	661	680
29	785	755	771	735	624	662	742	717	730	733	688	711
30	776	752	759	665	638	653	749	727	739	727	700	708
31	789	747	767	---	---	---	764	718	739	---	---	---
MONTH	---	---	---	814	606	737	---	---	---	---	---	---

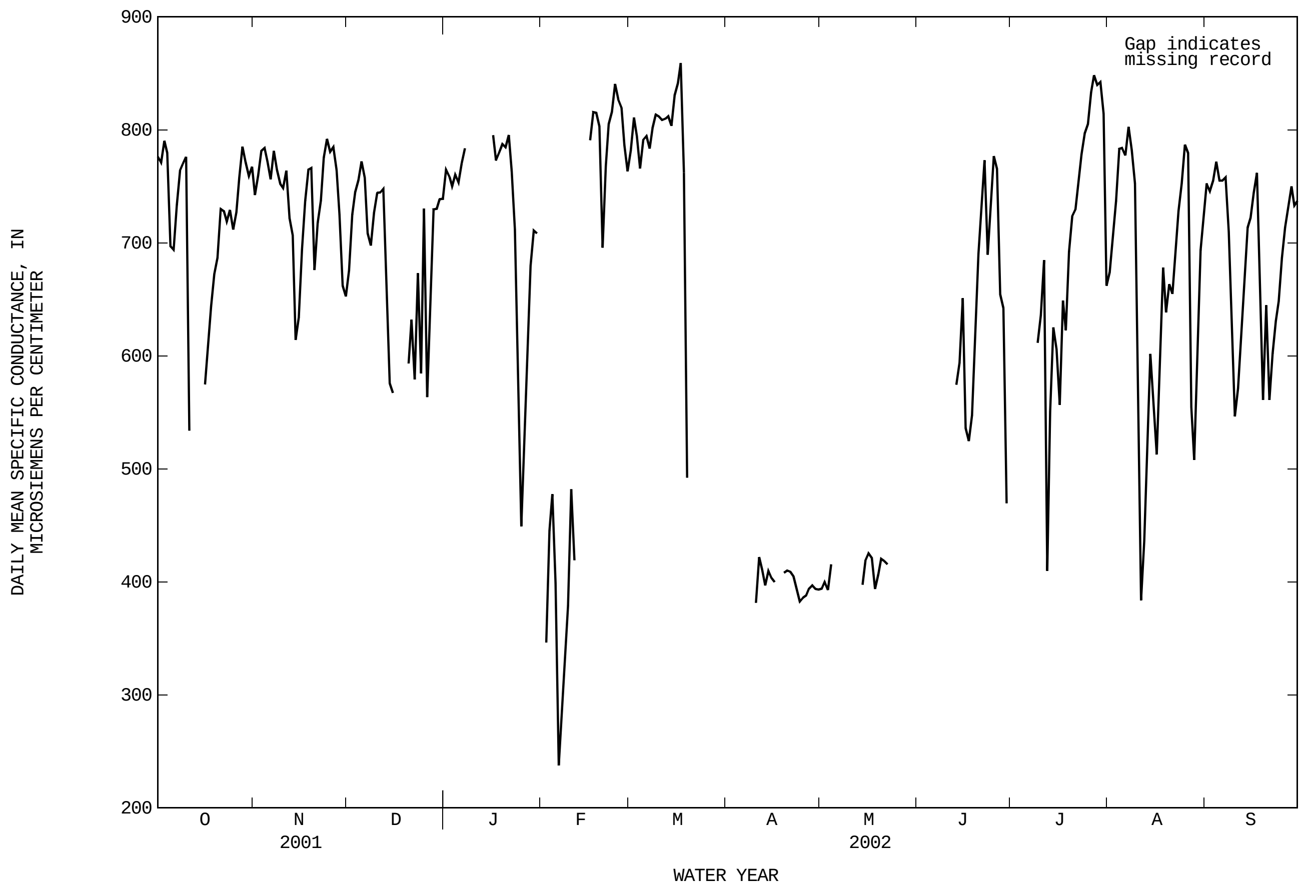
08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	809	772	782	---	---	---	401	361	394
2	393	301	346	824	801	811	---	---	---	403	393	400
3	516	393	445	819	761	794	---	---	---	410	380	393
4	526	461	478	785	747	766	---	---	---	427	400	416
5	561	224	399	805	780	791	---	---	---	---	---	---
6	250	214	237	807	784	795	---	---	---	---	---	---
7	317	250	282	796	774	784	---	---	---	---	---	---
8	367	317	336	823	790	802	---	---	---	---	---	---
9	399	364	379	827	796	814	---	---	---	---	---	---
10	538	399	482	823	804	812	430	338	381	---	---	---
11	513	393	419	824	795	809	434	399	422	---	---	---
12	---	---	---	822	800	810	432	392	410	---	---	---
13	---	---	---	822	806	812	413	390	397	---	---	---
14	---	---	---	815	795	804	423	393	410	415	387	397
15	---	---	---	850	815	831	421	397	403	421	415	419
16	800	784	791	850	836	841	410	392	400	428	420	425
17	833	787	816	873	841	859	---	---	---	432	390	421
18	823	807	815	867	487	762	---	---	---	423	376	394
19	842	687	803	603	308	492	413	402	408	417	388	406
20	737	668	696	---	---	---	413	408	410	427	414	420
21	790	737	768	---	---	---	412	407	409	425	410	418
22	825	790	805	---	---	---	409	389	405	421	404	416
23	828	806	816	---	---	---	402	378	394	---	---	---
24	855	825	841	---	---	---	399	367	382	---	---	---
25	832	817	827	---	---	---	392	375	386	---	---	---
26	828	808	820	---	---	---	406	360	388	---	---	---
27	808	774	786	---	---	---	406	381	394	---	---	---
28	774	756	763	---	---	---	400	392	397	---	---	---
29	---	---	---	---	---	---	402	385	394	---	---	---
30	---	---	---	---	---	---	396	388	393	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	703	643	674	765	739	752
2	---	---	---	---	---	---	730	680	708	764	731	746
3	---	---	---	---	---	---	773	705	737	770	731	755
4	---	---	---	---	---	---	800	770	783	784	759	772
5	---	---	---	---	---	---	792	778	784	774	741	755
6	---	---	---	---	---	---	786	774	778	764	749	755
7	---	---	---	---	---	---	811	786	803	772	716	758
8	---	---	---	---	---	---	796	739	782	778	533	710
9	---	---	---	620	605	611	764	739	753	642	551	608
10	---	---	---	672	614	636	783	315	613	609	526	546
11	---	---	---	761	349	685	574	329	383	593	510	571
12	---	---	---	567	338	410	475	376	436	637	581	610
13	599	552	575	630	431	550	574	475	539	702	624	660
14	620	562	594	643	529	625	625	573	602	725	698	714
15	673	620	651	725	480	606	632	454	552	735	704	722
16	656	457	536	691	499	556	567	477	513	760	726	744
17	573	493	525	685	457	649	629	567	602	777	734	762
18	583	515	547	683	505	623	724	621	678	736	537	659
19	654	583	616	715	670	692	680	621	638	684	419	561
20	714	653	690	737	705	723	672	640	663	675	583	645
21	749	706	730	745	714	729	677	631	655	583	549	561
22	789	741	773	780	712	752	716	674	693	635	561	602
23	752	665	689	800	755	778	743	716	728	649	605	631
24	776	697	731	809	782	797	778	735	753	692	605	648
25	809	746	777	822	786	805	796	778	787	710	667	687
26	791	723	765	857	816	833	793	770	780	730	708	714
27	735	559	654	857	841	848	809	336	555	745	715	732
28	738	391	642	848	831	840	567	460	508	758	736	750
29	564	322	469	847	835	842	645	562	607	748	722	733
30	---	---	---	845	734	814	725	645	694	763	723	737
31	---	---	---	734	618	662	741	709	726	---	---	---
MONTH	---	---	---	---	---	---	811	315	662	784	419	687

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued



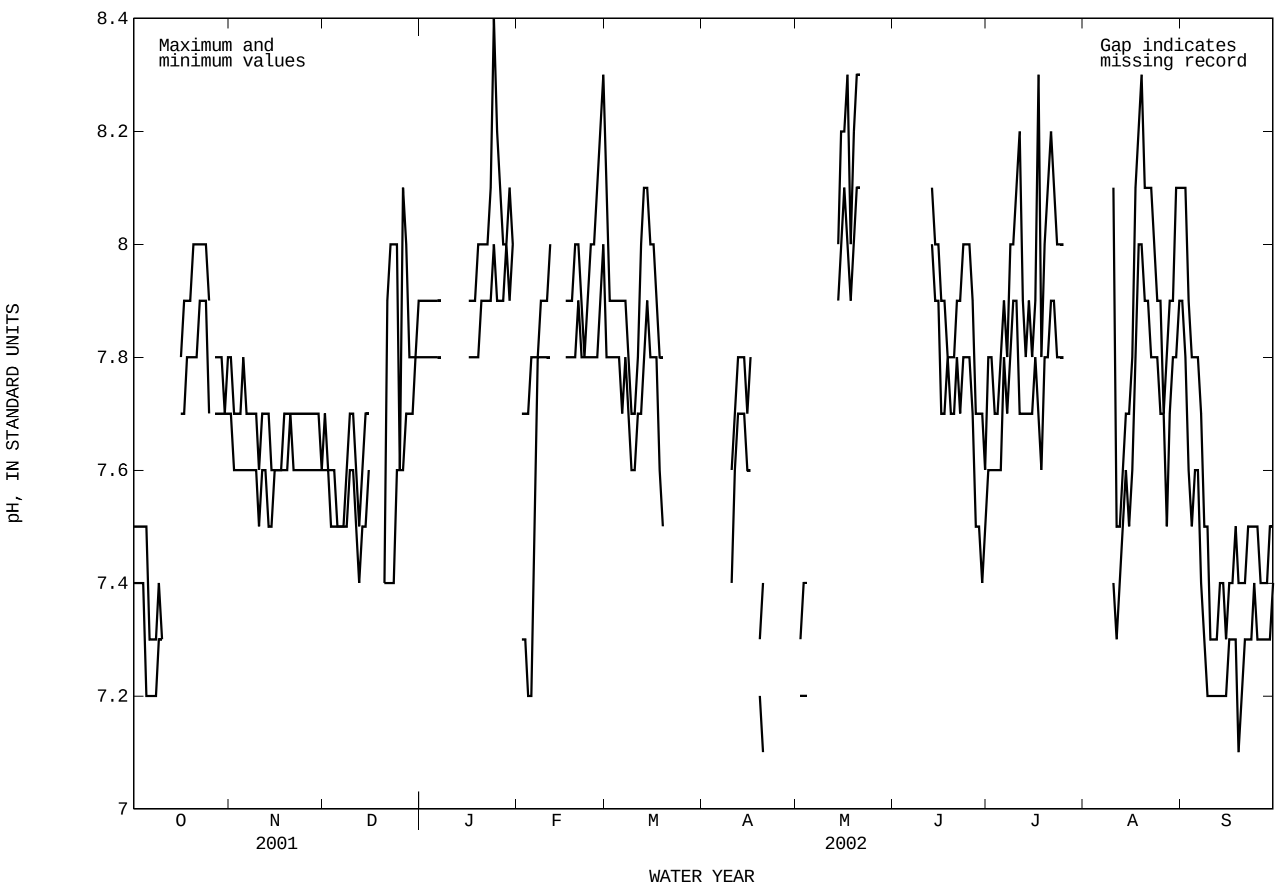
PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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



08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

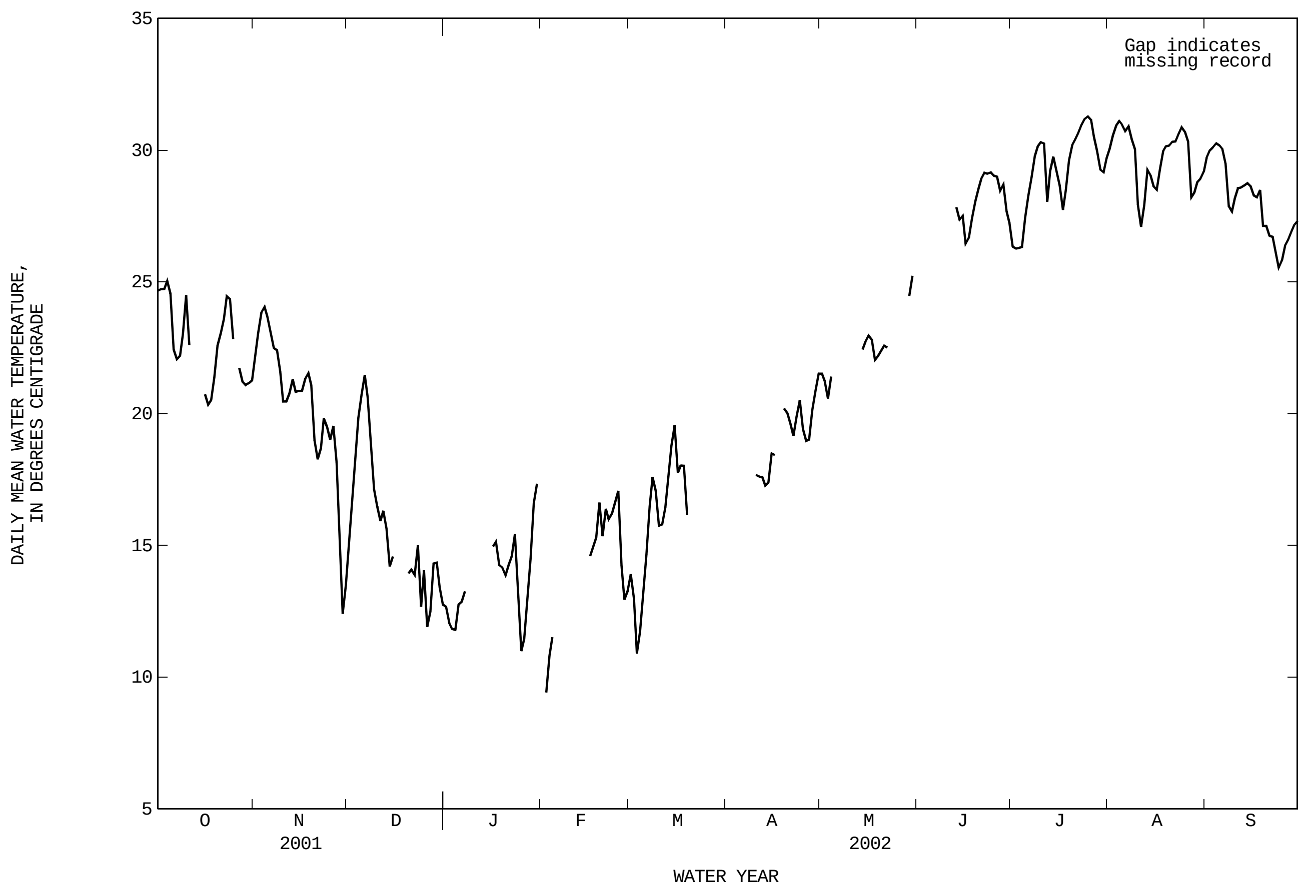
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	25.8	23.8	24.7	23.0	21.3	22.1	16.1	13.9	15.0	13.4	12.0	12.7
2	25.8	24.0	24.7	24.0	22.3	23.1	18.2	15.5	16.9	12.6	11.4	12.1
3	25.7	24.0	24.7	24.9	23.0	23.8	19.3	17.6	18.4	12.7	11.2	11.8
4	26.0	24.3	25.0	24.7	23.7	24.1	20.6	19.1	19.8	12.6	10.8	11.8
5	25.3	23.5	24.6	24.5	23.2	23.7	21.3	20.1	20.7	13.3	12.3	12.8
6	23.6	21.6	22.4	23.7	22.6	23.1	22.0	20.9	21.5	14.0	11.9	12.9
7	23.2	21.3	22.1	23.2	22.0	22.5	21.6	20.1	20.6	14.2	12.7	13.3
8	22.9	21.5	22.2	23.3	21.7	22.4	20.1	17.5	19.0	---	---	---
9	23.9	22.4	23.0	22.4	21.0	21.6	17.9	16.5	17.1	---	---	---
10	25.7	23.6	24.5	21.0	20.1	20.5	17.3	15.6	16.5	---	---	---
11	25.0	20.9	22.6	20.7	20.1	20.5	16.5	15.3	15.9	---	---	---
12	---	---	---	21.2	20.3	20.8	17.1	15.3	16.3	---	---	---
13	---	---	---	21.6	20.7	21.3	16.5	14.7	15.6	---	---	---
14	---	---	---	21.2	20.5	20.8	14.8	13.8	14.2	---	---	---
15	---	---	---	21.1	20.6	20.9	15.1	14.0	14.6	---	---	---
16	21.4	20.0	20.7	21.3	20.5	20.9	---	---	---	16.0	14.3	14.9
17	21.0	19.8	20.3	21.9	20.8	21.3	---	---	---	15.5	14.7	15.1
18	21.4	19.8	20.5	21.9	21.1	21.5	---	---	---	14.7	13.9	14.3
19	22.6	20.5	21.4	21.8	19.6	21.1	---	---	---	14.9	13.5	14.2
20	23.7	21.7	22.6	19.6	18.3	19.0	14.5	13.5	13.9	14.9	13.1	13.9
21	23.9	22.5	23.0	19.0	17.7	18.3	15.2	12.6	14.1	15.2	13.5	14.3
22	24.5	22.9	23.6	19.7	17.8	18.7	15.3	12.6	13.9	15.0	14.3	14.6
23	25.4	23.9	24.5	20.9	18.8	19.8	16.1	12.8	15.0	16.5	14.8	15.4
24	25.0	23.4	24.3	20.2	18.8	19.5	13.5	12.1	12.7	16.5	11.2	13.5
25	23.5	22.1	22.8	19.8	18.3	19.0	15.0	13.4	14.1	11.4	10.4	11.0
26	---	---	---	20.5	18.7	19.5	14.7	10.8	11.9	12.3	10.8	11.4
27	22.5	21.2	21.7	19.4	16.8	18.2	14.3	10.6	12.5	13.9	12.1	12.9
28	22.1	20.6	21.2	16.8	13.2	14.9	15.2	13.6	14.3	15.6	13.6	14.5
29	21.9	20.4	21.1	13.2	11.3	12.4	15.1	13.8	14.3	17.4	15.4	16.6
30	22.1	20.5	21.2	14.4	12.6	13.5	14.0	13.0	13.4	17.7	16.9	17.3
31	22.0	20.5	21.3	---	---	---	13.4	12.2	12.8	---	---	---
MONTH	---	---	---	24.9	11.3	20.3	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	14.2	13.6	13.9	---	---	---	22.0	21.2	21.5
2	10.1	9.1	9.4	14.4	11.3	13.0	---	---	---	21.6	20.5	21.2
3	12.0	10.1	10.8	11.7	10.0	10.9	---	---	---	21.2	20.1	20.6
4	12.2	11.3	11.5	13.1	10.6	11.7	---	---	---	21.9	21.1	21.4
5	---	10.1	---	14.7	12.4	13.3	---	---	---	---	---	---
6	---	11.9	---	15.9	13.7	14.7	---	---	---	---	---	---
7	---	12.1	---	17.4	15.6	16.5	---	---	---	---	---	---
8	---	13.6	---	18.1	17.2	17.6	---	---	---	---	---	---
9	---	15.2	---	18.0	16.0	17.1	---	---	---	---	---	---
10	---	15.6	---	16.6	15.0	15.7	18.3	17.2	17.7	---	---	---
11	---	15.4	---	16.0	15.6	15.8	18.3	17.1	17.6	---	---	---
12	---	---	---	17.9	15.4	16.5	18.1	17.1	17.6	---	---	---
13	---	---	---	18.9	16.4	17.5	17.7	16.9	17.3	---	---	---
14	---	---	---	20.2	17.7	18.8	18.3	16.8	17.4	22.9	21.9	22.4
15	---	---	---	20.0	18.5	19.6	19.0	18.1	18.5	23.3	22.2	22.7
16	15.5	13.8	14.6	18.5	17.3	17.8	18.8	18.1	18.4	23.3	22.6	23.0
17	15.7	14.4	15.0	18.9	17.4	18.0	---	---	---	23.2	22.4	22.8
18	15.9	14.8	15.3	18.7	16.2	18.0	---	---	---	22.4	21.7	22.0
19	17.7	15.8	16.6	16.7	15.7	16.1	20.5	19.9	20.2	22.6	21.7	22.2
20	16.4	14.2	15.4	---	---	---	20.4	19.8	20.0	22.8	21.9	22.4
21	16.6	15.9	16.4	---	---	---	19.9	19.2	19.6	23.1	22.1	22.6
22	17.0	15.1	16.0	---	---	---	19.7	18.6	19.1	23.0	21.7	22.5
23	17.1	15.5	16.2	---	---	---	20.7	19.4	19.9	---	---	---
24	17.7	15.9	16.6	---	---	---	20.8	19.9	20.5	---	---	---
25	17.8	16.1	17.1	---	---	---	19.9	19.1	19.4	---	---	---
26	16.1	13.0	14.2	---	---	---	19.1	18.7	19.0	---	---	---
27	14.0	12.0	13.0	---	---	---	19.5	18.6	19.0	---	---	---
28	14.3	12.6	13.3	---	---	---	20.8	19.5	20.1	---	---	---
29	---	---	---	---	---	---	21.5	20.3	20.9	25.2	23.7	24.5
30	---	---	---	---	---	---	21.9	21.2	21.5	26.1	23.8	25.2
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	26.5	25.5	26.3	31.0	29.4	30.1	30.9	28.9	29.7
2	---	---	---	27.1	25.8	26.3	31.6	29.7	30.6	31.2	29.3	30.0
3	---	---	---	26.8	25.8	26.3	32.1	30.1	30.9	31.0	29.5	30.1
4	---	---	---	27.3	25.7	26.3	32.1	30.5	31.1	31.2	29.7	30.3
5	---	---	---	28.1	26.8	27.4	31.9	30.3	31.0	31.1	29.7	30.2
6	---	---	---	28.9	27.6	28.3	31.7	30.2	30.7	30.8	29.6	30.0
7	---	---	---	29.7	28.2	29.0	31.8	30.2	30.9	30.0	28.9	29.5
8	---	---	---	30.6	29.1	29.8	31.1	29.9	30.4	28.9	25.4	27.9
9	---	---	---	31.0	29.2	30.1	31.0	29.3	30.0	28.4	27.1	27.7
10	---	---	---	31.1	29.7	30.3	30.2	24.5	27.9	28.9	27.4	28.2
11	---	---	---	31.3	27.0	30.3	27.7	26.2	27.1	29.4	28.0	28.6
12	---	---	---	29.6	26.1	28.0	28.9	27.2	27.9	29.1	28.2	28.6
13	28.5	27.2	27.8	29.9	28.4	29.2	30.3	28.6	29.3	29.5	28.0	28.7
14	27.9	26.6	27.4	30.6	28.9	29.8	29.5	28.4	29.1	29.6	28.1	28.7
15	28.3	26.7	27.5	29.7	28.6	29.2	29.0	28.0	28.6	29.3	28.2	28.6
16	27.6	25.8	26.4	29.0	28.1	28.6	29.3	27.7	28.5	28.9	27.9	28.3
17	27.6	25.7	26.7	28.6	25.8	27.7	30.3	28.7	29.3	29.1	27.7	28.2
18	28.3	26.4	27.4	29.4	27.7	28.5	31.0	29.2	30.0	29.3	28.1	28.5
19	28.9	27.4	28.0	30.6	29.0	29.6	30.9	29.6	30.1	28.2	25.7	27.1
20	29.6	27.9	28.5	31.2	29.6	30.2	31.1	29.5	30.2	27.5	26.5	27.1
21	30.1	28.2	28.9	31.3	29.8	30.4	31.2	29.7	30.3	27.4	26.1	26.8
22	30.0	28.4	29.2	31.7	29.9	30.7	31.4	29.6	30.3	27.6	26.2	26.7
23	30.0	28.4	29.1	32.1	30.2	31.0	31.6	29.9	30.6	26.9	25.6	26.1
24	30.2	28.5	29.2	32.2	30.5	31.2	31.9	30.3	30.9	26.5	24.8	25.5
25	29.6	28.7	29.0	32.4	30.6	31.3	31.6	30.2	30.7	27.0	25.0	25.8
26	29.5	28.7	29.0	32.0	30.5	31.2	31.3	29.6	30.3	27.5	25.7	26.4
27	29.0	27.6	28.4	31.4	29.8	30.5	30.9	23.2	28.2	27.8	25.7	26.6
28	29.7	27.2	28.7	30.6	29.5	29.9	29.2	27.5	28.4	28.1	26.2	26.9
29	28.7	26.4	27.7	29.6	29.0	29.3	29.3	28.4	28.8	28.2	26.4	27.2
30	28.3	25.5	27.2	29.9	28.5	29.2	29.9	28.3	28.9	28.3	26.6	27.3
31	---	---	---	30.5	28.6	29.7	30.2	28.5	29.2	---	---	---
MONTH	---	---	---	32.4	25.5	29.2	32.1	23.2	29.7	31.2	24.8	28.0



08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

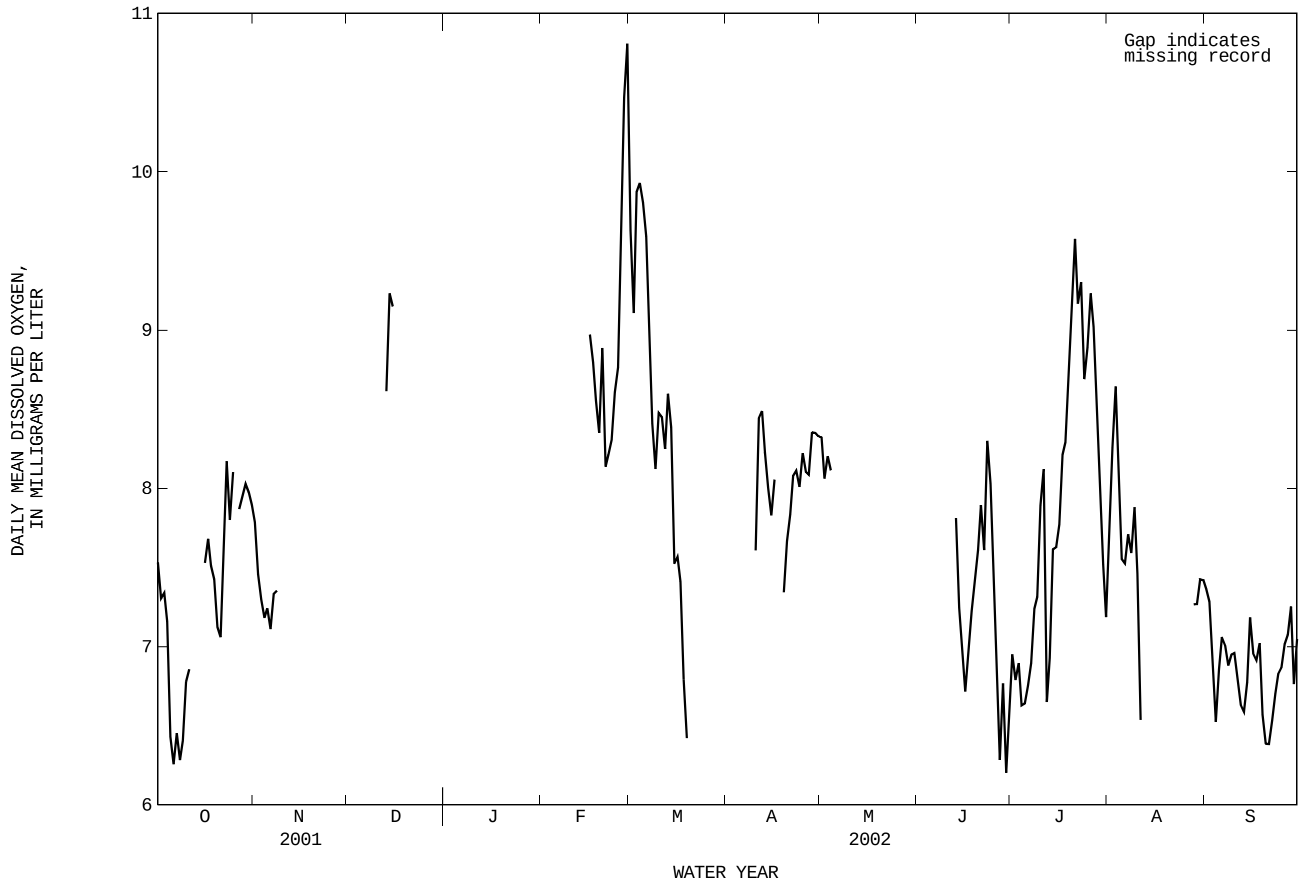
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.1	7.5	8.1	7.5	7.8	---	---	---	---	---	---
2	7.7	6.9	7.3	7.7	7.3	7.5	---	---	---	---	---	---
3	7.8	6.9	7.3	7.7	7.1	7.3	---	---	---	---	---	---
4	7.7	6.8	7.2	7.5	7.0	7.2	---	---	---	---	---	---
5	6.9	5.8	6.4	8.2	6.8	7.2	---	---	---	---	---	---
6	6.6	5.8	6.3	7.5	6.8	7.1	---	---	---	---	---	---
7	6.7	6.2	6.5	7.7	7.1	7.3	---	---	---	---	---	---
8	6.5	6.1	6.3	7.7	7.1	7.4	---	---	---	---	---	---
9	7.0	5.9	6.4	---	---	---	---	---	---	---	---	---
10	7.4	6.3	6.8	---	---	---	---	---	---	---	---	---
11	7.3	6.5	6.9	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	8.9	8.2	8.6	---	---	---
14	---	---	---	---	---	---	9.6	8.9	9.2	---	---	---
15	---	---	---	---	---	---	9.6	8.8	9.1	---	---	---
16	7.9	7.2	7.5	---	---	---	---	---	---	---	---	---
17	7.9	7.4	7.7	---	---	---	---	---	---	---	---	---
18	7.8	7.3	7.5	---	---	---	---	---	---	---	---	---
19	7.7	7.2	7.4	---	---	---	---	---	---	---	---	---
20	7.3	6.9	7.1	---	---	---	---	---	---	---	---	---
21	7.3	6.8	7.1	---	---	---	---	---	---	---	---	---
22	8.8	6.8	7.6	---	---	---	---	---	---	---	---	---
23	8.7	7.8	8.2	---	---	---	---	---	---	---	---	---
24	8.2	7.4	7.8	---	---	---	---	---	---	---	---	---
25	8.7	7.5	8.1	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	8.3	7.6	7.9	---	---	---	---	---	---	---	---	---
28	8.4	7.6	7.9	---	---	---	---	---	---	---	---	---
29	8.4	7.8	8.0	---	---	---	---	---	---	---	---	---
30	8.3	7.7	8.0	---	---	---	---	---	---	---	---	---
31	8.2	7.7	7.9	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	10.6	9.0	9.6	---	---	---	8.5	8.1	8.3
2	---	---	---	9.8	8.4	9.1	---	---	---	8.3	7.8	8.1
3	---	---	---	10.4	9.4	9.9	---	---	---	8.4	7.9	8.2
4	---	---	---	10.3	9.4	9.9	---	---	---	8.5	7.8	8.1
5	---	---	---	10.4	9.1	9.8	---	---	---	---	---	---
6	---	---	---	10.1	9.0	9.6	---	---	---	---	---	---
7	---	---	---	9.4	8.5	9.0	---	---	---	---	---	---
8	---	---	---	8.9	7.9	8.4	---	---	---	---	---	---
9	---	---	---	8.7	7.7	8.1	---	---	---	---	---	---
10	---	---	---	9.2	7.9	8.5	8.0	7.4	7.6	---	---	---
11	---	---	---	8.8	7.8	8.4	8.8	7.9	8.4	---	---	---
12	---	---	---	9.4	7.2	8.2	8.7	8.3	8.5	---	---	---
13	---	---	---	9.8	7.8	8.6	8.4	8.1	8.2	---	---	---
14	---	---	---	9.4	7.3	8.4	8.3	7.6	8.0	---	---	---
15	---	---	---	8.2	6.8	7.5	8.1	7.6	7.8	---	---	---
16	9.3	8.6	9.0	8.6	6.8	7.6	8.3	7.9	8.1	---	---	---
17	9.3	8.3	8.8	8.2	6.8	7.4	---	---	---	---	---	---
18	8.9	8.3	8.6	8.1	5.5	6.8	---	---	---	---	---	---
19	9.2	7.9	8.3	8.1	5.7	6.4	7.6	7.1	7.3	---	---	---
20	9.3	8.5	8.9	---	---	---	7.8	7.6	7.7	---	---	---
21	8.7	7.8	8.1	---	---	---	8.0	7.7	7.8	---	---	---
22	8.6	7.8	8.2	---	---	---	8.3	7.9	8.1	---	---	---
23	8.8	7.8	8.3	---	---	---	8.3	8.0	8.1	---	---	---
24	9.4	8.0	8.6	---	---	---	8.3	7.8	8.0	---	---	---
25	9.5	8.1	8.8	---	---	---	8.4	8.1	8.2	---	---	---
26	10.6	8.6	9.6	---	---	---	8.5	7.8	8.1	---	---	---
27	11.5	9.6	10.5	---	---	---	8.2	8.0	8.1	---	---	---
28	11.8	10.0	10.8	---	---	---	8.7	8.0	8.4	---	---	---
29	---	---	---	---	---	---	8.7	7.8	8.3	---	---	---
30	---	---	---	---	---	---	8.6	7.9	8.3	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

08057055 Trinity River at Cedar Crest Boulevard, Dallas, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	7.2	6.7	7.0	8.2	7.2	7.6	8.1	6.9	7.4
2	---	---	---	7.1	6.6	6.8	9.1	7.7	8.3	8.1	6.7	7.3
3	---	---	---	7.1	6.6	6.9	9.7	7.9	8.6	7.4	6.1	6.9
4	---	---	---	6.8	6.4	6.6	8.8	7.4	8.0	7.2	5.6	6.5
5	---	---	---	6.8	6.5	6.6	8.4	6.7	7.6	7.8	5.6	6.9
6	---	---	---	7.1	6.3	6.8	8.5	6.9	7.5	7.8	6.6	7.1
7	---	---	---	7.2	6.6	6.9	8.8	6.5	7.7	7.6	6.5	7.0
8	---	---	---	7.6	6.9	7.2	8.3	7.1	7.6	7.1	6.5	6.9
9	---	---	---	7.8	6.8	7.3	8.6	7.2	7.9	7.2	6.8	6.9
10	---	---	---	8.8	7.2	7.9	8.0	6.4	7.5	7.2	6.7	7.0
11	---	---	---	9.3	7.1	8.1	7.3	5.2	6.5	7.0	6.6	6.8
12	---	---	---	7.5	6.2	6.7	---	---	---	6.9	6.4	6.6
13	8.2	7.3	7.8	7.4	6.5	6.9	---	---	---	6.9	6.2	6.6
14	7.6	6.8	7.2	8.3	7.1	7.6	---	---	---	7.8	5.9	6.8
15	7.5	6.6	7.0	7.9	7.2	7.6	---	---	---	7.8	6.6	7.2
16	7.1	5.5	6.7	8.0	7.5	7.8	---	---	---	7.3	6.3	7.0
17	7.2	6.7	7.0	8.6	7.9	8.2	---	---	---	7.5	6.2	6.9
18	7.7	6.8	7.2	8.8	7.8	8.3	---	---	---	7.4	6.1	7.0
19	7.8	7.1	7.4	9.4	8.3	8.8	---	---	---	7.4	5.9	6.6
20	8.4	7.0	7.6	10.0	8.5	9.2	---	---	---	6.7	5.9	6.4
21	8.6	7.3	7.9	10.7	8.7	9.6	---	---	---	6.9	6.0	6.4
22	8.0	7.2	7.6	10.3	7.6	9.2	---	---	---	7.1	6.1	6.5
23	9.1	7.5	8.3	9.8	8.8	9.3	---	---	---	7.4	6.3	6.7
24	8.8	7.3	8.0	9.6	7.9	8.7	---	---	---	7.4	6.3	6.8
25	8.0	6.7	7.3	10.0	8.3	8.9	---	---	---	7.4	6.5	6.9
26	7.4	6.2	6.8	10.4	7.8	9.2	---	---	---	7.5	6.7	7.0
27	6.9	5.3	6.3	9.8	8.3	9.0	---	---	---	7.6	6.7	7.1
28	6.9	6.5	6.8	9.2	8.1	8.6	7.5	7.0	7.3	7.9	6.8	7.3
29	6.7	5.8	6.2	8.5	7.7	8.1	7.5	7.1	7.3	7.2	6.0	6.8
30	6.9	6.3	6.6	7.9	6.9	7.5	7.9	7.1	7.4	7.6	6.5	7.0
31	---	---	---	7.8	6.5	7.2	8.1	7.0	7.4	---	---	---
MONTH	---	---	---	10.7	6.2	7.9	---	---	---	8.1	5.6	6.9



08057200 White Rock Creek at Greenville Avenue, Dallas, TX

LOCATION.--Lat 32°53'21", long 96°45'23", Dallas County, Hydrologic Unit 12030105, on left bank 20 ft upstream from bridge on Greenville Avenue in Dallas, 1.1 mi downstream from Texas and New Orleans Railroad Co. bridge, 1.2 mi downstream from Cottonwood Creek, 2.9 mi upstream from White Rock Lake, and 8.2 mi northeast of Dallas County Courthouse.

DRAINAGE AREA.--66.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Aug. 1961 to Sept. 1980, Apr. 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 400 ft above NGVD of 1929. Prior to Oct. 24, 1961, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation. Low flow is affected by diversions from small dams upstream from station.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	22	35	24	140	33	85	20	38	266	e3.2	11
2	24	22	32	24	89	57	67	18	33	133	e3.3	9.2
3	24	23	31	23	79	49	57	224	29	210	e3.0	11
4	24	22	31	23	74	37	47	46	27	106	e2.7	8.6
5	106	26	30	65	516	33	43	535	48	60	e2.7	e5.0
6	43	34	154	35	457	31	69	54	41	40	e2.4	e3.0
7	31	23	49	26	332	34	3680	38	31	36	e15.2	e3.0
8	28	23	35	23	259	33	1020	40	28	31	41	475
9	26	27	30	22	217	57	94	45	32	26	12	147
10	35	23	29	24	179	37	67	633	30	21	120	62
11	486	110	70	22	164	42	52	81	23	138	43	37
12	214	50	79	23	137	33	47	57	20	118	29	30
13	517	32	132	23	128	31	211	105	119	54	16	28
14	77	28	73	22	107	28	86	44	108	57	60	25
15	55	34	81	21	91	27	58	39	39	35	49	24
16	44	39	5600	29	79	28	50	36	277	33	21	23
17	39	28	239	25	70	28	67	514	58	39	12	17
18	37	26	86	23	61	2300	63	80	35	40	8.2	19
19	37	42	63	30	63	6380	52	50	27	27	7.3	129
20	37	25	51	26	51	2020	42	50	23	20	e3.3	48
21	35	23	44	22	41	81	36	36	19	e16	e3.7	30
22	33	23	40	37	44	53	32	32	23	e13	e4.1	24
23	30	29	34	158	42	41	30	29	22	e9.5	e1.7	22
24	27	44	30	614	42	34	27	28	25	e5.9	e1.4	17
25	22	28	27	94	38	31	23	27	22	e5.8	e1.3	16
26	19	27	26	57	34	24	93	357	26	e6.5	5.9	14
27	22	23	25	48	34	20	41	90	56	e5.6	241	15
28	22	178	25	46	35	19	27	168	31	e4.0	51	e9.2
29	20	75	26	42	---	17	22	225	42	e3.6	26	18
30	22	44	27	48	---	717	20	60	197	e3.6	19	15
31	24	---	26	6730	---	340	---	44	---	e3.6	13	---
TOTAL	2185	1153	7260	8429	3603	12695	6308	3805	1529	1567.1	822.4	1295.0
MEAN	70.48	38.43	234.2	271.9	128.7	409.5	210.3	122.7	50.97	50.55	26.53	43.17
MAX	517	178	5600	6730	516	6380	3680	633	277	266	241	475
MIN	19	22	25	21	34	17	20	18	19	3.6	1.3	3.0
AC-FT	4330	2290	14400	16720	7150	25180	12510	7550	3030	3110	1630	2570

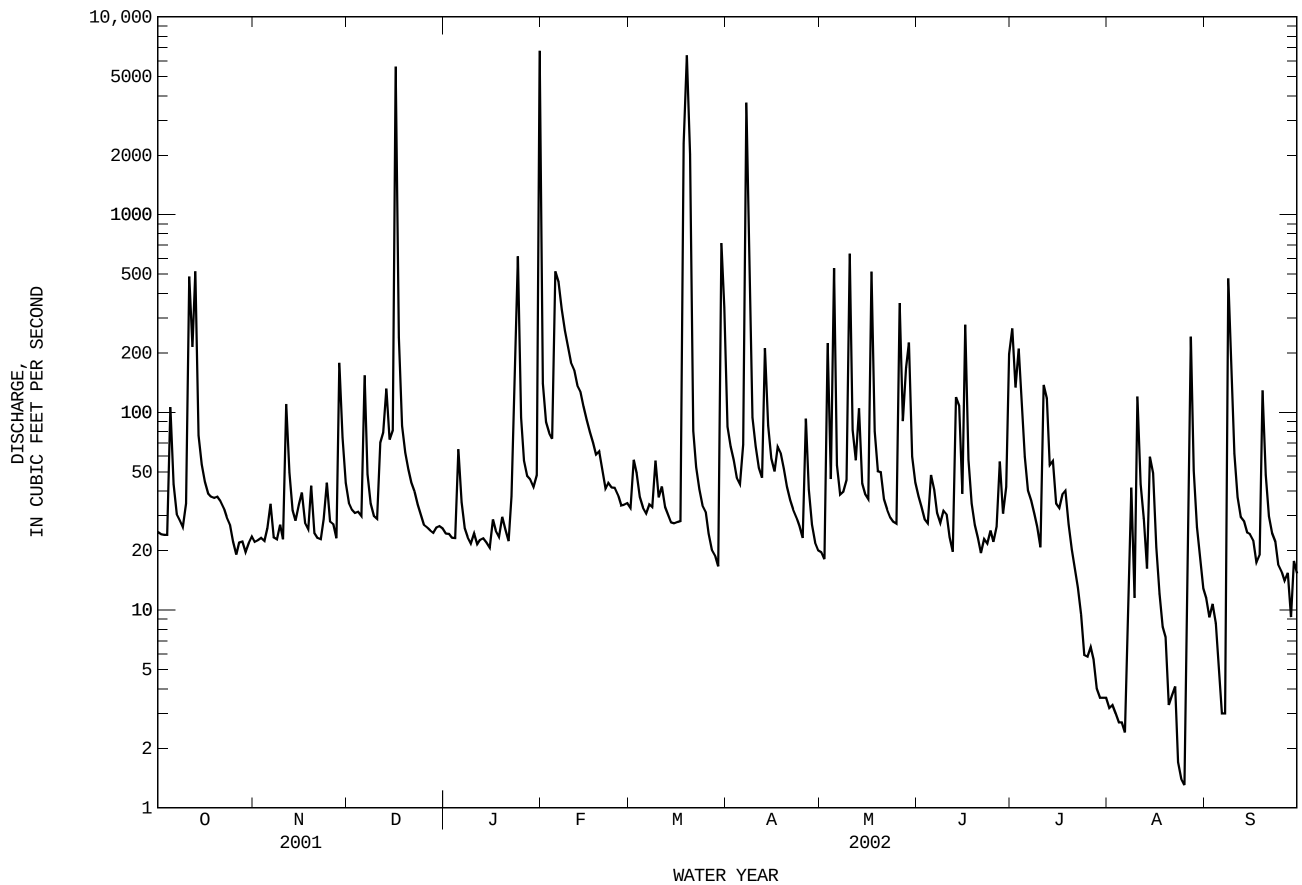
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	90.84	70.79	99.43	62.13	100.2	119.5	122.5	156.2	93.79	37.85	26.07	58.40
MAX	450	388	627	394	516	480	690	460	800	252	108	624
(WY)	1995	2001	1992	1998	2001	1995	1966	1990	1989	1962	1994	1964
MIN	0.83	2.96	4.35	5.85	6.19	12.0	16.6	15.8	7.25	0.78	1.26	0.92
(WY)	1964	1964	1964	1976	1967	1971	1971	1972	1980	1964	1963	1963

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002h	
ANNUAL TOTAL	56284.1		50651.5			
ANNUAL MEAN	154.2		138.8		87.26	
HIGHEST ANNUAL MEAN					201	2001
LOWEST ANNUAL MEAN					20.8	1971
HIGHEST DAILY MEAN	5710	Feb 16	6730	Jan 31	14700	Sep 21 1964
LOWEST DAILY MEAN	6.7	Jul 25	1.3	Aug 25	0.01	Jul 8 1970
ANNUAL SEVEN-DAY MINIMUM	8.5	Aug 7	3.0	Jul 31	0.21	Aug 21 1961
MAXIMUM PEAK FLOW			25700	Mar 19	39200	May 2 1990
MAXIMUM PEAK STAGE			89.29	Mar 19	90.59	May 2 1990
ANNUAL RUNOFF (AC-FT)	111600		100500		63210	
10 PERCENT EXCEEDS	235		160		121	
50 PERCENT EXCEEDS	44		34		22	
90 PERCENT EXCEEDS	13		14		4.2	

e Estimated
h See PERIOD OF RECORD paragraph.

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued



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 2001 TO SEPTEMBER 2002

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, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	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)	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)
OCT													
10...	0900	29	565	8.2	22.9	--	--	153	63.8	38.7	1.95	.022	1.97
25...	1400	21	572	7.8	19.3	8.6	--	--	--	--	--	--	--
NOV													
07...	1100	22	593	8.2	18.1	8.8	94	167	71.4	39.4	1.27	.013	1.28
19...	1300	77	599	7.9	17.2	8.9	--	--	--	--	--	--	--
DEC													
05...	1200	32	607	8.0	17.3	8.5	89	172	69.0	38.0	2.11	.027	2.14
20...	1130	50	568	7.8	9.4	10.8	--	--	--	--	--	--	--
JAN													
10...	1130	23	647	8.1	11.6	12.0	112	202	83.2	40.0	2.50	.021	2.53
25...	0930	90	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	1630	120	689	8.1	10.6	11.8	106	189	79.7	35.0	2.50	.026	2.53
19...	1600	71	674	8.0	16.3	10.1	--	--	--	--	--	--	--
MAR													
05...	0900	32	654	7.9	6.9	11.6	95	--	--	--	2.44	.022	2.46
13...	1600	30	593	8.2	15.2	12.8	130	170	73.7	35.8	1.93	.030	1.96
20...	1530	180	381	7.9	15.1	10.4	104	--	--	--	1.61	.034	1.64
27...	1030	20	681	8.0	12.6	10.7	101	--	--	--	2.69	.027	2.71
APR													
02...	1050	68	552	8.0	17.1	9.2	97	--	--	--	2.15	.034	2.19
10...	1030	71	567	8.0	17.4	9.3	97	190	64.3	23.7	2.18	.030	2.21
16...	0900	49	623	7.8	20.5	7.8	88	--	--	--	2.06	.032	2.09
23...	1230	31	656	8.1	24.0	12.7	151	--	--	--	2.19	.027	2.22
MAY													
07...	0800	37	489	8.5	23.7	9.2	111	--	--	--	1.55	.022	1.57
15...	1130	38	509	8.1	21.8	11.5	133	157	56.2	23.9	2.06	.032	2.09
21...	1000	36	477	7.8	19.7	10.9	120	--	--	--	1.74	.026	1.77
30...	1000	86	382	7.4	22.7	9.2	109	--	--	--	1.49	.020	1.51
JUN													
03...	1030	29	541	7.6	25.6	11.0	138	--	--	--	2.01	.023	2.03
11...	1030	23	534	7.4	26.4	9.1	115	125	64.5	33.8	1.91	.032	1.94
17...	1030	79	358	7.6	25.1	10.1	125	--	--	--	1.22	.018	1.24
24...	1430	25	474	7.9	30.3	13.4	180	--	--	--	1.20	.016	1.22
JUL													
09...	1130	29	465	8.3	30.0	12.7	168	124	53.6	27.4	1.24	.024	1.27
23...	1030	11	560	7.9	28.6	9.4	121	--	--	--	2.34	.034	2.37
AUG													
05...	1230	5.1	575	8.1	30.4	11.0	149	112	76.6	44.9	3.24	.038	3.28
19...	1100	7.9	500	8.1	28.3	10.0	132	--	--	--	1.85	.032	1.88
SEP													
11...	1000	37	383	7.9	25.1	8.9	110	99	40.6	18.9	1.20	.015	1.22

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	ORTHO-PHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SEDIMENT, SUSPENDED (MG/L) (80154)	BENZENE TOTAL (UG/L) (34030)	2,4-D, DISSOLVED (UG/L) (39732)
OCT													
10...	<.04	2.5	--	.54	.30	.24	.745	61.5	1.2	.86	11	<.04	.10
25...	--	--	--	--	--	--	--	--	--	--	--	E.02	--
NOV													
07...	<.04	1.7	--	.47	.23	.16	.488	4.3	3.0	2.0	34	<.04	.05
19...	--	--	--	--	--	--	--	--	--	--	--	<.04	--
DEC													
05...	<.04	2.7	--	.56	.34	.26	.806	4.2	1.1	1.5	17	<.04	E.19
20...	--	--	--	--	--	--	--	--	--	--	--	E.04	--
JAN													
10...	E.02	3.0	--	.44	.23	.18	.555	3.0	1.3	.50	8.0	<.04	.04
25...	--	--	--	--	--	--	--	--	--	--	--	E.02	--
FEB													
13...	.10	3.0	.42	.51	.123	.08	.258	3.0	1.3	8.1	25	<.04	.13
19...	--	--	--	--	--	--	--	--	--	--	--	<.04	--
MAR													
05...	<.04	3.0	--	.51	.25	.21	.632	--	--	--	--	--	.16
13...	<.04	2.5	--	.52	.21	.13	.405	3.7	7.6	3.2	39	--	.42
20...	.14	2.9	1.1	1.3	.27	.08	.251	--	--	--	--	--	.83
27...	E.03	3.1	--	.39	.133	.08	.242	--	--	--	--	<.04	.22
APR													
02...	.06	2.9	.63	.69	.175	.07	.230	--	--	--	--	--	.10
10...	.06	2.8	.51	.57	.133	.07	.202	3.2	2.5	8.6	45	<.04	.37
16...	E.02	2.9	--	.84	.29	.05	.163	--	--	--	--	--	.48
23...	<.04	2.6	--	.42	.171	.12	.377	--	--	--	--	--	.12
MAY													
07...	<.04	2.1	--	.51	.134	.08	.242	--	--	.90	9.0	--	.17
15...	<.04	2.6	--	.50	.19	.13	.411	3.7	.8	.62	6.0	<.04	.06
21...	<.04	2.2	--	.40	.183	.11	.337	--	--	.78	8.0	--	.04
30...	<.04	2.1	--	.60	.195	.13	.386	--	--	.70	3.0	--	.11
JUN													
03...	<.04	2.5	--	.49	.25	.20	.601	--	--	.23	3.0	--	.13
11...	<.04	2.5	--	.53	.26	.22	.668	3.5	1.0	.43	7.0	<.04	.11
17...	<.04	1.8	--	.53	.163	.08	.258	--	--	.43	2.0	--	.25
24...	<.04	1.8	--	.55	.21	.15	.451	--	--	.34	5.0	--	.11
JUL													
09...	<.04	1.8	--	.51	.21	.15	.466	4.0	1.1	.23	3.0	<.04	E.79
23...	<.04	2.9	--	.54	.50	.41	1.25	--	--	.12	4.0	--	<.02
AUG													
05...	E.02	4.0	--	.71	.79	.77	2.37	4.9	1.1	.14	10	<.04	<.02
19...	.10	2.5	.50	.60	.42	.38	1.17	--	--	.21	10	--	.07
SEP													
11...	<.04	1.7	--	.51	.161	.10	.316	4.0	1.1	.90	9.0	<.04	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)
OCT													
10...	<.02	<.002	<.006	<.004	<.007	<.002	<.04	<.02	<.008	<.005	E.106	<.050	<.010
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.02	<.002	<.006	<.004	<.007	<.002	<.04	<.02	<.008	<.005	E.019	<.050	<.010
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	<.02	<.002	<.006	<.004	<.007	<.002	<.04	<.02	<.008	<.005	.100	<.050	<.010
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	<.02	<.006	<.006	<.006	<.007	<.004	<.04	<.02	<.008	<.005	.167	<.050	<.010
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.02	<.006	<.006	<.006	<.007	<.004	<.04	<.02	<.008	<.005	.513	<.050	<.010
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	<.02	<.006	<.006	<.006	<.007	<.004	<.04	<.02	<.008	<.005	.468	<.050	<.010
13...	<.02	<.006	<.006	<.006	<.007	.027	<.04	<.02	<.008	<.005	.516	<.050	<.010
20...	<.02	<.006	<.006	.009	<.104	.013	<.04	<.02	<.008	<.005	1.63	<.050	E.005n
27...	<.02	<.006	<.006	.012	<.097	.015	<.04	<.02	<.008	<.005	.609	<.050	<.010
APR													
02...	<.02	<.006	<.006	.013	<.007	.025	<.04	<.02	<.008	<.005	1.06	<.050	<.010
10...	<.02	<.006	<.006	.013	<.007	.016	<.04	<.02	<.008	<.005	.880	<.050	<.010
16...	<.02	<.006	<.006	.029	<.007	.028	<.04	<.02	<.008	<.005	.799	<.050	<.010
23...	<.02	<.006	<.006	.011	<.007	.018	<.04	<.02	<.008	<.005	2.69	<.050	<.010
MAY													
07...	<.02	<.006	<.006	.015	<.007	.017	<.04	<.02	<.008	<.005	.712	<.050	<.010
15...	<.02	<.006	<.006	.017	<.007	.020	<.04	<.02	<.008	<.005	.585	<.050	<.010
21...	<.02	<.006	<.006	.010	<.007	.013	<.04	<.02	<.008	<.005	.496	<.050	<.010
30...	<.02	<.006	<.006	<.006	<.007	.011	<.04	<.02	<.008	<.005	.403	<.050	<.010
JUN													
03...	<.02	<.006	<.006	.013	<.007	.015	<.04	<.02	<.008	<.005	.338	<.050	<.010
11...	<.02	<.006	<.006	<.015	<.007	.014	<.04	<.02	<.008	<.005	.343	<.050	<.010
17...	<.02	<.006	<.006	<.007	<.007	.008	<.04	<.02	<.008	<.005	E.373	<.050	<.010
24...	<.02	--r	<.006	--r	<.007	--r	<.04	<.02	<.008	--r	.252	--r	--r
JUL													
09...	<.02	<.006	<.006	<.006	<.007	.010	<.04	<.02	<.008	<.005	.312	<.050	<.010
23...	<.02	<.006	<.006	<.010	<.007	<.015	<.04	<.02	<.008	<.005	.317	<.050	<.010
AUG													
05...	<.02	<.006	<.006	.009	<.007	.009	<.04	<.02	<.008	<.005	.357	<.050	<.010
19...	<.02	<.006	<.006	<.006	<.007	<.004	<.04	<.02	<.008	<.005	.228	<.050	<.010
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO-MACIL, WATER, DISS, REC (UG/L) (04029)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)
OCT													
10...	<.01	<.03	<.02	<.002	M	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.01	<.03	<.02	<.002	<.03	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	E.01	<.03	<.02	<.002	M	E.007	<.006	<.020	E4.23	<.005	<.006	<.01	<.018
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	<.01	E.02	<.02	<.002	<.03	<.041	<.006	<.020	<.04	<.005	<.006	E.01	<.018
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.01	<.03	<.02	<.002	M	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	<.01	E.02	<.02	<.002	<.03	E.008	<.006	<.020	<.04	<.005	<.006	<.01	<.018
13...	<.01	E.05	<.02	<.002	E.02	E.065	<.006	<.020	<.04	<.005	<.006	<.01	<.018
20...	<.01	<.03	<.02	<.002	.06	E.066	<.006	<.020	<.04	<.005	<.006	<.01	<.018
27...	<.01	<.03	<.02	<.002	E.02	E.020	<.006	<.020	<.04	<.005	<.006	<.01	<.018
APR													
02...	<.01	<.03	<.02	<.002	E.03	E.023	<.006	<.020	<.04	<.005	<.006	<.01	<.018
10...	<.01	.01	<.02	<.002	.02	E.029	<.006	<.020	<.04	<.005	<.006	<.01	<.018
16...	<.01	<.03	<.02	<.002	E.02	E.041	<.006	<.020	<.04	.008	<.006	<.01	<.018
23...	<.01	<.03	<.02	<.002	E.01	<.041	<.006	E.012	<.04	<.005	<.006	<.01	<.018
MAY													
07...	<.01	<.03	<.02	<.002	E.03	E.043	<.006	<.020	<.04	E.004n	<.006	<.01	<.018
15...	<.01	<.03	<.02	<.002	.03	E.061	<.006	<.020	<.04	<.005	<.006	<.01	<.018
21...	<.01	<.03	<.02	<.002	.05	E.111	<.006	<.020	<.04	E.003n	<.006	<.01	<.018
30...	<.01	<.03	<.02	<.002	.05	E.115	<.006	<.020	<.04	.006	<.006	<.01	<.018
JUN													
03...	<.01	<.03	<.02	<.002	<.03	E.007	<.006	<.020	<.04	E.003n	<.006	<.01	<.018
11...	E.04	<.03	<.02	<.002	<.03	E.006	<.006	<.020	<.04	<.005	<.006	<.01	<.018
17...	<.01	E.21	<.02	<.002	E.02	E.042	<.006	<.020	<.04	<.005	<.006	<.01	<.018
24...	<.01	<.03	<.02	--r	<.03	--r	<.006	--r	<.04	--r	--r	<.01	--r
JUL													
09...	<.01	<.03	<.02	<.002	<.03	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
23...	<.01	<.03	<.02	<.002	<.03	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
AUG													
05...	<.01	<.03	<.02	<.002	<.03	<.041	<.006	<.020	<.04	<.005	<.006	<.01	<.018
19...	<.01	<.03	<.02	<.002	M	E.007	<.006	<.020	<.04	<.005	<.006	<.01	<.018
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
OCT													
10...	<.01	<.003	E.03	.099	.04	<.01	<.005	<.01	<.02	E.02	<.002	<.009	<.005
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.01	<.003	E.01	.039	<.01	<.01	<.005	<.01	<.02	<.01	<.002	<.009	<.005
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	<.01	<.003	E.03	.053	.05	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	<.01	<.003	E.031	.017	E.01	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.01	<.003	E.043	.013	<.01	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	<.01	<.003	E.050	.015	<.01	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
13...	<.01	<.003	E.035	.029	.11	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
20...	<.01	<.003	E.028	.242	.06	.04	<.005	<.01	<.02	.04	<.002	<.009	<.005
27...	<.01	<.003	E.028	.076	.04	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
APR													
02...	--u	<.003	E.036	.292	.32	<.01	<.005	<.01	<.02	E.04	<.002	<.009	<.005
10...	<.01	<.003	E.022	.157	.11	.02	<.005	<.01	<.02	.09	<.002	<.009	<.005
16...	<.01	<.003	E.034	.178	.12	<.01	<.005	<.01	<.02	E.03	<.002	<.009	<.005
23...	<.01	<.003	E.058	.014	.10	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
MAY													
07...	<.01	<.003	E.067	.186	<.01	<.01	<.005	<.01	<.02	.03	<.002	<.009	<.005
15...	<.01	<.003	E.072	.306	.08	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
21...	<.01	<.003	E.053	.222	.12	<.01	<.005	<.01	<.02	.13	<.002	<.009	<.005
30...	<.01	<.003	E.043	.218	.06	<.01	<.005	<.01	<.02	.09	<.002	<.009	<.005
JUN													
03...	<.01	<.003	E.056	.081	<.01	<.01	<.005	<.01	<.02	E.04	<.002	<.009	<.005
11...	<.01	<.003	E.073	.048	.04	<.01	<.005	<.01	<.02	.05	<.002	<.009	<.005
17...	<.01	<.003	E.050	.162	.05	<.01	<.005	<.01	<.02	.99	<.002	<.009	<.005
24...	<.01	--r	E.05	--r	<.01	<.01	--r	<.01	--r	.21	--r	--r	--r
JUL													
09...	<.01	<.003	E.062	.048	<.01	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
23...	<.01	<.003	E.076	.024	<.01	<.01	<.005	<.01	<.02	.02	<.002	<.009	<.005
AUG													
05...	<.01	<.003	E.103	.165	<.01	<.01	<.005	<.01	<.02	<.01	<.002	<.009	<.005
19...	<.01	<.003	E.050	.169	<.01	<.01	<.005	<.01	<.02	E.05	<.002	<.009	<.005
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	FEN- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUO- METURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)
OCT													
10...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.03	<.01	<.008	<.004	E.006	<.006
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.17	<.01	<.008	<.004	E.006	<.006
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.05	<.01	<.008	<.004	E.004	<.006
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.02	<.01	<.008	<.004	E.005	<.006
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.12	<.01	<.008	<.004	E.005n	<.006
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.09	<.01	<.008	<.004	E.012n	<.006
13...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.16	<.01	<.008	<.004	.017	<.006
20...	<.03	<.03	<.003	<.004	<.01	<.035	E.011n	.30	<.01	<.008	<.004	1.69	<.006
27...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	<.06	<.01	<.008	<.004	.233	<.006
APR													
02...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.02	<.01	<.008	<.004	.889	<.006
10...	<.03	<.03	<.003	<.004	<.01	<.035	E.004n	.08	<.01	<.008	<.004	.288	<.006
16...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	E.10	<.01	<.008	<.004	.172	<.006
23...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.02	<.01	<.008	<.004	.261	<.006
MAY													
07...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.02	<.01	<.008	<.004	.071	<.006
15...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.04	<.01	<.008	<.004	.116	<.006
21...	<.03	<.03	<.003	<.004	<.01	<.035	E.012n	.04	<.01	<.008	<.004	.107	<.006
30...	<.03	<.03	<.003	<.004	<.01	<.035	E.017n	E.01	<.01	<.008	<.004	.039	<.006
JUN													
03...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	E.01	<.01	<.008	<.004	.070	<.006
11...	<.03	<.03	<.003	<.004	.11	<.035	<.027	<.02	<.01	<.008	<.004	.077	<.006
17...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	.05	<.01	<.008	<.004	.046	<.006
24...	<.03	<.03	--r	--r	<.01	--r	--r	<.02	<.01	<.008	<.004	--r	--r
JUL													
09...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	<.02	<.01	<.008	<.004	.044	<.006
23...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	<.02	<.01	<.008	<.004	.062	<.006
AUG													
05...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	<.02	<.01	<.008	<.004	.075	<.006
19...	<.03	<.03	<.003	<.004	<.01	<.035	<.027	<.02	<.01	<.008	<.004	.032	<.006
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P,P' DDE 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)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)
OCT													
10...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.007	<.006	<.002	.020	<.011	<.02
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.007	<.006	<.002	<.010	<.011	<.02
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.007	<.006	<.002	.037	<.011	<.02
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.052	<.011	<.02
13...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.075	<.011	<.02
20...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.214	<.011	<.02
27...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.116	<.011	<.02
APR													
02...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.100	<.011	<.02
10...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.080	<.011	<.02
16...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.077	<.011	<.02
23...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
MAY													
07...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.028	<.011	<.02
15...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.032	<.011	<.02
21...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	E.018n	<.011	<.02
30...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	.024	<.011	<.02
JUN													
03...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	E.010n	<.011	<.02
11...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
17...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	E.013n	<.011	<.02
24...	--r	--r	<.01	<.02	<.02	<.01	--r	--r	--r	--r	--r	--r	<.02
JUL													
09...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
23...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
AUG													
05...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
19...	<.002	<.007	<.01	<.02	<.02	<.01	<.003	<.010	<.006	<.004	<.022	<.011	<.02
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	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)
OCT													
10...	E.01	<.010	<.011	<.02	<.010	E.023	<.004	.664	<.006	<.041	<.02	<.005	<.002
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
07...	<.01	<.010	<.011	<.02	<.010	<.008	<.004	.891	<.006	<.034	<.02	<.005	<.002
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
05...	E.01	<.010	<.011	<.02	<.010	E.012	<.004	1.10	<.006	<.034	<.02	<.005	<.002
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
10...	E.01	<.010	<.011	<.02	<.010	.008	<.004	.527	<.02	<.034	<.02	<.005	<.002
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13...	<.01	<.010	<.011	<.02	<.010	E.005	.023	.437	<.02	<.034	<.02	<.005	<.002
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
05...	E.01n	<.010	<.011	<.02	<.010	<.008	E.030	.746	<.02	<.034	<.02	<.005	<.002
13...	<.01	<.010	<.011	<.02	<.010	.009	.034	1.05	E.01	<.034	<.02	<.005	<.002
20...	<.01	<.010	<.011	<.02	<.010	.014	.016	3.38	<.02	<.034	<.02	<.005	<.002
27...	<.01	<.010	<.011	<.02	<.010	E.006	.018	.858	E.01	<.034	<.02	<.005	<.002
APR													
02...	<.01	<.010	<.011	<.02	<.010	E.008	<.004	1.86	<.02	<.034	<.02	<.005	<.002
10...	E.01n	<.010	<.011	<.02	<.010	<.008	.019	.783	<.02	<.034	<.02	<.005	<.002
16...	E.01n	<.010	<.011	<.02	<.010	E.004	.025	.362	<.02	<.034	<.02	<.005	<.002
23...	E.01n	<.010	<.011	<.02	<.010	E.005	<.004	.104	E.03	<.034	<.02	<.005	<.002
MAY													
07...	E.01n	<.010	<.011	<.02	<.010	E.005	<.004	.315	<.02	<.034	<.02	<.005	<.002
15...	.02	<.010	<.011	<.02	<.010	E.006	<.025	.281	<.02	<.034	<.02	<.005	<.002
21...	E.01n	<.010	<.011	<.02	<.010	<.008	E.004n	.233	<.02	<.034	<.02	<.005	<.002
30...	.02	<.010	<.011	<.02	<.010	.011	<.004	.154	<.02	<.034	<.02	<.005	<.002
JUN													
03...	.02	<.010	<.011	<.02	<.010	E.005	<.011	.121	<.02	<.034	<.02	<.005	<.002
11...	.02	<.010	<.011	<.02	<.010	.009	<.004	.107	<.02	<.034	<.02	<.005	<.002
17...	.02	<.010	<.011	<.02	<.010	.008	<.004	.106	<.02	<.034	<.02	<.005	<.002
24...	--r	--r	--r	--r	<.010	E.004	--r	--r	<.006	--r	--r	--r	--r
JUL													
09...	.02	<.010	<.011	<.02	<.010	E.007	<.004	.071	<.02	<.034	<.02	<.005	<.002
23...	E.01	<.010	<.011	<.02	<.010	E.007	<.015	.056	<.02	<.034	<.02	<.005	<.002
AUG													
05...	.03	<.010	<.011	<.02	<.010	E.011	<.004	.070	E.01n	<.034	<.02	<.005	<.002
19...	.02	<.010	<.011	<.02	<.010	E.011	<.004	.049	<.02	<.034	<.02	<.005	<.002
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--

08057200 White Rock Creek at Greenville Avenue, Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
OCT		
10...	<.02	E.006
25...	--	--
NOV		
07...	<.02	<.009
19...	--	--
DEC		
05...	.03	<.009
20...	--	--
JAN		
10...	<.02	<.009
25...	--	--
FEB		
13...	E.02	<.009
19...	--	--
MAR		
05...	.03	<.009
13...	<.06	<.009
20...	.08	E.005n
27...	.02	<.009
APR		
02...	.05	E.003n
10...	.05	E.003n
16...	.03	<.009
23...	.02	<.009
MAY		
07...	<.02	<.009
15...	.03	<.009
21...	<.02	<.009
30...	<.02	<.009
JUN		
03...	<.02	<.009
11...	<.02	<.009
17...	<.02	<.009
24...	<.02	--r
JUL		
09...	<.02	<.009
23...	<.02	<.009
AUG		
05...	<.02	<.009
19...	<.02	<.009
SEP		
11...	--	--

Remark codes used in this report:
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

Value qualifier codes used in this report:
- n -- Below the NDV

Null value qualifier codes used in this report:
- r -- Sample ruined in preparation
- u -- Unable to determine-matrix interference

THIS PAGE IS INTENTIONALLY BLANK

08057410 Trinity River below Dallas, TX
(National Water-Quality Assessment Program)

LOCATION.--Lat 32°42'26", long 96°44'08", Dallas County, Hydrologic Unit 12030105, on right bank at downstream side of bridge on South Loop Highway 12, 1.0 mi downstream from White Rock Creek, 1.5 mi upstream from Fivemile Creek, 6.4 mi southeast of Dallas County Courthouse in Dallas, and at mile 491.8.

DRAINAGE AREA.--6,278 mi^2.

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1967 to Sept. 1998, Oct. 2001 to Sept. 2002.
BIOCHEMICAL DATA: Oct. 1967 to Sept. 1998, Oct. 2001 to Sept. 2002.
PESTICIDE DATA: Oct. 1970 to July 1981, Oct. 1994 to Sept. 1998, Oct. 2001 to Sept. 2002.
SEDIMENT DATA: Apr. 1972 to Apr. 1975, Oct. 1998 to Sept. 1999.
Water-discharge records.--Nov. 1956 to Sept. 1998.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Oct. 1967 to Sept. 1992, Apr. 1993 to Sept. 1999.
pH: Jan. 1977 to Sept. 1992, Apr. 1993 to Sept. 1999.
WATER TEMPERATURE: Oct. 1967 to Sept. 1992, Apr. 1993 to Sept. 1999.
DISSOLVED OXYGEN: Jan. 1977 to Sept. 1992, Apr. 1993 to Sept. 1999.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,130 microsiemens/cm, Dec. 17, 1977; minimum, 112 microsiemens/cm, Oct. 20, 1984.
pH: Maximum, 8.8 units, Jan. 23, 1980; minimum, 6.5 units, Jan. 1,2 4, and 5, 1997.
WATER TEMPERATURES: Maximum, 35.0°C, Aug. 20, 25, 28, 31, 1972; minimum, 1.0°C, Jan. 29, 1968.
DISSOLVED OXYGEN: Maximum, 12.8 mg/L, Mar. 19, 1990; minimum, 0.0 mg/L, on many days during spring and summer of 1977-1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	Time	DIS-CHARGE, IN CUBIC FEET PER SECOND (00060)	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)	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)	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)
OCT													
11...	1200	E680	--	--	--	--	--	100	78.3	68.6	11.1	.063	11.2
NOV													
05...	1200	E760	725	7.3	23.2	8.0	94	112	86.0	74.0	11.6	.059	11.7
DEC													
04...	1200	E2470	700	7.5	19.1	8.8	96	128	84.4	65.5	9.06	.022	9.08
JAN													
09...	1130	E225	735	7.6	13.6	10.0	98	115	101	68.3	10.9	.017	10.9
FEB													
13...	1030	E880	669	7.5	12.9	10.0	95	130	95.6	48.1	7.24	.030	7.27
MAR													
13...	1030	E485	796	7.6	16.6	10.0	104	131	106	71.4	10.2	.023	10.2
26...	0930	E4030	447	7.8	13.6	9.8	94	126	55.8	25.8	2.03	.016	2.05
APR													
09...	1100	E24000	298	7.5	16.7	7.7	80	91	35.6	10.7	.77	.027	.80
23...	0930	E4450	413	7.8	19.9	9.3	102	--	--	--	1.94	.012	1.95
MAY													
14...	0930	E5300	400	7.6	22.0	7.8	90	116	41.4	18.9	1.69	.018	1.71
29...	1100	E2080	550	7.6	24.1	7.3	88	--	--	--	4.22	.043	4.26
JUN													
12...	1040	E1400	544	7.3	27.0	7.5	96	119	59.1	39.5	3.94	.026	3.96
25...	1015	E315	751	7.2	28.4	7.6	99	--	--	--	10.7	.032	10.7
JUL													
10...	1145	E365	628	7.5	30.1	12.5	165	106	73.3	51.2	7.05	.016	7.07
24...	1030	E340	746	7.4	30.3	7.4	98	--	--	--	8.39	.043	8.43
AUG													
06...	1130	E265	743	7.4	30.1	7.3	99	104	84.5	71.9	11.0	.045	11.0
20...	1100	E340	667	7.3	29.6	7.6	102	100	73.7	63.2	8.39	.041	8.43
SEP													
12...	1100	E170	595	7.3	28.4	6.5	86	91	69.1	52.0	7.05	.044	7.09

08057410 Trinity River below Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)
OCT													
11...	.15	13	1.2	1.4	2.07	1.44	4.42	7.7	.3	229	<.002	<.004	<.002
NOV													
05...	.31	13	1.0	1.3	1.90	1.75	5.37	7.1	1.7	23	<.002	<.004	<.002
DEC													
04...	.07	10	.96	1.0	1.66	1.52	4.65	5.9	2.1	48	<.002	<.004	<.002
JAN													
09...	.08	12	1.1	1.1	1.82	1.69	5.18	5.7	1.2	14	<.006	<.006	<.004
FEB													
13...	<.04	8.4	--	1.1	1.06	.96	2.94	5.4	1.9	38	<.006	<.006	<.004
MAR													
13...	<.04	11	--	1.1	1.43	1.25	3.82	6.7	1.6	--	<.006	<.006	<.004
26...	.10	2.8	.67	.77	.49	.23	.696	--	--	287	<.006	<.006	.010
APR													
09...	.07	1.9	.99	1.1	.32	.08	.245	4.9	6.0	214	<.006	<.006	.028
23...	<.04	2.4	--	.45	.36	.22	.665	--	--	--	<.006	.011	<.004
MAY													
14...	E.03	2.5	--	.81	.37	.21	.644	4.7	2.7	164	<.006	.014	.088
29...	.20	5.7	1.2	1.4	.84	.59	1.80	--	--	175	<.006	<.006	.026
JUN													
12...	.07	4.8	.82	.89	.76	.60	1.84	5.1	3.2	74	<.006	<.006	.065
25...	.06	12	1.1	1.1	1.88	1.77	5.42	--	--	49	--r	--r	--r
JUL													
10...	<.04	8.1	--	.98	1.25	1.08	3.31	5.1	2.7	51	<.006	<.006	.011
24...	.17	9.5	.87	1.0	1.91	1.76	5.39	--	--	38	<.006	<.006	<.004
AUG													
06...	.20	12	.89	1.1	2.13	1.90	5.82	5.8	1.7	44	<.006	<.006	<.004
20...	.20	9.5	.84	1.0	1.94	1.75	5.35	--	--	55	<.006	<.006	<.004
SEP													
12...	E.03	8.2	--	1.2	1.52	1.33	4.07	6.5	3.1	44	<.006	<.006	<.004

Date	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)
OCT													
11...	<.005	.183	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.033	<.030
NOV													
05...	<.005	.208	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.027	.021
DEC													
04...	<.005	.150	<.050	<.010	<.002	E.006	<.020	<.005	<.006	<.018	<.003	E.034	.025
JAN													
09...	<.005	.143	<.050	<.010	<.002	E.017	<.020	<.005	<.006	<.018	<.003	E.030	.012
FEB													
13...	<.005	.444	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.033	.029
MAR													
13...	<.005	.344	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.029	<.005
26...	<.005	.805	<.050	<.010	<.002	E.011	<.020	<.005	<.006	<.018	<.003	E.032	.034
APR													
09...	<.005	2.46	<.050	<.010	<.002	E.125	<.020	<.005	<.006	<.018	<.003	E.037	.333
23...	<.005	.024	<.050	<.010	<.002	E.069	<.020	<.005	<.006	<.018	<.003	E.007	.052
MAY													
14...	<.005	.660	<.050	<.010	<.002	E.037	<.020	<.005	<.006	<.018	<.003	E.052	.074
29...	<.005	.564	<.050	<.010	<.002	E.061	<.020	<.005	<.006	<.018	<.003	E.053	.091
JUN													
12...	<.005	.486	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.061	.020
25...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
10...	<.005	.375	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.059	.026
24...	<.005	.276	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.054	.026
AUG													
06...	<.005	.311	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.073	.034
20...	<.005	.281	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.059	.043
SEP													
12...	<.005	.293	<.050	<.010	<.002	E.010	<.020	<.005	<.006	<.018	<.003	E.067	.024

08057410 Trinity River below Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	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 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)
OCT													
11...	<.005	<.02	<.002	<.009	<.005	<.003	<.006	<.035	<.027	<.013	<.006	<.002	<.007
NOV													
05...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.004	<.006	<.002	<.007
DEC													
04...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.005	<.006	<.002	<.007
JAN													
09...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.007	<.006	<.002	<.007
FEB													
13...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.005n	<.006	<.002	<.007
MAR													
13...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.009n	<.006	<.002	<.007
26...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.066	<.006	<.002	<.007
APR													
09...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.020	<.006	<.002	<.007
23...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.035	<.006	<.002	<.007
MAY													
14...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.033	<.006	<.002	<.007
29...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	E.020n	.032	<.006	<.002	<.007
JUN													
12...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.027	<.006	<.002	<.007
25...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
10...	<.005	<.02	<.002	<.009	<.005	<.003	.009	<.035	<.027	.019	<.006	<.010	<.007
24...	<.005	<.02	<.002	<.009	<.005	<.003	<.013	<.035	<.027	.014	<.006	<.002	<.007
AUG													
06...	<.005	<.02	<.002	<.009	<.005	<.003	.008	<.035	<.027	.020	<.010	<.002	<.007
20...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.014	<.006	<.002	<.007
SEP													
12...	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.013	<.006	<.002	<.007

Date	P,P' DDE 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)	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)
OCT													
11...	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004	.101	.03
NOV													
05...	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004	.185	.02
DEC													
04...	<.003	<.007	<.006	<.002	<.010	<.011	E.01	<.010	<.011	<.02	<.004	.240	E.06
JAN													
09...	<.003	<.010	<.006	<.004	<.022	<.011	E.01	<.010	<.011	<.02	<.004	.425	.04
FEB													
13...	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.836	.06
MAR													
13...	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.354	E.04
26...	<.003	<.010	<.006	<.004	E.021n	<.011	<.01	<.010	<.011	<.02	<.004	.382	E.07
APR													
09...	<.003	<.010	<.006	<.004	.066	<.011	E.01n	<.010	<.011	<.02	<.004	.453	.06
23...	<.003	<.010	<.006	<.004	.025	<.011	.07	<.010	<.011	<.02	<.004	.287	<.02
MAY													
14...	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.176	.04
29...	<.003	<.010	<.006	<.004	<.022	<.011	.02	<.010	<.011	<.02	<.004	.141	.04
JUN													
12...	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.127	.06
25...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
10...	<.003	<.010	<.006	<.004	<.022	<.011	.03	<.010	<.011	<.02	<.004	.083	E.10
24...	<.003	<.010	<.006	<.004	<.022	<.011	E.01	<.010	<.011	<.02	<.004	.053	.06
AUG													
06...	<.003	<.010	<.006	<.004	<.022	<.011	.02	<.010	<.011	<.02	<.010	.073	E.08
20...	<.003	<.010	<.006	<.004	<.022	<.011	.02	<.010	<.011	<.02	<.004	.060	E.10
SEP													
12...	<.003	<.010	<.006	<.004	<.022	<.011	.03	<.010	<.011	<.02	<.004	.075	.04

08057410 Trinity River below Dallas, TX--Continued
(National Water-Quality Assessment Program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)
OCT					
11...	<.034	<.02	<.005	<.002	<.009
NOV					
05...	<.034	<.02	<.005	<.002	<.009
DEC					
04...	<.034	<.02	<.005	<.002	<.009
JAN					
09...	<.034	<.02	<.005	<.002	<.009
FEB					
13...	<.034	<.02	<.005	<.002	<.009
MAR					
13...	<.034	<.02	<.005	<.002	<.009
26...	<.034	<.02	<.005	<.002	<.009
APR					
09...	<.034	<.02	<.005	<.002	<.009
23...	<.034	<.02	<.005	<.002	E.007n
MAY					
14...	<.034	<.02	<.005	<.002	<.009
29...	<.034	<.02	<.005	<.002	<.009
JUN					
12...	<.034	<.02	<.005	<.002	<.009
25...	--r	--r	--r	--r	--r
JUL					
10...	<.034	<.02	<.005	<.002	<.009
24...	<.034	<.02	<.005	<.002	<.009
AUG					
06...	<.034	<.02	<.005	<.002	<.009
20...	<.034	<.02	<.005	<.002	<.009
SEP					
12...	<.034	<.02	<.005	<.002	<.009

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
n -- Below the NDV

Null value qualifier codes used in this report:
r -- Sample ruined in preparation

08057445 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^2.

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 NGVD of 1929. Satellite telemeter at station.

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

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	0.23	5.5	0.87	1.2	1.0	13	e0.86	0.42	28	0.14	0.17
2	0.36	0.24	e5.3	0.57	1.9	0.94	7.2	e0.89	0.30	33	0.09	0.07
3	0.24	0.24	e5.2	0.48	1.9	0.96	3.3	e7.4	0.20	17	0.08	0.05
4	0.17	0.23	e5.1	0.71	1.4	1.1	1.7	13	0.16	4.4	0.07	0.04
5	74	0.20	e5.5	1.1	1.0	0.99	1.3	389	0.14	1.5	0.08	0.04
6	8.1	0.17	e11	2.1	0.87	1.0	5.6	30	0.12	0.65	0.09	0.04
7	0.63	0.16	e7.5	0.99	1.4	1.4	e111	9.3	0.11	0.38	0.09	0.03
8	0.18	0.13	e5.4	1.3	3.7	1.2	e320	4.8	0.10	0.27	0.08	23
9	0.13	0.13	e4.9	1.3	3.3	4.0	e14	3.2	0.20	0.19	0.07	20
10	0.18	0.13	e4.8	1.3	1.3	2.5	3.8	16	0.22	0.15	145	2.7
11	151	3.5	e5.6	1.0	1.2	2.5	2.3	5.4	0.20	1.7	13	0.94
12	9.1	3.6	e7.2	0.96	1.3	1.9	2.2	2.7	0.26	151	2.9	0.32
13	93	2.2	e8.6	0.86	1.2	2.0	1.8	43	0.34	17	1.3	0.15
14	6.6	0.64	e9.1	1.4	0.99	2.1	5.6	6.6	0.41	8.8	0.85	0.08
15	1.7	0.27	e5.9	1.3	1.0	2.2	2.8	2.6	0.45	37	0.57	0.06
16	0.74	0.19	e345	2.1	0.84	2.2	e4.2	1.5	32	10	0.33	0.05
17	0.61	0.27	e39	2.5	0.97	3.4	e4.7	92	5.8	55	0.22	0.05
18	0.68	0.38	11	1.5	1.1	29	e2.7	14	1.3	40	0.16	0.04
19	0.71	0.23	e4.1	1.7	1.2	e341	e2.0	3.8	0.41	5.1	0.13	116
20	0.53	1.3	e2.5	2.4	1.4	24	e1.7	2.2	0.24	2.3	0.08	64
21	0.52	4.2	e11	2.5	1.1	6.6	e1.4	1.2	0.15	1.2	0.07	4.7
22	0.44	1.6	e3.6	3.0	1.00	2.3	e1.3	0.82	0.11	0.62	0.06	1.6
23	0.33	2.2	e9.4	21	0.85	2.1	e1.2	0.89	0.09	0.34	0.06	0.45
24	0.23	8.7	e3.8	3.8	0.86	2.0	e1.2	0.66	0.09	0.21	0.06	0.18
25	0.28	e6.3	e3.0	2.8	0.92	2.2	e1.1	0.54	0.09	0.14	0.08	0.09
26	0.28	e5.5	e10	2.1	0.85	2.2	e3.1	0.46	0.23	0.11	0.23	0.07
27	0.25	5.0	2.2	1.4	0.85	1.4	e1.7	0.41	0.18	0.09	81	0.08
28	0.26	4.9	1.7	1.3	0.88	1.4	e1.0	3.1	0.16	0.12	12	0.08
29	0.26	5.0	1.3	1.3	---	1.4	e0.80	42	4.0	0.14	2.8	0.09
30	0.24	6.5	0.98	1.0	---	152	e0.77	4.2	2.9	0.15	1.0	0.10
31	0.23	---	0.89	e376	---	32	---	0.92	---	0.16	0.38	---
TOTAL	352.21	64.34	546.07	442.64	36.48	630.99	524.47	703.45	51.38	416.72	263.07	235.27
MEAN	11.36	2.145	17.62	14.28	1.303	20.35	17.48	22.69	1.713	13.44	8.486	7.842
MAX	151	8.7	345	376	3.7	341	320	389	32	151	145	116
MIN	0.13	0.13	0.89	0.48	0.84	0.94	0.77	0.41	0.09	0.09	0.06	0.03
AC-FT	699	128	1080	878	72	1250	1040	1400	102	827	522	467

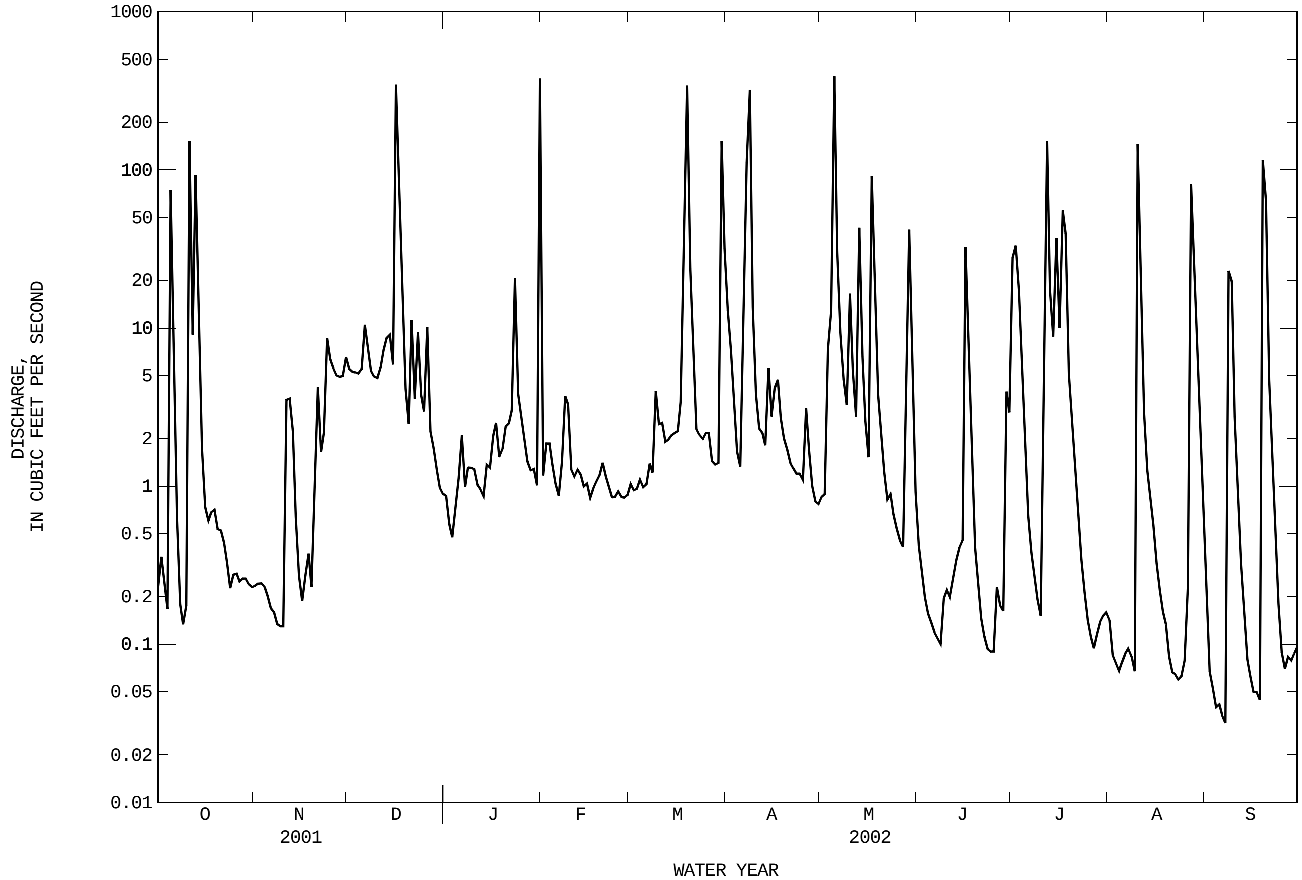
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	11.43	8.986	11.70	7.053	11.13	11.71	11.97	16.56	9.150	3.984	2.495	3.449
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	0.000	0.33	0.42	0.12	0.34	1.28	0.66	0.64	0.32	0.000	0.000	0.003
(WY)	1976	1990	1978	1976	1976	1996	1978	1977	1978	1980	1980	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1976 - 2002h	
ANNUAL TOTAL	3705.44		4267.09			
ANNUAL MEAN	10.15		11.69		9.269	
HIGHEST ANNUAL MEAN					17.4	1995
LOWEST ANNUAL MEAN					1.61	1978
HIGHEST DAILY MEAN	345	Dec 16	389	May 5	1150	May 17 1989
LOWEST DAILY MEAN	0.09	May 15	0.03	Sep 7	0.00	Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	0.12	Jul 23	0.06	Sep 1	0.00	Oct 1 1975
MAXIMUM PEAK FLOW			2140	May 5	5660	May 17 1989
MAXIMUM PEAK STAGE			22.76	May 5	29.21	May 17 1989
ANNUAL RUNOFF (AC-FT)	7350		8460		6710	
10 PERCENT EXCEEDS	14		14		11	
50 PERCENT EXCEEDS	1.4		1.3		1.0	
90 PERCENT EXCEEDS	0.15		0.11		0.02	

e Estimated
h See PERIOD OF RECORD paragraph.

08057445 Prairie Creek at U.S. Highway 175, Dallas, TX--Continued



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^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1998 to Sept. 2002 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 345.95 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Oct. 1998, at least 10% of contributing drainage area has been regulated. 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.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	763	784	814	741	12300	975	11800	5060	1350	3200	860	746
2	788	769	751	684	14700	962	6920	4930	1260	3860	751	693
3	784	794	684	708	8370	1170	5870	5190	1170	3770	662	729
4	807	770	718	736	3570	1160	6240	5580	1100	4380	580	728
5	1160	804	665	784	3580	1020	6280	7830	986	2600	569	742
6	1390	817	735	854	7190	1020	6810	10900	999	1690	597	769
7	983	769	1150	865	6850	918	7270	11800	1170	1940	574	773
8	844	752	906	789	4160	894	10500	8680	1430	1180	586	815
9	815	792	718	767	3230	1050	17200	4670	1850	1060	617	1220
10	802	971	619	754	2330	1040	18900	4470	1940	995	2200	1740
11	2510	937	627	760	2240	885	12500	6210	2140	822	4520	1080
12	4430	1320	925	768	1790	909	8160	6150	2000	3610	3110	837
13	4620	1470	1130	1160	1540	888	7760	6790	1510	2940	1360	742
14	4550	1190	1480	742	1390	884	7620	6710	1800	1430	1090	660
15	2020	962	1240	725	1320	900	7300	5690	1640	1380	1920	551
16	1380	969	7030	687	1240	874	6840	5390	2040	1800	1650	582
17	1130	903	11300	690	1160	820	7760	5630	2780	1410	1110	811
18	1110	958	9930	682	1140	1130	9090	7200	1570	2050	1020	738
19	963	1050	3610	690	1200	4170	8390	6100	1060	1270	913	1290
20	1000	857	1650	724	1480	10100	7390	4720	902	1010	976	1710
21	901	719	1310	699	1170	18200	6490	4420	855	816	969	1300
22	896	683	1890	720	1090	20800	5960	4180	1100	740	843	904
23	834	641	1120	989	1010	15300	5810	3610	838	714	797	775
24	880	633	1600	2680	953	9260	5940	2920	695	699	770	642
25	841	596	866	4820	956	6510	5590	2300	660	670	719	538
26	814	617	1370	2460	995	5190	5960	1920	796	659	755	500
27	741	657	1220	1230	1010	5500	6050	2170	1180	639	1900	486
28	761	868	794	1030	900	5490	5710	2000	1220	632	2030	458
29	769	1470	798	998	---	4410	5330	2860	2520	614	1250	440
30	801	1200	788	999	---	7360	5160	2690	1430	724	934	462
31	781	---	751	5380	---	11500	---	1680	---	1090	796	---
TOTAL	41868	26722	59189	37315	88864	141289	238600	160450	41991	50394	37428	24461
MEAN	1351	890.7	1909	1204	3174	4558	7953	5176	1400	1626	1207	815.4
MAX	4620	1470	11300	5380	14700	20800	18900	11800	2780	4380	4520	1740
MIN	741	596	619	682	900	820	5160	1680	660	614	569	440
AC-FT	83050	53000	117400	74010	176300	280200	473300	318300	83290	99960	74240	48520

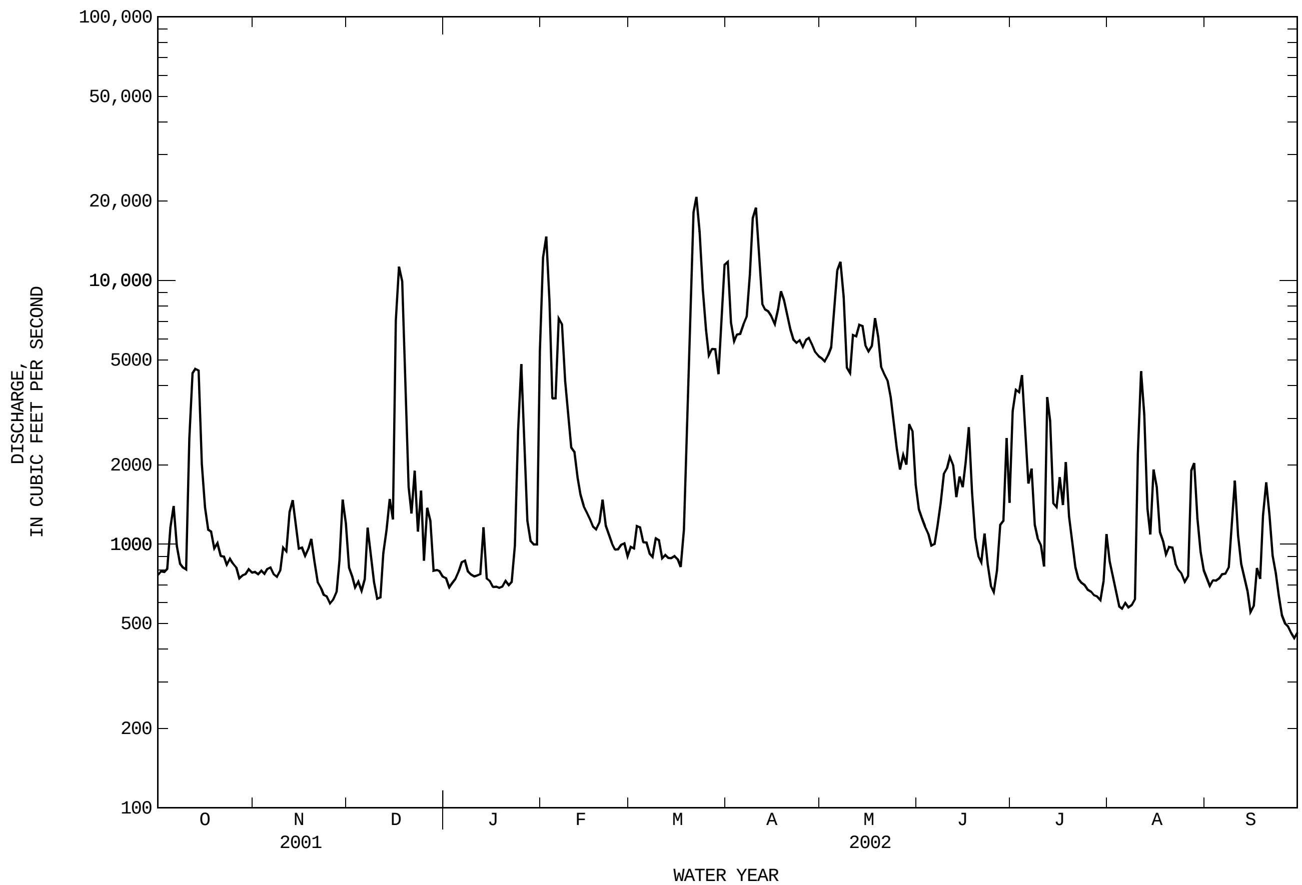
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1514	1773	2470	1427	3001	4692	4118	3294	2393	1308	924.1	1105
MAX	2174	3029	4196	2096	6242	10710	7953	5176	5069	1626	1207	2083
(WY)	1999	2001	1999	2001	2001	2001	2002	2002	2000	2002	2002	2001
MIN	997	891	1535	1019	1176	1567	1434	1829	1085	783	581	593
(WY)	2000	2002	2000	2000	1999	2000	2000	2000	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1999 - 2002	
ANNUAL TOTAL	1153208		948571			
ANNUAL MEAN	3159		2599		2330	
HIGHEST ANNUAL MEAN					3379	2001
LOWEST ANNUAL MEAN					1480	2000
HIGHEST DAILY MEAN	32500	Feb 17	20800	Mar 22	e32500	Feb 17 2001
LOWEST DAILY MEAN	596	Nov 25	440	Sep 29	440	Sep 29 2002
ANNUAL SEVEN-DAY MINIMUM	649	Nov 21	504	Sep 24	504	Sep 24 2002
MAXIMUM PEAK FLOW			21800	Mar 22	b21800	Mar 22 2002
MAXIMUM PEAK STAGE			27.36	Mar 22	27.36	Mar 22 2002
INSTANTANEOUS LOW FLOW					321	Sep 30 2002
ANNUAL RUNOFF (AC-FT)	2287000		1881000		1688000	
10 PERCENT EXCEEDS	8390		6820		6130	
50 PERCENT EXCEEDS	1290		1110		1030	
90 PERCENT EXCEEDS	741		689		660	

e Estimated
b Maximum discharge for period of record occurred Feb. 17, 2001, discharge unknown.

08057448 Trinity River near Wilmer, TX--Continued



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 Sept. 2002 (discontinued).
pH: Oct. 1999 to Sept. 2002 (discontinued).
WATER TEMPERATURE: Oct. 1999 to Sept. 2002 (discontinued).
DISSOLVED OXYGEN: Oct. 1999 to Sept. 2002 (discontinued).

INSTRUMENTATION.--Water-quality monitor since Oct. 1999.

REMARKS.--Records fair. 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, 6.3 units, Jan. 31, 2002.
WATER TEMPERATURE: Maximum, 32.1°C, July 24, 25, 2001; minimum, 7.8°C, Feb. 26, 2002.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Mar. 28, 2001, Feb. 6, 2002; minimum, 2.5 mg/L, Aug. 11, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 796 microsiemens/cm, Mar. 18; minimum, 221 microsiemens/cm, Aug. 10.
pH: Maximum, 8.3 units, on several days; minimum, 6.3 units, Jan. 31.
WATER TEMPERATURE: Maximum, 32.0°C, July 25; minimum, 7.8°C, Feb. 26.
DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Feb. 6; minimum, 2.5 mg/L, Aug. 11.

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	733	723	729	746	715	732	657	635	646	717	703	709
2	729	720	724	726	712	717	685	655	670	728	717	724
3	732	722	727	728	712	722	714	682	695	723	709	716
4	752	732	745	744	727	736	722	699	711	732	720	726
5	742	586	723	747	726	735	735	714	720	744	732	739
6	674	506	593	733	712	725	743	728	737	743	722	734
7	676	633	651	719	708	714	729	706	721	737	720	728
8	726	676	705	735	707	723	706	653	685	747	732	739
9	744	721	733	723	708	716	690	650	678	754	744	749
10	751	723	734	727	690	706	730	687	709	751	739	744
11	728	380	597	762	684	726	736	723	728	746	733	738
12	467	377	417	721	650	686	741	705	729	760	729	740
13	421	320	372	680	626	645	725	681	715	774	593	699
14	408	376	392	706	613	673	681	600	638	748	604	674
15	---	---	---	613	606	610	639	616	627	750	737	745
16	---	---	---	---	---	---	636	234	387	752	740	745
17	---	---	---	---	---	---	365	352	358	770	752	760
18	---	---	---	---	---	---	383	356	365	756	737	746
19	---	---	---	---	---	---	493	383	437	761	738	747
20	---	---	---	---	---	---	576	493	540	773	745	760
21	---	---	---	---	---	---	627	576	610	770	745	753
22	---	---	---	---	---	---	684	552	599	777	740	762
23	---	---	---	---	---	---	665	559	610	745	704	725
24	---	---	---	---	---	---	717	570	630	716	457	610
25	---	---	---	---	---	---	664	573	606	491	438	463
26	---	---	---	---	---	---	726	539	683	521	468	499
27	713	700	708	---	---	---	566	539	552	595	521	569
28	730	711	724	---	---	---	709	566	643	665	595	641
29	748	720	735	---	---	---	713	701	707	693	662	681
30	737	716	730	---	---	---	712	685	696	712	684	701
31	729	717	723	---	---	---	718	703	712	708	288	504
MONTH	---	---	---	---	---	---	743	234	630	777	288	696

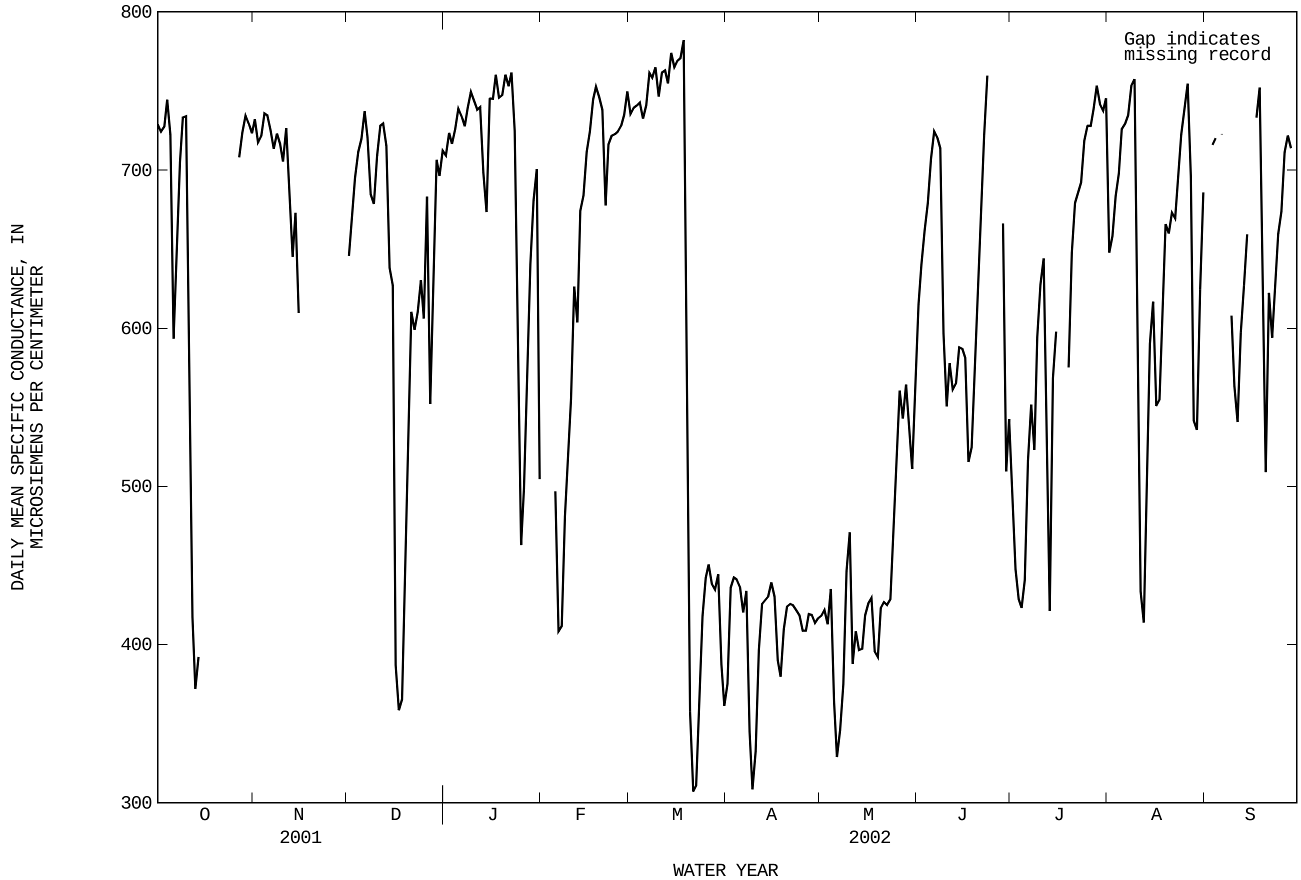
08057448 Trinity River near Wilmer, TX--Continued

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	743	730	735	396	359	375	421	416	418
2	---	---	---	746	733	739	474	396	436	424	419	422
3	---	---	---	761	724	741	456	434	442	425	387	413
4	---	---	---	752	729	743	455	429	441	451	417	435
5	557	427	497	746	722	733	455	424	436	448	271	364
6	427	397	408	765	718	741	436	391	420	335	314	329
7	445	396	411	767	757	761	450	424	434	361	334	346
8	509	445	481	766	753	758	426	319	345	404	361	375
9	532	506	517	776	760	765	322	303	308	487	404	446
10	603	530	555	778	734	747	364	308	333	509	384	471
11	659	583	626	772	746	762	420	364	396	418	349	388
12	641	585	604	774	757	763	441	417	426	419	388	408
13	684	641	674	771	749	755	444	421	428	406	379	396
14	704	671	684	777	771	774	445	421	430	407	385	397
15	719	704	712	774	759	765	447	432	439	425	407	418
16	734	719	725	777	764	769	435	426	430	431	424	426
17	753	734	744	776	764	771	435	339	390	437	406	429
18	762	737	753	796	750	782	397	361	380	413	376	396
19	755	730	746	790	430	598	421	397	410	410	373	392
20	780	668	738	430	330	357	427	421	424	430	410	423
21	701	664	677	331	291	307	427	423	426	431	422	427
22	724	701	716	335	292	311	429	421	425	430	422	425
23	736	705	722	396	335	365	425	417	422	439	424	428
24	727	721	723	432	396	418	426	415	418	486	439	472
25	726	721	724	451	432	442	417	403	409	525	486	508
26	739	725	728	455	432	451	428	387	409	588	525	560
27	743	724	735	449	432	439	428	411	419	596	515	543
28	759	743	750	440	432	435	422	416	419	584	529	564
29	---	---	---	451	439	444	418	409	414	582	476	539
30	---	---	---	456	327	387	421	414	417	533	499	511
31	---	---	---	376	354	361	---	---	---	593	533	566
MONTH	---	---	---	796	291	610	474	303	410	596	271	440

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	627	593	615	590	411	491	687	624	648	---	---	---
2	653	627	640	495	408	448	679	627	658	---	---	---
3	670	651	662	449	408	429	699	662	684	725	704	716
4	691	663	679	478	384	423	713	688	698	739	704	720
5	720	690	707	482	401	441	732	713	726	---	---	---
6	730	718	725	571	482	516	736	718	729	741	668	723
7	731	716	721	585	511	552	741	722	735	---	---	---
8	740	651	714	547	507	523	767	732	753	---	---	---
9	651	558	597	623	547	594	765	751	757	734	528	608
10	559	537	550	638	623	628	754	221	611	592	525	564
11	606	537	578	655	637	644	574	272	434	563	523	541
12	608	539	561	681	346	497	463	369	414	616	563	597
13	577	543	565	496	355	421	541	463	510	651	611	627
14	604	573	588	612	496	569	618	541	590	686	649	659
15	609	577	587	617	568	598	646	526	617	---	---	---
16	636	492	581	---	---	---	587	507	551	---	---	---
17	549	462	515	---	---	---	600	521	555	746	717	733
18	544	514	525	---	---	---	642	600	622	759	742	752
19	602	544	573	628	486	575	709	633	666	742	481	672
20	651	602	624	660	628	648	690	648	660	603	430	509
21	699	651	680	688	660	679	680	664	673	642	590	622
22	747	699	722	692	679	685	686	651	670	609	585	594
23	765	747	760	708	682	692	709	684	694	654	609	630
24	---	---	---	726	708	719	732	709	723	672	649	660
25	---	---	---	737	721	728	745	730	738	700	663	674
26	---	---	---	732	722	728	765	743	755	717	700	711
27	---	---	---	744	731	739	762	454	695	731	712	722
28	728	611	666	764	741	754	582	454	542	719	706	714
29	732	396	509	756	728	742	588	507	536	---	---	---
30	594	483	543	748	728	738	654	588	624	---	---	---
31	---	---	---	761	687	745	712	654	686	---	---	---
MONTH	---	---	---	---	---	---	767	221	644	---	---	---

08057448 Trinity River near Wilmer, TX--Continued



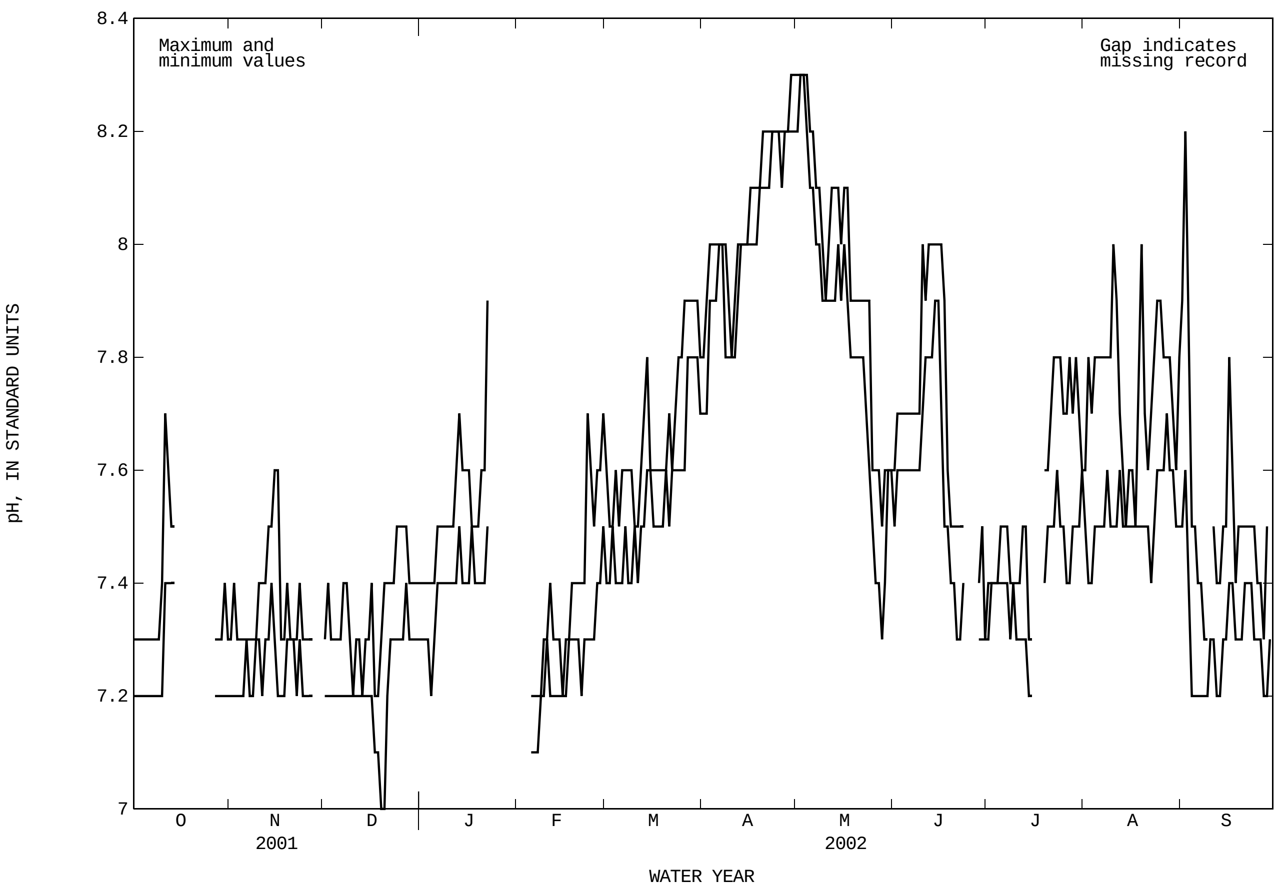
PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.3	7.2	7.3	7.2	7.3	7.2	7.4	7.3	---	---	7.6	7.4
2	7.3	7.2	7.4	7.2	7.4	7.2	7.4	7.3	---	---	7.5	7.4
3	7.3	7.2	7.3	7.2	7.3	7.2	7.4	7.3	---	---	7.5	7.5
4	7.3	7.2	7.3	7.2	7.3	7.2	7.4	7.2	---	---	7.6	7.4
5	7.3	7.2	7.3	7.2	7.3	7.2	7.4	7.3	7.2	7.1	7.5	7.4
6	7.3	7.2	7.3	7.3	7.3	7.2	7.5	7.4	7.2	7.1	7.6	7.4
7	7.3	7.2	7.3	7.2	7.4	7.2	7.5	7.4	7.2	7.1	7.6	7.5
8	7.3	7.2	7.3	7.2	7.4	7.2	7.5	7.4	7.2	7.2	7.6	7.4
9	7.3	7.2	7.3	7.3	7.3	7.2	7.5	7.4	7.3	7.2	7.6	7.4
10	7.4	7.2	7.4	7.3	7.2	7.2	7.5	7.4	7.3	7.3	7.5	7.5
11	7.7	7.4	7.4	7.2	7.3	7.2	7.5	7.4	7.4	7.2	7.5	7.4
12	7.6	7.4	7.4	7.3	7.3	7.2	7.6	7.4	7.3	7.2	7.6	7.5
13	7.5	7.4	7.5	7.3	7.2	7.2	7.7	7.5	7.3	7.2	7.7	7.5
14	7.5	7.4	7.5	7.4	7.3	7.2	7.6	7.4	7.3	7.2	7.8	7.6
15	---	---	7.6	7.3	7.3	7.2	7.6	7.4	7.2	7.2	7.6	7.6
16	---	---	7.6	7.2	7.4	7.2	7.6	7.4	7.3	7.2	7.6	7.5
17	---	---	7.3	7.2	7.2	7.1	7.5	7.5	7.3	7.3	7.6	7.5
18	---	---	7.3	7.2	7.2	7.1	7.5	7.4	7.4	7.3	7.6	7.5
19	---	---	7.4	7.3	7.3	7.0	7.5	7.4	7.4	7.3	7.6	7.5
20	---	---	7.3	7.3	7.4	7.0	7.6	7.4	7.4	7.3	7.6	7.6
21	---	---	7.3	7.3	7.4	7.2	7.6	7.4	7.4	7.2	7.7	7.5
22	---	---	7.3	7.2	7.4	7.3	7.9	7.5	7.4	7.3	7.6	7.6
23	---	---	7.4	7.3	7.4	7.3	---	---	7.7	7.3	7.7	7.6
24	---	---	7.3	7.2	7.5	7.3	---	---	7.6	7.3	7.8	7.6
25	---	---	7.3	7.2	7.5	7.3	---	---	7.5	7.3	7.8	7.6
26	---	---	7.3	7.2	7.5	7.3	---	---	7.6	7.4	7.9	7.6
27	7.3	7.2	7.3	7.2	7.5	7.4	---	---	7.6	7.4	7.9	7.8
28	7.3	7.2	---	---	7.4	7.3	---	---	7.7	7.5	7.9	7.8
29	7.3	7.2	---	---	7.4	7.3	---	---	---	---	7.9	7.8
30	7.4	7.2	---	---	7.4	7.3	---	---	---	---	7.9	7.8
31	7.3	7.2	---	---	7.4	7.3	---	---	---	---	7.8	7.7
MONTH	---	---	---	---	7.5	7.0	---	---	---	---	7.9	7.4

08057448 Trinity River near Wilmer, TX--Continued

PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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



08057448 Trinity River near Wilmer, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

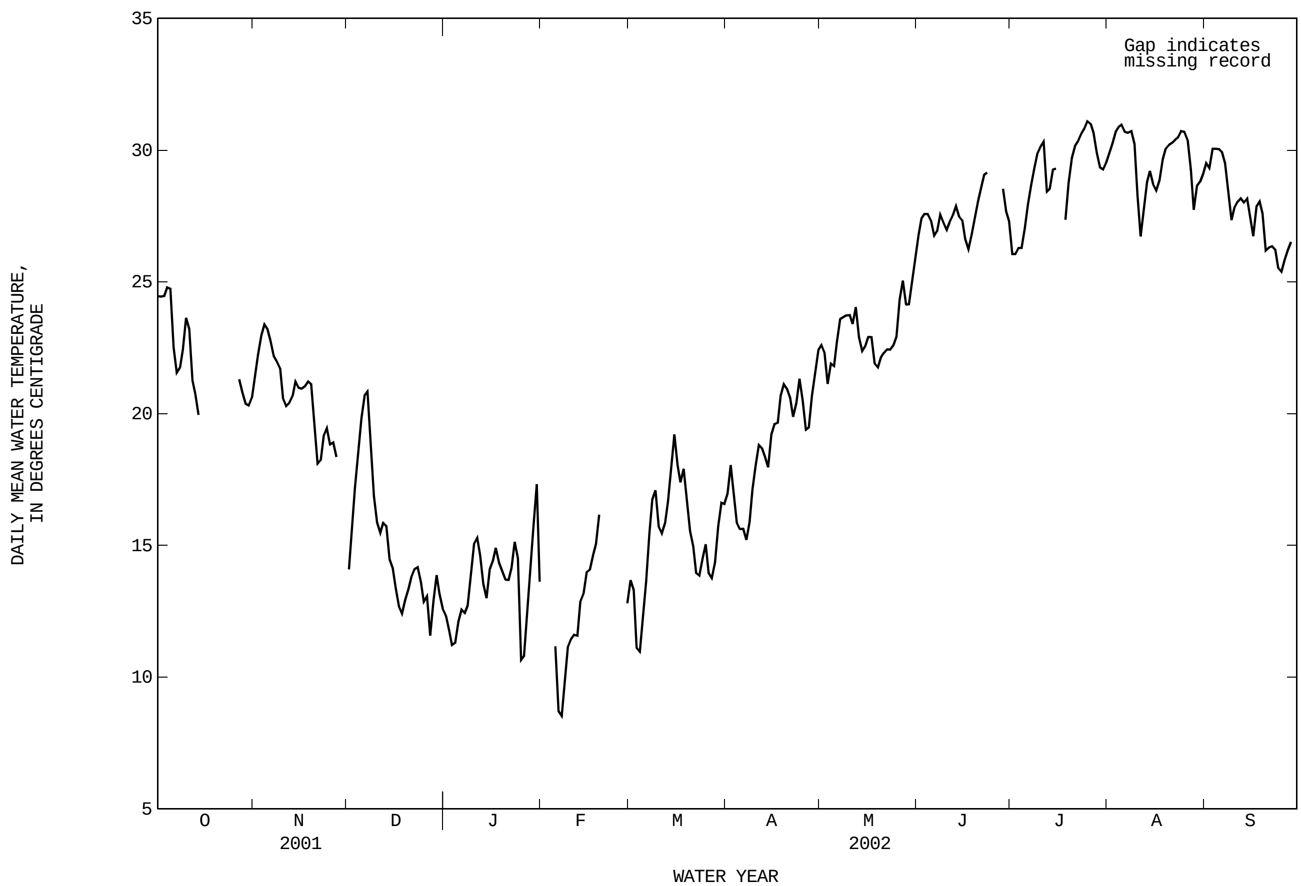
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	25.0	23.8	24.5	21.9	20.8	21.4	14.9	13.3	14.1	12.7	12.0	12.3
2	25.0	23.8	24.4	22.9	21.7	22.2	16.9	14.5	15.6	12.4	11.4	11.8
3	25.0	23.8	24.5	23.5	22.3	23.0	18.1	16.6	17.2	11.8	10.8	11.2
4	25.3	24.2	24.8	23.7	23.0	23.4	19.5	18.1	18.6	12.0	10.7	11.3
5	25.2	23.3	24.7	23.6	22.8	23.2	20.5	19.3	19.8	12.6	11.8	12.1
6	23.4	22.0	22.5	23.2	22.3	22.8	21.1	20.4	20.7	12.9	12.1	12.6
7	22.1	21.0	21.6	22.6	21.7	22.2	21.0	20.2	20.8	12.9	11.8	12.4
8	22.3	21.2	21.7	22.4	21.4	22.0	20.2	17.9	19.0	13.4	12.1	12.7
9	23.2	21.9	22.4	22.2	21.3	21.7	17.9	16.3	16.9	14.7	13.0	13.8
10	24.4	23.1	23.6	21.3	20.3	20.6	16.3	15.4	15.9	15.7	14.5	15.0
11	24.5	21.4	23.2	20.5	20.0	20.3	15.9	15.1	15.5	15.7	14.8	15.3
12	21.8	21.0	21.3	20.6	20.2	20.4	16.1	15.6	15.8	15.3	14.2	14.6
13	21.4	20.1	20.7	21.0	20.3	20.7	15.9	15.1	15.7	14.7	12.1	13.5
14	20.2	19.7	20.0	21.4	21.0	21.2	15.1	14.1	14.5	14.2	12.2	13.0
15	---	---	---	21.2	20.7	21.0	14.4	13.9	14.1	14.5	13.5	14.1
16	---	---	---	21.2	20.8	20.9	14.5	12.9	13.4	15.1	13.9	14.4
17	---	---	---	21.6	20.6	21.0	12.9	12.6	12.7	15.1	14.7	14.9
18	---	---	---	21.7	20.6	21.2	12.7	12.2	12.4	14.9	14.1	14.3
19	---	---	---	21.6	20.4	21.1	13.2	12.7	12.9	14.3	13.7	14.0
20	---	---	---	20.4	18.8	19.5	13.7	13.1	13.3	14.1	13.3	13.7
21	---	---	---	18.8	17.5	18.1	14.1	13.4	13.8	14.4	13.1	13.7
22	---	---	---	18.8	17.6	18.2	15.0	13.5	14.1	14.7	13.8	14.1
23	---	---	---	19.9	18.6	19.1	14.7	13.6	14.2	15.7	14.5	15.1
24	---	---	---	19.9	19.0	19.4	14.6	12.7	13.6	15.7	11.4	14.5
25	---	---	---	19.4	18.3	18.8	13.3	12.4	12.9	11.4	10.3	10.6
26	---	---	---	19.4	18.4	18.9	13.6	11.5	13.1	11.1	10.4	10.8
27	21.8	20.8	21.3	19.4	17.2	18.4	12.0	11.3	11.6	12.8	10.9	12.1
28	21.2	20.3	20.8	---	---	---	14.2	11.9	12.9	14.7	12.8	13.7
29	20.8	20.0	20.4	---	---	---	14.2	13.5	13.9	16.6	14.7	15.8
30	20.8	19.6	20.3	---	---	---	13.9	12.8	13.2	17.8	16.6	17.3
31	21.1	20.0	20.6	---	---	---	13.0	12.2	12.6	17.4	10.4	13.6
MONTH	---	---	---	---	---	---	21.1	11.3	15.0	17.8	10.3	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	14.2	13.1	13.7	18.0	16.4	17.0	23.0	22.2	22.6
2	---	---	---	14.0	12.1	13.3	18.2	17.9	18.0	22.8	21.8	22.3
3	---	---	---	12.1	10.4	11.1	18.1	16.0	16.8	21.8	20.7	21.1
4	---	---	---	11.8	10.0	11.0	16.2	15.6	15.9	22.5	21.3	21.9
5	11.9	9.4	11.2	13.3	11.6	12.4	15.8	15.5	15.6	22.5	21.0	21.8
6	9.4	8.4	8.7	14.8	12.6	13.7	15.8	15.4	15.6	23.4	22.1	22.7
7	9.3	8.1	8.5	16.3	14.7	15.5	15.4	15.1	15.2	24.0	23.4	23.6
8	10.5	9.3	9.8	17.4	16.2	16.7	16.9	15.1	15.9	24.0	23.5	23.7
9	11.6	10.5	11.1	17.4	16.7	17.1	17.8	16.6	17.1	24.0	23.6	23.7
10	11.6	11.3	11.4	16.7	15.0	15.7	18.9	17.5	18.0	24.0	23.2	23.7
11	12.5	11.1	11.6	15.7	15.2	15.5	19.2	18.5	18.8	24.2	22.6	23.4
12	12.2	11.1	11.6	16.5	15.2	15.8	19.1	18.3	18.7	24.4	23.7	24.0
13	13.3	12.1	12.9	17.6	15.7	16.7	18.8	18.0	18.4	23.7	22.4	22.9
14	13.8	12.7	13.2	19.0	17.0	18.0	18.5	17.7	18.0	22.6	22.2	22.4
15	14.4	13.6	14.0	19.6	18.9	19.2	19.7	18.5	19.2	22.8	22.3	22.5
16	14.5	13.6	14.1	18.9	17.5	18.0	19.7	19.5	19.6	23.1	22.7	22.9
17	15.2	14.0	14.6	17.8	17.0	17.4	20.4	18.9	19.6	23.1	22.4	22.9
18	15.5	14.6	15.0	18.3	17.7	17.9	21.3	20.3	20.7	22.4	21.7	21.9
19	17.0	15.2	16.2	18.2	15.7	16.7	21.3	21.0	21.1	22.1	21.4	21.7
20	---	---	---	15.9	15.2	15.5	21.0	20.7	20.9	22.5	21.7	22.1
21	---	---	---	15.5	14.4	15.0	21.0	20.2	20.6	22.7	21.9	22.3
22	---	---	---	14.7	13.5	14.0	20.2	19.5	19.9	22.7	22.1	22.4
23	---	---	---	14.6	13.3	13.9	20.9	19.9	20.4	22.7	22.1	22.4
24	---	---	---	15.1	14.2	14.5	21.8	20.7	21.3	22.8	22.4	22.6
25	---	---	---	15.3	14.5	15.0	21.6	19.9	20.5	23.7	22.4	22.9
26	---	---	---	14.5	13.7	14.0	19.9	19.1	19.4	25.6	23.4	24.3
27	---	---	---	14.0	13.4	13.8	20.0	19.1	19.5	25.4	24.6	25.1
28	13.4	12.1	12.8	15.1	14.0	14.4	21.5	20.0	20.7	24.6	23.8	24.1
29	---	---	---	16.4	15.1	15.7	22.1	21.1	21.6	25.0	23.5	24.2
30	---	---	---	17.0	16.3	16.6	22.8	22.0	22.4	25.6	24.6	25.1
31	---	---	---	17.0	16.3	16.6	---	---	---	26.7	25.3	25.9
MONTH	---	---	---	19.6	10.0	15.3	22.8	15.1	18.9	26.7	20.7	23.1

08057448 Trinity River near Wilmer, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.7	26.0	26.8	27.0	25.3	26.1	30.5	29.1	29.9	30.3	28.7	29.5
2	27.9	26.6	27.4	26.2	26.0	26.1	31.0	29.5	30.2	30.4	28.4	29.3
3	28.0	27.0	27.6	26.6	26.0	26.3	31.6	29.8	30.7	30.7	29.2	30.1
4	28.0	27.0	27.6	26.4	26.1	26.3	31.7	30.0	30.9	30.7	29.3	30.1
5	27.9	26.9	27.3	27.7	26.3	27.0	31.7	30.1	31.0	30.7	29.3	30.0
6	27.1	26.3	26.8	28.9	27.1	28.0	31.3	29.9	30.7	30.4	29.3	29.9
7	27.8	26.1	26.9	29.4	28.0	28.7	31.5	29.7	30.7	30.0	29.1	29.5
8	28.0	27.2	27.6	29.9	28.8	29.3	31.4	30.1	30.7	29.2	28.0	28.5
9	27.8	26.9	27.3	30.5	29.2	29.9	30.9	29.5	30.2	28.0	26.4	27.4
10	27.5	26.5	27.0	30.7	29.5	30.1	30.4	24.3	28.3	28.4	27.4	27.8
11	27.8	26.9	27.3	31.0	29.6	30.3	27.8	24.8	26.7	28.6	27.6	28.0
12	28.0	27.1	27.5	30.5	27.1	28.4	28.6	27.1	27.8	28.6	27.8	28.2
13	28.5	27.4	27.9	29.1	27.5	28.5	29.5	28.2	28.8	28.4	27.5	28.0
14	28.0	27.1	27.5	30.0	28.7	29.3	29.5	28.9	29.2	28.7	27.6	28.2
15	27.9	26.7	27.3	29.8	28.8	29.3	29.1	28.4	28.7	28.6	26.0	27.5
16	27.5	26.1	26.6	---	---	---	29.1	28.0	28.5	28.0	24.5	26.7
17	26.8	25.7	26.2	---	---	---	29.5	28.3	28.9	28.4	27.4	27.9
18	27.7	26.1	26.8	28.3	26.1	27.4	30.5	29.0	29.6	28.6	27.6	28.0
19	28.1	26.7	27.4	29.6	27.9	28.8	30.7	29.4	30.0	28.2	26.5	27.6
20	28.8	27.5	28.1	30.4	29.1	29.7	30.8	29.6	30.2	26.9	25.3	26.2
21	29.4	27.7	28.6	30.9	29.4	30.1	30.8	29.7	30.3	26.7	25.9	26.3
22	29.8	28.4	29.1	31.1	29.5	30.3	31.1	29.7	30.4	26.9	25.9	26.4
23	29.9	28.4	29.1	31.6	29.7	30.6	31.2	29.7	30.5	26.7	25.8	26.2
24	---	---	---	31.7	29.9	30.8	31.5	29.9	30.7	26.1	25.0	25.5
25	---	---	---	32.0	30.3	31.1	31.3	30.0	30.7	26.1	24.6	25.4
26	---	---	---	31.7	30.2	31.0	31.1	29.6	30.4	26.5	25.1	25.8
27	---	---	---	31.4	29.8	30.6	30.7	26.3	29.3	26.9	25.4	26.2
28	29.2	27.8	28.5	30.6	29.0	29.9	29.0	26.3	27.7	27.2	25.7	26.5
29	29.0	27.0	27.7	29.8	28.8	29.4	29.1	28.2	28.6	---	---	---
30	27.4	27.0	27.3	29.9	28.6	29.3	29.3	28.2	28.8	---	---	---
31	---	---	---	30.0	28.9	29.5	29.9	28.4	29.1	---	---	---
MONTH	---	---	---	---	---	---	31.7	24.3	29.6	---	---	---



08057448 Trinity River near Wilmer, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.5	6.2	6.4	7.4	6.8	7.1	8.7	8.1	8.4	9.6	9.3	9.4
2	6.5	6.1	6.4	7.2	6.8	7.0	8.3	7.7	8.1	9.8	9.4	9.6
3	6.3	5.5	6.0	7.3	6.8	7.0	7.9	7.4	7.6	10.2	9.5	9.9
4	6.0	5.0	5.5	7.4	6.7	7.0	7.5	7.1	7.3	10.2	9.7	10.0
5	6.4	5.4	6.0	7.3	6.6	6.9	7.2	6.8	7.0	9.8	9.3	9.6
6	5.9	3.4	5.2	7.5	7.0	7.2	6.9	6.7	6.8	9.6	9.2	9.4
7	6.7	5.9	6.4	7.4	7.1	7.2	6.7	6.0	6.5	9.6	9.2	9.4
8	6.8	6.6	6.7	7.4	7.1	7.2	7.2	5.8	6.6	9.5	8.8	9.2
9	7.2	6.4	6.8	7.4	7.1	7.2	7.7	7.1	7.5	9.4	8.8	9.0
10	7.1	6.2	6.7	7.6	7.3	7.4	7.9	7.6	7.7	9.2	8.7	9.0
11	6.8	5.3	6.2	7.5	7.2	7.4	8.0	7.6	7.8	9.1	8.4	8.8
12	6.1	5.4	5.9	7.4	6.8	7.2	7.8	7.0	7.5	9.4	8.7	9.1
13	6.5	5.4	6.0	7.5	7.2	7.4	7.6	7.0	7.3	10.0	8.7	9.4
14	6.4	5.8	6.1	7.6	7.3	7.5	7.9	7.1	7.6	9.8	8.8	9.4
15	---	---	---	---	---	---	8.2	7.8	8.0	9.6	8.7	9.1
16	---	---	---	---	---	---	9.4	8.0	8.8	9.2	8.8	8.9
17	---	---	---	---	---	---	8.7	8.3	8.5	9.0	8.7	8.9
18	---	---	---	---	---	---	8.3	8.0	8.2	9.0	8.6	8.8
19	---	---	---	---	---	---	8.6	8.1	8.3	9.3	8.9	9.1
20	---	---	---	---	---	---	8.8	8.6	8.8	9.8	8.9	9.4
21	---	---	---	---	---	---	8.9	8.6	8.8	9.7	9.1	9.5
22	---	---	---	---	---	---	9.2	8.3	8.8	---	---	---
23	---	---	---	---	---	---	9.1	8.5	8.8	---	---	---
24	---	---	---	---	---	---	9.6	8.4	9.0	11.2	9.2	10.2
25	---	---	---	---	---	---	9.5	9.2	9.4	11.7	11.1	11.4
26	---	---	---	---	---	---	9.9	8.9	9.1	11.6	11.1	11.3
27	7.3	7.0	7.2	---	---	---	10.2	9.9	10.0	11.5	11.1	11.2
28	7.4	7.0	7.2	---	---	---	9.9	8.8	9.3	11.1	9.8	10.9
29	7.3	7.1	7.2	---	---	---	8.9	8.7	8.8	10.7	9.8	10.5
30	7.4	7.1	7.2	---	---	---	9.2	8.9	9.1	10.3	9.7	9.9
31	7.5	7.0	7.2	---	---	---	9.4	9.1	9.2	11.3	9.0	10.4
MONTH	---	---	---	---	---	---	10.2	5.8	8.2	---	---	---

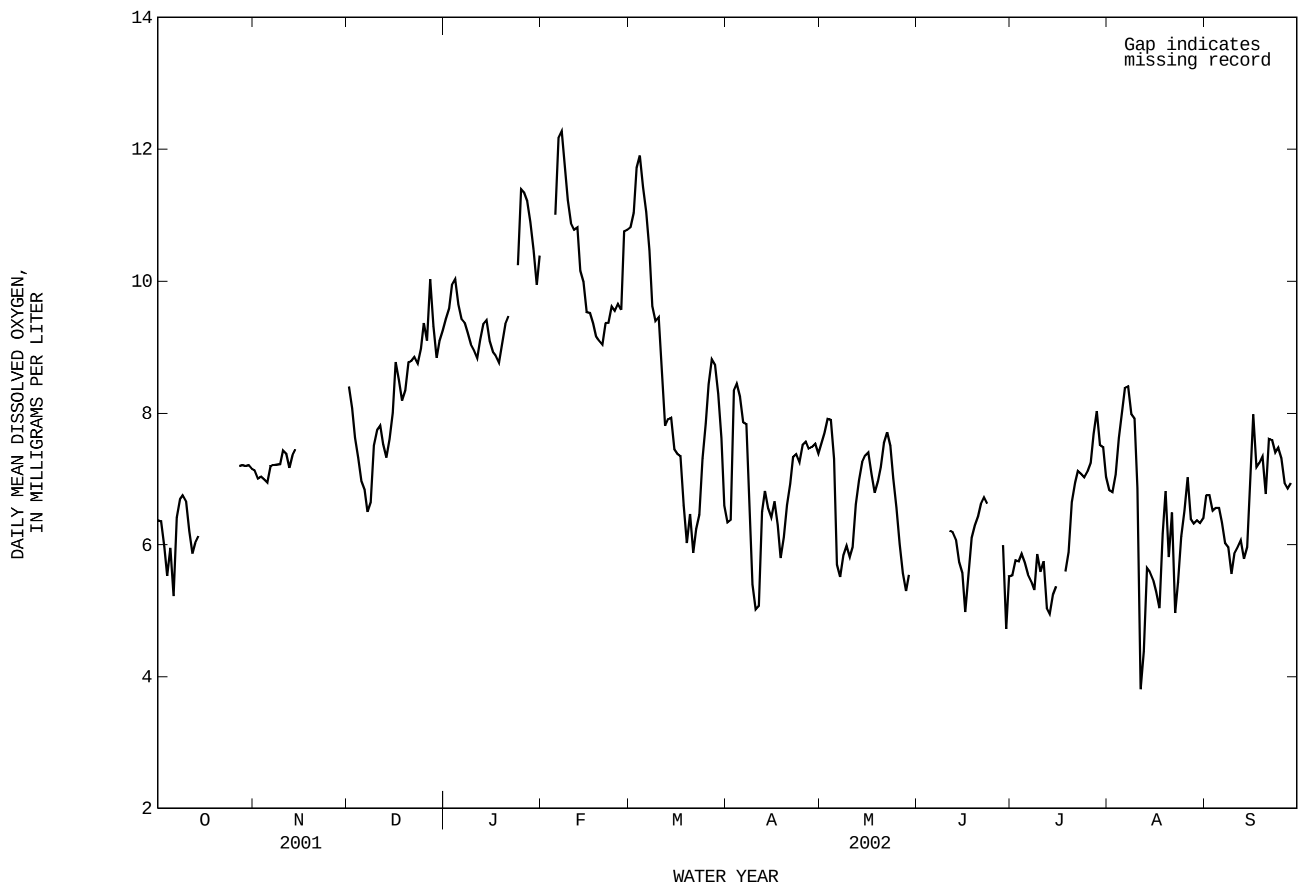
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	11.2	10.5	10.8	6.7	6.0	6.3	7.8	7.3	7.5
2	---	---	---	11.5	10.5	11.0	7.7	5.9	6.4	7.9	7.5	7.7
3	---	---	---	12.1	11.2	11.7	9.9	7.7	8.3	8.2	7.7	7.9
4	---	---	---	12.1	11.7	11.9	8.8	8.0	8.4	8.1	7.8	7.9
5	11.8	10.6	11.0	11.8	11.1	11.4	8.5	8.1	8.2	8.0	6.3	7.3
6	12.6	11.8	12.2	11.6	10.6	11.1	8.2	7.7	7.9	6.3	5.4	5.7
7	12.5	12.0	12.3	11.4	10.1	10.5	8.0	7.5	7.8	5.8	5.4	5.5
8	12.0	11.5	11.8	10.1	9.0	9.6	7.6	5.7	6.5	6.1	5.6	5.8
9	11.6	11.0	11.2	9.7	9.0	9.4	5.7	5.1	5.4	6.2	5.8	6.0
10	11.0	10.7	10.9	9.6	9.3	9.5	5.2	4.7	5.0	5.9	5.5	5.8
11	11.2	10.4	10.8	9.4	e7.5	8.5	5.9	4.7	5.1	6.4	5.6	6.0
12	11.2	10.3	10.8	8.2	7.5	7.8	6.9	5.9	6.5	6.9	6.3	6.6
13	10.4	10.0	10.2	8.3	7.5	7.9	7.0	6.6	6.8	7.3	6.6	7.0
14	10.2	9.6	10	8.4	7.6	7.9	6.8	6.2	6.6	7.4	7.1	7.3
15	9.8	9.4	9.5	7.9	7.2	7.5	6.6	6.3	6.4	7.6	7.2	7.4
16	9.6	9.3	9.5	7.8	7.0	7.4	6.9	6.4	6.7	7.6	7.3	7.4
17	9.5	9.2	9.4	7.6	7.0	7.3	7.1	5.7	6.3	7.4	6.8	7.1
18	9.4	8.9	9.2	7.0	6.2	6.6	6.0	5.5	5.8	7.0	6.6	6.8
19	9.5	8.6	9.1	7.0	5.2	6.0	6.4	5.9	6.1	7.2	6.6	7.0
20	9.7	8.3	9.0	7.0	6.0	6.5	6.9	6.1	6.6	7.4	7.0	7.2
21	9.9	9.2	9.4	6.3	5.7	5.9	7.2	6.6	6.9	7.8	7.3	7.5
22	9.8	9.1	9.4	6.4	6.0	6.2	7.5	6.9	7.3	7.9	7.6	7.7
23	9.8	9.4	9.6	6.7	6.3	6.5	7.6	7.2	7.4	7.6	7.3	7.5
24	9.8	9.4	9.5	7.6	6.6	7.3	7.4	7.0	7.3	7.3	6.8	7.0
25	9.8	9.5	9.7	8.3	7.5	7.8	7.8	7.2	7.5	6.8	6.3	6.6
26	9.7	9.4	9.6	8.8	8.1	8.4	7.8	7.1	7.6	6.3	5.9	6.0
27	11.1	9.4	10.8	9.0	8.7	8.8	7.6	7.3	7.5	5.9	5.2	5.6
28	11.2	10.4	10.8	8.9	8.5	8.7	7.7	7.3	7.5	5.6	4.7	5.3
29	---	---	---	8.6	8.1	8.3	7.7	7.4	7.5	6.3	4.8	5.5
30	---	---	---	8.3	7.0	7.6	7.5	7.3	7.4	---	---	---
31	---	---	---	7.1	6.4	6.6	---	---	---	---	---	---
MONTH	---	---	---	12.1	5.2	8.5	9.9	4.7	6.9	---	---	---

08057448 Trinity River near Wilmer, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	6.0	4.8	5.5	7.1	6.5	6.8	7.2	6.2	6.8
2	---	---	---	6.0	5.6	5.8	7.1	6.6	6.8	8.0	6.1	6.8
3	---	---	---	6.2	5.4	5.8	7.9	6.5	7.1	7.2	5.7	6.5
4	---	---	---	6.2	5.5	5.9	8.3	6.8	7.6	7.0	6.1	6.6
5	---	---	---	6.0	5.5	5.7	9.2	6.7	8.0	7.0	6.0	6.6
6	---	---	---	5.8	5.4	5.6	8.8	7.9	8.4	7.0	6.1	6.3
7	---	---	---	5.8	5.1	5.4	8.9	7.9	8.4	6.4	5.7	6.0
8	---	---	---	5.5	5.0	5.3	8.6	7.1	8.0	6.2	5.8	6.0
9	---	---	---	6.2	5.5	5.9	8.3	7.4	7.9	6.2	4.9	5.6
10	---	---	---	5.8	5.3	5.6	8.2	4.2	6.9	6.1	5.5	5.9
11	6.4	6.0	6.2	6.3	5.3	5.8	5.2	2.5	3.8	6.2	5.7	6.0
12	6.5	5.8	6.2	6.3	3.5	5.0	5.5	3.6	4.4	6.4	5.8	6.1
13	6.3	5.9	6.1	5.3	4.7	5.0	5.9	5.1	5.6	6.0	5.2	5.8
14	6.1	5.2	5.7	5.5	4.9	5.2	5.9	5.3	5.6	6.3	5.7	6.0
15	5.8	5.4	5.6	5.9	4.9	5.4	6.0	4.9	5.5	9.1	5.9	7.0
16	6.1	3.3	5.0	---	---	---	6.4	4.6	5.3	9.4	6.3	8.0
17	6.1	4.6	5.5	---	---	---	6.1	3.7	5.0	7.4	6.9	7.2
18	6.4	5.8	6.1	6.4	4.8	5.6	7.0	5.7	6.2	7.6	7.0	7.2
19	6.5	6.1	6.3	6.2	5.6	5.9	8.2	5.9	6.8	7.7	6.4	7.3
20	6.8	6.1	6.4	8.0	6.0	6.7	6.8	5.0	5.8	7.8	5.3	6.8
21	6.9	6.4	6.6	7.4	6.5	6.9	7.8	5.1	6.5	7.9	7.3	7.6
22	7.1	6.4	6.7	7.7	6.7	7.1	7.1	3.0	5.0	7.9	7.3	7.6
23	7.1	6.3	6.6	7.5	6.7	7.1	7.3	4.0	5.4	7.6	7.2	7.4
24	---	---	---	7.4	6.6	7.0	8.3	4.7	6.1	7.7	7.3	7.5
25	---	---	---	7.5	6.7	7.1	7.8	5.4	6.5	7.5	6.9	7.3
26	---	---	---	7.7	6.9	7.2	7.5	6.6	7.0	7.3	6.8	6.9
27	---	---	---	8.4	7.0	7.7	8.0	4.2	6.4	7.1	6.6	6.9
28	6.4	5.2	6.0	8.7	7.4	8.0	7.0	4.7	6.3	7.2	6.7	6.9
29	5.8	3.2	4.7	8.0	7.3	7.5	6.8	6.1	6.4	---	---	---
30	6.2	4.7	5.5	7.9	7.1	7.5	6.6	5.9	6.3	---	---	---
31	---	---	---	7.3	6.7	7.0	7.3	5.4	6.4	---	---	---
MONTH	---	---	---	---	---	---	9.2	2.5	6.4	---	---	---

e Estimated



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	5.8	6.5	e51	1860	64	939	63	32	6.2	0.0	0.02
2	0.12	4.8	4.9	e48	727	66	653	46	29	12	0.0	0.0
3	0.10	3.2	4.5	45	600	67	515	81	27	18	0.0	0.0
4	0.10	1.8	3.5	46	495	63	402	62	25	15	0.0	0.0
5	0.11	2.2	3.0	51	479	63	318	50	25	10	0.0	0.0
6	0.05	1.7	6.5	59	583	63	264	52	37	6.6	0.0	0.0
7	0.02	0.99	7.2	51	514	62	1660	45	29	3.7	0.0	0.0
8	0.02	0.38	5.2	48	393	62	6130	38	26	2.4	0.0	0.07
9	0.0	6.7	2.8	46	298	65	1370	34	24	2.2	0.0	0.05
10	0.0	1.7	1.7	45	211	63	939	1020	20	1.1	0.01	0.0
11	33	1.9	1.4	44	191	60	707	314	17	1.3	30	0.0
12	141	2.5	2.2	43	178	60	568	167	15	1.4	13	0.0
13	723	1.9	4.3	41	125	59	528	112	13	1.4	4.4	0.0
14	259	1.1	8.7	41	109	59	550	72	18	0.55	0.64	0.0
15	115	1.0	10	39	97	59	392	56	16	0.42	0.23	0.0
16	63	1.0	445	38	91	59	335	47	17	0.77	0.54	0.0
17	48	0.39	510	37	87	58	775	628	20	0.95	0.25	0.0
18	43	0.35	381	36	88	78	411	382	16	3.1	0.0	0.0
19	40	0.41	e250	36	89	3760	305	167	14	4.6	0.0	0.01
20	39	0.15	e131	36	114	7780	254	111	11	4.1	0.0	0.0
21	31	0.14	e62	36	89	1480	217	81	9.8	3.5	0.0	0.0
22	29	0.12	e51	36	80	1100	190	65	8.4	2.5	0.0	0.0
23	26	0.22	e54	41	75	1030	158	53	7.0	3.0	0.0	0.0
24	24	0.19	e56	153	73	882	134	48	6.2	0.58	0.0	0.0
25	20	0.10	e46	216	71	704	109	47	5.6	0.09	0.0	0.0
26	16	0.03	e54	113	67	534	97	49	5.4	0.06	0.0	0.0
27	14	0.02	e48	86	63	409	91	47	5.7	0.03	0.19	0.0
28	11	1.3	e46	74	63	357	78	45	7.8	0.0	2.6	0.0
29	11	2.2	e56	69	---	289	73	42	5.3	0.0	2.0	0.0
30	9.4	6.7	e56	66	---	2830	73	39	4.5	0.0	0.27	0.0
31	7.2	---	e51	3670	---	2930	---	36	---	0.0	0.13	---
TOTAL	1703.22	50.99	2369.4	5441	7910	25215	19235	4099	496.7	105.55	54.26	0.15
MEAN	54.94	1.700	76.43	175.5	282.5	813.4	641.2	132.2	16.56	3.405	1.750	0.005
MAX	723	6.7	510	3670	1860	7780	6130	1020	37	18	30	0.07
MIN	0.00	0.02	1.4	36	63	58	73	34	4.5	0.00	0.00	0.00
AC-FT	3380	101	4700	10790	15690	50010	38150	8130	985	209	108	0.3

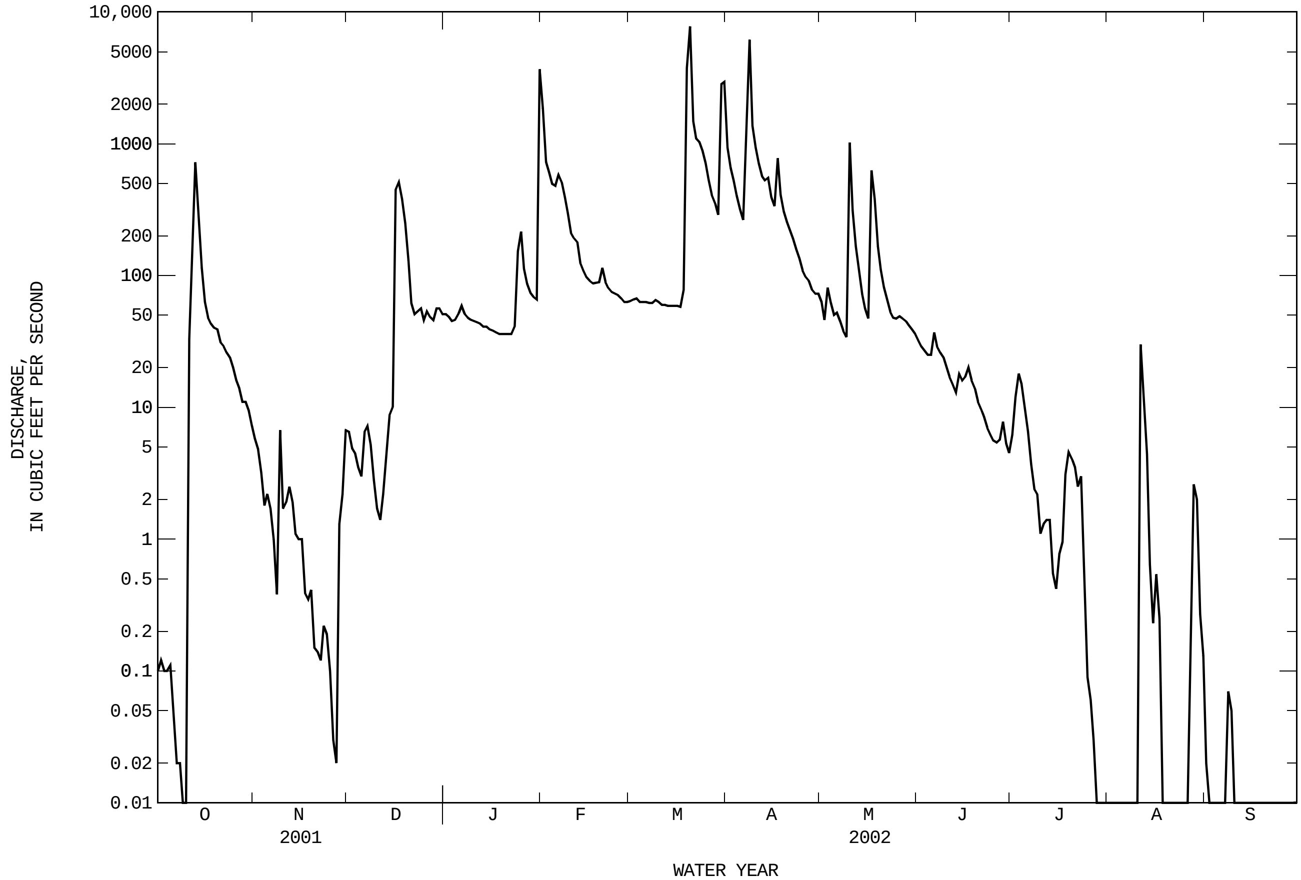
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.93	126.9	152.3	105.3	218.1	251.9	161.4	255.1	127.1	21.20	3.251	6.931
MAX	1022	1120	1160	805	987	813	804	1704	737	213	19.0	64.0
(WY)	1982	1995	1992	1998	2001	2002	1990	1982	1989	1994	1990	1994
MIN	0.000	0.000	0.000	0.000	1.37	2.30	4.08	2.52	0.81	0.000	0.000	0.000
(WY)	1978	1978	1978	1978	1976	1976	1980	1996	1996	1984	1980	1977

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1976 - 2002	
ANNUAL TOTAL	68580.91		66680.27			
ANNUAL MEAN	187.9		182.7		125.7	
HIGHEST ANNUAL MEAN					373	1982
LOWEST ANNUAL MEAN					4.65	1980
HIGHEST DAILY MEAN	6420	Feb 16	7780	Mar 20	26800	May 13 1982
LOWEST DAILY MEAN	0.00	Jul 16	0.00	Oct 9	0.00	Aug 18 1976
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 16	0.00	Jul 28	0.00	Aug 18 1976
MAXIMUM PEAK FLOW			13600	Mar 20	61800	May 13 1982
MAXIMUM PEAK STAGE			20.27	Mar 20	22.17	May 13 1982
ANNUAL RUNOFF (AC-FT)	136000		132300		91030	
10 PERCENT EXCEEDS	446		410		252	
50 PERCENT EXCEEDS	46		29		14	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

08058900 East Fork Trinity River at McKinney, TX--Continued



08059400 Sister Grove Creek near Blue Ridge, TX
(Flood hydrograph-partial record station)

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^2.

PERIOD OF RECORD.--July 1975 to Sept. 2001 (daily mean discharge). Oct. 2001 to Sept. 2002.(peaks above base discharge)
Water-quality records.--Chemical data: Nov. 1985 to June 1987, Oct. 1995 to Sept. 1999. Biochemical data: Nov. 1985 to Jun 1987, Oct. 1995 to Sept. 1999.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 526.29 ft above NGVD of 1929. Prior to June 29, 1988, at datum 10.00 ft higher at same site. Satellite telemeter at station.

REMARKS.--Records fair. 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^2. Discharge may contain flow released from Lake Texoma and placed into channel 40 miles upstream from site. No flow at times.

AVERAGE DISCHARGE.--26 years (water years 1975-2001), 69.5 ft^3/s (50,340 acre-ft/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s, May 13, 1982, gage height, 32.50 ft. Mimimum discharge, no flow at times, most years.

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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 692 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 17	0000	709	19.15	Apr 8	0915	2,690	26.94
Jan 31	2215	2,380	26.50	Apr 17	1400	2,190	26.21
Mar 20	0715	*2,800	*27.07	May 17	1830	913	20.86
Mar 30	2000	2,130	26.12				

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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 NGVD of 1929. Prior to Jan. 20, 1954, nonrecording gage in the approach channel at same datum. 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 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. 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^2 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, l976, elevation, 465.96 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 587,700 acre-ft, Apr. 11, elevation, 497.63 ft; minimum contents, 292,600 acre-ft, Dec. 14, elevation, 483.30 ft.

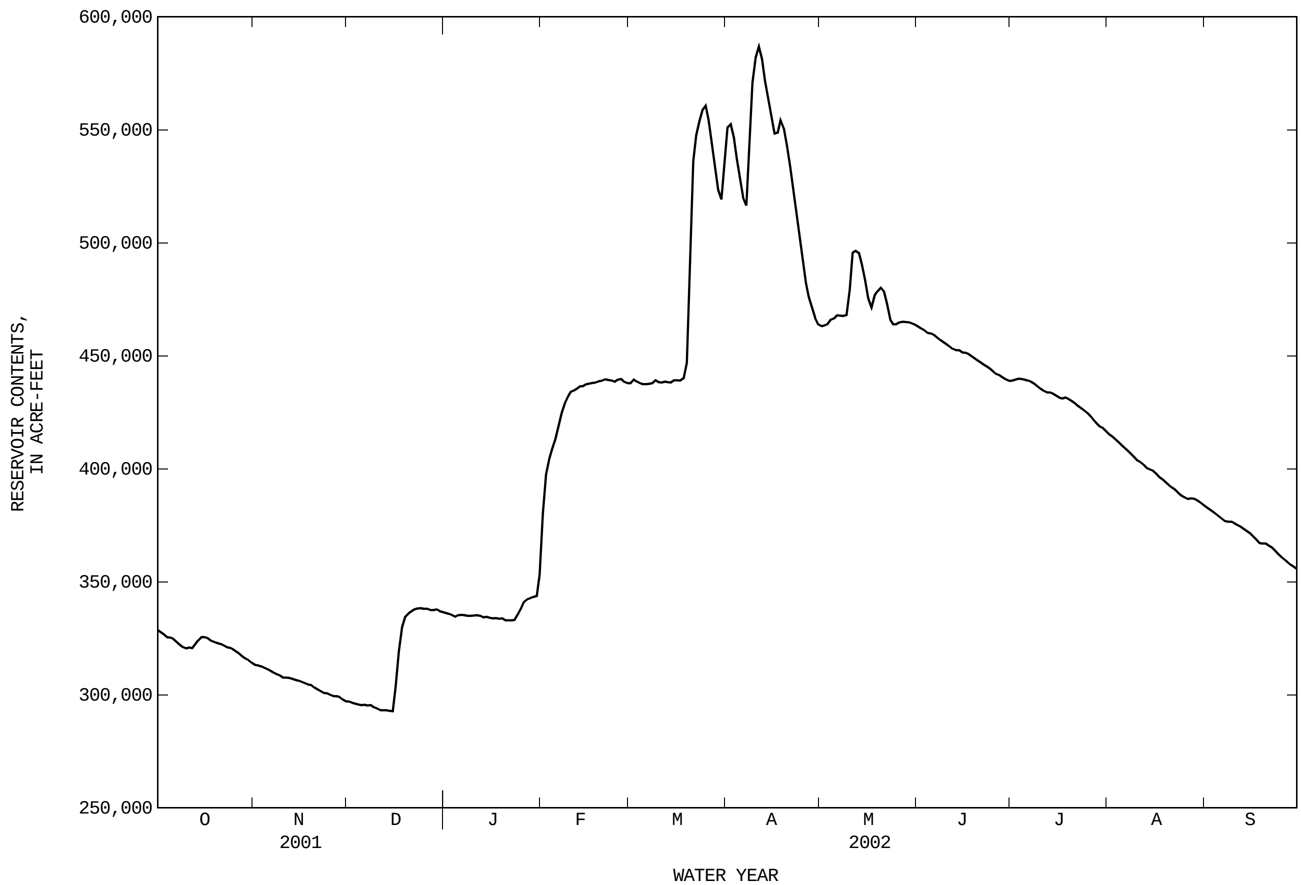
RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328600	313300	296900	336200	380100	437900	551000	463100	462900	439000	415300	383100
2	327500	313000	296400	335800	397500	439500	552500	463400	462000	439500	414200	382100
3	326600	312500	296100	335200	404400	438600	546600	464000	461300	439900	413100	381100
4	325400	311900	295700	334600	408800	437900	537400	466000	460200	439800	411700	380100
5	325300	311200	295500	335200	413000	437500	528500	e466500	459900	439500	410400	379000
6	324600	310500	295500	335300	418800	437400	520000	e467900	459100	439000	409100	377900
7	323300	309700	295200	335300	424700	437700	516600	467800	458200	438400	407800	376800
8	322100	309000	295500	335000	429000	437900	541000	467600	457100	437700	406400	376600
9	321000	308400	294400	334900	431600	439200	571000	468100	456100	436700	405000	376600
10	320500	307600	293800	335100	434100	438400	582000	479300	455100	435600	403600	375900
11	320900	307600	293200	335200	434700	438200	586800	495600	454200	434500	403000	375100
12	320700	307400	293200	335000	435500	438600	581200	496400	453100	433800	401800	374300
13	322400	307000	293200	334200	436500	438300	571900	495400	452500	433800	400300	373300
14	324100	306600	292900	334500	436600	438200	564600	489800	452600	433200	399700	372300
15	325600	306100	292800	334100	437500	439100	556600	483600	451500	432400	399100	371500
16	325500	305600	303600	333800	437800	439200	548400	475300	451400	431600	397800	370100
17	324900	305100	319300	333900	438100	439100	548800	471400	450700	431100	396300	368700
18	323800	304400	329800	333700	438100	440100	554300	476800	449800	431600	395200	367100
19	323300	304400	334400	333700	438700	447000	550800	478700	448800	430800	394100	367000
20	322900	303200	335900	332900	439100	496700	542900	480100	447900	429900	392900	367000
21	322500	302400	336800	333000	439600	536100	533600	478400	447000	429000	391800	366000
22	321800	301500	337700	333000	439300	547500	523800	472800	446000	427900	390700	365100
23	321100	300700	338300	333200	439100	553700	513200	466000	445200	426900	389500	363700
24	320800	300700	338300	335400	438500	558800	503100	464000	444100	425900	388200	362300
25	320100	300000	338100	338200	439500	560600	492900	463900	443000	424800	387300	361000
26	319100	299400	338000	341000	439800	554300	482500	464900	441900	423200	386700	359900
27	318300	299400	337500	342100	438500	544100	476100	465200	441300	421600	386900	358600
28	317000	299100	337500	342700	438000	533200	471500	465000	440300	420000	386700	357400
29	316000	298000	337800	343300	---	523300	466800	464800	439500	418700	386100	356600
30	315200	297200	337100	343700	---	519200	463800	464200	438900	417900	385200	355600
31	314200	---	336600	353400	---	535200	---	463700	---	416700	384100	---
TOTAL	9985100	9162900	9757000	10432600	12026900	14802500	15980200	14649700	13531600	13360400	12340000	11101800
MEAN	322100	305400	314700	336500	429500	477500	532700	472600	451100	431000	398100	370100
MAX	328600	313300	338300	353400	439800	560600	586800	496400	462900	439900	415300	383100
MIN	314200	297200	292800	332900	380100	437400	463800	463100	438900	416700	384100	355600
(+)	484.57	483.57	485.85	486.77	491.12	495.48	492.34	492.33	491.16	490.06	488.41	486.90
(@)	-15500	-17000	+39400	+16800	+84600	+97200	-71400	-100	-24800	-22200	-32600	-28500

CAL YR 2001 MAX 659500 MIN 292800 (@) -130500
WTR YR 2002 MAX 586800 MIN 292800 (@) +25900

(+) 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

LOCATION.--Lat 32°57'35", long 96°36'51", Dallas County, Hydrologic Unit 12030106, on right bank at downstream side of railroad embankment of Gulf, Colorado, and Santa Fe Railway Co., 100 ft downstream from Spring Creek, 150 ft upstream from State Highway 78, and 1.5 mi southwest of Sachse.

DRAINAGE AREA.--120 mi^2.

PERIOD OF RECORD.--Mar. 1968 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 450.00 ft above NGVD of 1929. Mar. 1968 to Aug. 25, 1993, at site on left bank 150 ft downstream. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation or diversions. The North Texas Municipal Water District returns wastewater effluent into a tributary above this station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1942, 35.4 ft in 1942, from information by Texas Department of Transportation.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	77	57	71	468	76	240	106	74	225	53	44
2	48	72	52	70	204	94	177	108	68	219	53	43
3	48	72	53	71	154	92	145	415	66	140	50	40
4	53	75	54	69	125	90	126	180	67	85	51	39
5	79	73	54	116	694	86	121	800	76	60	48	36
6	56	76	122	66	527	84	146	e200	72	54	42	37
7	45	63	60	69	311	82	1730	97	59	51	41	37
8	43	52	54	65	189	87	3260	90	58	48	54	511
9	41	49	52	60	151	147	335	95	67	50	47	457
10	43	52	52	63	120	89	221	1740	60	e47	212	99
11	429	187	69	61	111	100	184	131	55	49	75	69
12	135	91	95	58	105	91	159	83	52	286	50	62
13	801	73	112	62	99	84	317	100	112	140	45	61
14	105	62	86	61	92	81	226	70	122	75	340	59
15	84	58	72	58	88	83	160	65	61	65	93	76
16	88	63	4290	58	83	84	829	64	303	64	47	57
17	88	61	576	58	77	88	536	895	79	108	40	54
18	85	57	158	59	78	524	157	178	60	72	39	53
19	79	60	122	55	84	3260	135	117	57	56	39	211
20	78	56	101	52	75	5540	141	102	51	50	39	81
21	76	53	93	50	70	383	143	96	47	46	41	61
22	85	55	91	67	71	239	134	89	50	47	43	57
23	84	59	84	105	75	199	125	96	49	45	41	52
24	80	85	79	860	74	175	117	89	48	44	38	51
25	69	53	71	156	75	156	111	83	48	42	43	50
26	71	49	69	95	e77	133	193	506	48	42	52	46
27	72	48	68	77	73	125	133	104	60	42	683	42
28	74	164	81	68	77	121	114	154	50	42	87	48
29	69	79	74	69	---	116	103	174	63	44	58	44
30	71	63	72	76	---	1090	113	90	76	45	50	43
31	76	---	73	5230	---	1420	---	75	---	43	47	---
TOTAL	3308	2137	7146	8155	4427	15019	10631	7192	2158	2426	2641	2620
MEAN	106.7	71.23	230.5	263.1	158.1	484.5	354.4	232.0	71.93	78.26	85.19	87.33
MAX	801	187	4290	5230	694	5540	3260	1740	303	286	683	511
MIN	41	48	52	50	70	76	103	64	47	42	38	36
AC-FT	6560	4240	14170	16180	8780	29790	21090	14270	4280	4810	5240	5200

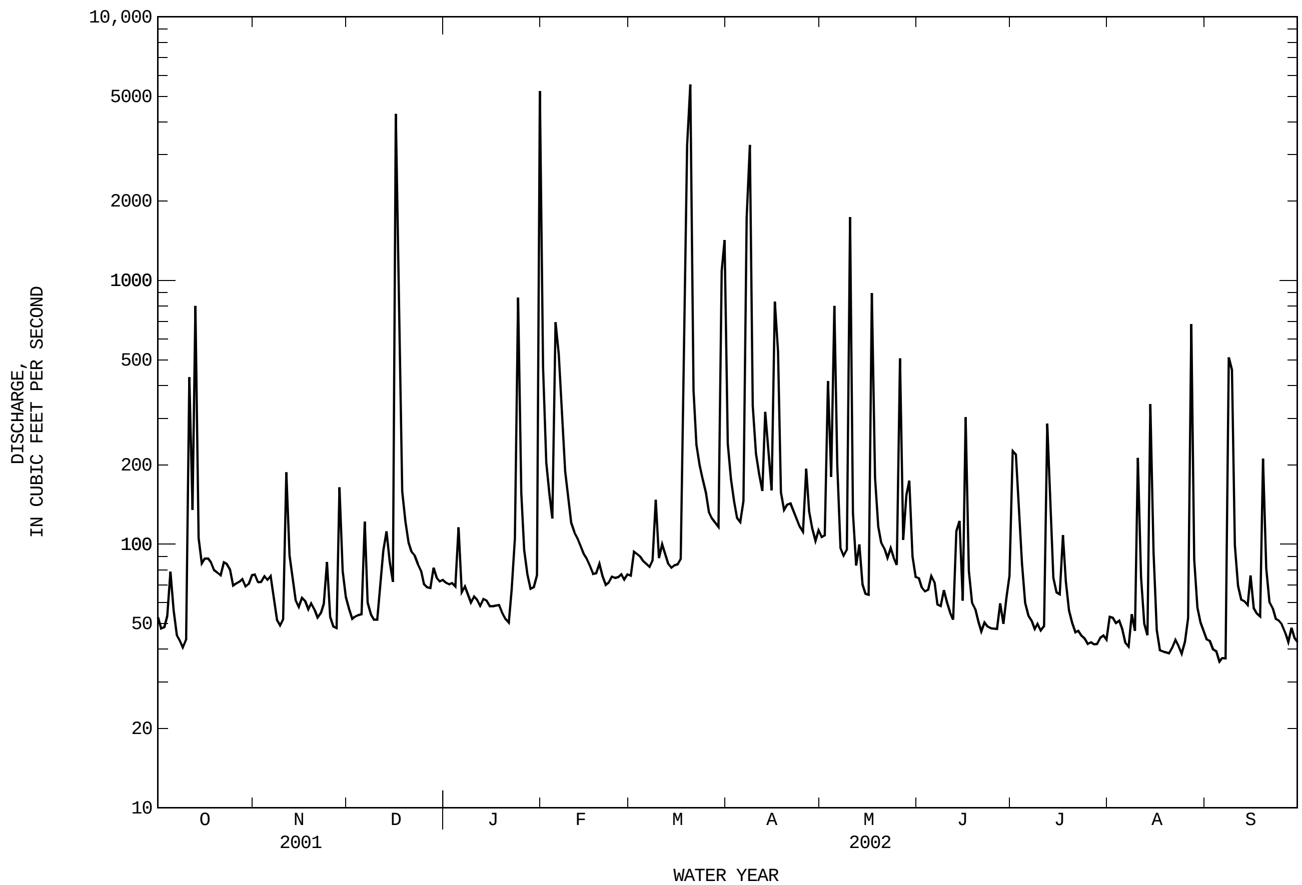
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	132.7	128.5	167.9	115.0	169.6	195.4	165.2	228.2	145.3	50.29	37.82	56.78
MAX	610	586	898	617	680	484	573	1039	566	241	120	180
(WY)	1982	1995	1992	1998	2001	2002	1990	1982	1981	1994	2001	1974
MIN	4.88	7.63	7.52	6.72	7.83	11.9	23.8	18.8	4.60	1.91	1.78	3.75
(WY)	1979	1976	1978	1976	1976	1971	1972	1972	1971	1972	1972	1969

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1968 - 2002	
ANNUAL TOTAL	79903		67860			
ANNUAL MEAN	218.9		185.9		132.4	
HIGHEST ANNUAL MEAN					269	2001
LOWEST ANNUAL MEAN					22.2	1971
HIGHEST DAILY MEAN	7570	Feb 16	5540	Mar 20	14900	May 13 1982
LOWEST DAILY MEAN	41	Aug 9	36	Sep 5	0.00	Aug 24 1969
ANNUAL SEVEN-DAY MINIMUM	43	Jul 20	39	Sep 1	0.00	Aug 24 1969
MAXIMUM PEAK FLOW			18500	Mar 20	32200	Jan 5 1998
MAXIMUM PEAK STAGE			27.33	Mar 20	29.62	May 17 1989
ANNUAL RUNOFF (AC-FT)	158500		134600		95900	
10 PERCENT EXCEEDS	350		225		212	
50 PERCENT EXCEEDS	86		75		49	
90 PERCENT EXCEEDS	48		46		8.5	

e Estimated

08061540 Rowlett Creek near Sachse, TX--Continued



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily contents. Records poor. 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, 431,100 acre-ft, Mar. 20, elevation, 436.30 ft; minimum contents, 353,700 acre-ft, Sept. 30, elevation, 432.57 ft.

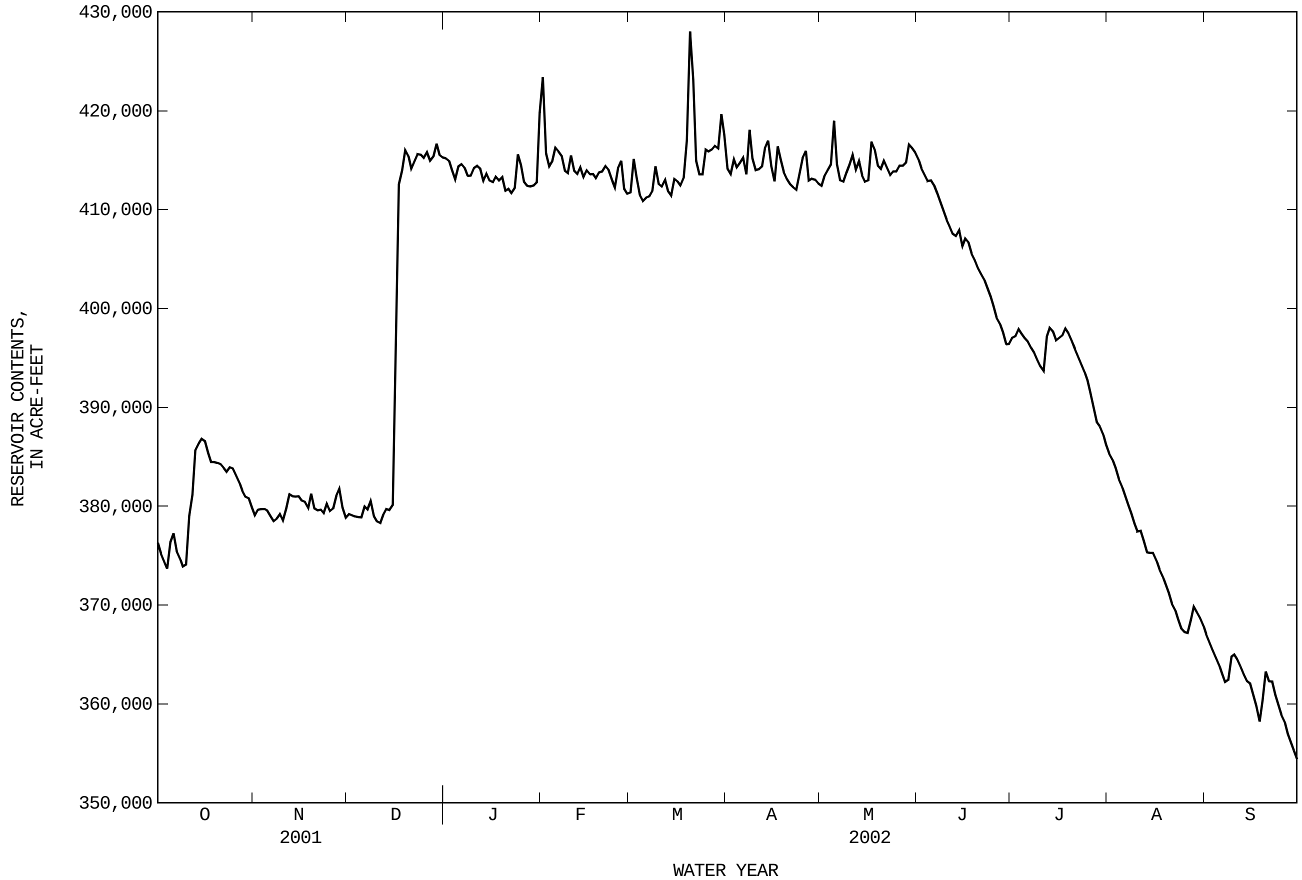
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	376300	379100	379200	415200	423400	411700	414200	412400	415100	397000	385300	367100
2	375200	379600	379100	414900	415700	415100	413600	413400	414200	397200	384700	366300
3	374400	379700	379000	414000	414400	413300	415100	414000	413500	397900	383800	365500
4	373700	379700	378900	413100	414800	411500	414200	414500	412900	397400	382800	364700
5	376400	379600	378900	414400	416300	410900	414700	419000	413000	397000	382100	364000
6	377200	379000	380000	414600	415900	411200	415200	414600	412400	396600	381100	363100
7	375400	378500	379700	414200	415400	411300	413600	412900	411700	396000	380200	362200
8	374700	378700	380500	413400	413900	411900	418100	412800	410800	395500	379300	362400
9	373900	379200	379000	413400	413700	414400	415200	413800	409900	394800	378200	364800
10	374100	378600	378400	414200	415500	412600	414000	414600	409000	394200	377400	365000
11	379000	379700	378300	414400	413900	412300	414100	415500	408300	393700	377500	364500
12	381200	381200	379100	414200	413600	413000	414400	414100	407600	397200	376500	363700
13	385600	381000	379700	412900	414300	411900	416200	414900	407300	398000	375300	363000
14	386300	381000	379600	413600	413300	411400	417000	413500	407900	397700	375300	362300
15	386800	381000	380100	412900	414000	413100	414400	412800	406300	396800	375300	362100
16	386600	380600	398700	412800	413600	412900	412900	412900	407100	397000	374600	360900
17	385400	380400	412500	413300	413600	412400	416400	416900	406700	397300	373600	359700
18	384500	379800	413900	413000	413200	413200	415100	416100	405600	398000	372900	358200
19	384500	381300	416100	413300	413800	417000	413800	414400	404900	397500	372100	360300
20	384400	379800	415400	411900	413900	428000	413100	414100	404100	396800	371200	363300
21	384300	379600	414100	412100	414400	423100	412600	415000	403500	395900	370100	362300
22	383900	379600	414900	411700	414000	414900	412300	414200	402900	395200	369500	362300
23	383500	379300	415600	412100	413100	413600	412000	413500	402100	394400	368600	360900
24	383900	380300	415600	415600	412200	413600	413600	413900	401200	393700	367600	359900
25	383800	379500	415200	414400	414200	416100	415200	413900	400300	392700	367300	358900
26	383100	379800	415800	412800	414900	415900	415900	414500	399100	391300	367200	358200
27	382500	381100	414900	412400	412100	416100	412900	414500	398500	389900	368500	356900
28	381600	381700	415400	412400	411600	416500	413100	414800	397600	388500	369800	356100
29	380900	379900	416600	412500	---	416200	413000	416600	396400	388100	369300	355300
30	380800	378800	415600	412800	---	419700	412600	416200	396400	387300	368700	354400
31	379800	---	415300	419800	---	417600	---	415800	---	386200	368000	---
MEAN	380800	379900	397300	413600	414400	414600	414300	414500	406200	394700	374600	361600
MAX	386800	381700	416600	419800	423400	428000	418100	419000	415100	398000	385300	367100
MIN	373700	378500	378300	411700	411600	410900	412000	412400	396400	386200	367200	354400
(+)	433.90	433.85	435.58	435.79	435.41	435.69	435.46	435.60	434.70	434.21	433.30	432.60
(@)	+2400	-1000	+36500	+4500	-8200	+6000	-5000	+3200	-19400	-10200	-18200	-13600

CAL YR 2001 MAX 434800 MIN 366700 (@) -3000
WTR YR 2002 MAX 428000 MIN 354400 (@) -23000

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

08061550 Lake Ray Hubbard near Forney, TX--Continued



08061750 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^2, of which 1,071 mi^2 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 NGVD of 1929. 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.--No estimated daily discharges. Records good. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

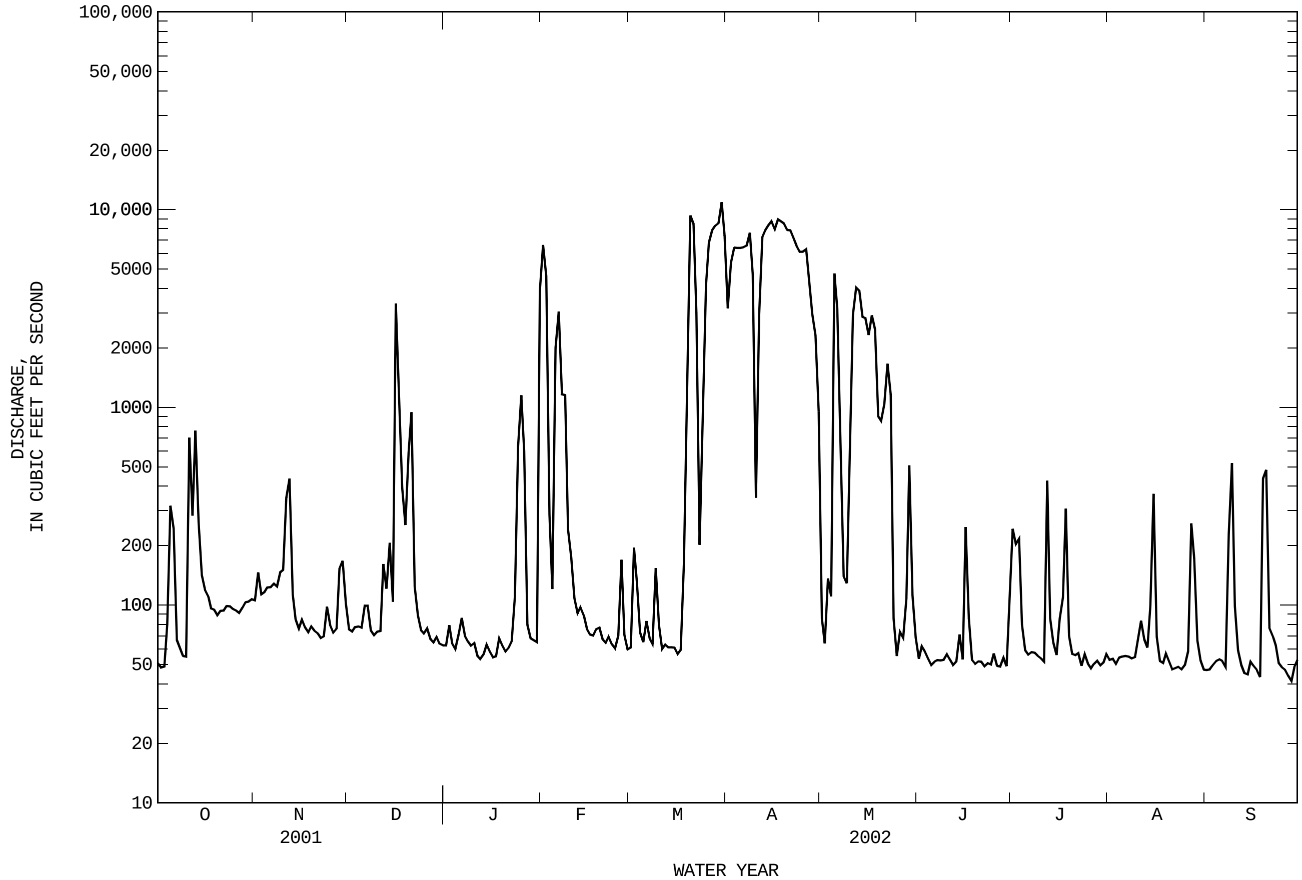
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	106	75	63	6630	61	3160	85	53	243	53	47
2	48	146	73	79	4610	195	5390	64	62	203	53	47
3	49	113	77	64	286	131	6430	136	58	215	50	50
4	80	116	78	60	121	73	6410	111	54	80	54	52
5	318	123	77	71	2000	65	6410	4750	50	59	55	53
6	243	123	99	86	3050	83	6440	3180	52	56	55	52
7	67	128	99	70	1170	68	6580	541	53	58	55	49
8	60	124	74	66	1150	64	7640	140	52	57	54	230
9	55	146	70	62	241	153	4700	129	53	56	54	521
10	55	150	73	64	174	79	348	676	56	54	67	99
11	702	349	74	55	108	60	2920	2950	53	52	83	59
12	283	435	161	53	91	63	7260	4040	50	424	67	50
13	763	113	121	56	97	61	7830	3880	52	86	61	45
14	261	84	206	63	89	61	8310	2860	71	64	98	45
15	142	76	104	58	76	61	8730	2820	53	56	364	52
16	120	84	3350	54	71	56	7970	2320	247	86	69	49
17	111	77	1070	55	70	59	8930	2910	86	109	52	47
18	96	73	392	68	75	163	8740	2470	53	307	51	43
19	95	78	253	63	77	1970	8490	901	50	70	57	437
20	89	74	590	58	67	9330	7890	854	52	56	52	482
21	93	72	941	61	64	8480	7870	1040	52	56	47	77
22	94	68	124	65	69	3000	7250	1660	49	57	48	70
23	99	69	89	110	63	202	6570	1160	51	49	49	62
24	99	98	74	635	60	892	6140	86	50	56	47	51
25	95	79	72	1150	70	4140	6120	55	57	50	50	48
26	93	72	76	602	169	6790	6280	73	49	48	58	47
27	91	76	67	79	71	7820	4550	68	49	50	259	44
28	97	152	65	68	60	8280	2970	108	54	52	172	41
29	103	167	69	66	---	8550	2320	507	49	50	66	49
30	104	102	64	65	---	10900	948	112	96	51	52	53
31	107	---	62	3880	---	7420	---	69	---	57	47	---
TOTAL	4763	3673	8819	8049	20879	79330	181596	40755	1866	2967	2399	3051
MEAN	153.6	122.4	284.5	259.6	745.7	2559	6053	1315	62.20	95.71	77.39	101.7
MAX	763	435	3350	3880	6630	10900	8930	4750	247	424	364	521
MIN	48	68	62	53	60	56	348	55	49	48	47	41
AC-FT	9450	7290	17490	15970	41410	157400	360200	80840	3700	5890	4760	6050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	366.7	512.8	628.1	625.9	910.6	1255	1208	1545	1059	384.2	125.0	184.2
MAX	3975	3076	3276	4826	4043	5918	6053	8008	5436	2207	1246	1583
(WY)	1974	1995	1992	1998	2001	2001	2002	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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1973 - 2002	
ANNUAL TOTAL	479746		358147			
ANNUAL MEAN	1314		981.2		723.2	
HIGHEST ANNUAL MEAN					1941	1995
LOWEST ANNUAL MEAN					37.6	1978
HIGHEST DAILY MEAN	18200	Feb 16	10900	Mar 30	50700	May 4 1990
LOWEST DAILY MEAN	48	Oct 2	41	Sep 28	8.0	Jun 23 1979
ANNUAL SEVEN-DAY MINIMUM	51	Sep 27	47	Sep 12	15	Sep 30 1977
MAXIMUM PEAK FLOW			13600	Mar 30	53000	May 3 1990
MAXIMUM PEAK STAGE			16.69	Mar 30	22.01	May 3 1990
ANNUAL RUNOFF (AC-FT)	951600		710400		523900	
10 PERCENT EXCEEDS	5570		4080		2320	
50 PERCENT EXCEEDS	95		77		64	
90 PERCENT EXCEEDS	58		50		27	

08061750 East Fork Trinity River near Forney, TX--Continued



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^2.

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 1886 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 NGVD of 1929. Prior to Feb. 21, 1983, at datum 5.00 ft higher. Satellite telemeter at station.

REMARKS.--Records fair, except those for estimated daily mean discharges, which are poor. Since Sept. 1953, at least 10% of contributing drainage area has been regulated by major reservoirs. 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^2 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^3/s (472,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1950-53).--Maximum discharge, 16,400 ft^3/s May 2, 1953 (gage height, 19.87 ft); no flow at times.

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	87	101	175	4930	88	e5200	e210	83	175	86	91
2	83	90	95	168	7150	105	e4850	e180	78	170	84	88
3	82	95	95	172	e5200	158	e6240	e240	78	247	83	89
4	86	87	95	146	370	100	e6550	e180	76	121	82	90
5	319	87	94	146	1850	92	e6530	e4000	75	76	83	89
6	492	87	108	163	3200	89	e6570	e4420	74	72	83	88
7	128	86	112	149	e2220	96	e7740	e1760	72	79	83	90
8	100	87	98	141	e1390	91	7300	e390	74	70	82	101
9	92	87	91	139	e650	110	e6790	e300	77	71	81	591
10	89	97	90	132	e327	113	e2540	e840	77	70	217	164
11	1210	106	93	129	190	91	e1710	e2860	79	68	126	104
12	886	502	142	121	147	88	e6000	e3780	75	499	98	95
13	2050	135	138	121	137	88	e7910	e4030	74	252	90	89
14	1030	103	179	121	127	88	e8410	e3280	78	137	89	80
15	332	96	522	121	115	86	e8770	e2900	79	125	251	80
16	223	96	6850	118	108	85	e8830	e2550	129	181	130	82
17	174	98	7020	114	104	85	e9250	e3140	107	202	100	81
18	144	91	2010	114	104	106	e9080	e2900	67	675	91	79
19	130	92	809	122	108	660	e8720	e1510	63	191	94	293
20	121	94	980	118	105	e11100	e8230	1140	63	121	94	818
21	113	93	1550	117	99	e10800	e8020	901	66	109	89	197
22	106	90	904	120	98	e7700	e7590	1540	66	106	88	116
23	103	88	561	210	99	e1900	e6920	1670	65	100	89	110
24	98	103	371	700	95	e262	e6400	360	67	89	89	92
25	93	100	303	1290	95	e3040	e6240	93	66	90	86	86
26	91	91	273	1070	110	e6000	e6390	82	66	84	91	85
27	91	88	245	241	121	7600	e5270	94	64	84	229	83
28	88	117	223	162	93	e8250	e3610	103	65	88	299	82
29	88	154	208	151	---	e8580	e2640	513	79	91	119	81
30	87	115	196	146	---	e10900	e1510	285	77	86	100	85
31	86	---	184	1780	---	e11500	---	95	---	85	93	---
TOTAL	8900	3342	24740	8717	29342	90051	191810	46346	2259	4614	3499	4299
MEAN	287.1	111.4	798.1	281.2	1048	2905	6394	1495	75.30	148.8	112.9	143.3
MAX	2050	502	7020	1780	7150	11500	9250	4420	129	675	299	818
MIN	82	86	90	114	93	85	1510	82	63	68	81	79
AC-FT	17650	6630	49070	17290	58200	178600	380500	91930	4480	9150	6940	8530

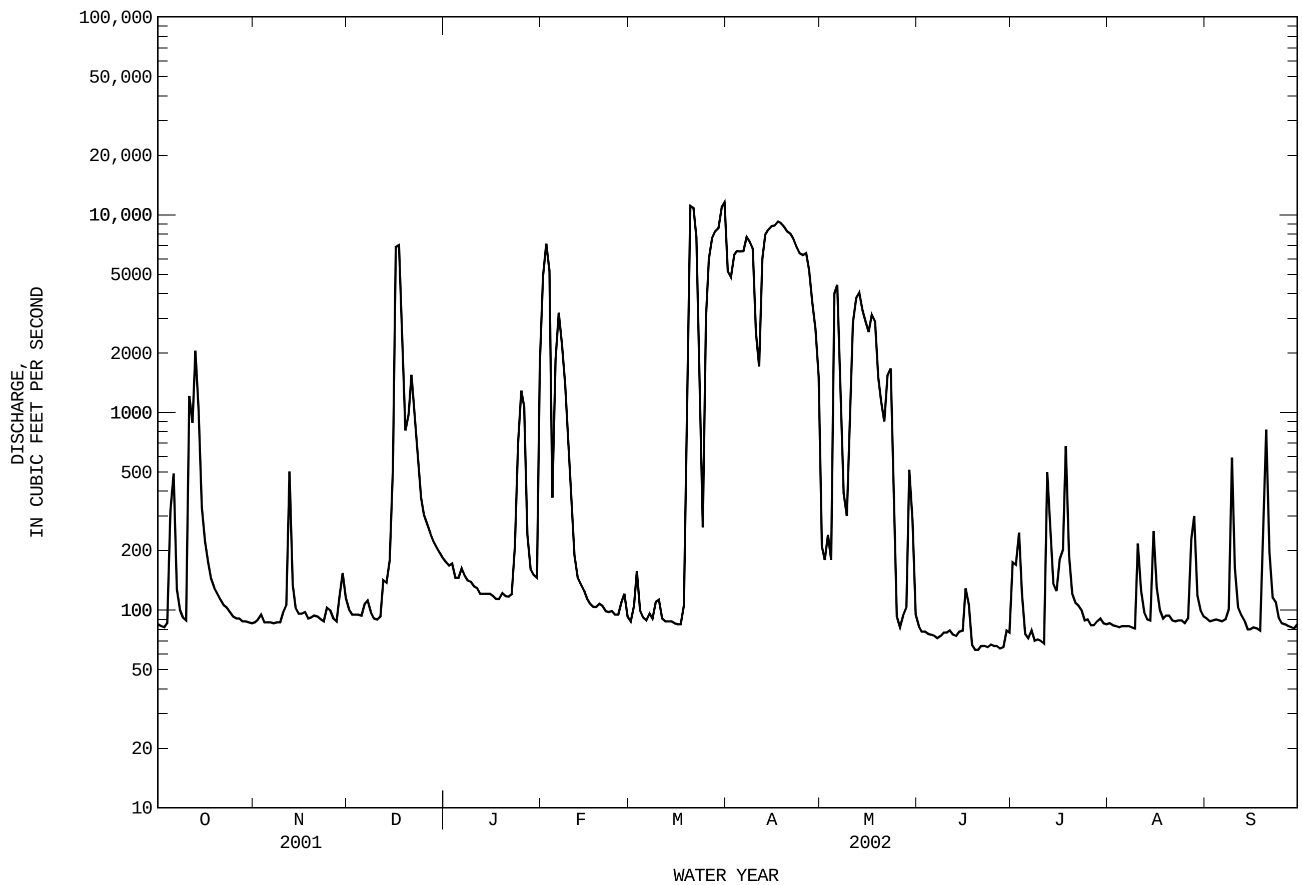
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	375.0	473.9	695.2	616.7	864.0	1091	1186	1700	1024	412.8	158.2	201.2
MAX	4116	3293	4401	5039	4176	8028	6394	9586	5718	2026	1459	1560
(WY)	1974	1995	1972	1998	2001	2001	2002	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	0.000	0.000
(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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1954 - 2002z	
ANNUAL TOTAL	625821		417919			
ANNUAL MEAN	1715		1145		732.3	
HIGHEST ANNUAL MEAN					2209	1995
LOWEST ANNUAL MEAN					38.4	1955
HIGHEST DAILY MEAN	20700	Feb 17	11500	Mar 31	48800	May 5 1990
LOWEST DAILY MEAN	74	Aug 8	63	Jun 19	0.00	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	77	Aug 4	65	Jun 19	0.00	Oct 1 1953
MAXIMUM PEAK FLOW			12700	Mar 31	59900	May 5 1990
MAXIMUM PEAK STAGE			15.44	Mar 31	27.17	May 5 1990
ANNUAL RUNOFF (AC-FT)	1241000		828900		530600	
10 PERCENT EXCEEDS	6810		5200		2170	
50 PERCENT EXCEEDS	144		113		98	
90 PERCENT EXCEEDS	82		80		21	

e Estimated
z Period of regulated streamflow.



08062000 East Fork Trinity River near Crandall, TX--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Datum of gage is 338.69 ft above NGVD of 1929.

REMARKS.--Records fair.

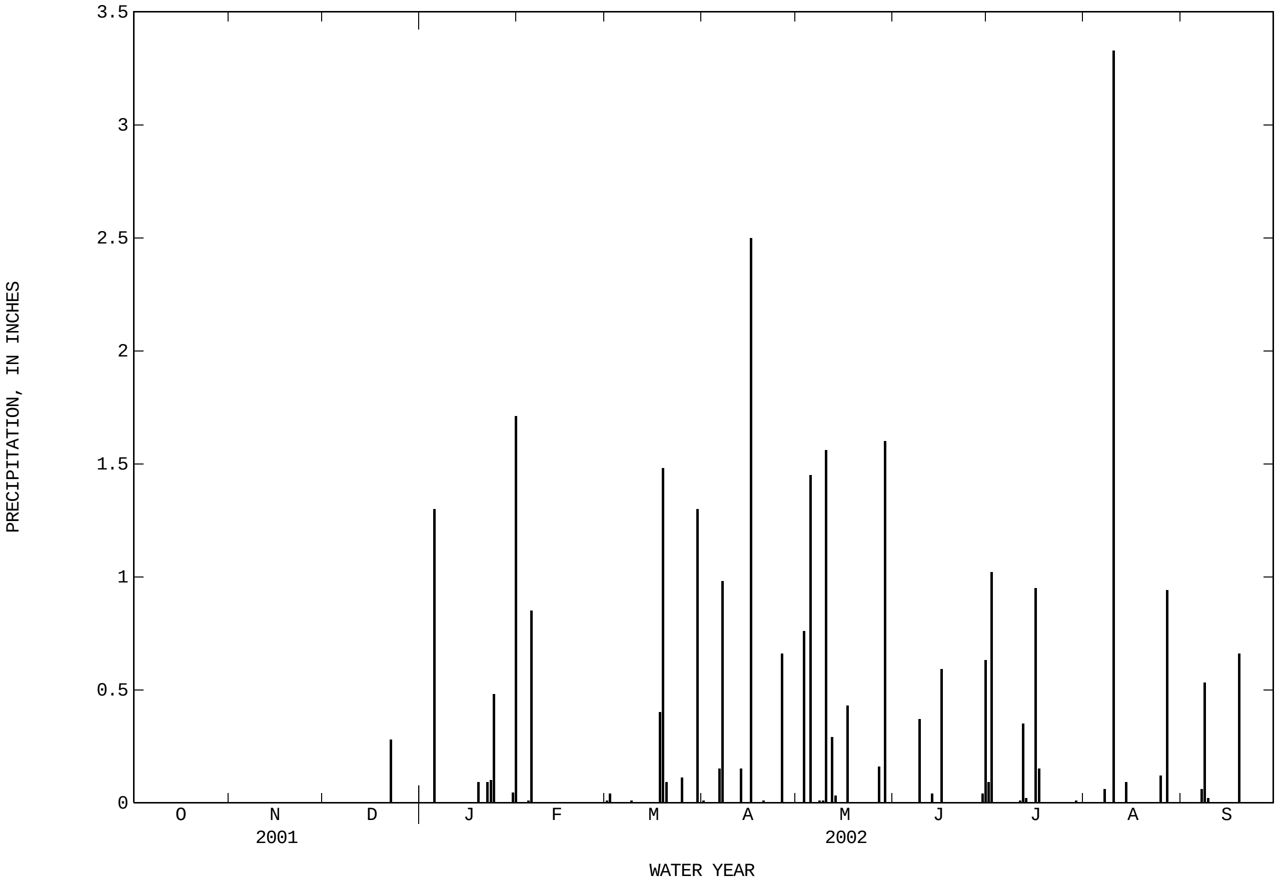
EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 3.339 inches, Aug. 10.

PRECIPITATION FROM DCP, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	e0.00	e0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.09	0.00	0.00
2	e0.00	e0.00	---	0.00	0.00	0.04	0.00	0.00	0.00	1.02	0.00	0.00
3	e0.00	e0.00	---	0.00	0.00	0.00	0.00	0.76	0.00	0.00	0.00	0.00
4	---	e0.00	---	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	---	e0.00	---	1.30	0.85	0.00	0.00	1.45	0.00	0.00	0.00	0.00
6	---	e0.00	---	0.00	---	0.00	0.15	0.00	0.00	0.00	0.00	0.00
7	e0.00	e0.00	---	0.00	---	0.00	0.98	0.00	0.00	0.00	0.06	0.06
8	e0.00	---	e0.00	0.00	e0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.53
9	e0.00	---	e0.00	0.00	e0.00	0.01	0.00	0.01	0.37	0.00	0.00	0.02
10	---	---	---	0.00	e0.00	0.00	0.00	1.56	0.00	0.00	3.33	0.00
11	---	---	---	0.00	e0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
12	---	---	---	0.00	0.00	0.00	0.00	0.29	0.00	0.35	0.00	0.00
13	---	e0.00	---	0.00	0.00	0.00	0.15	0.03	0.04	0.02	0.00	0.00
14	---	e0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.00
15	e0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	e0.00	e0.00	---	0.00	0.00	0.00	2.50	0.00	0.59	0.95	0.00	0.00
17	e0.00	e0.00	---	0.00	0.00	0.00	0.00	0.43	0.00	0.15	0.00	0.00
18	e0.00	e0.00	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.00	0.00	0.00
19	e0.00	e0.00	0.00	0.09	0.00	1.48	0.00	0.00	0.00	0.00	0.00	0.66
20	e0.00	e0.00	0.00	0.00	0.00	0.09	0.01	0.00	0.00	0.00	0.00	0.00
21	e0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	e0.00	e0.00	0.28	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	e0.00	---	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	e0.00	e0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	e0.00	e0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.12	0.00
26	e0.00	---	0.00	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00
27	e0.00	---	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.94	0.00
28	e0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	e0.00	---	0.00	0.00	---	0.00	0.00	1.60	0.04	0.01	0.00	0.00
30	e0.00	---	0.00	0.04	---	1.30	0.00	0.00	0.63	0.00	0.00	0.00
31	e0.00	---	0.00	1.71	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	3.81	---	3.44	4.46	6.30	1.67	2.60	4.54	1.27

e Estimated

08062000 East Fork Trinity River near Crandall, TX--Continued



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^2.

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 NGVD of 1929. 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.--Records fair except those for period from Mar. 28 to Apr. 29 and estimated daily discharges, which are poor. 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 flood- water retarding structures in the drainage basin above this station. These structures control runoff from 76.7 mi^2 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	812	774	1180	1340	e15700	e1130	25600	6590	e2980	2790	1120	892
2	780	778	972	1280	e19400	1140	e18500	5860	e2420	4520	883	862
3	764	803	903	1280	e17000	1350	21700	6160	e2100	4730	840	850
4	776	777	905	1260	e8840	e1370	17200	7140	e1850	4810	776	876
5	802	769	878	1250	e6460	1240	16200	9110	e1750	3860	727	832
6	2090	804	872	1340	e11000	1200	e16000	17300	e1690	1940	741	831
7	1280	780	1210	1350	e13200	1140	e15900	17700	e1600	2200	754	824
8	917	751	1240	1310	e9000	1100	18800	13900	1470	1580	728	834
9	825	746	980	1270	e6150	1110	24400	8130	1920	1180	758	2160
10	788	910	849	1220	e4200	1300	27800	7990	2160	1180	1250	2560
11	1920	892	802	1210	e3120	1100	21500	9370	2250	1000	5180	1570
12	6780	859	1030	1180	e2640	1040	15200	10300	2350	2630	4580	1100
13	8990	1520	1280	1530	1990	1060	28700	11100	1860	4470	1730	963
14	9860	1450	1740	1200	1860	1020	24400	12200	1750	2090	1200	914
15	4190	1050	1700	1100	e1720	1030	19700	10200	2090	1650	1530	858
16	2120	985	17600	1060	e1620	1010	15900	9200	1840	1790	2170	718
17	1640	1010	28900	1040	e1500	972	14100	8600	3360	1960	1290	961
18	1430	945	20600	e1050	e1450	995	12700	10700	2300	2900	1110	1010
19	1310	1140	11700	e1040	e1490	4640	11500	10800	1350	1820	942	1060
20	1200	1020	5250	e1040	e1680	13800	10600	6870	1120	1370	1030	2950
21	1120	875	4200	1040	e1560	20600	9500	5870	1040	1060	1010	2110
22	1030	809	4350	998	1370	26400	8640	5970	1150	946	953	1260
23	949	781	3200	1080	1300	25800	8320	5980	1110	892	889	1050
24	931	784	3150	2500	1230	17000	8110	4290	931	847	861	960
25	901	797	2480	6700	1180	12100	6930	2990	876	818	837	833
26	819	775	1920	5480	1180	10600	6370	2220	970	798	832	793
27	801	784	2410	2320	1280	11900	7060	2550	1170	812	1270	768
28	755	878	1570	e1570	1170	e13300	7090	2310	1430	785	2790	764
29	770	1560	1450	1440	---	12900	8190	3400	2370	786	1670	761
30	792	1700	1420	1370	---	14900	8320	e4470	1930	799	1120	673
31	783	---	1360	e5530	---	e26600	---	e3600	---	1090	956	---
TOTAL	58925	28506	128101	54378	140290	230847	454930	242870	53187	60103	42527	33597
MEAN	1901	950.2	4132	1754	5010	7447	15160	7835	1773	1939	1372	1120
MAX	9860	1700	28900	6700	19400	26600	28700	17700	3360	4810	5180	2950
MIN	755	746	802	998	1170	972	6370	2220	876	785	727	673
AC-FT	116900	56540	254100	107900	278300	457900	902400	481700	105500	119200	84350	66640

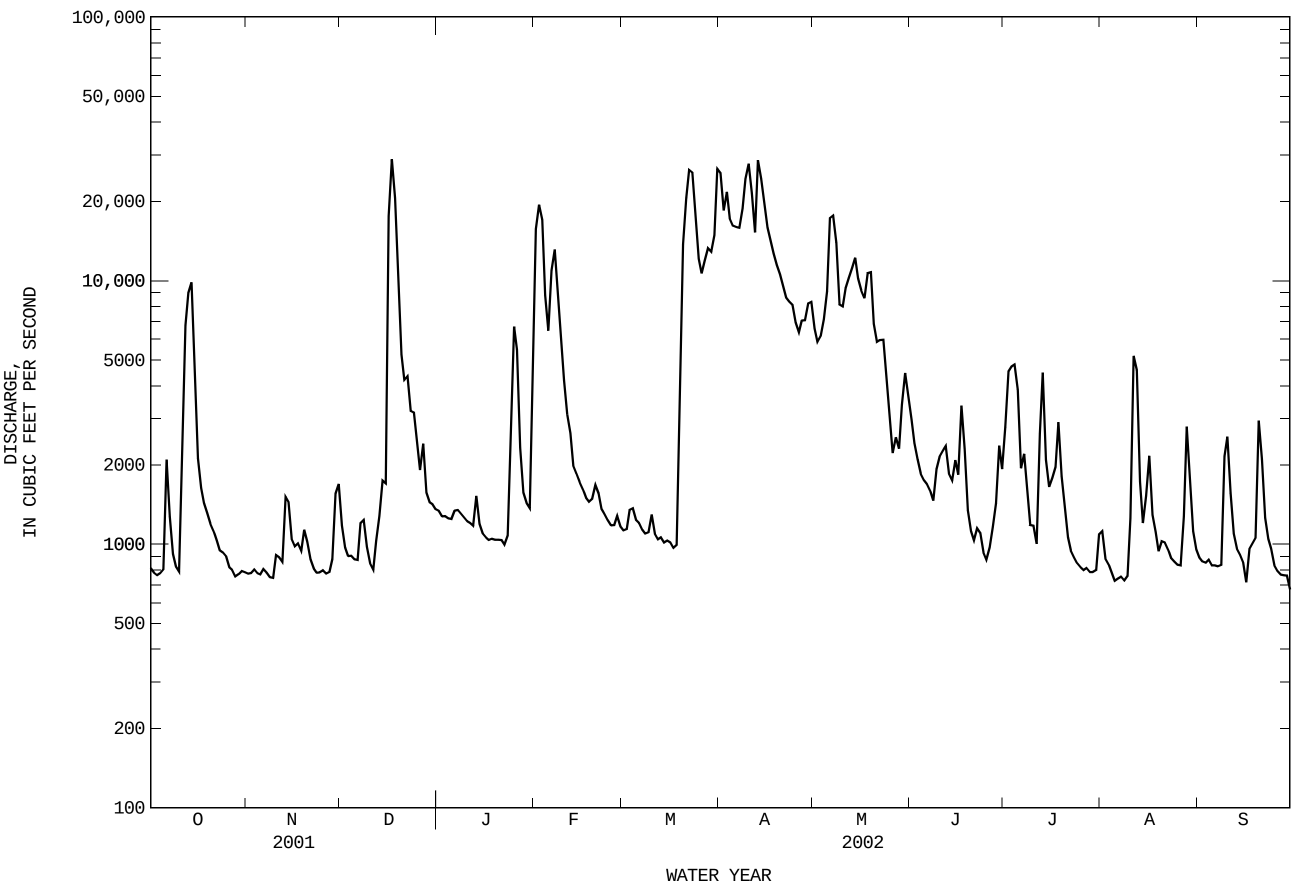
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1856	2340	2841	2253	3451	4085	4665	6529	5132	2006	1106	1191
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1925 - 2002h	
ANNUAL TOTAL	1825931		1528261			
ANNUAL MEAN	5003		4187		3150	
HIGHEST ANNUAL MEAN					9702	1992
LOWEST ANNUAL MEAN					280	1956
HIGHEST DAILY MEAN	35300	Feb 18	28900	Dec 17	133000	Apr 23 1942
LOWEST DAILY MEAN	703	Sep 30	673	Sep 30	32	Oct 4 1924
ANNUAL SEVEN-DAY MINIMUM	768	Sep 29	761	Aug 3	32	Oct 14 1924
MAXIMUM PEAK FLOW			40500	Apr 3	150000	Apr 23 1942
MAXIMUM PEAK STAGE			36.91	Apr 3	41.55	Apr 22 1942
ANNUAL RUNOFF (AC-FT)	3622000		3031000		2282000	
10 PERCENT EXCEEDS	15000		12800		8830	
50 PERCENT EXCEEDS	1900		1370		956	
90 PERCENT EXCEEDS	849		800		243	

e Estimated
h See PERIOD OF RECORD paragraph.



08062500 Trinity River near Rosser, TX--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--Oct. 2001 to Sept. 2002 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Datum of gage is 297.65 ft above NGVD of 1929.

REMARKS.--Records fair.

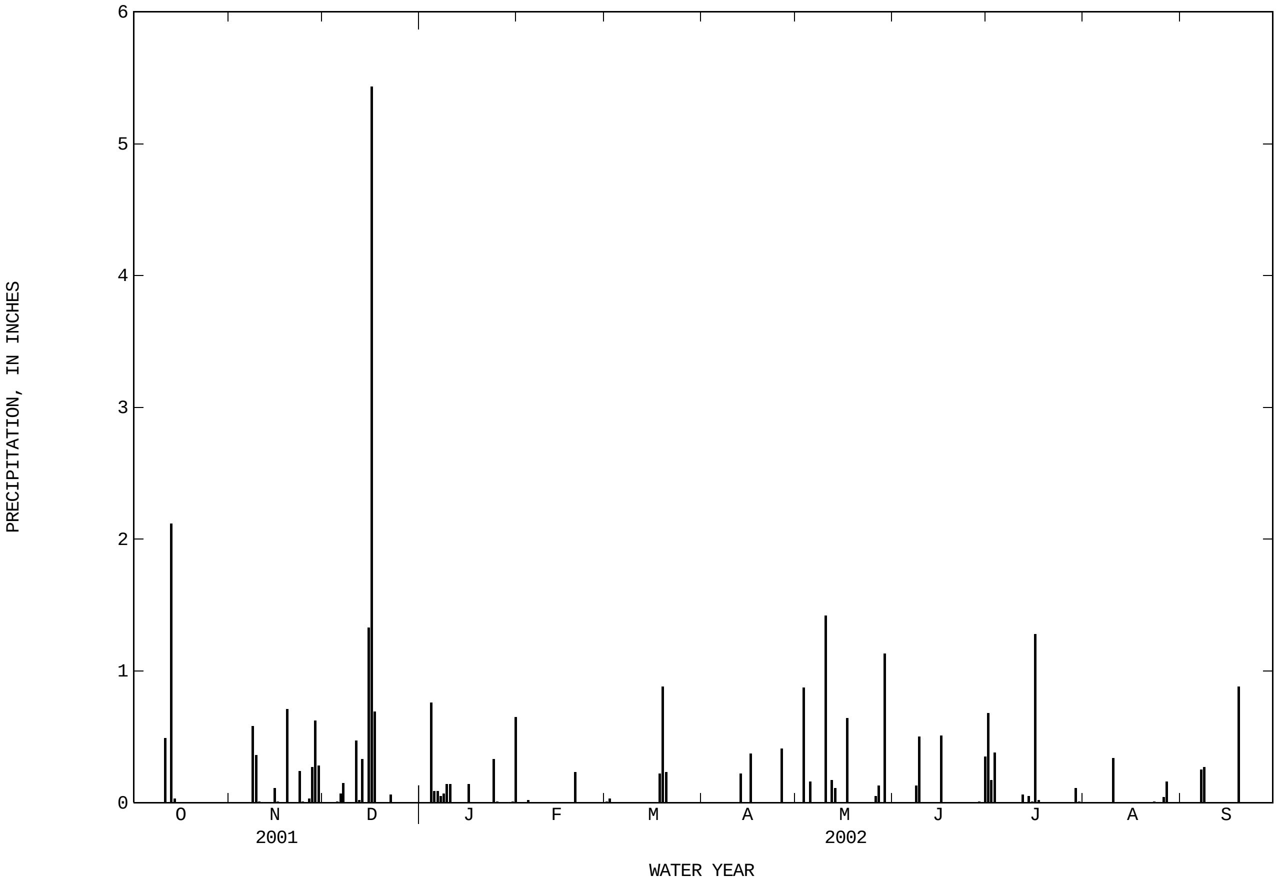
EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 5.43 inches, Dec. 16.

PRECIPITATION FROM DCP, in INCHES, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.68	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.17	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87	0.00	0.38	0.00	0.00
4	0.00	0.00	0.00	0.76	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.01	0.09	---	0.00	0.00	0.16	0.00	0.00	0.00	0.00
6	0.00	0.00	0.07	0.09	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.15	0.05	---	0.00	0.00	0.00	0.00	0.00	0.00	0.25
8	0.00	0.58	0.00	0.07	---	0.00	0.00	0.00	0.13	0.00	0.00	0.27
9	0.00	0.36	0.00	0.14	---	0.00	0.00	0.00	0.50	0.00	0.00	0.00
10	0.00	0.01	0.00	0.14	---	0.00	0.00	1.42	0.00	0.00	0.34	0.00
11	0.49	---	0.47	---	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	0.02	---	0.00	0.00	0.00	0.17	0.00	0.06	0.00	0.00
13	2.12	---	0.33	---	0.00	0.00	0.22	0.11	0.00	0.00	0.00	0.00
14	0.03	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00
15	0.00	0.11	1.33	---	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
16	0.00	0.01	e5.43	0.14	0.00	0.00	0.37	0.00	0.51	1.28	0.00	0.00
17	0.00	0.00	e0.69	---	0.00	0.00	0.00	0.64	0.00	0.02	0.00	0.00
18	0.00	0.00	0.00	---	0.00	e0.22	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.71	0.00	---	0.23	e0.88	0.00	0.00	0.00	0.00	0.00	0.88
20	0.00	0.00	0.00	---	0.00	e0.23	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.06	---	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.24	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
24	0.00	0.01	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.03	0.00	0.00	0.00	0.00	0.41	0.05	0.00	0.00	0.04	0.00
27	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.16	0.00
28	0.00	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
29	0.00	0.28	0.00	0.00	---	0.00	0.00	1.13	0.00	0.11	0.00	0.00
30	0.00	0.00	0.00	0.01	---	0.00	0.00	0.00	0.35	0.01	0.00	0.00
31	0.00	---	0.00	0.65	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	2.64	---	8.56	---	---	---	1.00	4.68	1.50	2.77	0.55	1.40

e Estimated

08062500 Trinity River near Rosser, TX--Continued



08062500 Trinity River near Rosser, TX--Continued

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, 6.5 units, Apr. 12, 2002.
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, 775 microsiemens/cm, Mar. 11; minimum, 254 microsiemens/cm, Apr. 18.
pH: Maximum, 8.6 units, on several days; minimum, 6.5 units, Apr. 12.
WATER TEMPERATURE: Maximum, 32.2°C, July 11, Aug. 4; minimum, 6.9°C, Jan. 5.
DISSOLVED OXYGEN: Maximum, 13.4 mg/L, Mar. 5; minimum, 2.8 mg/L, Oct. 12, 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV													
01...	1035	799	716	7.8	19.5	7.7	84	<2.0	160	61	56.2	5.70	69.0
MAR													
28...	0950	13500	394	7.9	15.0	9.9	99	2.3	140	32	50.0	4.06	23.8
MAY													
01...	0950	6660	418	8.0	22.5	7.7	92	<2.0	130	27	46.7	4.33	27.3
JUN													
27...	0900	1170	700	7.8	29.0	6.4	86	2.2	170	63	57.8	6.05	67.6
JUL													
17...	1045	2080	610	7.6	27.5	6.8	88	3.0	160	61	55.8	5.56	53.8
SEP													
03...	1045	908	688	7.7	29.0	7.7	100	2.2	--	--	--	--	--

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
NOV													
01...	2	46	9.86	<1	126	104	83.1	71.7	1.1	8.0	424	11.6	.079
MAR													
28...	.9	26	4.32	<1	133	110	46.0	22.6	.4	4.0	226	1.19	.018
MAY													
01...	1	30	4.69	<1	131	109	46.2	22.4	.4	4.1	230	2.04	.025
JUN													
27...	2	45	9.17	<1	129	107	85.3	64.5	1.1	7.0	404	8.30	.094
JUL													
17...	2	40	7.85	<1	124	102	68.8	51.9	.9	7.6	347	6.91	.037
SEP													
03...	--	--	--	<1	121	100	78.6	65.3	1.2	7.6	--	9.25	.052

08062500 Trinity River near Rosser, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
NOV							
01...	11.7	.07	.87	.93	2.02	1.88	5.77
MAR							
28...	1.21	.05	.39	.44	.12	.12	.371
MAY							
01...	2.06	E.03	--	.54	.26	.23	.711
JUN							
27...	8.40	.06	.70	.76	1.59	1.59	4.88
JUL							
17...	6.94	E.04	--	.75	.94	.97	2.98
SEP							
03...	9.30	<.04	--	.79	1.72	1.62	4.97

Remark codes used in this report:
< -- Less than
E -- Estimated value

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	698	640	666	724	711	720	681	620	637	---	---	---
2	716	698	711	719	711	715	634	626	629	---	---	---
3	718	712	716	732	708	721	647	628	640	620	600	608
4	716	708	712	716	707	711	674	647	665	628	620	624
5	718	709	712	722	710	717	699	674	688	635	622	628
6	731	541	662	731	718	726	708	691	699	655	634	641
7	613	428	500	731	718	724	726	701	710	664	653	657
8	564	445	532	725	701	718	725	701	714	660	646	653
9	618	564	589	706	703	704	711	684	701	662	648	656
10	671	618	649	722	703	714	684	653	671	669	658	664
11	685	474	662	---	---	---	678	655	672	676	667	672
12	502	360	411	---	---	---	708	676	692	675	666	671
13	412	281	383	---	---	---	713	697	708	699	668	682
14	396	276	303	653	619	635	700	684	694	---	---	---
15	377	278	352	689	631	664	687	585	622	---	---	---
16	428	377	401	678	602	636	---	---	---	728	623	683
17	483	428	459	617	602	611	---	---	---	730	725	728
18	530	483	498	644	617	630	---	---	---	---	---	---
19	561	530	552	676	644	662	---	---	---	---	---	---
20	588	538	562	704	676	692	---	---	---	---	---	---
21	604	588	599	723	704	712	---	---	---	---	---	---
22	626	589	609	723	668	694	---	---	---	---	---	---
23	643	623	631	668	653	658	---	---	---	---	---	---
24	662	643	655	698	664	678	---	---	---	---	---	---
25	669	662	667	700	693	697	---	---	---	---	---	---
26	677	666	670	708	698	704	---	---	---	---	---	---
27	691	677	684	719	699	710	---	---	---	---	---	---
28	692	670	680	701	690	697	---	---	---	---	---	---
29	703	692	699	704	674	692	---	---	---	---	---	---
30	718	703	713	681	642	661	---	---	---	---	---	---
31	729	712	721	---	---	---	---	---	---	---	---	---
MONTH	731	276	592	---	---	---	---	---	---	---	---	---

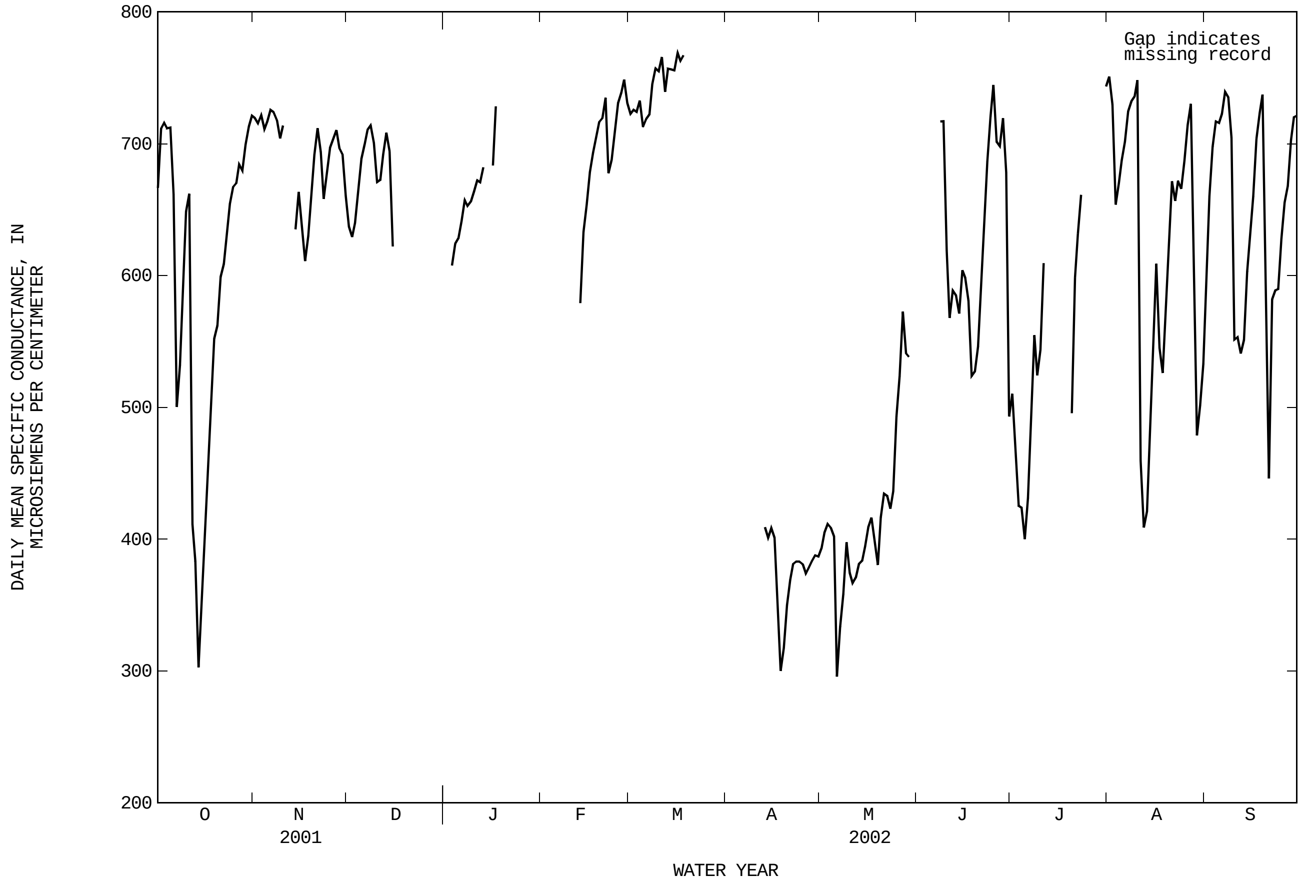
08062500 Trinity River near Rosser, TX--Continued

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	726	719	723	---	---	---	400	388	393
2	---	---	---	730	720	726	---	---	---	416	396	405
3	---	---	---	734	716	724	---	---	---	417	407	412
4	---	---	---	743	716	733	---	---	---	418	404	408
5	---	---	---	722	705	713	---	---	---	448	270	402
6	---	---	---	726	711	719	---	---	---	321	263	296
7	---	---	---	732	712	722	---	---	---	347	321	333
8	---	---	---	756	722	745	---	---	---	371	345	358
9	---	---	---	760	753	757	---	---	---	430	371	398
10	---	---	---	759	749	755	---	---	---	439	288	374
11	---	---	---	775	752	766	---	---	---	402	333	366
12	---	---	---	752	732	739	---	---	---	379	333	371
13	591	567	579	760	745	757	415	401	409	401	369	381
14	656	591	633	762	750	756	403	399	401	388	374	384
15	664	648	654	770	749	756	412	401	408	409	382	395
16	685	664	679	771	766	769	406	397	401	410	408	409
17	701	684	693	769	758	763	402	272	353	428	409	416
18	719	693	704	771	763	767	359	254	300	428	378	397
19	728	709	716	---	---	---	346	299	318	398	354	380
20	728	706	719	---	---	---	360	340	350	430	398	417
21	747	725	735	---	---	---	385	356	369	437	430	434
22	731	661	678	---	---	---	385	378	381	438	422	433
23	703	673	688	---	---	---	387	380	383	425	421	423
24	721	703	710	---	---	---	388	380	383	468	420	436
25	735	721	731	---	---	---	383	374	381	507	468	493
26	745	735	738	---	---	---	382	367	374	541	507	524
27	754	745	749	---	---	---	385	371	378	598	541	573
28	746	717	731	---	---	---	390	376	383	591	522	541
29	---	---	---	---	---	---	392	384	388	578	449	538
30	---	---	---	---	---	---	392	381	387	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	566	453	510	763	741	751	630	571	604
2	---	---	---	527	436	470	759	668	730	685	630	660
3	---	---	---	473	405	425	668	645	654	708	685	698
4	---	---	---	457	391	424	684	650	670	723	708	717
5	---	---	---	450	382	400	703	672	687	720	708	716
6	---	---	---	456	410	431	711	696	702	738	713	722
7	---	---	---	549	456	498	730	711	724	742	736	740
8	721	712	717	569	542	555	737	726	732	744	720	735
9	734	689	717	558	512	524	740	726	736	736	610	705
10	689	580	619	585	521	544	760	735	748	668	498	551
11	580	553	568	622	585	609	742	311	460	575	520	553
12	617	553	589	---	---	---	529	370	409	567	526	541
13	619	558	585	---	---	---	446	391	421	575	535	551
14	593	556	571	---	---	---	518	446	480	617	575	603
15	618	589	604	---	---	---	616	518	549	652	616	631
16	616	594	598	---	---	---	646	564	609	681	652	660
17	641	530	581	---	---	---	577	515	545	714	681	704
18	544	489	524	---	---	---	550	505	526	730	712	723
19	541	524	527	---	---	---	605	524	568	744	730	737
20	569	527	546	571	411	495	638	605	624	747	434	592
21	608	569	590	618	571	598	693	637	671	530	410	446
22	664	608	634	646	618	632	669	651	657	611	530	582
23	704	664	687	668	646	661	675	667	672	617	571	589
24	741	704	721	---	---	---	678	661	666	600	574	590
25	748	741	745	---	---	---	702	678	687	646	600	628
26	744	684	702	---	---	---	722	702	714	670	644	656
27	710	694	698	---	---	---	754	722	730	689	661	668
28	738	708	719	---	---	---	754	418	644	710	689	703
29	716	581	678	---	---	---	512	418	479	726	709	720
30	581	433	493	---	---	---	515	490	501	728	717	721
31	---	---	---	751	738	743	571	497	533	---	---	---
MONTH	---	---	---	---	---	---	763	311	622	747	410	648

08062500 Trinity River near Rosser, TX--Continued



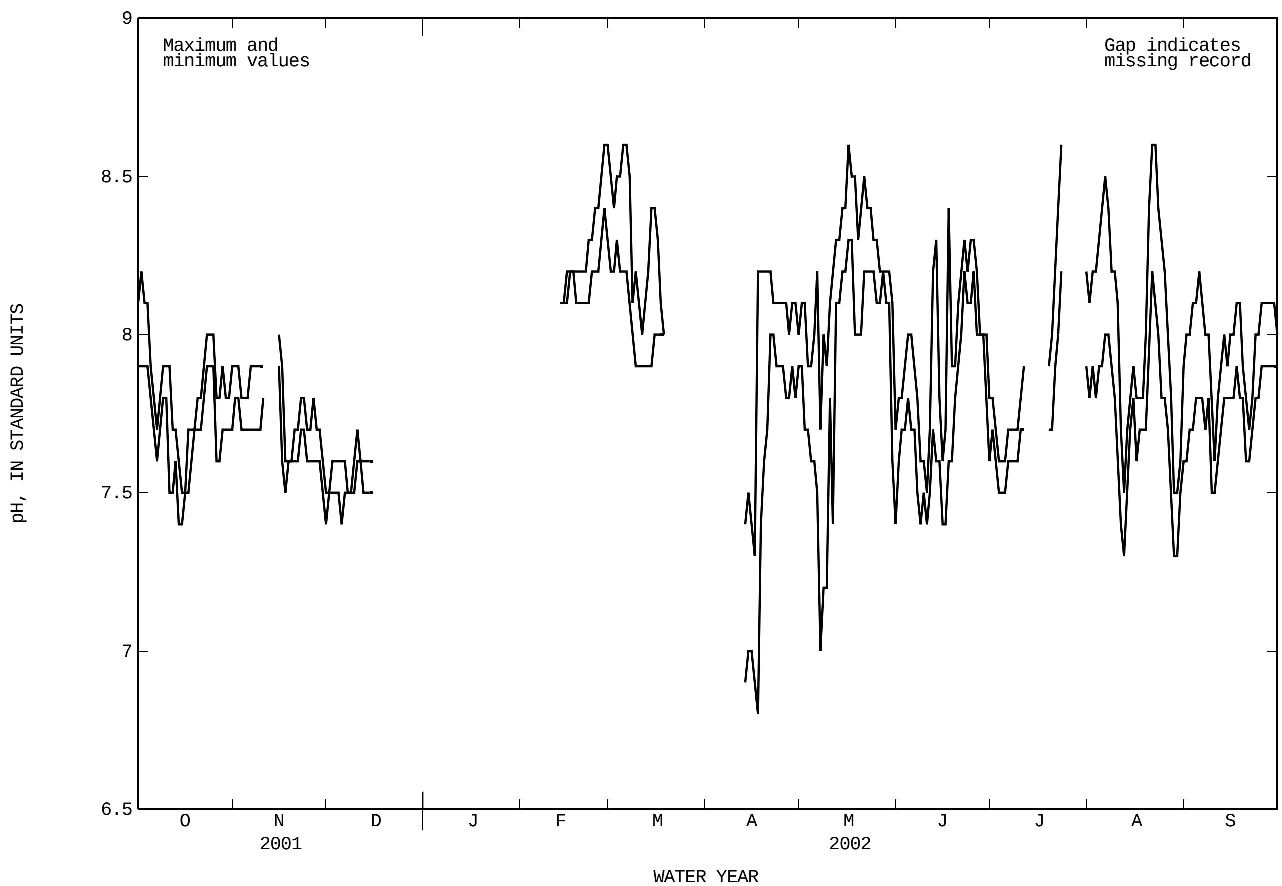
PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.1	7.9	7.9	7.8	7.5	7.5	---	---	---	---	8.5	8.2
2	8.2	7.9	7.9	7.8	7.6	7.5	---	---	---	---	8.4	8.2
3	8.1	7.9	7.8	7.7	7.6	7.5	---	---	---	---	8.5	8.3
4	8.1	7.9	7.8	7.7	7.6	7.5	---	---	---	---	8.5	8.2
5	7.9	7.8	7.8	7.7	7.6	7.4	---	---	---	---	8.6	8.2
6	7.8	7.7	7.9	7.7	7.6	7.5	---	---	---	---	8.6	8.2
7	7.7	7.6	7.9	7.7	7.5	7.5	---	---	---	---	8.5	8.1
8	7.8	7.7	7.9	7.7	7.5	7.5	---	---	---	---	8.1	8.0
9	7.9	7.8	7.9	7.7	7.6	7.5	---	---	---	---	8.2	7.9
10	7.9	7.8	7.9	7.8	7.7	7.6	---	---	---	---	8.1	7.9
11	7.9	7.5	---	---	7.6	7.6	---	---	---	---	8.0	7.9
12	7.7	7.5	---	---	7.6	7.5	---	---	---	---	8.1	7.9
13	7.7	7.6	---	---	7.6	7.5	---	---	8.1	8.1	8.2	7.9
14	7.6	7.4	---	---	7.6	7.5	---	---	8.1	8.1	8.4	7.9
15	7.5	7.4	8.0	7.9	7.6	7.5	---	---	8.2	8.1	8.4	8.0
16	7.5	7.5	7.9	7.6	---	---	---	---	8.2	8.2	8.3	8.0
17	7.7	7.5	7.6	7.5	---	---	---	---	8.2	8.2	8.1	8.0
18	7.7	7.6	7.6	7.6	---	---	---	---	8.2	8.1	8.0	8.0
19	7.7	7.7	7.6	7.6	---	---	---	---	8.2	8.1	---	---
20	7.8	7.7	7.7	7.6	---	---	---	---	8.2	8.1	---	---
21	7.8	7.7	7.7	7.6	---	---	---	---	8.2	8.1	---	---
22	7.9	7.8	7.8	7.7	---	---	---	---	8.3	8.1	---	---
23	8.0	7.9	7.8	7.7	---	---	---	---	8.3	8.2	---	---
24	8.0	7.9	7.7	7.6	---	---	---	---	8.4	8.2	---	---
25	8.0	7.9	7.7	7.6	---	---	---	---	8.4	8.2	---	---
26	7.8	7.6	7.8	7.6	---	---	---	---	8.5	8.3	---	---
27	7.8	7.6	7.7	7.6	---	---	---	---	8.6	8.4	---	---
28	7.9	7.7	7.7	7.6	---	---	---	---	8.6	8.3	---	---
29	7.8	7.7	7.6	7.5	---	---	---	---	---	---	---	---
30	7.8	7.7	7.5	7.4	---	---	---	---	---	---	---	---
31	7.9	7.7	---	---	---	---	---	---	---	---	---	---
MONTH	8.2	7.4	---	---	---	---	---	---	---	---	---	---

08062500 Trinity River near Rosser, TX--Continued

PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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	7.6	7.8	7.7	8.1	7.8	8.0	7.6
2	---	---	8.1	7.7	7.8	7.7	7.7	7.6	8.2	7.9	8.0	7.7
3	---	---	7.9	7.7	7.9	7.7	7.6	7.5	8.2	7.8	8.1	7.7
4	---	---	7.9	7.6	8.0	7.8	7.6	7.5	8.3	7.9	8.1	7.8
5	---	---	8.0	7.6	8.0	7.7	7.6	7.5	8.4	7.9	8.2	7.8
6	---	---	8.2	7.5	7.9	7.7	7.7	7.6	8.5	8.0	8.1	7.8
7	---	---	7.7	7.0	7.8	7.5	7.7	7.6	8.4	8.0	8.0	7.7
8	---	---	8.0	7.2	7.6	7.4	7.7	7.6	8.2	7.9	8.0	7.8
9	---	---	7.9	7.2	7.6	7.5	7.7	7.6	8.2	7.8	7.8	7.5
10	---	---	8.1	7.8	7.5	7.4	7.8	7.7	8.1	7.6	7.6	7.5
11	---	---	8.2	7.4	7.7	7.5	7.9	7.7	7.7	7.4	7.8	7.6
12	---	---	8.3	8.1	8.2	7.7	---	---	7.5	7.3	7.9	7.7
13	7.4	6.9	8.3	8.1	8.3	7.6	---	---	7.7	7.5	8.0	7.8
14	7.5	7.0	8.4	8.2	7.8	7.6	---	---	7.8	7.7	7.9	7.8
15	7.4	7.0	8.4	8.2	7.6	7.4	---	---	7.9	7.8	8.0	7.8
16	7.3	6.9	8.6	8.3	7.7	7.4	---	---	7.8	7.6	8.0	7.8
17	8.2	6.8	8.5	8.3	8.4	7.6	---	---	7.8	7.7	8.1	7.9
18	8.2	7.4	8.5	8.0	7.9	7.6	---	---	7.8	7.7	8.1	7.8
19	8.2	7.6	8.3	8.0	7.9	7.8	7.9	7.7	8.0	7.7	7.9	7.8
20	8.2	7.7	8.4	8.0	8.1	7.9	8.0	7.7	8.4	7.9	7.8	7.6
21	8.2	8.0	8.5	8.2	8.2	8.0	8.2	7.9	8.6	8.2	7.7	7.6
22	8.1	8.0	8.4	8.2	8.3	8.2	8.4	8.0	8.6	8.1	7.8	7.7
23	8.1	7.9	8.4	8.2	8.2	8.1	8.6	8.2	8.4	8.0	8.0	7.8
24	8.1	7.9	8.3	8.2	8.3	8.1	---	---	8.3	7.8	8.0	7.8
25	8.1	7.9	8.3	8.1	8.3	8.2	---	---	8.2	7.8	8.1	7.9
26	8.1	7.8	8.2	8.1	8.2	8.0	---	---	8.0	7.7	8.1	7.9
27	8.0	7.8	8.2	8.2	8.0	8.0	---	---	7.8	7.5	8.1	7.9
28	8.1	7.9	8.2	8.1	8.0	8.0	---	---	7.5	7.3	8.1	7.9
29	8.1	7.8	8.2	8.1	8.0	7.8	---	---	7.5	7.3	8.1	7.9
30	8.0	7.9	8.1	7.6	7.8	7.6	---	---	7.6	7.5	8.0	7.9
31	---	---	7.7	7.4	---	---	8.2	7.9	7.9	7.6	---	---
MONTH	---	---	8.6	7.0	8.4	7.4	---	---	8.6	7.3	8.2	7.5



08062500 Trinity River near Rosser, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

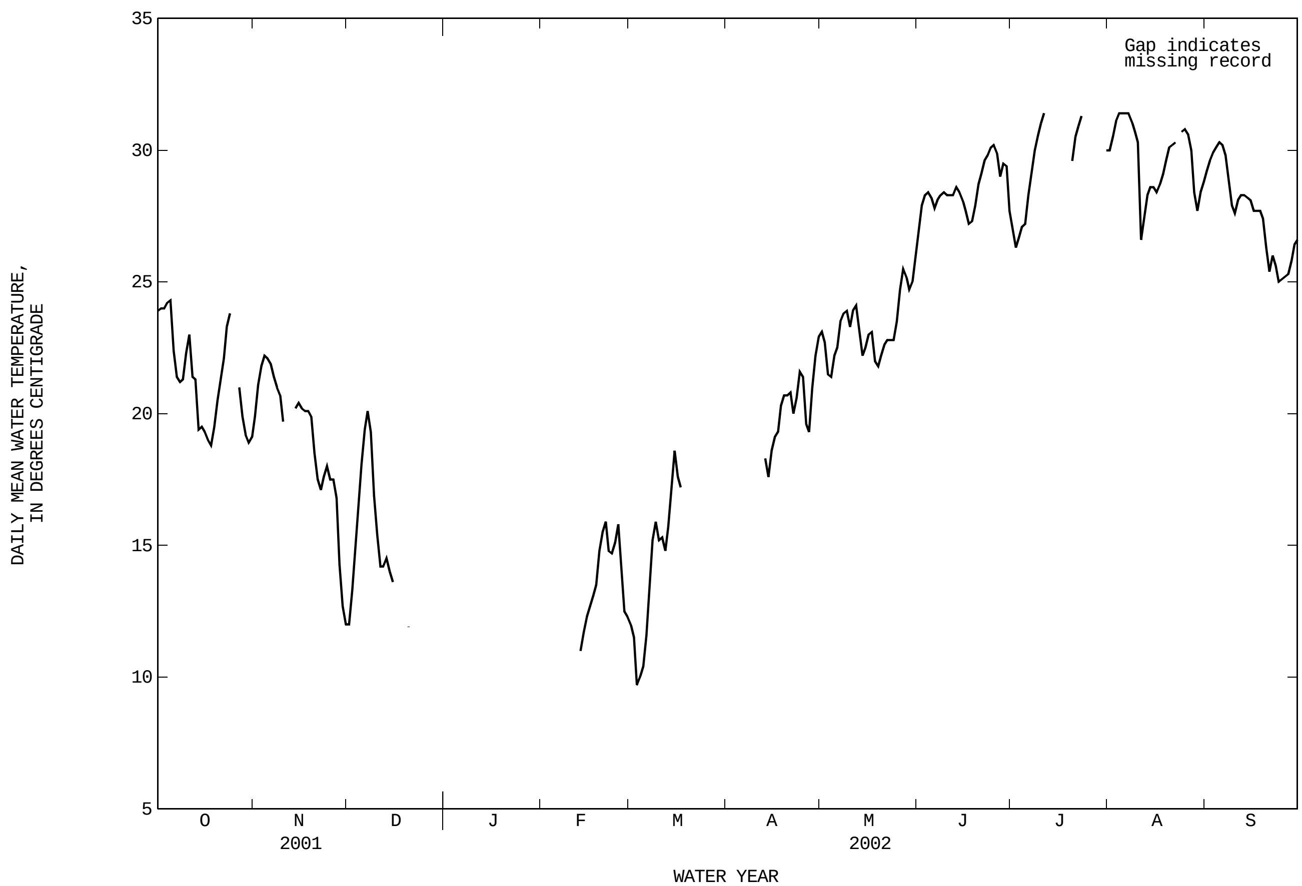
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.6	23.2	23.9	20.6	19.2	19.9	12.5	11.6	12.0	---	---	---
2	24.7	23.2	24.0	21.5	20.6	21.1	13.9	12.5	13.3	---	---	---
3	24.5	23.3	24.0	22.3	21.2	21.8	15.3	13.9	14.8	---	---	---
4	24.9	23.6	24.2	22.6	21.8	22.2	17.4	15.3	16.4	---	---	---
5	24.7	23.4	24.3	22.5	21.7	22.1	18.7	17.4	18.1	---	---	---
6	23.4	21.9	22.4	22.4	21.5	21.9	19.8	18.7	19.4	---	---	---
7	22.2	21.1	21.4	21.8	21.0	21.4	20.3	19.8	20.1	---	---	---
8	21.5	20.9	21.2	21.5	20.6	21.0	20.2	18.0	19.3	---	---	---
9	21.7	20.9	21.3	21.1	20.1	20.7	18.0	16.1	16.9	---	---	---
10	23.0	21.6	22.3	20.1	19.5	19.7	16.1	14.7	15.4	---	---	---
11	23.4	21.8	23.0	---	---	---	14.7	13.8	14.2	---	---	---
12	21.9	20.9	21.4	---	---	---	14.8	13.7	14.2	---	---	---
13	21.7	19.3	21.3	---	---	---	14.7	14.0	14.5	---	---	---
14	21.4	18.9	19.4	20.5	19.8	20.2	14.3	13.7	14.0	---	---	---
15	20.0	18.9	19.5	20.6	20.2	20.4	14.2	13.3	13.6	---	---	---
16	19.9	18.8	19.3	20.4	19.9	20.2	---	---	---	---	---	---
17	19.3	18.6	19.0	20.4	19.8	20.1	---	---	---	---	---	---
18	19.2	18.6	18.8	20.3	20.0	20.1	---	---	---	---	---	---
19	20.2	19.2	19.5	20.3	19.1	19.9	---	---	---	---	---	---
20	21.0	20.1	20.5	19.1	17.9	18.5	12.5	11.6	11.9	---	---	---
21	21.7	20.9	21.3	17.9	17.1	17.5	---	---	---	---	---	---
22	22.7	21.5	22.1	17.4	16.7	17.1	---	---	---	---	---	---
23	23.9	22.5	23.3	18.2	17.1	17.6	---	---	---	---	---	---
24	24.2	23.5	23.8	18.3	17.7	18.0	---	---	---	---	---	---
25	---	---	---	17.8	17.0	17.5	---	---	---	---	---	---
26	---	---	---	17.9	17.2	17.5	---	---	---	---	---	---
27	21.5	20.5	21.0	17.8	15.6	16.8	---	---	---	---	---	---
28	20.5	19.5	19.9	15.6	13.2	14.3	---	---	---	---	---	---
29	19.6	18.8	19.2	13.2	12.5	12.7	---	---	---	---	---	---
30	19.4	18.3	18.9	12.5	11.6	12.0	---	---	---	---	---	---
31	19.5	18.6	19.1	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	12.3	11.8	12.0	---	---	---	23.6	22.5	23.1
2	---	---	---	12.1	10.4	11.5	---	---	---	23.3	22.2	22.7
3	---	---	---	10.4	9.4	9.7	---	---	---	22.2	20.9	21.5
4	---	---	---	10.2	9.8	10.0	---	---	---	22.3	20.7	21.4
5	---	---	---	10.8	10.0	10.4	---	---	---	22.7	21.6	22.2
6	---	---	---	12.6	10.7	11.6	---	---	---	23.3	21.5	22.5
7	---	---	---	14.4	12.6	13.7	---	---	---	23.8	23.2	23.5
8	---	---	---	15.8	14.3	15.2	---	---	---	24.0	23.6	23.8
9	---	---	---	16.3	15.5	15.9	---	---	---	24.4	23.5	23.9
10	---	---	---	15.7	14.7	15.2	---	---	---	24.4	22.6	23.3
11	---	---	---	15.6	14.6	15.3	---	---	---	24.2	23.4	23.9
12	---	---	---	15.4	14.3	14.8	---	---	---	24.5	23.7	24.1
13	11.3	10.6	11.0	16.5	15.0	15.7	18.7	17.6	18.3	24.0	22.3	23.1
14	12.1	11.3	11.7	18.0	16.1	17.0	18.0	17.3	17.6	22.6	21.8	22.2
15	12.6	12.1	12.3	19.3	18.0	18.6	19.4	18.0	18.6	23.0	22.0	22.5
16	13.1	12.4	12.7	18.3	17.0	17.6	19.5	18.8	19.1	23.6	22.5	23.0
17	13.4	13.0	13.1	17.5	17.0	17.2	20.2	18.7	19.3	23.5	22.7	23.1
18	13.9	13.3	13.5	---	---	---	20.8	20.1	20.3	22.7	21.7	22.0
19	15.4	13.9	14.8	---	---	---	20.8	20.6	20.7	22.3	21.3	21.8
20	16.0	15.2	15.5	---	---	---	21.0	20.4	20.7	23.0	21.5	22.2
21	16.3	15.4	15.9	---	---	---	21.1	20.3	20.8	23.3	22.0	22.6
22	15.4	14.5	14.8	---	---	---	20.4	19.7	20.0	23.4	22.2	22.8
23	15.1	14.4	14.7	---	---	---	21.2	20.2	20.6	23.4	22.3	22.8
24	15.5	14.6	15.1	---	---	---	22.2	21.2	21.6	23.3	22.4	22.8
25	16.5	15.3	15.8	---	---	---	22.2	20.3	21.4	24.3	22.9	23.5
26	15.5	12.7	14.1	---	---	---	20.3	18.8	19.6	25.4	24.0	24.7
27	12.8	12.1	12.5	---	---	---	20.1	18.8	19.3	25.9	25.2	25.5
28	12.7	12.0	12.3	---	---	---	21.8	20.1	21.0	25.5	24.9	25.2
29	---	---	---	---	---	---	22.7	21.8	22.2	25.4	23.8	24.7
30	---	---	---	---	---	---	23.4	22.5	22.9	25.9	24.1	25.0
31	---	---	---	---	---	---	---	---	---	26.6	25.3	26.0
MONTH	---	---	---	---	---	---	---	---	---	26.6	20.7	23.3

08062500 Trinity River near Rosser, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	27.7	26.5	27.0	27.4	26.6	27.0	30.5	29.6	30.0	30.0	28.5	29.2
2	28.3	27.6	27.9	26.7	25.9	26.3	31.3	29.8	30.5	30.5	28.7	29.6
3	28.6	28.0	28.3	27.4	26.2	26.7	32.0	30.3	31.1	30.5	29.1	29.9
4	28.7	28.1	28.4	27.6	26.5	27.1	32.2	30.6	31.4	30.7	29.5	30.1
5	28.5	27.7	28.2	27.8	26.6	27.2	32.0	30.7	31.4	30.9	29.7	30.3
6	28.3	27.3	27.8	29.0	27.8	28.3	31.9	30.6	31.4	30.6	29.7	30.2
7	28.5	27.7	28.1	30.0	28.6	29.2	31.9	30.7	31.4	30.2	29.4	29.8
8	28.5	28.1	28.3	30.5	29.6	30.0	31.5	30.6	31.1	29.5	28.1	28.8
9	28.7	28.2	28.4	31.0	30.0	30.5	31.3	29.9	30.7	28.1	27.6	27.9
10	28.7	27.8	28.3	31.5	30.4	31.0	31.0	29.3	30.3	28.1	26.8	27.6
11	28.7	27.9	28.3	32.2	30.8	31.4	29.3	25.1	26.6	28.3	27.7	28.1
12	28.7	27.9	28.3	---	---	---	28.1	26.4	27.5	28.8	28.0	28.3
13	29.0	28.3	28.6	---	---	---	28.7	27.9	28.3	28.6	27.9	28.3
14	28.8	27.9	28.4	---	---	---	28.7	28.4	28.6	28.7	27.8	28.2
15	28.6	27.6	28.1	---	---	---	29.0	28.2	28.6	28.4	27.7	28.1
16	28.1	27.5	27.7	---	---	---	28.8	28.0	28.4	28.1	27.4	27.7
17	27.8	26.5	27.2	---	---	---	29.0	28.4	28.7	28.1	27.1	27.7
18	27.8	26.7	27.3	---	---	---	29.7	28.6	29.1	28.2	27.4	27.7
19	28.4	27.4	27.9	---	---	---	30.3	29.0	29.6	27.6	27.0	27.4
20	29.4	28.2	28.7	30.2	29.1	29.6	30.8	29.5	30.1	27.1	25.7	26.3
21	29.9	28.5	29.1	31.1	29.9	30.5	30.8	29.7	30.2	26.0	24.7	25.4
22	30.3	29.1	29.6	31.6	30.3	30.9	31.0	29.7	30.3	26.2	25.8	26.0
23	30.3	29.3	29.8	32.1	30.6	31.3	---	---	---	26.1	25.3	25.6
24	30.7	29.4	30.1	---	---	---	31.4	30.1	30.7	25.5	24.6	25.0
25	30.9	29.8	30.2	---	---	---	31.5	30.2	30.8	25.8	24.4	25.1
26	30.7	29.4	29.9	---	---	---	31.3	29.8	30.6	25.9	24.6	25.2
27	29.4	28.7	29.0	---	---	---	30.8	29.0	30.0	25.9	24.5	25.3
28	29.9	29.1	29.5	---	---	---	29.0	27.5	28.4	26.5	25.1	25.8
29	29.8	28.8	29.4	---	---	---	28.3	27.2	27.7	26.9	25.7	26.4
30	28.8	26.9	27.7	---	---	---	28.9	28.1	28.4	27.0	26.1	26.6
31	---	---	---	30.7	29.4	30.0	29.5	28.2	28.8	---	---	---
MONTH	30.9	26.5	28.5	---	---	---	---	---	---	30.9	24.4	27.6



08062500 Trinity River near Rosser, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

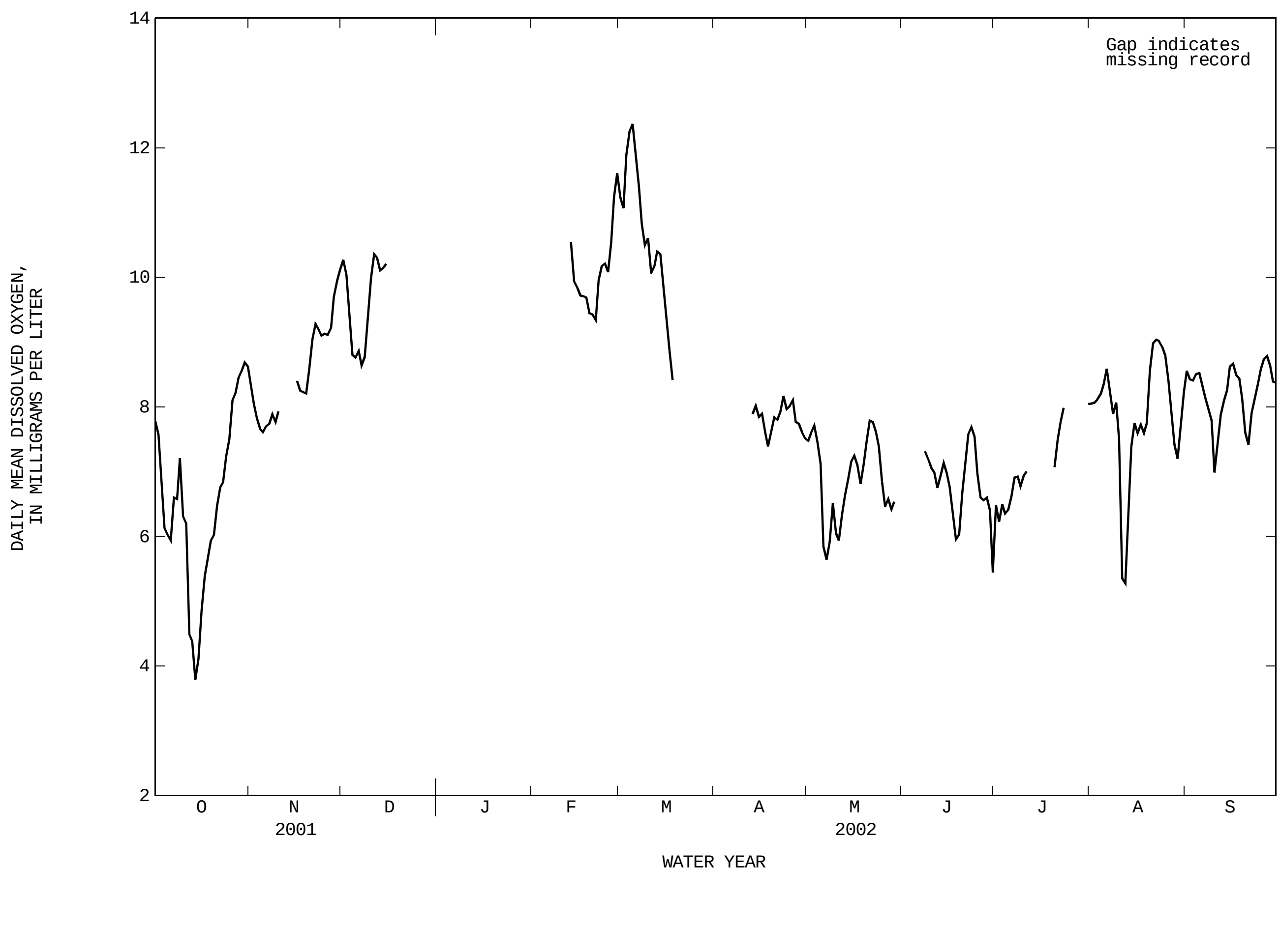
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.1	7.5	7.8	8.7	8.1	8.4	10.6	9.9	10.3	---	---	---
2	7.8	7.3	7.6	8.3	7.8	8.0	10.3	9.8	10.0	---	---	---
3	7.3	6.3	6.8	8.1	7.5	7.8	9.9	9.1	9.4	---	---	---
4	6.3	6.0	6.1	8.0	7.4	7.7	9.2	8.4	8.8	---	---	---
5	6.2	5.9	6.0	7.9	7.3	7.6	9.5	8.2	8.8	---	---	---
6	6.1	5.8	5.9	8.2	7.4	7.7	9.3	8.5	8.9	---	---	---
7	6.5	6.1	6.6	8.1	7.2	7.7	8.8	8.4	8.6	---	---	---
8	6.7	6.4	6.6	8.3	7.6	7.9	9.0	8.4	8.8	---	---	---
9	6.9	6.5	7.2	8.0	7.6	7.8	9.7	8.9	9.4	---	---	---
10	6.6	6.0	6.3	8.1	7.5	7.9	10.3	9.4	10	---	---	---
11	6.8	5.1	6.2	---	---	---	10.6	10.0	10.4	---	---	---
12	5.4	2.8	4.5	---	---	---	10.4	10.1	10.3	---	---	---
13	5.5	2.8	4.4	---	---	---	10.2	9.8	10.1	---	---	---
14	5.2	3.5	3.8	---	---	---	10.3	9.8	10.1	---	---	---
15	4.4	3.5	4.1	---	---	---	10.4	9.9	10.2	---	---	---
16	5.2	4.4	4.9	7.0	8.2	8.4	---	---	---	---	---	---
17	5.6	5.2	5.4	8.4	8.1	8.2	---	---	---	---	---	---
18	5.9	5.5	5.7	8.5	8.1	8.2	---	---	---	---	---	---
19	6.1	5.8	5.9	8.5	8.1	8.2	---	---	---	---	---	---
20	6.4	5.8	6.0	8.9	8.3	8.6	---	---	---	---	---	---
21	6.7	6.2	6.5	9.2	8.8	9.0	---	---	---	---	---	---
22	7.0	6.6	6.8	9.5	9.1	9.3	---	---	---	---	---	---
23	7.0	6.6	6.8	9.4	8.8	9.2	---	---	---	---	---	---
24	7.5	6.9	7.2	9.5	8.8	9.1	---	---	---	---	---	---
25	7.7	7.4	7.5	9.4	8.9	9.1	---	---	---	---	---	---
26	8.3	7.9	8.1	9.5	8.9	9.1	---	---	---	---	---	---
27	8.7	7.8	8.2	9.6	8.9	9.2	---	---	---	---	---	---
28	8.8	8.1	8.4	10.0	9.3	9.7	---	---	---	---	---	---
29	8.8	8.3	8.6	10.2	9.7	9.9	---	---	---	---	---	---
30	9.1	8.4	8.7	10.3	10.0	10.1	---	---	---	---	---	---
31	8.9	8.3	8.6	---	---	---	---	---	---	---	---	---
MONTH	9.1	2.8	6.6	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	11.7	10.7	11.2	---	---	---	7.6	7.4	7.5
2	---	---	---	11.8	10.2	11.1	---	---	---	7.7	7.5	7.6
3	---	---	---	12.6	11.1	11.9	---	---	---	7.8	7.4	7.7
4	---	---	---	12.8	11.5	12.2	---	---	---	7.6	7.3	7.5
5	---	---	---	13.4	11.6	12.4	---	---	---	7.7	5.9	7.1
6	---	---	---	12.4	11.3	11.8	---	---	---	6.2	5.6	5.8
7	---	---	---	12.4	10.6	11.4	---	---	---	5.7	5.5	5.6
8	---	---	---	11.4	10.1	10.8	---	---	---	6.3	5.6	5.9
9	---	---	---	11.5	9.4	10.5	---	---	---	6.7	6.3	6.5
10	---	---	---	11.3	9.9	10.6	---	---	---	6.6	5.4	6.0
11	---	---	---	10.5	9.6	10.1	---	---	---	6.1	5.8	5.9
12	---	---	---	11.2	9.4	10.2	---	---	---	6.6	6.0	6.3
13	10.7	10.1	10.5	11.4	9.4	10.4	8.1	7.8	7.9	6.8	6.4	6.6
14	10.1	9.8	9.9	11.4	9.4	10.4	8.1	7.9	8.0	7.2	6.5	6.9
15	10.0	9.7	9.8	11.1	9.0	9.9	8.1	7.6	7.8	7.4	6.9	7.1
16	9.9	9.6	9.7	10.3	8.6	9.4	8.1	7.7	7.9	7.4	7.1	7.2
17	9.8	9.5	9.7	9.4	8.4	8.9	8.0	7.3	7.6	7.2	7.0	7.1
18	9.8	9.6	9.7	8.9	8.2	8.4	7.8	7.1	7.4	7.1	6.6	6.8
19	9.6	9.2	9.4	---	---	---	7.9	7.3	7.6	7.3	7.0	7.1
20	9.7	9.1	9.4	---	---	---	8.2	7.6	7.8	7.7	7.1	7.5
21	9.5	9.2	9.3	---	---	---	8.3	7.4	7.8	8.0	7.5	7.8
22	10.4	9.5	10	---	---	---	8.5	7.7	7.9	7.9	7.6	7.8
23	10.5	9.7	10.2	---	---	---	8.6	7.7	8.2	7.7	7.4	7.6
24	10.7	9.8	10.2	---	---	---	8.5	7.6	8.0	7.6	7.3	7.4
25	10.5	9.4	10.1	---	---	---	8.4	7.7	8.0	7.4	6.6	6.8
26	11.3	9.7	10.5	---	---	---	8.6	7.7	8.1	6.6	6.2	6.5
27	11.8	10.5	11.2	---	---	---	8.0	7.6	7.8	6.8	6.3	6.6
28	12.5	10.7	11.6	---	---	---	8.1	7.5	7.7	6.9	5.9	6.4
29	---	---	---	---	---	---	7.8	7.5	7.6	6.7	6.3	6.5
30	---	---	---	---	---	---	7.8	7.3	7.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

08062500 Trinity River near Rosser, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	6.8	6.1	6.5	8.8	7.4	8.0	9.1	8.1	8.6
2	---	---	---	6.6	5.7	6.2	8.7	7.5	8.1	9.1	7.7	8.4
3	---	---	---	6.6	6.3	6.5	8.8	7.5	8.1	8.9	7.7	8.4
4	---	---	---	6.5	6.0	6.3	9.1	7.5	8.2	9.2	7.9	8.5
5	---	---	---	6.7	6.1	6.4	9.3	7.5	8.3	9.4	7.7	8.5
6	---	---	---	6.8	6.5	6.6	9.7	7.7	8.6	9.0	7.9	8.3
7	---	---	---	7.0	6.8	6.9	8.9	7.5	8.3	8.7	7.6	8.1
8	7.7	7.1	7.3	7.1	6.7	6.9	8.5	7.3	7.9	8.3	7.6	8.0
9	7.5	7.0	7.2	7.0	6.7	6.8	8.8	7.3	8.1	8.1	7.6	7.8
10	7.3	6.8	7.1	7.2	6.6	6.9	8.1	7.2	7.5	7.9	6.5	7.0
11	7.2	6.8	7.0	7.4	6.6	7.0	7.2	4.7	5.4	8.0	6.9	7.4
12	7.1	6.5	6.8	---	---	---	6.0	4.5	5.3	8.2	7.5	7.9
13	7.1	6.7	6.9	---	---	---	7.1	6.0	6.6	8.7	7.7	8.1
14	7.4	6.9	7.1	---	---	---	7.7	7.1	7.4	8.7	7.7	8.3
15	7.4	6.4	7.0	---	---	---	8.1	7.3	7.8	9.2	8.0	8.6
16	7.1	6.5	6.8	---	---	---	7.9	7.3	7.6	9.0	8.3	8.7
17	7.2	5.4	6.4	---	---	---	8.0	7.2	7.7	8.9	7.9	8.5
18	6.2	5.8	6.0	---	---	---	8.0	7.3	7.6	8.9	7.7	8.4
19	6.7	5.7	6.0	---	---	---	8.4	7.3	7.7	8.5	7.7	8.1
20	6.9	6.4	6.7	7.3	6.8	7.1	9.6	7.7	8.6	8.6	6.9	7.6
21	7.6	6.6	7.1	8.0	7.1	7.5	10.1	8.0	9.0	7.7	7.1	7.4
22	7.8	7.4	7.6	8.4	7.3	7.8	10.4	7.8	9.0	8.2	7.5	7.9
23	8.0	7.4	7.7	8.6	7.5	8.0	9.9	8.0	9.0	8.5	7.8	8.1
24	7.8	7.3	7.5	---	---	---	9.9	8.1	8.9	8.8	7.8	8.3
25	7.4	6.8	7.0	---	---	---	9.5	8.1	8.8	9.4	8.0	8.6
26	6.8	6.4	6.6	---	---	---	9.2	7.8	8.4	9.7	8.0	8.7
27	6.7	6.4	6.6	---	---	---	8.4	7.3	7.9	9.3	8.3	8.8
28	6.7	6.3	6.6	---	---	---	8.1	6.5	7.4	9.1	8.2	8.6
29	6.7	5.4	6.4	---	---	---	7.7	6.5	7.2	8.9	7.9	8.4
30	6.1	4.8	5.4	---	---	---	8.1	7.0	7.7	8.9	8.1	8.4
31	---	---	---	8.8	7.5	8.0	8.9	7.7	8.2	---	---	---
MONTH	---	---	---	---	---	---	10.4	4.5	7.9	9.7	6.5	8.2



THIS PAGE IS INTENTIONALLY BLANK

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^2, not including 1,007 mi^2 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. Datum of gage is 239.21 ft above NGVD of 1929. Prior to May 3, 1967, at site 0.9 mi upstream at datum 1.28 ft higher. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	952	938	1680	1560	7520	1250	18400	8580	2350	1920	1110	995
2	932	939	1270	e1520	13600	1220	20800	6610	1770	3010	1140	938
3	925	949	1110	1460	15700	1240	25300	5750	1560	4520	983	906
4	914	963	1050	1450	17200	1400	26900	6300	1480	4510	950	896
5	924	951	1040	1420	16600	1440	24400	6920	1390	4600	883	911
6	1020	940	1030	1420	14500	1320	21600	9730	1310	3460	840	877
7	1910	963	1020	1470	17100	1290	19200	14300	1250	1930	845	874
8	1320	946	1290	1480	18400	1230	18900	16300	1340	2050	852	883
9	1040	938	1290	1420	16800	1200	19200	17100	1490	1550	828	893
10	969	935	1090	1370	11400	1210	19800	14000	1860	1240	856	2080
11	955	1040	1020	1330	7070	1350	21000	11400	2040	1210	1850	2240
12	2640	1070	1130	1310	4100	1210	23300	12200	2150	1120	4560	1490
13	7040	1520	1210	1290	2610	1160	25000	13100	2180	3000	3910	1140
14	10800	1630	1440	1540	2040	1170	24000	13800	1780	3870	1670	1030
15	10200	1440	2080	1320	1860	1140	22000	14500	1730	2010	1180	978
16	5150	1160	11800	1220	1730	1150	20300	12800	1940	2710	1510	933
17	3210	1100	31000	1180	1630	1160	19000	11200	1930	10600	1860	832
18	2270	1110	49800	1160	1550	1190	18500	11300	2990	7350	1250	1010
19	1600	1080	49100	1160	1760	e1310	19200	12400	2130	4610	1090	1090
20	1440	1200	42000	1160	2650	e4000	20100	11900	1380	2810	972	1320
21	1340	1120	34600	1150	2730	e7000	e20400	7660	1180	1520	1020	2570
22	1250	1020	24600	1130	1690	e12000	e20300	5820	1110	1220	1020	1920
23	1180	977	16000	1130	1420	e20000	19300	5790	1180	1090	974	1280
24	1100	960	9270	1320	1350	e25700	17600	5570	1160	1030	916	1110
25	1070	953	7090	3950	1290	e29500	15700	3920	1020	990	892	1030
26	1040	957	4330	7100	1260	28700	14100	2740	981	961	871	928
27	987	938	3370	5790	1270	24400	13300	2150	1050	924	892	886
28	963	1010	2520	2430	1320	19200	13300	2370	1210	917	1400	865
29	932	1130	2020	1560	---	16200	12400	3290	1400	898	2330	860
30	942	1680	2800	1450	---	15100	10500	4370	2230	897	1560	855
31	954	---	1920	2000	---	16600	---	3790	---	909	1140	---
TOTAL	67969	32557	310970	56250	188150	242040	583800	277660	48571	79436	42154	34620
MEAN	2193	1085	10030	1815	6720	7808	19460	8957	1619	2562	1360	1154
MAX	10800	1680	49800	7100	18400	29500	26900	17100	2990	10600	4560	2570
MIN	914	935	1020	1130	1260	1140	10500	2150	981	897	828	832
AC-FT	134800	64580	616800	111600	373200	480100	1158000	550700	96340	157600	83610	68670

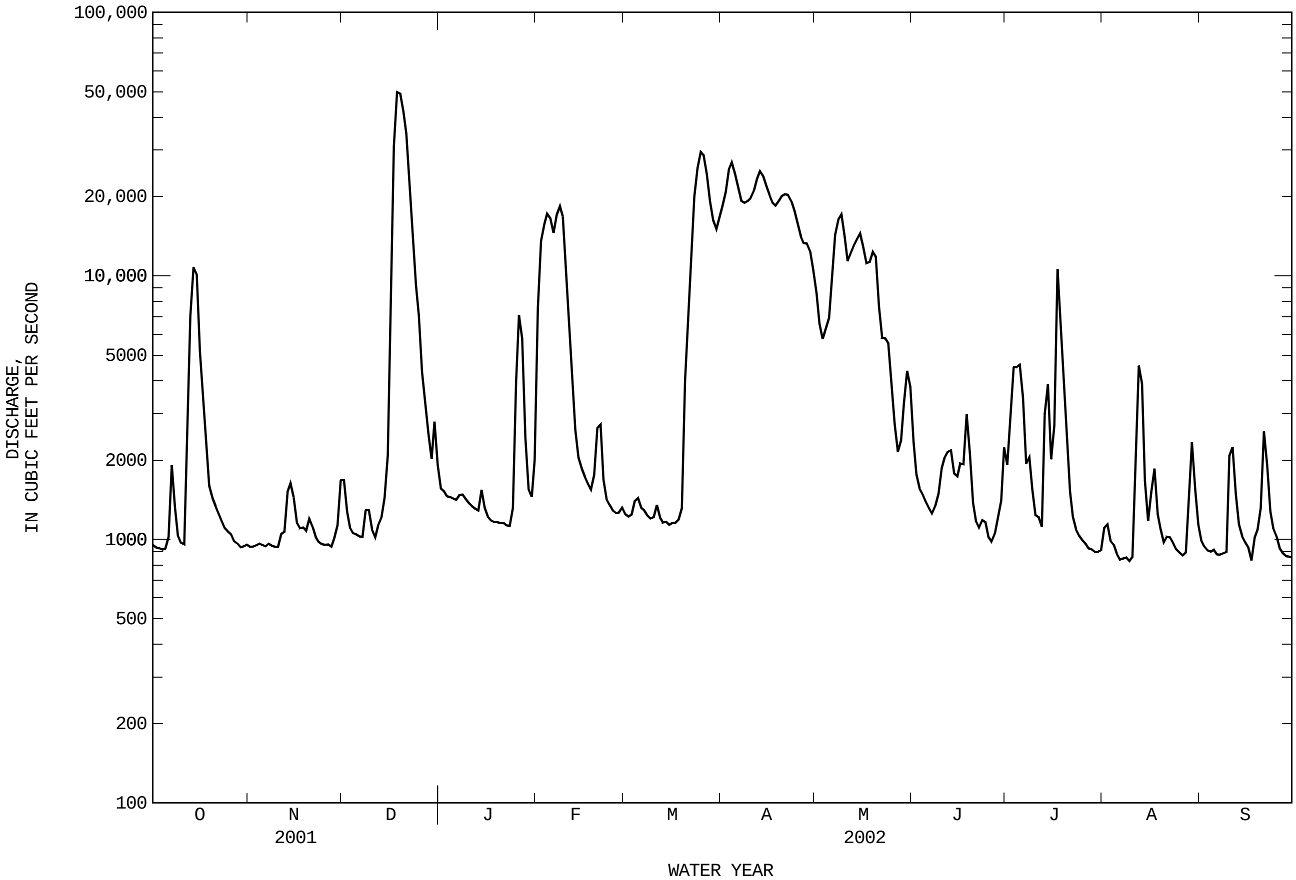
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2583	3855	4891	3713	5405	6921	6246	9034	6280	2454	1353	1252
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

08062700 Trinity River at Trinidad, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1965 - 2002	
ANNUAL TOTAL	2703384		1964177			
ANNUAL MEAN	7407		5381		4493	
HIGHEST ANNUAL MEAN					11400	1992
LOWEST ANNUAL MEAN					854	1978
HIGHEST DAILY MEAN	49800	Dec 18	49800	Dec 18	94100	May 7 1990
LOWEST DAILY MEAN	839	Jul 31	828	Aug 9	312	Aug 9 1972
ANNUAL SEVEN-DAY MINIMUM	851	Aug 6	865	Aug 4	326	Jul 7 1972
MAXIMUM PEAK FLOW			52600	Dec 18	94500	May 7 1990
MAXIMUM PEAK STAGE			41.94	Dec 18	48.11	May 7 1990
ANNUAL RUNOFF (AC-FT)	5362000		3896000		3255000	
10 PERCENT EXCEEDS	21000		17900		12500	
50 PERCENT EXCEEDS	2220		1470		1310	
90 PERCENT EXCEEDS	934		938		520	

e Estimated



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^2.

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

GAGE.--Water data recorder. Datum of gage is NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily contents, which are fair. 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, 11,840 acre-ft, June 10, 2002, elevation, 507.31 ft; minimum contents, 3,800 acre-ft, Apr. 30, 2000, elevation, 497.29 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 11,840 acre-ft, June 10, elevation, 507.31 ft; minimum contents, 6,210 acre-ft, Oct. 11, elevation, 501.04 ft.

RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

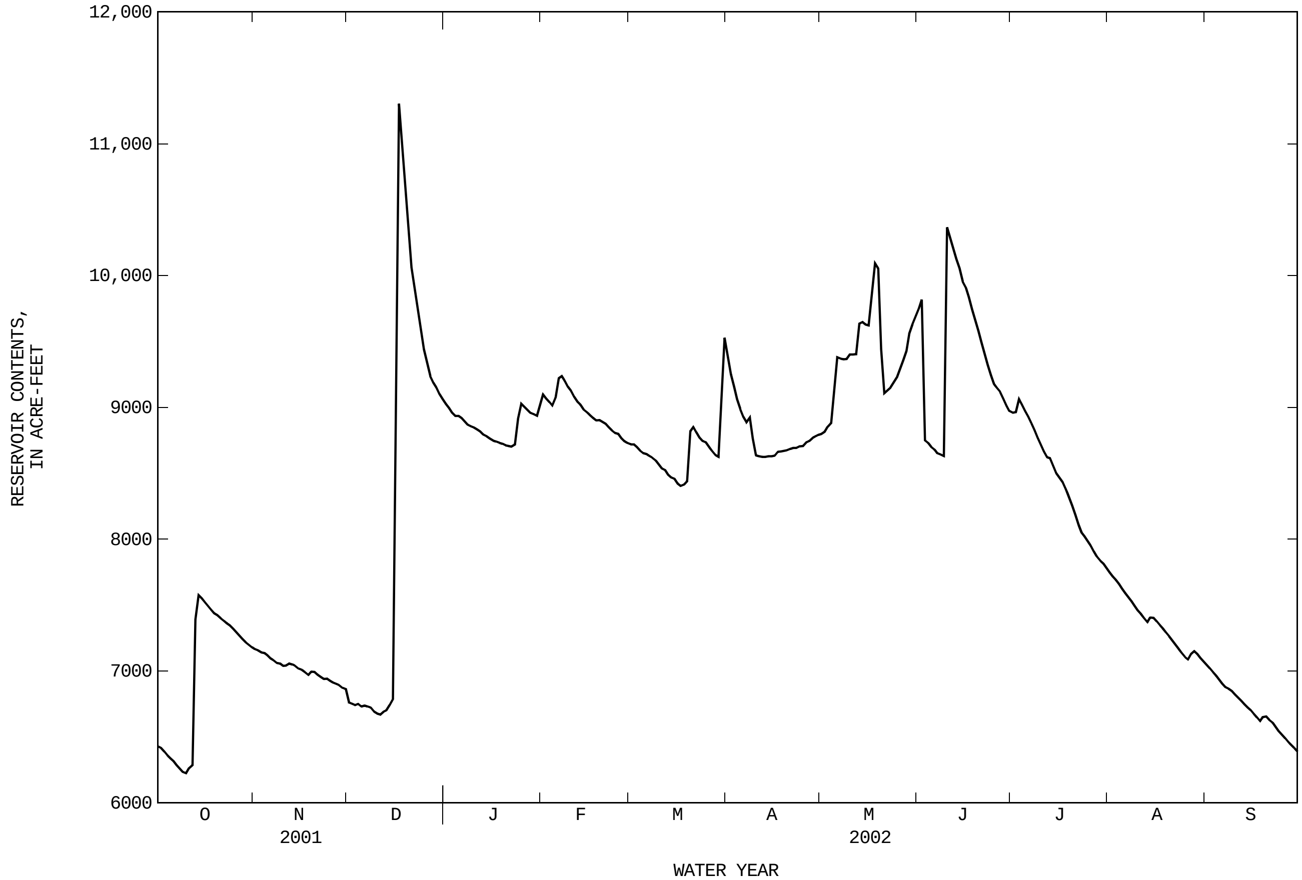
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6430	7170	e6760	9030	9100	8720	9390	8800	9750	8960	7750	7050
2	6410	7150	e6750	8990	9070	8720	9250	8810	9820	8960	7720	7020
3	6390	7140	e6740	8960	9040	8700	9150	8850	e8750	9060	7690	6990
4	6360	7140	e6750	8940	9010	8670	9060	8880	e8730	9020	7660	6960
5	6340	7120	e6730	8930	9070	8650	8990	9160	e8700	8970	7620	6930
6	6310	7090	6740	8920	9220	8650	8930	9380	e8680	8930	7590	6900
7	6280	7080	6730	8890	9240	8630	8890	9370	e8650	8880	7560	6880
8	6260	7060	6720	8870	9200	8620	8920	9360	e8640	8830	7530	6860
9	6230	7060	6690	8860	9160	8600	8760	9370	e8630	8770	7490	6850
10	6220	7040	6680	8840	9120	8570	8640	9400	10370	8720	7460	6820
11	6260	7040	6670	8830	9080	8540	8630	9400	10290	8670	7430	6800
12	6280	7060	6690	8820	9040	8520	8620	9400	10210	8620	7400	6770
13	7390	7050	6700	8790	9020	8490	8620	9640	10130	8620	7370	6750
14	7580	7040	6740	8780	8980	8470	8630	9650	10050	8560	7410	6720
15	7550	7020	6780	8760	8960	8460	8630	9630	9960	8500	7400	6700
16	7520	7010	9560	8750	8940	8420	8630	9620	9910	8460	7380	6680
17	7490	6990	11300	8740	8920	8400	8660	9860	9830	8430	7350	6650
18	7460	6970	10920	8730	8900	8410	8670	10090	9740	8380	7320	6620
19	7440	6990	10590	8720	8900	8440	8670	10050	9660	8320	7290	6650
20	7420	6990	10290	8710	8890	8820	8680	9440	9580	8250	7260	6660
21	7400	6970	10060	8710	8870	8850	8690	9110	9500	8180	7230	6630
22	7380	6950	9880	8700	8850	8810	8690	9130	9410	8110	7200	6610
23	7360	6940	9710	8720	8830	8770	8690	9150	9320	8050	7170	6570
24	7340	6940	9560	8910	8810	8740	8700	9180	9240	8020	7130	6540
25	7320	6920	9440	9030	8800	8730	8710	9220	9180	7980	7110	6520
26	7290	6910	9330	9000	8770	8700	8730	9290	9150	7950	7090	6490
27	7270	e6900	9240	8980	8740	8670	8740	9350	9120	7910	7130	6460
28	7240	e6890	9190	8960	8730	8640	8760	9430	9070	7860	7150	6440
29	7220	e6870	9150	8950	---	8630	8780	9560	9010	7830	7130	6410
30	7200	e6860	9100	8940	---	9150	8790	9630	8970	7810	7100	6390
31	7180	---	9060	9010	---	9530	---	9690	---	7780	7070	---
MEAN	6960	7010	8300	8860	8970	8670	8790	9380	9400	8430	7360	6710
MAX	7580	7170	11300	9030	9240	9530	9390	10090	10370	9060	7750	7050
MIN	6220	6860	6670	8700	8730	8400	8620	8800	8630	7780	7070	6390
(+)	502.30	e501.82	504.71	504.63	504.20	505.27	504.30	505.42	504.58	503.04	502.16	501.27
(@)	+770	-320	+2200	-50	-280	+800	-740	+900	-720	-1190	-710	-680

CAL YR 2001 MAX 11300 MIN 5990 (@) +1230
WTR YR 2002 MAX 11300 MIN 6220 (@) -20

e Estimated

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

08062730 New Terrell City Lake near Terrell, TX--Continued



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^2.

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 NGVD of 1929. 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.--Records fair except those for estimated daily contents, which are 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 are 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, 686,200 acre-ft, Dec. 17, elevation, 323.45 ft; minimum contents, 587,900 acre-ft, Oct. 10, elevation, 320.40 ft.

RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

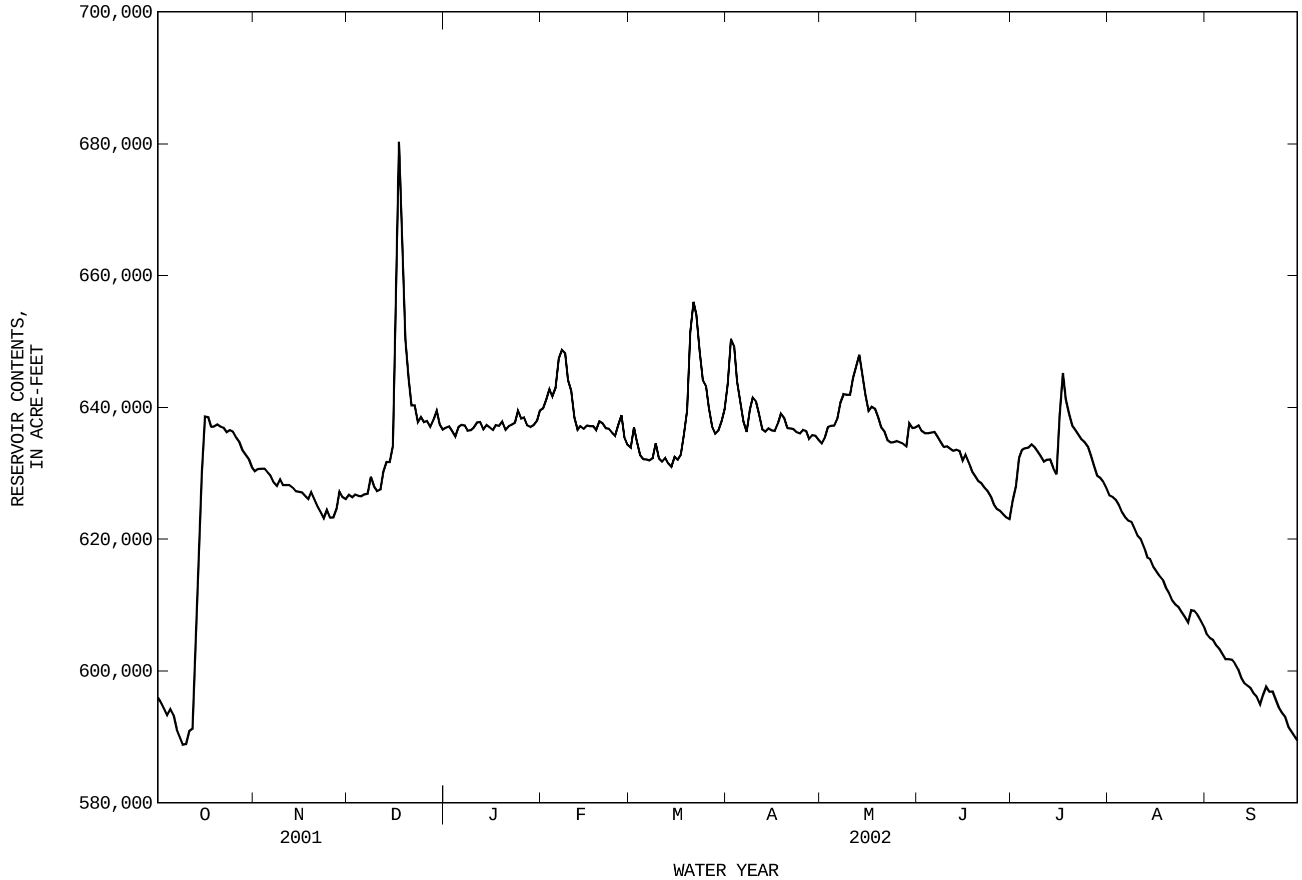
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	596000	630300	626700	636900	639800	633900	643600	634500	637200	625800	626600	e605600
2	595200	630600	626400	637100	641200	637000	650400	635400	636400	628000	626400	e605000
3	594200	630700	626800	636400	642800	634800	649300	637000	636100	632300	625900	e604700
4	593300	630700	626600	635600	641700	632800	643900	637200	636100	633500	625100	e603900
5	594200	630100	626500	637000	643000	632200	640700	637300	636200	633800	624100	603400
6	593300	629600	626800	637300	647400	632100	637800	638200	636300	633900	623300	602600
7	591100	628600	626900	637200	648700	631900	636200	640700	635600	634400	622800	601800
8	589900	628100	629500	636500	648200	632200	639600	642000	634800	633900	622600	601800
9	588800	629100	628000	636600	644100	634600	641500	641900	634000	633300	621500	601700
10	588900	628200	627300	637000	642500	632200	640900	641900	634100	632600	620500	601200
11	590900	628200	627600	637700	638400	631700	638900	644400	633700	631800	620000	600300
12	591200	628200	630200	637800	636600	632300	636700	646100	633400	632000	618800	599000
13	604800	627800	631700	636700	637100	631500	636300	648000	633600	632100	617200	598100
14	616000	627300	631700	637300	636800	631000	636800	644800	633300	630800	616900	597800
15	629900	627200	634200	636900	637200	632500	636500	641900	631900	629800	615800	597400
16	638600	627100	655000	636600	637100	632100	636400	639400	632800	639000	615000	596600
17	638500	626600	680300	637300	637100	632700	637600	640100	631700	645200	614300	596100
18	637000	626100	663100	637200	636500	635900	639000	639800	630300	641200	613700	594900
19	637100	627200	650300	637800	637900	639500	638400	638500	629600	639000	612600	596300
20	637400	626000	644400	636600	637600	651500	636800	637000	628800	637200	611800	597600
21	637000	625000	640300	637200	636900	656000	636800	636400	628500	636600	610700	596800
22	636800	624100	640300	637300	636800	654000	636700	635000	627800	635900	610100	596900
23	636200	623200	637700	637600	636200	648600	636200	634700	627300	635200	609700	595600
24	636500	624500	638500	639500	635700	644200	636100	634700	626400	634700	608900	594500
25	636300	623200	637800	638300	637400	643300	636600	634900	625300	634000	608200	593700
26	635400	623300	637900	638400	638800	639900	636400	634700	624600	632600	607400	593000
27	634800	624600	637100	637300	635500	637200	635200	634500	624300	631100	609200	591600
28	633500	627200	638100	637000	634300	636000	635800	634100	623700	629600	609100	590800
29	632800	626400	639500	637300	---	636500	635700	637600	623300	629300	608500	590100
30	632200	626100	637500	637900	---	637900	635100	636900	623000	628700	e607700	589400
31	630900	---	636600	639500	---	639700	---	637000	---	627800	e606800	---
MEAN	617100	627200	636800	637300	639400	637300	638600	638600	631000	633400	615800	597900
MAX	638600	630700	680300	639500	648700	656000	650400	648000	637200	645200	626600	605600
MIN	588800	623200	626400	635600	634300	631000	635100	634100	623000	625800	606800	589400
(+)	321.80	321.64	321.98	322.07	321.91	322.08	321.93	321.99	321.54	321.70	e321.02	320.45
(@)	+33800	-4800	+10500	+2900	-5200	+5400	-4600	+1900	-14000	+4800	-21000	-17400

CAL YR 2001 MAX 680300 MIN 584700 (@) -16100
WTR YR 2002 MAX 680300 MIN 588800 (@) -7700

e Estimated

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

08063010 Cedar Creek Reservoir near Trinidad, TX--Continued



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^2.

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 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
FEB													
13...	1200	35	441	7.9	8.5	8.6	75	<2.0	220	25	83.3	1.89	7.78
MAY													
01...	1100	14	387	7.9	23.0	7.0	82	3.1	180	--	69.1	2.00	10.0
JUL													
10...	0945	1.0	418	7.6	26.5	7.6	95	2.6	180	28	65.1	3.03	21.6
AUG													
01...	1145	.04	392	7.9	30.0	5.3	70	2.1	150	16	55.9	2.90	19.1

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
13...	.2	7	1.14	2	229	190	20.4	7.32	.3	5.77	250	246	44
MAY													
01...	.3	11	1.27	2	219	182	21.9	10.0	.3	8.94	234	235	34
JUL													
10...	.7	21	2.13	1	177	146	31.1	19.8	.4	9.53	235	241	44
AUG													
01...	.7	21	2.12	1	164	135	25.0	19.1	.4	10.3	228	217	<10

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,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
FEB													
13...	.90	.019	.92	<.04	--	.18	E.004	<.02	2.6	7	.08	<2	49
MAY													
01...	--	E.005	.46	<.04	--	.24	.009	<.04	4.7	2	.14	E2	57
JUL													
10...	--	E.004	.11	.04	.42	.47	.012	<.02	4.0	<1	.15	2	65
AUG													
01...	--	E.005	.05	.06	.33	.39	.010	<.02	4.8	2	.20	3	61

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													
13...	<.06	<.04	<.8	.20	1.0	<10	<.08	4.6	E.01n	.5	.43	<2	<1
MAY													
01...	<.06	.06	<.8	.33	1.4	<10	E.06	16.4	<.01	.6	2.08	<2	<1
JUL													
10...	<.06	E.02	<.8	.41	2.3	<10	<.08	41.1	.01	.9	2.92	<2	<1
AUG													
01...	<.06	E.02	<.8	.36	1.1	<10	E.05	91.3	.03	1.0	2.47	<2	<1

08063045 Richland Creek near Irene, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
FEB		
13...	2	1.26
MAY		
01...	2	.96
JUL		
10...	1	.68
AUG		
01...	4	.57

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
n -- Below the NDV

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^2.

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 NGVD of 1929 (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 good except those for estimated daily contents, which are fair. 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^2 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, 115,000 acre-ft, Dec. 25, elevation, 433.44 ft; minimum contents, 45,340 acre-ft, Oct. 12, elevation, 422.07 ft.

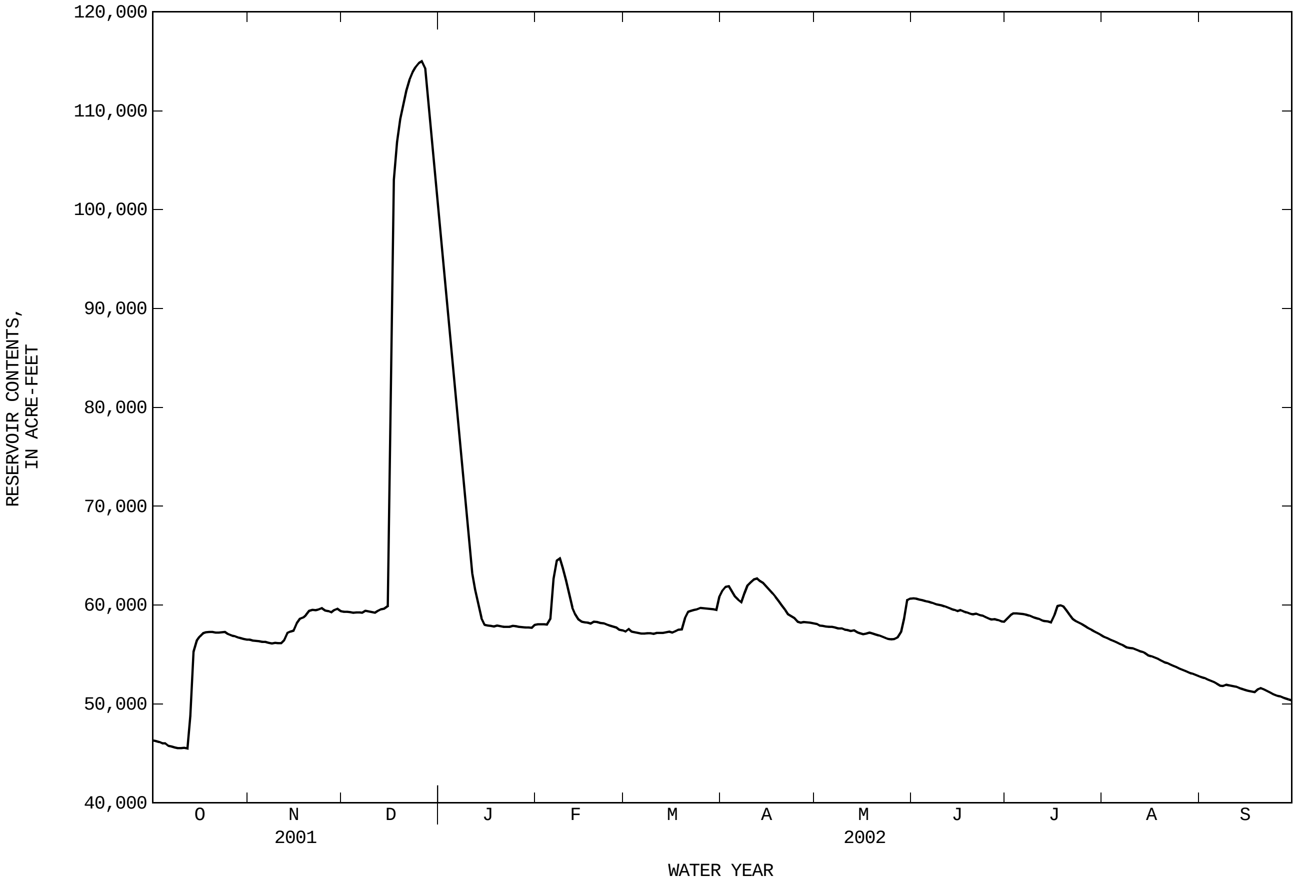
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46320	56490	59320	96120	58070	57320	61450	58090	60690	e58630	56770	52730
2	46230	56400	59300	92560	58060	57580	61850	57940	60650	e58970	56620	52610
3	46130	56380	59280	88930	58050	57300	61890	57900	60560	e59160	56470	52460
4	46000	56330	59210	85410	58020	57250	61430	57830	60480	59140	56330	52330
5	46000	56280	59260	82110	58580	57170	60870	57800	60380	59120	56210	52190
6	45760	56270	59240	78840	62640	57120	60540	57790	60330	59100	56060	52040
7	45680	56180	59210	75470	64470	57100	60300	57730	60230	59020	55920	51820
8	45590	56110	59430	72250	64680	57150	61220	57620	60110	58930	55730	51820
9	45520	56160	59360	69110	63730	57150	61960	57630	60020	58820	55650	51940
10	45520	56140	59300	66090	62480	57080	62310	57520	59960	58710	55610	51880
11	45570	56130	59210	63210	61050	57170	62590	57480	59860	58590	55510	51810
12	45490	56480	59430	61550	59740	57190	62700	57390	59730	58460	55380	51730
13	48800	57170	59590	60060	59050	57190	62440	57440	59620	58380	55270	51620
14	55270	57320	59640	58680	58530	57240	62220	57260	59530	58360	55130	51530
15	56390	57420	59870	58000	58330	57310	61880	57140	59390	58250	54920	51430
16	56830	58140	78420	57910	58250	57200	61530	57050	59480	58930	54820	51310
17	57130	58600	103000	57910	58220	57350	61170	57110	59360	59910	54680	51250
18	57260	58730	106800	57820	58120	57490	60800	57210	59260	59980	54540	51180
19	57280	58980	109200	57940	58320	57550	60380	57100	59120	59840	54400	51460
20	57280	59410	110700	57860	58280	58690	59920	57010	59070	59420	54250	51590
21	57220	59520	112000	57810	58180	59330	59510	56910	59120	58970	54130	51440
22	57220	59470	113100	57790	58140	59430	59070	56780	59010	58560	53980	51280
23	57250	59560	113900	57800	58020	59510	58880	56660	58910	58330	53850	51110
24	57280	59680	114500	57900	57930	59580	58680	56560	58770	58170	53730	50970
25	57050	59440	114800	57850	57830	59710	58310	56540	58640	58010	53550	50830
26	56920	59370	115000	57800	57730	59680	58230	56560	58550	57840	53410	50760
27	56870	59260	114300	57750	57500	59640	58280	56720	58570	57650	53290	50650
28	56720	59470	110900	57730	57440	59610	58230	57230	58480	57460	53180	50530
29	56650	59610	107200	57730	---	59590	58210	58530	58340	57280	53070	50440
30	56570	59390	103400	57700	---	59520	58170	60480	58310	57130	52950	50350
31	56520	---	99770	58000	---	60820	---	60640	---	56940	52810	---
TOTAL	1622320	1735890	2617640	2033690	1659440	1803020	1815020	1783650	1784530	1816060	1698220	1545090
MEAN	52330	57860	84440	65600	59270	58160	60500	57540	59480	58580	54780	51500
MAX	57280	59680	115000	96120	64680	60820	62700	60640	60690	59980	56770	52730
MIN	45490	56110	59210	57700	57440	57080	58170	56540	58310	56940	52810	50350
(+)	424.41	424.97	431.46	424.70	424.59	425.24	424.73	425.21	424.76	424.49	423.66	423.16
(@)	+10120	+2870	+40380	-41770	-560	+3380	-2650	+2470	-2330	-1370	-4130	-2460

CAL YR 2001 MAX 137200 MIN 45490 (@) +23080
WTR YR 2002 MAX 115000 MIN 45490 (@) +3950

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

08063050 Navarro Mills Lake near Dawson, TX--Continued



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 2001 TO SEPTEMBER 2002

315730096412601 -- Navarro Mills Lk Site AC

Date	Time	RESER-VOIR STORAGE (AC-FT) (00054)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
FEB													
13...	1426	59000	.27	1.00	274	7.9	10.0	9.9	88	E2k	<1k	110	8
FEB													
13-13	1426	--	--	--	--	--	--	--	--	--	--	--	--
13...	1432	--	--	10.0	275	7.9	10.0	10.0	89	--	--	--	--
13...	1439	--	--	20.0	275	7.9	10.0	10.0	89	--	--	--	--
13...	1446	--	--	27.0	275	7.9	10.0	10.2	91	--	--	110	12
MAY													
01...	1309	58200	.43	1.00	335	8.2	25.5	7.8	98	E20k	E6k	140	11
MAY													
01-01	1309	--	--	--	--	--	--	--	--	--	--	--	--
01...	1317	--	--	10.0	335	8.2	25.5	7.8	98	--	--	--	--
01...	1324	--	--	20.0	336	8.1	25.0	7.5	93	--	--	--	--
01...	1331	--	--	26.0	336	8.0	25.0	7.1	88	--	--	140	14
AUG													
01...	1216	56800	.24	1.00	279	7.6	29.5	4.4	59	<2k	<2k	110	11
AUG													
01-01	1216	--	--	--	--	--	--	--	--	--	--	--	--
01...	1221	--	--	10.0	278	7.8	30.0	4.9	66	--	--	--	--
01...	1226	--	--	20.0	280	7.6	29.5	4.0	53	--	--	--	--
01...	1230	--	--	26.0	280	7.6	30.0	4.6	62	--	--	110	10

315730096412601 -- Navarro Mills Lk Site AC

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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
13...	40.5	2.54	9.05	.4	15	3.46	<1	126	105	21.2	6.47	.3	6.2
FEB													
13-13	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	41.3	2.58	9.11	.4	14	3.40	<1	124	103	21.1	5.67	.3	6.4
MAY													
01...	50.1	3.05	12.4	.5	16	3.18	2	152	127	26.1	7.14	.3	.6r
MAY													
01-01	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	51.2	3.10	12.6	.5	16	3.52	1	152	127	26.2	6.79	.5	.9r
AUG													
01...	37.9	3.09	13.1	.6	20	3.68	1	116	95	23.5	8.41	.4	6.3
AUG													
01-01	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	37.1	3.04	12.8	.5	20	3.50	1	114	94	23.7	8.80	.4	6.3

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

315730096412601 -- Navarro Mills Lk Site AC

Date	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)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	BENZENE TOTAL (UG/L) (34030)	ETHYL-BENZENE TOTAL (UG/L) (34371)
FEB													
13...	157	1.17	.036	1.20	.04	.33	.38	.019	E.01	<10	E.9n	--	--
FEB													
13-13	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	156	1.16	.035	1.20	.04	.33	.37	.019	E.01	<10	E1.8b	--	--
MAY													
01...	185	1.25	.014	1.27	<.04	--	.34	.005	<.02	<10	<2.0	<.2	<.2
MAY													
01-01	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	187	1.26	.018	1.28	<.04	--	.34	.007	<.04	<10	E.8n	--	--
AUG													
01...	154	--	<.008	<.05	E.02	--	.27	.006	<.02	<10	45.9	<.2	<.2
AUG													
01-01	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	153	--	<.008	E.03	E.03	--	.30	.007	<.02	<10	51.9	--	--

315730096412601 -- Navarro Mills Lk Site AC

Date	TOLUENE TOTAL (UG/L) (34010)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)
FEB													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13-13	--	--	--	<.006	<.006	<.004	<.005	3.58	<.050	<.010	<.002	<.041	<.020
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01...	<.2	<.2	<.2	--	--	--	--	--	--	--	--	--	--
MAY													
01-01	--	--	--	<.006	.036	.113	<.005	1.32	<.050	<.010	<.002	<.041	<.020
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	<.2	<.2	E.1	--	--	--	--	--	--	--	--	--	--
AUG													
01-01	--	--	--	<.006	.006	.019	<.005	1.18	<.050	<.010	<.002	<.041	<.020
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

315730096412601 -- Navarro Mills Lk Site AC

Date	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)
FEB													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13-13	<.005	<.006	<.018	<.003	E.149	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01-01	<.005	<.006	<.018	<.003	E.258	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01-01	<.005	<.006	<.018	<.003	E.220	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

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- BUZIN 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' DDE 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)
FEB													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
13-13	<.035	<.027	.038	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
01-01	<.035	<.027	.282	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
01-01	<.035	<.027	.155	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
FEB											
13...	--	--	--	--	--	--	--	--	--	--	--
FEB											
13-13	<.010	<.011	<.02	<.004	<.005	<.02	<.034	<.02	<.005	<.002	<.009
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--
MAY											
01...	--	--	--	--	--	--	--	--	--	--	--
MAY											
01-01	<.010	<.011	<.02	<.004	.011	<.02	<.034	<.02	<.005	<.002	<.009
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01-01	<.010	<.011	<.02	<.004	.007	<.02	<.034	<.02	<.005	<.002	<.009
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--

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 (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
FEB							
13...	1458	1.00	275	8.0	10.5	10.6	95
13...	1500	10.0	275	8.0	10.5	10.5	94
13...	1503	20.0	275	7.9	10.0	10.3	92
MAY							
01...	1342	1.00	336	8.2	25.5	8.4	105
01...	1344	10.0	336	8.2	25.5	8.4	105
01...	1346	20.0	339	8.1	25.0	7.7	96
AUG							
01...	1238	1.00	277	8.1	30.0	6.1	82
01...	1240	10.0	278	8.0	29.5	5.7	76
01...	1242	20.0	280	7.7	29.5	4.7	63

315710096431301 -- Navarro Mills Lk Site BC

Date	Time	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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													
13...	1521	.30	1.00	278	8.0	10.5	10.6	95	E3k	E4k	120	13	42.0
13...	1528	--	10.0	278	8.0	10.5	10.6	95	--	--	--	--	--
13...	1535	--	24.0	281	7.9	9.5	10.2	90	--	--	120	12	42.2
MAY													
01...	1413	.27	1.00	338	8.2	25.5	8.2	103	E3k	<2k	140	10	50.5
01...	1421	--	10.0	338	8.2	25.0	7.8	97	--	--	--	--	--
01...	1429	--	24.0	344	7.7	23.0	5.3	63	--	--	140	8	50.9
AUG													
01...	1258	.44	1.00	275	8.0	29.5	5.9	79	<2k	E2k	100	10	36.9
01...	1303	--	10.0	279	7.8	29.0	5.1	68	--	--	--	--	--
01...	1308	--	23.0	281	7.6	29.0	4.3	57	--	--	110	9	37.1

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

315710096431301 -- Navarro Mills Lk Site BC

Date	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)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
13...	2.58	9.73	.4	15	3.34	<1	125	104	21.4	5.83	.3	6.1	159
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	2.59	9.69	.4	15	3.32	<1	126	105	21.4	6.10	.3	6.1	160
MAY													
01...	3.05	12.4	.5	16	3.22	2	154	129	26.2	6.94	.3	.5	186
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.04	12.3	.5	16	3.21	1	159	132	25.6	6.75	.4	2.2	189
AUG													
01...	3.04	12.7	.5	20	3.55	1	114	94	23.7	8.50	.4	5.9	151
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.01	12.8	.5	20	3.57	1	116	96	23.8	8.72	.4	6.1	153

315710096431301 -- Navarro Mills 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,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
FEB										
13...	1.32	.061	1.38	E.02	--	.35	.019	<.02	<10	<2.0
13...	--	--	--	--	--	--	--	--	--	--
13...	1.37	.079	1.45	E.03	--	.35	.017	E.01	<10	E1.2n
MAY										
01...	1.23	.013	1.24	<.04	--	.32	E.004	<.04	<10	<2.0
01...	1.24	.014	1.25	<.04	--	.32	.005	<.02	<10	E.8n
01...	1.24	.041	1.28	<.04	--	.35	.006	<.04	<10	<2.0
AUG										
01...	--	<.008	<.05	<.04	--	.22	E.003	<.02	<10	E2.8
01...	--	--	--	--	--	--	--	--	--	--
01...	--	E.004	<.05	.07	.24	.31	.007	<.02	<10	36.6

315642096444401 -- Navarro Mills Lk Site CC

Date	Time	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	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)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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													
13...	1550	.27	1.00	288	8.0	10.0	10.8	96	E7k	E3k	120	14	43.5
13...	1556	--	10.0	288	8.0	9.5	10.7	94	--	--	--	--	--
13...	1602	--	16.0	289	8.0	9.0	10.5	91	--	--	120	16	43.8
MAY													
01...	1456	.26	1.00	344	8.2	25.5	8.3	104	E3k	<2k	140	12	51.9
01...	1502	--	10.0	344	8.2	25.5	8.3	104	--	--	--	--	--
01...	1507	--	15.0	344	8.2	25.5	8.4	105	--	--	140	11	52.0
AUG													
01...	1324	.37	1.00	281	8.3	30.0	7.2	97	<2k	E2k	110	10	37.1
01...	1332	--	14.0	281	8.2	29.0	6.2	82	--	--	110	9	37.7

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

315642096444401 -- Navarro Mills Lk Site CC

Date	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)
FEB													
13...	2.65	10.0	.4	15	3.35	1	126	106	22.3	6.03	.3	6.2	166
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	2.66	10.1	.4	15	3.46	<1	127	106	22.7	6.00	.3	6.4	167
MAY													
01...	3.07	12.2	.4	15	3.54	2	156	131	26.2	6.82	.3	.8	188
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.07	12.1	.4	15	3.44	2	156	131	26.1	6.86	.3	.8	189
AUG													
01...	3.02	12.7	.5	20	3.55	1	114	96	24.2	8.81	.4	5.7	153
01...	3.04	12.9	.5	20	3.51	1	117	98	23.9	8.39	.4	5.7	154

315642096444401 -- Navarro Mills Lk Site CC

Date	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
FEB									
13...	1.79	.191	1.98	<.04	.36	.016	<.02	<10	E.9n
13...	--	--	--	--	--	--	--	--	--
13...	1.83	.202	2.04	E.03	.40	.017	<.02	<10	E.9n
MAY									
01...	1.19	.012	1.20	<.04	.32	.005	<.02	<10	E1.9b
01...	--	--	--	--	--	--	--	--	--
01...	1.18	.012	1.20	<.04	.30	.006	<.04	<10	E3.0b
AUG									
01...	--	<.008	<.05	<.04	.24	E.004	<.02	<10	<2.0
01...	--	<.008	<.05	<.04	.24	.005	<.02	<10	<2.0

315602096470001 -- Navarro Mills Lk Site DC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
FEB													
13...	1624	1.00	343	8.1	11.0	11.6	106	2.73	.262	2.99	<.04	.38	.010
MAY													
01...	1530	1.00	344	8.1	26.5	8.0	102	1.17	.017	1.18	<.04	.32	.007
01...	1534	3.00	344	8.1	26.5	7.9	101	--	--	--	--	--	--
AUG													
01...	1356	1.00	281	8.2	29.5	6.6	88	--	<.008	<.05	<.04	.24	.006
01...	1400	4.00	282	8.2	29.5	6.6	88	--	--	--	--	--	--

315602096470001 -- Navarro Mills Lk Site DC

Date	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
FEB			
13...	<.02	<10	E1.2n
MAY			
01...	<.02	<10	E1.1n
01...	--	--	--
AUG			
01...	<.02	<10	<2.0
01...	--	--	--

08063050 Navarro Mills Lake near Dawson, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
FEB													
13...	1645	1.00	299	8.2	11.0	11.5	105	2.22	.389	2.60	E.02	.42	.015
MAY													
01...	1556	1.00	345	8.2	26.0	8.2	104	1.17	.021	1.19	<.04	.33	.006
01...	1601	4.00	344	8.1	26.0	8.3	105	--	--	--	--	--	--
AUG													
01...	1420	1.00	296	8.3	30.0	7.1	96	--	<.008	E.02	<.04	.27	.005
01...	1424	3.00	296	8.3	30.0	7.2	97	--	--	--	--	--	--

315706096463201 -- Navarro Mills Lk Site EC

Date	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
FEB			
13...	<.02	E6	E1.5n
MAY			
01...	E.01	<10	<2.0
01...	--	--	--
AUG			
01...	<.02	<10	<2.0
01...	--	--	--

Remark codes used in this report:
- < -- Less than
- E -- Estimated value

Value qualifier codes used in this report:
- b -- Value was extrapolated below
- k -- Counts outside acceptable range
- n -- Below the NDV
- r -- Value verified by rerun, same method

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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 NGVD of 1929. 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^2 area below Navarro Mills Lake and above this station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--3 years (water years 1961-63) prior to completion of Navarro Mills Lake, 181 ft^3/s (131,100 acre-ft/yr)

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1961-63).--Maximum discharge, 25,500 ft^3/s, July 3, 1961, gage height, 25.50 ft, from rating curve extended above 14,000 ft^3/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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.90	1.7	37	1720	38	34	64	22	1.1	2.0	2.8	0.12
2	0.92	2.3	38	1700	38	34	65	11	1.1	1.9	0.42	0.12
3	0.98	0.78	39	1670	38	34	173	1.1	1.0	2.0	0.27	0.13
4	1.2	2.3	39	1630	38	34	352	0.95	1.1	1.7	0.19	0.14
5	0.88	2.1	39	1600	50	34	302	0.91	1.0	1.5	0.12	0.13
6	0.76	1.6	39	1570	73	34	260	0.93	0.98	1.6	0.10	0.14
7	0.86	1.6	39	1550	42	34	261	0.88	1.0	1.6	0.09	0.20
8	0.90	1.6	38	1520	446	17	203	0.86	1.0	1.6	0.09	0.29
9	0.84	1.4	38	1480	757	1.7	3.1	0.85	1.0	1.7	0.10	0.31
10	0.79	0.82	37	1450	747	1.6	2.2	0.82	1.0	1.5	0.16	0.28
11	0.82	1.2	38	1160	737	1.6	2.0	0.84	1.1	1.5	0.16	0.24
12	1.0	1.2	38	724	612	1.6	137	0.84	1.0	1.5	0.15	0.24
13	1.4	1.5	38	720	348	1.6	247	0.89	1.1	1.5	0.13	0.24
14	0.78	1.4	37	541	260	1.7	249	0.83	1.1	1.5	0.00	0.24
15	0.70	1.3	59	196	108	1.6	250	0.88	1.0	1.5	0.00	0.23
16	0.63	1.6	1180	39	72	1.5	250	0.86	1.2	5.9	0.0	0.22
17	1.0	1.5	239	38	72	1.6	250	1.3	1.1	4.2	0.0	0.24
18	0.70	1.6	88	38	72	1.7	249	1.1	1.1	2.0	0.0	0.24
19	0.70	2.0	82	38	72	1.8	249	0.90	1.4	87	0.03	0.41
20	0.69	2.0	65	38	72	3.1	247	0.93	1.4	181	0.03	0.33
21	0.68	5.4	57	37	72	2.1	246	1.6	1.3	181	0.04	0.29
22	0.71	38	59	38	72	1.7	175	1.7	1.2	127	0.04	0.29
23	0.75	39	61	38	72	1.6	116	1.5	1.3	31	0.05	0.27
24	1.2	39	61	38	72	1.6	117	1.1	1.3	7.4	0.05	0.26
25	0.83	39	62	38	72	1.6	62	1.1	1.2	6.9	0.06	0.25
26	0.78	39	63	39	58	1.5	20	1.2	1.3	6.4	0.08	0.26
27	0.75	39	974	39	34	23	20	1.5	1.4	6.0	0.16	0.26
28	0.81	39	1830	39	34	64	20	2.1	1.4	5.5	0.14	0.27
29	1.2	39	1810	39	---	64	20	16	1.4	5.3	0.11	0.29
30	2.0	39	1790	39	---	64	21	1.7	1.6	5.0	0.12	0.28
31	2.2	---	1760	39	---	64	---	1.2	---	4.6	0.12	---
TOTAL	29.36	386.90	10774	19845	5178	565.2	4632.3	80.37	35.18	690.8	5.81	7.21
MEAN	0.947	12.90	347.5	640.2	184.9	18.23	154.4	2.593	1.173	22.28	0.187	0.240
MAX	2.2	39	1830	1720	757	64	352	22	1.6	181	2.8	0.41
MIN	0.63	0.78	37	37	34	1.5	2.0	0.82	0.98	1.5	0.00	0.12
AC-FT	58	767	21370	39360	10270	1120	9190	159	70	1370	12	14

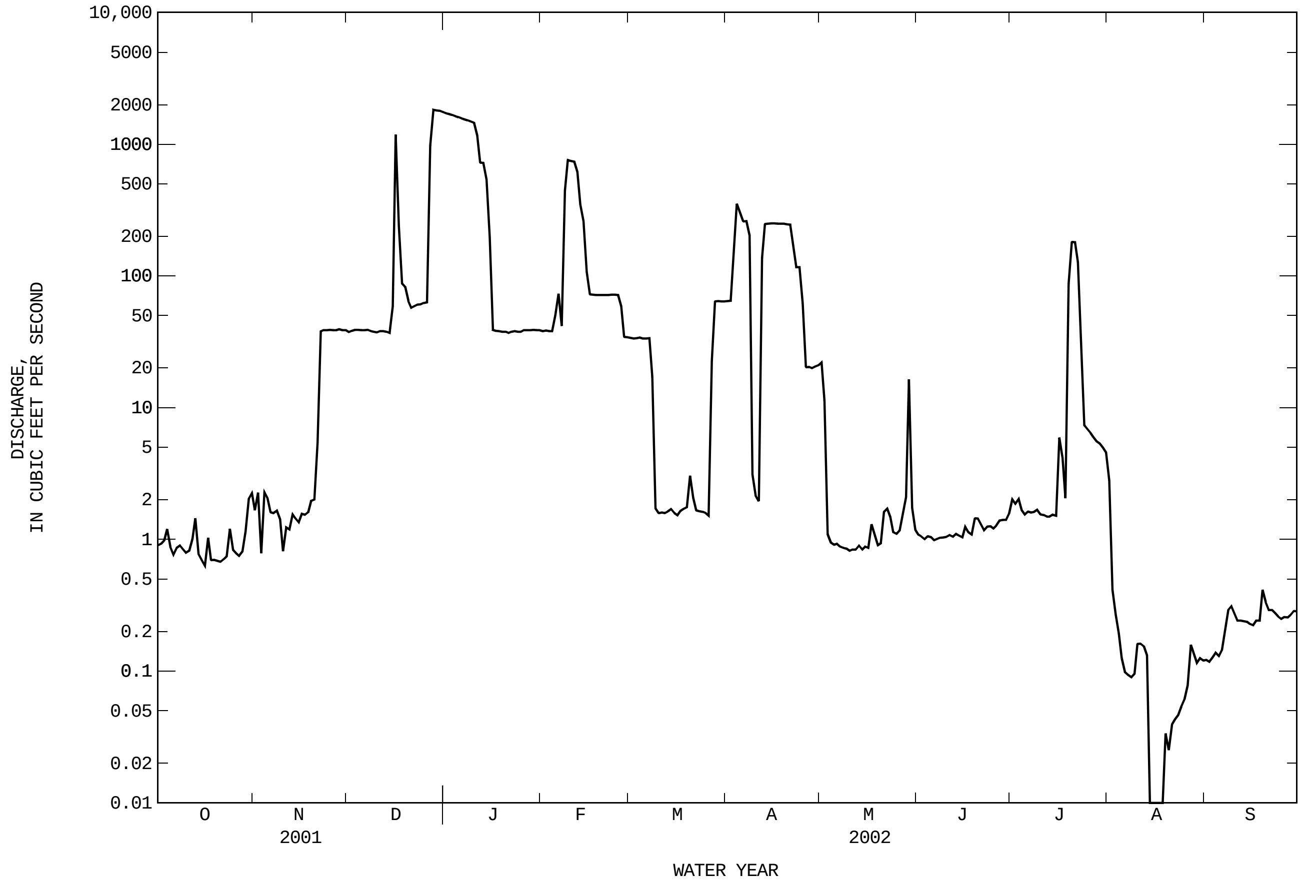
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	45.55	141.4	157.7	202.0	199.0	216.1	225.8	262.5	327.3	94.05	25.74	19.33
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	0.000	0.000	0.000	0.058	0.066	0.22	0.023	0.019	0.000	0.000	0.068	0.005
(WY)	1964	1964	1964	1964	1964	1971	1964	1964	1964	1970	1981	1997

08063100 Richland Creek near Dawson, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002z	
ANNUAL TOTAL	83518.35		42230.13			
ANNUAL MEAN	228.8		115.7		159.2	
HIGHEST ANNUAL MEAN					561	1968
LOWEST ANNUAL MEAN					0.20	1964
HIGHEST DAILY MEAN	2110	Mar 22	1830	Dec 28	2620	Aug 4 1995
LOWEST DAILY MEAN	0.25	Jul 12	0.00	Aug 14	0.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	0.27	Jul 7	0.01	Aug 14	0.00	Oct 1 1963
MAXIMUM PEAK FLOW			2110	Dec 16	3850	Nov 24 1974
MAXIMUM PEAK STAGE			18.54	Dec 16	22.85	Nov 24 1974
ANNUAL RUNOFF (AC-FT)	165700		83760		115300	
10 PERCENT EXCEEDS	874		249		666	
50 PERCENT EXCEEDS	5.0		1.7		1.8	
90 PERCENT EXCEEDS	0.35		0.23		0.04	

z Period of regulated streamflow.



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 2001 TO SEPTEMBER 2002

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, DIS-SOLVED (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													
13...	1400	347	286	8.1	10.5	10.0	91	110	13	41.5	2.57	9.24	.4
MAY													
01...	1345	24	346	8.2	23.0	8.6	101	150	11	53.5	3.26	13.6	.5
AUG													
01...	1315	2.3	311	7.6	28.5	5.2	67	110	14	39.2	3.27	14.3	.6

Date	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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													
13...	15	3.34	<1	124	103	19.1	5.74	.3	5.70	160	154	26	1.20
MAY													
01...	16	3.39	1	163	136	28.0	10.2	.3	1.25	207	201	46	1.22
AUG													
01...	21	3.40	<1	118	98	25.6	9.82	.4	6.32	168	161	<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. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
FEB													
13...	.029	1.23	.05	.33	.38	.022	E.01	5.4	1	.19	4	39	<.06
MAY													
01...	.016	1.24	<.04	--	.40	.010	<.04	5.3	4	.21	3	56	<.06
AUG													
01...	E.004	.05	E.03	--	.35	.009	<.02	5.8	2	.29	7	83	<.06

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)
FEB													
13...	<.04	<.8	.13	1.3	E8	<.08	5.8	.04	.4	.99	<2	<1	2
MAY													
01...	<.04	<.8	.20	3.7	<10	E.07	3.6	.12	.5	2.12	<2	<1	1
AUG													
01...	.20	<.8	.14	.7	<10	E.05	5.3	.02	.6	1.26	<2	<1	1

Date	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
FEB	
13...	.70
MAY	
01...	.90
AUG	
01...	.69

Remark codes used in this report:
< -- Less than
E -- Estimated value

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. 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, 13,770 acre-ft, Mar. 30, elevation, 531.27 ft; minimum contents, 12,380 acre-ft, Dec. 11, 13, 14, 15, elevation, 529.75 ft.

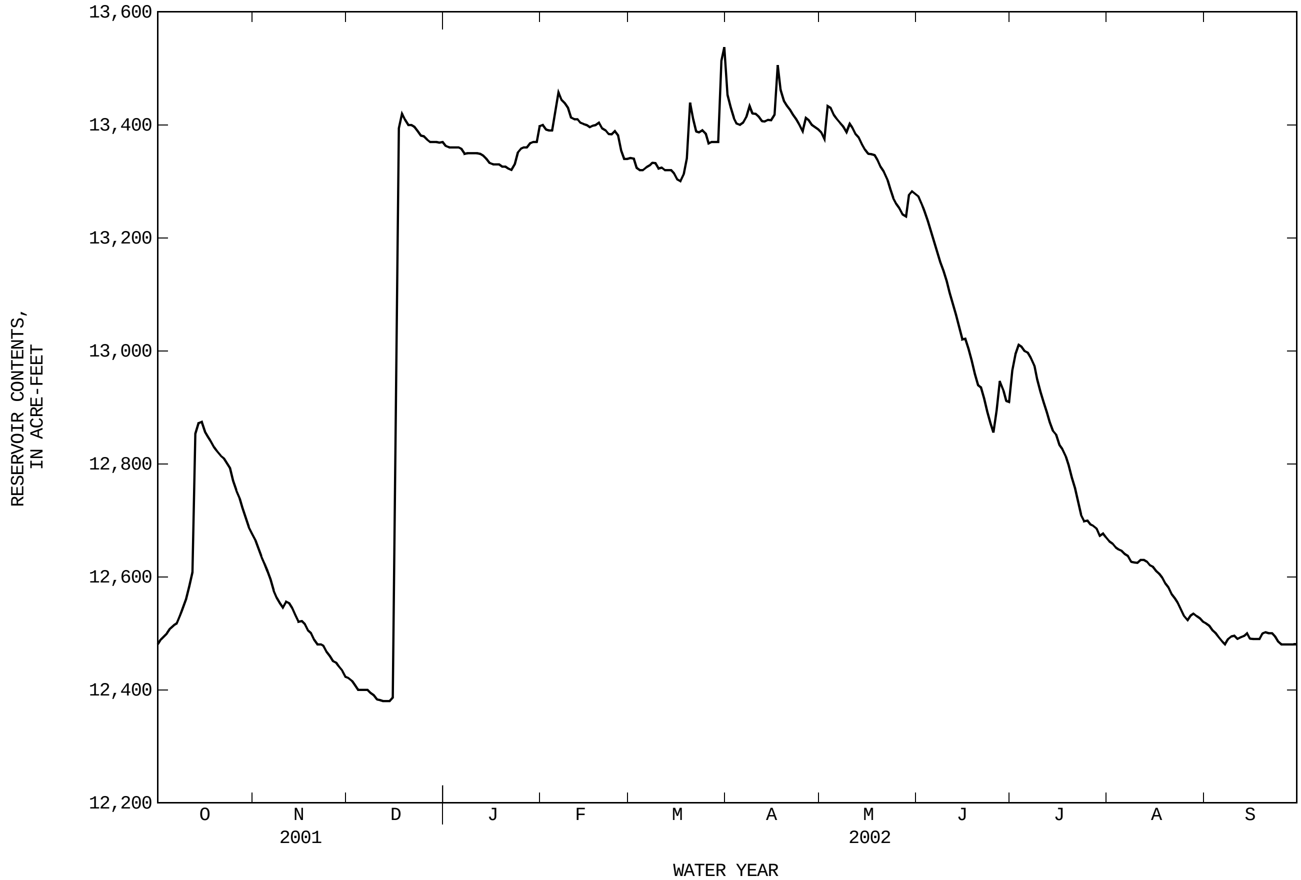
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12480	12670	12420	13360	13400	13340	13450	13390	13270	12960	12660	12520
2	12490	12650	12420	13360	13390	13340	13430	13380	13260	12990	12660	12510
3	12500	12640	12410	13360	13390	13320	13410	13430	13250	13010	12650	12510
4	12500	12620	12400	13360	13390	13320	13400	13430	13230	13010	12650	12500
5	12510	12610	12400	13360	13420	13320	13400	13420	13210	13000	12650	12490
6	12510	12600	12400	13360	13460	13320	13400	13410	13190	13000	12640	12490
7	12520	12580	12400	13350	13440	13330	13410	13400	13180	12990	12640	12480
8	12530	12560	12390	13350	13440	13330	13430	13400	13160	12970	12630	12490
9	12540	12550	12390	13350	13430	13330	13420	13390	13140	12950	12630	12490
10	12560	12550	12380	13350	13410	13320	13420	13400	13120	12930	12620	12500
11	12580	12560	12380	13350	13410	13320	13410	13390	13100	12910	12630	12490
12	12610	12550	12380	13350	13410	13320	13410	13380	13080	12890	12630	12490
13	12850	12540	12380	13350	13400	13320	13410	13380	13060	12870	12630	12500
14	12870	12530	12380	13340	13400	13320	13410	13370	13040	12860	12620	12500
15	12870	12520	12390	13330	13400	13310	13410	13360	13020	12850	12620	12490
16	12860	12520	13110	13330	13400	13300	13420	13350	13020	12830	12610	12490
17	12850	12520	13390	13330	13400	13300	13510	13350	13000	12830	12600	12490
18	12840	12500	13420	13330	13400	13310	13460	13350	12980	12820	12600	12490
19	12830	12500	13410	13330	13400	13340	13440	13340	12960	12800	12590	12500
20	12820	12490	13400	13330	13390	13440	13430	13330	12940	12780	12580	12500
21	12810	12480	13400	13320	13390	13410	13430	13320	12940	12760	12570	12500
22	12810	12480	13400	13320	13380	13390	13420	13300	12920	12730	12560	12500
23	12800	12480	13390	13330	13380	13390	13410	13290	12890	12710	12550	12490
24	12790	12470	13380	13350	13390	13390	13400	13270	12870	12700	12540	12490
25	12770	12460	13380	13360	13380	13380	13390	13260	12860	12700	12530	12480
26	12750	12450	13370	13360	13350	13370	13410	13250	12890	12690	12520	12480
27	12740	12450	13370	13360	13340	13370	13410	13240	12950	12690	12530	12480
28	12720	12440	13370	13370	13340	13370	13400	13240	12930	12690	12530	12480
29	12710	12430	13370	13370	---	13370	13400	13280	12910	12670	12530	12480
30	12690	12420	13370	13370	---	13510	13390	13280	12910	12680	12530	12480
31	12680	---	13370	13400	---	13540	---	13280	---	12670	12520	---
MEAN	12690	12530	12900	13350	13400	13360	13420	13340	13040	12840	12600	12490
MAX	12870	12670	13420	13400	13460	13540	13510	13430	13270	13010	12660	12520
MIN	12480	12420	12380	13320	13340	13300	13390	13240	12860	12670	12520	12480
(+)	530.18	529.85	530.87	530.90	530.84	531.04	530.89	530.78	530.41	530.17	530.02	529.96
(@)	+200	-260	+950	+30	-60	+200	-150	-110	-370	-240	-150	-40

CAL YR 2001 MAX 13420 MIN 11960 (@) +890
WTR YR 2002 MAX 13540 MIN 12380 (@) 0

(+) 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^2.

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 2001 TO SEPTEMBER 2002

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, 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)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
FEB													
28...	1010	43	730	8.2	7.0	11.2	93	--	250	33	95.0	2.40	60.9
APR													
10...	1315	--	517	8.0	17.8	8.3	87	3.1	200	25	78.3	2.10	24.5
24...	1100	113	554	8.2	22.0	6.8	79	<2.0	220	16	83.9	2.12	26.2
AUG													
07...	0845	10	1120	7.9	25.0	5.9	72	<2.0	210	42	81.3	2.65	129

Date	SODIUM AD- SORP- TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
28...	2	34	5.74	3	256	215	121	27.6	.4	5.01	470	457	<10
APR													
10...	.7	20	3.08	2	215	179	51.8	16.1	.3	5.61	306	294	63
24...	.8	20	3.77	2	242	202	53.5	15.8	.3	7.07	343	319	27
AUG													
07...	4	55	12.1	1	207	172	229	84.6	.5	7.40	713	674	<10

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,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, 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)
FEB													
28...	--	E.005	2.24	<.04	--	.24	.020	E.01	--	3.3	1	<.05	<2
APR													
10...	1.01	.027	1.03	.07	.29	.36	.019	E.01	--	6.6	2	.21	E2
24...	1.21	.018	1.22	E.03	--	.38	.026	E.01	--	3.9	5	.30	E2
AUG													
07...	5.24	.022	5.26	<.04	--	.56	.120	.09	.267	6.8	3	.35	3

Date	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)	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)
FEB													
28...	68	<.06	.04	<.8	.45	1.5	E6	.13	37.5	<.01	15.7	1.43	<2
APR													
10...	62	<.06	E.03	<.8	.30	1.1	<10	<.08	2.3	--	8.9	2.40	<2
24...	66	<.1	.06	<.8	.37	1.4	<10	.19	13.1	<.01	8.1	2.12	<2
AUG													
07...	96	<.06	.21	E.5	1.04	3.0	<10	.26	19.5	.02	60.9	4.64	<2

08063685 Waxahachie Creek near Waxahachie, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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			
28...	<1	6	1.20
APR			
10...	<1	2	1.13
24...	<1	7	1.14
AUG			
07...	<1	15	.59

Remark codes used in this report:
< -- Less than
E -- Estimated value

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^2.

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 NGVD of 1929 (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-ft 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-ft-diameter concrete conduit with two 5.0- by 10.0-ft 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^2 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, 68,160 acre-ft, Dec. 26, elevation, 426.55 ft; minimum contents, 41,090 acre-ft, Sept. 30, elevation, 419.24 ft.

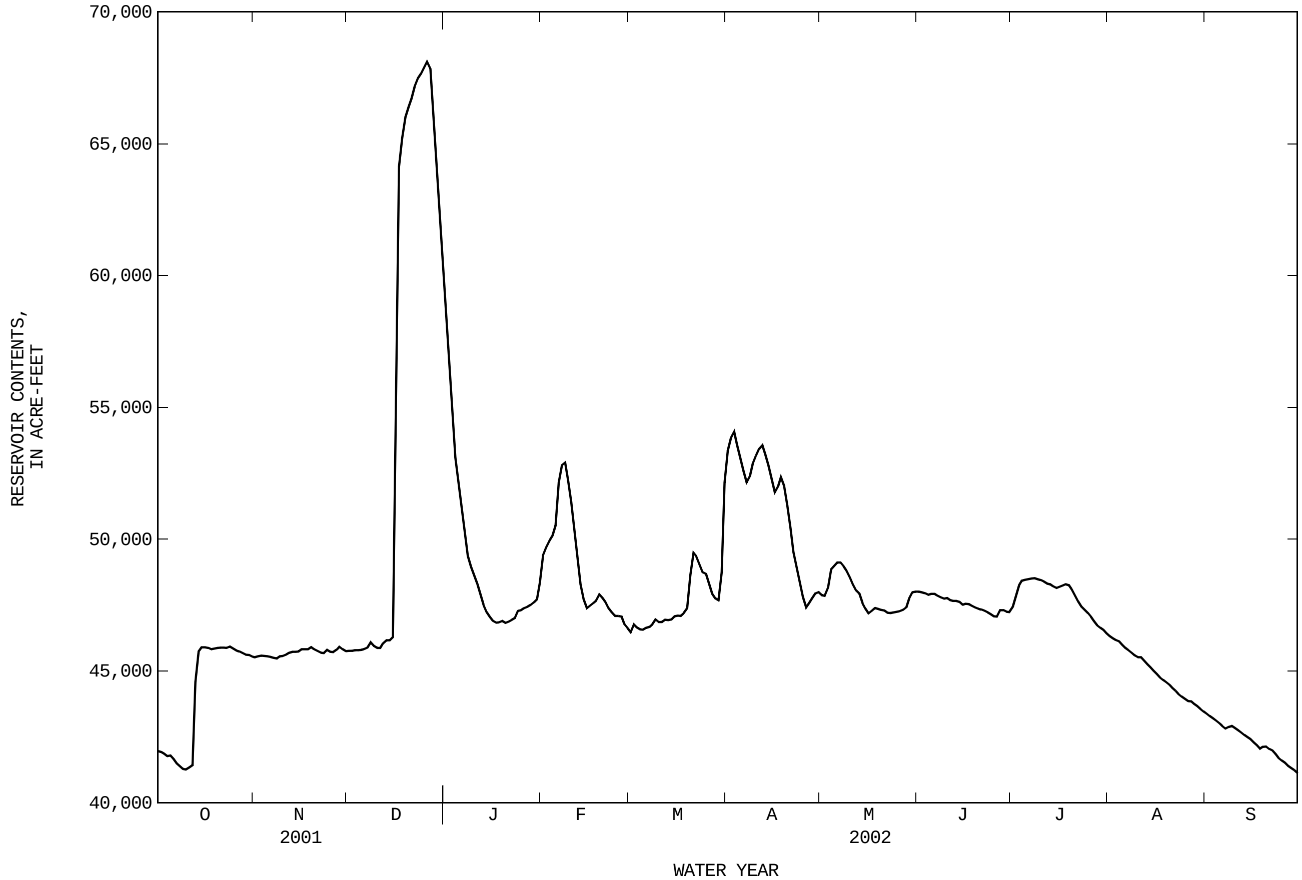
RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41960	45520	45760	58680	49380	46470	53350	47880	48010	47420	46330	43380
2	41920	45550	45760	56840	49680	46750	53840	47850	47990	47810	46240	43290
3	41860	45580	45790	54880	49930	46650	54070	48140	47950	48240	46170	43200
4	41770	45570	45790	53090	50110	46580	53580	48860	47890	48420	46120	43110
5	41790	45550	45800	52150	50510	46570	53060	48990	47920	48450	45990	43020
6	41650	45530	45830	51220	52140	46630	52590	49110	47920	48480	45870	42910
7	41490	45490	45890	50240	52800	46670	52150	49110	47850	48510	45780	42810
8	41380	45470	46080	49360	52910	46770	52380	48960	47790	48520	45690	42880
9	41290	45550	45940	48940	52250	46960	52860	48790	47740	48480	45580	42910
10	41260	45570	45870	48620	51400	46850	53150	48540	47760	48450	45520	42840
11	41340	45610	45870	48290	50370	46850	53430	48290	47690	48390	45520	42760
12	41410	45680	46060	47930	49310	46950	53560	48060	47650	48320	45380	42670
13	44580	45730	46170	47520	48290	46930	53220	47940	47660	48280	45250	42570
14	45730	45730	46160	47240	47700	46950	52790	47570	47630	48210	45140	42490
15	45890	45740	46290	47040	47380	47070	52290	47360	47510	48140	45010	42410
16	45900	45820	56640	46890	47470	47100	51780	47180	47550	48190	44890	42280
17	45870	45820	64130	46830	47570	47090	51990	47280	47540	48240	44760	42180
18	45820	45820	65230	46840	47670	47200	52340	47390	47460	48290	44660	42050
19	45850	45900	66010	46890	47900	47370	52010	47350	47400	48250	44580	42120
20	45880	45810	66390	46830	47770	48630	51270	47320	47360	48080	44490	42130
21	45880	45760	66710	46870	47600	49470	50410	47290	47330	47840	44350	42030
22	45880	45690	67160	46930	47380	49350	49520	47210	47280	47630	44240	41980
23	45880	45670	67470	47000	47220	49040	48930	47200	47220	47440	44130	41840
24	45920	45800	67660	47280	47080	48730	48370	47220	47150	47310	44030	41700
25	45840	45720	67870	47300	47090	48680	47790	47250	47070	47200	43940	41600
26	45770	45720	68110	47380	47060	48320	47410	47270	47060	47050	43860	41520
27	45740	45800	67860	47430	46770	47940	47570	47310	47300	46890	43850	41390
28	45680	45920	66190	47500	46630	47750	47760	47410	47310	46740	43750	41310
29	45620	45820	64420	47590	---	47680	47940	47750	47240	46640	43660	41240
30	45610	45750	62470	47720	---	48730	47980	47990	47230	46560	43550	41130
31	45540	---	60560	48350	---	52150	---	48010	---	46440	43450	---
TOTAL	1368000	1370690	1733940	1517670	1369370	1476880	1539390	1483880	1426460	1482910	1391780	1269750
MEAN	44130	45690	55930	48960	48910	47640	51310	47870	47550	47840	44900	42320
MAX	45920	45920	68110	58680	52910	52150	54070	49110	48010	48520	46330	43380
MIN	41260	45470	45760	46830	46630	46470	47410	47180	47060	46440	43450	41130
(+)	420.70	420.77	424.71	421.52	421.04	422.54	421.42	421.42	421.21	420.99	420.02	419.25
(@)	+3510	+210	+14810	-12210	-1720	+5520	-4170	+30	-780	-790	-2990	-2320

CAL YR 2001 MAX 106900 MIN 41090 (@) +9790
WTR YR 2002 MAX 68110 MIN 41130 (@) -900

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

08063700 Bardwell Lake near Ennis, TX--Continued



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 2001 TO SEPTEMBER 2002

321506096382601 -- Bardwell Lk Site AC

Date	Time	RESER-VOIR STORAGE (AC-FT) (00054)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)
FEB													
28...	1151	46700	.53	1.00	326	8.1	10.0	10.7	96	E18k	23	120	6
FEB													
28-28	1151	--	--	--	--	--	--	--	--	--	--	--	--
28...	1156	--	--	10.0	325	8.0	10.0	10.6	95	--	--	--	--
28...	1202	--	--	20.0	326	8.0	10.0	10.6	95	--	--	--	--
28...	1207	--	--	30.0	328	8.0	9.5	10.3	91	--	--	--	--
28...	1212	--	--	38.0	321	7.9	6.5	10.3	85	--	--	120	5
APR													
25...	1227	47700	.55	1.00	364	8.2	22.5	7.8	91	E1k	E1k	130	14
25...	1233	--	--	10.0	364	8.2	22.0	7.7	89	--	--	--	--
25...	1239	--	--	20.0	365	8.2	22.0	7.8	90	--	--	--	--
25...	1245	--	--	30.0	366	7.3	18.0	1.4	15	--	--	--	--
25...	1253	--	--	39.0	369	7.2	17.0	.2	2	--	--	140	8
AUG													
07...	1104	45800	.85	1.00	309	8.5	30.5	8.9	121	<1k	<1k	92	8
AUG													
07-07	1104	--	--	--	--	--	--	--	--	--	--	--	--
07...	1110	--	--	10.0	311	8.3	30.0	7.6	102	--	--	--	--
07...	1115	--	--	20.0	338	7.3	28.5	.2	3	--	--	--	--
07...	1120	--	--	30.0	349	7.1	28.0	.2	3	--	--	--	--
07...	1125	--	--	35.0	364	7.1	27.5	.3	4	--	--	110	--

321506096382601 -- Bardwell Lk Site AC

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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
28...	43.3	2.30	21.3	.9	27	4.30	1	134	113	36.6	13.1	.3	5.6
FEB													
28-28	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	43.3	2.29	21.1	.8	27	4.18	1	134	112	36.6	13.4	.3	5.7
APR													
25...	49.9	2.47	21.7	.8	25	3.98	2	143	121	37.2	11.7	.3	3.5
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	49.9	2.55	22.2	.8	26	4.07	1	153	126	36.2	11.8	.3	6.2
AUG													
07...	32.5	2.55	25.2	1	36	4.77	2	98	84	38.1	14.0	.4	5.4
AUG													
07-07	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	41.3	2.65	24.6	1	31	4.57	1	153	126	27.6	14.9	.4	8.2

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

321506096382601 -- Bardwell Lk Site AC

Date	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)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	ORTHO- PHOS- PHATE, 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)	BENZENE TOTAL (UG/L) (34030)
FEB													
28...	197	.65	.029	.68	.06	.30	.35	.006	<.02	--	<10	E1.0n	--
FEB													
28-28	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	198	.66	.027	.69	.07	.29	.37	.009	<.02	--	<10	3.8	--
APR													
25...	206	.66	.023	.69	<.04	--	.35	.005	<.02	--	<10	E1.2n	<.2
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	.67	.024	.69	<.04	--	.35	.005	<.02	--	<10	4.1	--
25...	--	--	<.008	.98	<.04	--	.35	.008	<.02	--	<10	3.3	--
25...	214	.86	.055	.91	.05	.38	.43	.011	<.02	--	<10	37.0	--
AUG													
07...	173	--	E.004	<.05	<.04	--	.29	.009	<.02	--	<10	E1.3n	<.2
AUG													
07-07	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	<.008	<.05	<.04	--	.29	.005	<.02	--	<10	6.3	--
07...	--	--	E.004	<.05	.04	.30	.34	.006	<.02	--	38	202	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	205	--	<.008	<.05	1.21	.32	1.5	.110	.09	.264	681	1950	--

321506096382601 -- Bardwell Lk Site AC

Date	ETHYL- BENZENE TOTAL (UG/L) (34371)	TOLUENE TOTAL (UG/L) (34010)	XYLENE WATER UNFLTRD REC (UG/L) (81551)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28-28	--	--	--	--	<.006	<.006	<.004	<.005	.517	<.050	<.010	<.002	<.041
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
25...	<.2	<.2	<.2	<.2	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
07...	<.2	<.2	<.2	.4	--	--	--	--	--	--	--	--	--
AUG													
07-07	--	--	--	--	<.006	<.006	<.004	<.005	1.10	<.050	<.010	<.002	<.041
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

321506096382601 -- Bardwell Lk Site AC

Date	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28-28	<.020	<.005	<.006	<.018	<.003	E.063	.007	<.005	<.02	<.002	<.009	<.005	<.003
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
07-07	<.020	<.005	<.006	<.018	<.003	E.150	<.005	<.005	<.02	<.002	<.009	<.005	<.003
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

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 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' DDE 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)
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28-28	<.004	<.035	<.027	.037	<.006	<.002	<.007	<.003	<.010	<.006	<.004	<.022	<.011
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
07-07	<.004	<.035	<.027	.136	<.006	<.002	<.007	<.003	<.010	--u	<.004	<.022	<.011
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)
FEB												
28...	--	--	--	--	--	--	--	--	--	--	--	--
FEB												
28-28	E.01n	<.010	<.011	<.02	<.004	.069	E.02n	<.034	<.02	<.005	<.002	<.009
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
07...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
07-07	.03	<.010	<.011	<.02	<.004	.057	.03	<.034	<.02	<.005	<.002	<.009
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--	--

321704096393501 -- Bardwell Lk Site BC

Date	Time	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	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)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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													
28...	1228	.34	1.00	329	8.1	10.0	10.8	97	E8k	E1k	20	6	43.9
28...	1232	--	10.0	327	8.1	10.0	10.8	97	--	--	--	--	--
28...	1237	--	22.0	324	8.1	9.5	10.7	95	--	--	120	2	43.2
APR													
25...	1318	.46	1.00	366	8.2	22.5	7.8	91	E2k	E2k	130	8	49.5
25...	1325	--	10.0	366	8.2	22.5	7.7	90	--	--	--	--	--
25...	1332	--	22.0	368	7.5	20.5	2.9	33	--	--	130	11	49.3
AUG													
07...	1144	.67	1.00	317	8.5	31.0	8.1	111	<1k	E6k	91	3	32.5
07...	1149	--	10.0	324	7.8	29.5	5.5	73	--	--	--	--	--
07...	1156	--	21.0	344	7.3	28.5	.2	3	--	--	100	--	37.9

321704096393501 -- Bardwell Lk Site BC

Date	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)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
28...	2.32	21.0	.8	27	4.07	1	136	113	36.8	13.8	.3	5.7	199
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	2.29	21.2	.9	27	4.19	1	138	115	36.5	13.7	.3	5.7	199
APR													
25...	2.42	21.5	.8	25	4.06	2	148	125	36.7	11.8	.3	3.6	208
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	2.50	21.9	.8	26	4.10	<1	149	123	36.6	11.6	.3	4.7	208
AUG													
07...	2.42	25.8	1	37	4.74	2	103	88	38.9	14.9	.4	5.4	178
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
07...	2.48	25.4	1	33	4.52	1	128	105	35.2	14.7	.4	6.5	192

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB										
28...	.66	.027	.68	.05	.29	.34	.008	<.02	31	E2.2b
28...	--	--	--	--	--	--	--	--	--	--
28...	.66	.027	.69	.05	.29	.34	.006	<.02	16	E1.9b
APR										
25...	.64	.019	.66	<.04	--	.36	.004	<.02	<10	<2.0
25...	.64	.018	.66	<.04	--	.37	.006	<.02	15	E1.2n
25...	.85	.014	.87	<.04	--	.42	.007	<.02	<10	E2.7b
AUG										
07...	--	E.004	<.05	<.04	--	.28	.006	<.02	<10	E1.5
07...	--	E.004	<.05	<.04	--	.29	.005	<.02	<10	11.0
07...	--	E.004	<.05	.15	.32	.47	.009	<.02	393	482

321830096404001 -- Bardwell Lk Site CC

Date	Time	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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, 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. (MG/L AS N) (00623)
FEB													
28...	1250	.30	1.00	330	8.2	9.0	11.8	103	.65	.026	.68	E.03	.34
28...	1553	--	4.00	334	8.2	9.0	11.7	102	--	--	--	--	--
APR													
25...	1343	.30	1.00	363	8.3	22.5	8.3	97	.64	.021	.66	<.04	.37
25...	1347	--	3.00	363	8.3	22.5	8.4	98	--	--	--	--	--
AUG													
07...	1211	.34	1.00	324	8.4	31.5	7.8	108	--	E.004	<.05	<.04	.29
07...	1214	--	4.00	326	8.4	31.0	7.6	104	--	--	--	--	--

321830096404001 -- Bardwell Lk Site CC

Date	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB				
28...	.009	<.02	61	5.1
28...	--	--	--	--
APR				
25...	.006	<.02	<10	E1.5n
25...	--	--	--	--
AUG				
07...	.006	<.02	<10	<2.0
07...	--	--	--	--

321758096412901 -- Bardwell Lk Site DC

Date	Time	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	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)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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													
28...	1317	.30	1.00	329	8.2	9.5	11.5	102	E4k	E9k	130	9	46.7
28...	1326	--	5.00	329	8.2	9.5	11.5	102	--	--	130	10	47.7
APR													
25...	1407	.23	1.00	392	8.1	22.5	8.4	98	E16k	E23	160	18	59.6
25...	1415	--	6.00	397	8.1	22.5	8.2	96	--	--	150	5	57.4
AUG													
07...	1229	.34	1.00	349	8.4	32.0	9.0	126	<2k	<2k	93	6	33.2
07...	1235	--	5.00	384	8.2	30.5	7.8	106	--	--	100	9	37.2

08063700 Bardwell Lake near Ennis, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

321758096412901 -- Bardwell Lk Site DC

Date	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)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB													
28...	2.36	22.3	.9	27	4.22	1	140	117	38.3	13.6	.3	5.6	207
28...	2.36	22.4	.9	27	4.35	2	142	119	42.4	14.6	.3	5.3	214
APR													
25...	2.33	21.0	.7	22	3.80	2	166	141	37.0	12.0	.3	5.0	228
25...	2.33	20.7	.7	22	3.84	1	179	148	36.4	11.8	.3	4.8	229
AUG													
07...	2.38	29.8	1	39	5.28	2	102	87	46.8	19.2	.4	6.0	195
07...	2.49	33.0	1	39	5.81	1	112	94	53.9	20.2	.4	6.6	216

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. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
FEB									
28...	.70	.026	.73	E.03	.33	.009	<.02	60	5.7
28...	.77	.023	.80	E.04	.30	.006	<.02	80	9.6
APR									
25...	.54	.013	.55	<.04	.34	.007	<.02	<10	E.9n
25...	.54	.013	.55	<.04	.34	.007	<.02	<10	<2.0
AUG									
07...	--	E.005	<.05	<.04	.31	.006	<.02	<10	<2.0
07...	--	E.006	.05	<.04	.31	.006	<.02	<10	E1.3n

Remark codes used in this report
- < -- Less than
- E -- Estimated value

Value qualifier codes used in this report:
- b -- Value was extrapolated below
- k -- Counts outside acceptable range
- n -- Below the NDV

Null value qualifier codes used in this report:
- u -- Unable to determine-matrix interference

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^2.

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 NGVD of 1929 (U.S. Army Corps of Engineers benchmark). Prior to Oct. 2, 1998, at datum 10.0 ft higher. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since Nov. 1965, at least 10% of contributing drainage area has been regulated. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.0	0.03	0.13	848	0.22	21	68	54	e0.34	e0.25	e0.11	e0.0
2	e0.0	0.03	0.09	841	0.17	0.29	69	54	e0.34	e0.24	e0.12	e0.0
3	e0.0	0.03	0.08	834	0.15	0.40	160	55	e0.34	e0.24	e0.12	e0.0
4	e0.00	0.03	0.08	615	52	0.38	273	53	e0.34	e0.22	e0.11	e0.0
5	e0.0	0.02	0.07	414	157	0.36	271	53	e0.33	e0.22	e0.11	e0.0
6	e0.0	0.02	0.07	412	157	0.36	269	53	e0.34	e0.22	e0.10	e0.0
7	e0.0	0.02	0.09	409	157	0.35	269	103	e0.34	e0.20	e0.10	e0.0
8	e0.0	0.02	0.18	291	378	0.34	177	139	e0.33	e0.20	e0.08	e0.0
9	e0.0	0.05	0.10	159	540	0.31	0.98	139	e0.33	e0.18	e0.07	e0.0
10	e0.0	0.05	0.08	159	529	0.24	0.73	139	e0.34	e0.18	e0.06	e0.0
11	e0.0	0.06	0.13	158	524	0.23	0.56	138	e0.34	e0.16	e0.05	e0.0
12	0.04	0.08	0.24	158	518	0.23	155	136	e0.32	e0.16	e0.05	e0.0
13	1.6	0.08	0.21	157	422	0.19	269	135	e0.30	e0.14	e0.04	e0.0
14	0.52	0.07	0.20	106	258	0.18	267	92	e0.28	e0.14	e0.02	e0.0
15	0.25	0.06	e0.25	72	116	0.17	264	50	e0.28	e0.14	e0.01	e0.0
16	0.12	0.09	e0.30	73	0.54	0.16	265	50	e0.28	e0.14	e0.0	e0.0
17	0.06	0.07	e0.35	28	0.43	0.17	317	23	e0.26	e0.12	e0.0	e0.0
18	0.04	0.07	e0.35	0.33	0.36	0.20	385	0.47	e0.26	e0.12	e0.0	e0.0
19	0.04	0.08	0.35	0.15	69	0.34	437	0.44	e0.26	16	e0.0	e0.0
20	0.04	0.08	0.29	0.08	138	0.67	527	0.43	e0.25	50	e0.0	e0.0
21	0.03	0.08	0.26	0.07	136	53	524	0.42	e0.24	47	e0.0	e0.0
22	0.03	0.08	0.23	0.12	86	154	377	0.41	e0.25	47	e0.0	e0.0
23	0.03	0.09	0.19	0.15	56	153	266	0.40	e0.24	29	e0.0	e0.0
24	0.02	0.05	0.17	0.20	56	153	266	0.37	e0.22	e0.18	e0.0	e0.0
25	0.02	0.05	0.16	0.15	56	153	269	0.36	e0.24	e0.16	e0.0	e0.0
26	0.02	0.05	0.15	0.13	56	153	111	0.36	e0.22	e0.16	e0.0	e0.0
27	0.02	0.05	485	0.09	56	117	0.35	0.36	e0.24	e0.12	e0.0	e0.0
28	0.02	0.23	897	0.10	56	66	0.30	0.36	e0.24	e0.10	e0.0	e0.0
29	0.02	0.23	879	0.11	---	66	0.27	0.48	e0.25	e0.11	e0.0	e0.0
30	0.02	0.17	867	0.12	---	67	33	e0.35	e0.24	e0.10	e0.0	e0.0
31	0.02	---	858	0.28	---	68	---	e0.34	---	e0.11	e0.0	---
TOTAL	2.96	2.12	3990.80	5736.08	4574.87	1229.57	6291.19	1471.55	8.58	193.31	1.15	0.0
MEAN	0.095	0.071	128.7	185.0	163.4	39.66	209.7	47.47	0.286	6.236	0.037	0.000
MAX	1.6	0.23	897	848	540	154	527	139	0.34	50	0.12	0.00
MIN	0.00	0.02	0.07	0.07	0.15	0.16	0.27	0.34	0.22	0.10	0.00	0.00
AC-FT	5.9	4.2	7920	11380	9070	2440	12480	2920	17	383	2.3	0.00

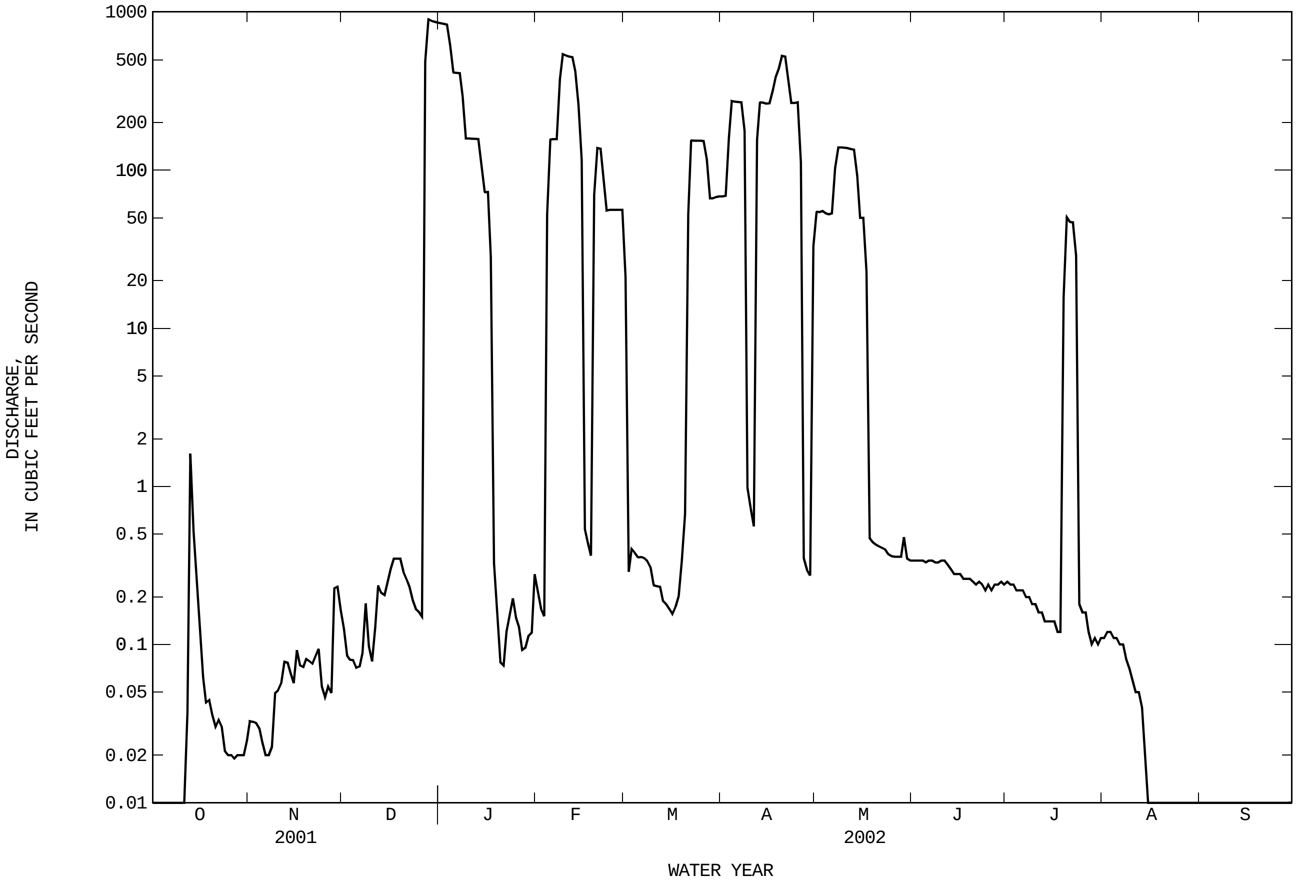
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	18.90	74.62	87.74	124.5	114.3	161.2	128.6	158.6	179.9	24.67	4.293	5.831
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	0.000	0.000	0.018	0.022	0.022	0.024	0.11	0.11	0.001	0.000	0.000	0.000
(WY)	1964	1964	1990	1967	1967	1967	1996	1996	1996	1966	1964	1966

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	44551.96		23502.18			
ANNUAL MEAN	122.1		64.39		90.02	
HIGHEST ANNUAL MEAN					318	1992
LOWEST ANNUAL MEAN					0.063	1967
HIGHEST DAILY MEAN	1580	Mar 22	897	Dec 28	1880	Jun 25 1981
LOWEST DAILY MEAN	0.00	Jul 7	0.00	Oct 1	0.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 7	0.00	Oct 1	0.00	Oct 1 1963
MAXIMUM PEAK FLOW			930	Dec 27	1960	Jun 25 1981
MAXIMUM PEAK STAGE			20.23	Dec 27	aa28.13	Jun 25 1981
ANNUAL RUNOFF (AC-FT)	88370		46620		65210	
10 PERCENT EXCEEDS	287		260		283	
50 PERCENT EXCEEDS	0.09		0.23		1.1	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated
aa Adjusted to present datum.

08063800 Waxahachie Creek near Bardwell, TX--Continued



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 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
FEB 28...	1300	56	324	8.4	10.0	11.7	104	--	120	10	43.9	2.31	21.4
APR 24...	1400	262	368	8.3	21.0	8.4	96	--	130	9	49.1	2.46	21.8
AUG 07...	1032	.42	407	7.4	27.5	5.3	68	<2.0	130	--	46.8	2.87	26.9

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
FEB 28...	.9	27	3.88	1	131	110	36.7	13.7	.3	5.31	212	196	24
APR 24...	.8	26	4.07	1	148	124	36.9	12.0	.2	3.61	222	208	23
AUG 07...	1	30	4.02	<1	161	132	41.1	16.9	.4	5.93	243	224	<10

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,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
FEB 28...	.66	.027	.69	.05	.33	.38	.008	<.02	5.0	<1	<.05	2	52
APR 24...	.73	.051	.78	E.02	--	.41	.007	<.02	5.3	1	.38	3	61
AUG 07...	--	<.008	<.05	<.04	--	.33	.015	<.02	4.6	3	.24	4	61

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 28...	<.06	<.04	<.8	.15	1.2	E9	.10	.3	<.01	.3	1.53	<2	<1
APR 24...	<.06	E.03	<.8	.17	1.8	<10	.08	.4	E.01n	3.4	1.45	<2	<1
AUG 07...	<.06	<.04	<.8	.17	.9	<10	<.08	8.7	<.01	4.6	2.17	<2	<1

Date	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
FEB 28...	<1	.71
APR 24...	2	.82
AUG 07...	4	.58

Remark codes used in this report:
< -- Less than
E -- Estimated value

Value qualifier codes used in this report:
n -- Below the NDV

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	12	22	e517	1350	151	1640	171	115	14	2.2	0.09
2	19	12	22	e492	751	77	955	164	73	100	2.4	0.08
3	19	13	21	e467	397	75	751	175	54	178	3.5	0.08
4	19	13	20	e442	280	69	753	921	44	195	1.9	0.07
5	16	13	20	e417	577	65	659	531	36	169	1.1	0.06
6	9.8	e2.6	21	e392	2930	66	608	410	32	74	0.96	0.06
7	7.5	e2.6	e11	e367	e4490	66	595	441	28	49	0.74	0.07
8	7.1	12	e12	e343	e1960	e100	888	386	26	36	0.56	0.08
9	7.2	13	e8.3	e318	e1440	67	1340	337	24	28	0.45	0.09
10	6.7	18	e8.9	e306	e1210	66	663	308	23	22	0.43	0.09
11	6.6	19	e11	e293	e1000	60	461	359	20	18	0.41	0.08
12	10	18	30	285	e775	59	461	320	18	17	1.3	0.07
13	e53	38	36	281	e610	60	624	294	16	15	1.4	0.07
14	e162	34	42	242	e501	59	589	255	e33	13	0.74	0.07
15	e171	26	48	164	433	57	574	166	13	12	0.49	0.06
16	341	28	9960	163	170	54	545	152	14	14	0.41	0.06
17	219	37	13000	e144	150	53	786	132	16	62	0.37	0.05
18	137	46	7550	e156	141	53	2110	62	16	91	0.29	0.05
19	76	e34	2550	e152	178	60	978	56	14	56	0.23	0.08
20	e17	e27	1730	e145	353	822	904	56	12	108	0.20	0.08
21	e12	e23	1260	e133	336	1180	837	48	10	110	0.18	0.07
22	e11	e20	e1090	e145	289	788	711	42	21	103	0.17	0.06
23	e10	e17	e991	e163	214	601	504	38	12	96	0.15	0.06
24	e9.4	e13	e867	e200	209	506	485	34	9.4	23	0.14	0.06
25	e6.6	e12	e767	e251	203	445	469	31	8.2	8.9	0.13	0.05
26	e3.9	e11	e717	211	192	410	349	30	7.9	6.2	0.12	0.04
27	e3.2	e10	e692	108	186	361	133	31	13	4.6	0.13	0.05
28	14	e12	e617	74	180	251	126	53	19	4.4	0.13	0.04
29	13	e16	e592	62	---	237	105	442	12	3.6	0.11	0.03
30	13	e15	e567	57	---	531	113	630	8.4	2.9	0.10	0.03
31	12	---	e542	135	---	3030	---	241	---	3.0	0.09	---
TOTAL	1424.0	567.2	43825.2	7625	21505	10479	20716	7316	747.9	1636.6	21.53	1.93
MEAN	45.94	18.91	1414	246.0	768.0	338.0	690.5	236.0	24.93	52.79	0.695	0.064
MAX	341	46	13000	517	4490	3030	2110	921	115	195	3.5	0.09
MIN	3.2	2.6	8.3	57	141	53	105	30	7.9	2.9	0.09	0.03
AC-FT	2820	1130	86930	15120	42660	20790	41090	14510	1480	3250	43	3.8

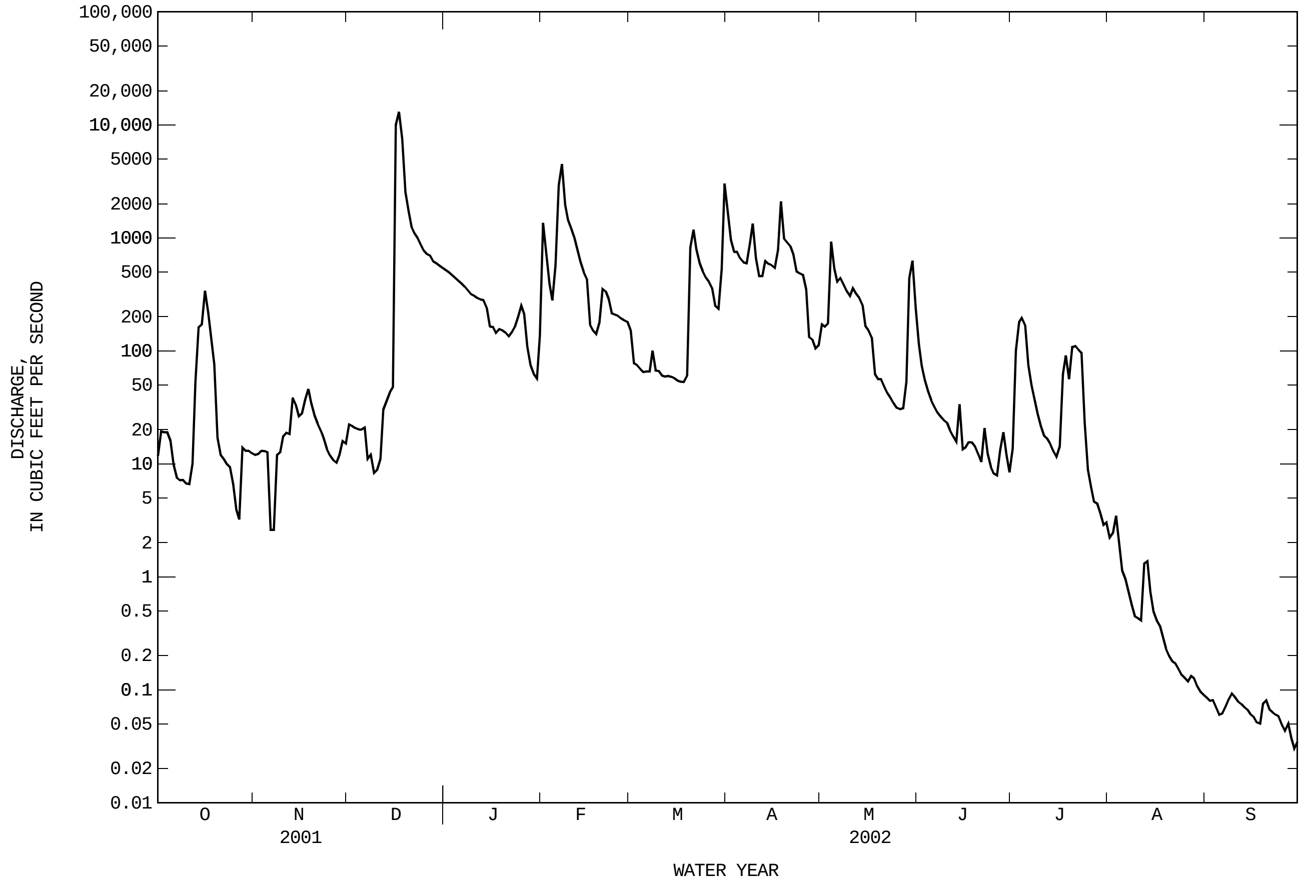
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	303.5	354.9	911.6	566.7	805.8	831.3	555.5	698.6	624.0	47.96	33.71	24.62
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	0.000	0.000	1.45	4.66	5.16	6.35	12.2	1.34	0.051	0.081	0.000	0.000
(WY)	1989	2000	1989	1996	1996	1996	1996	1996	1996	1988	1988	1985

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1984 - 2002	
ANNUAL TOTAL	202492.72		115865.36			
ANNUAL MEAN	554.8		317.4		487.2	
HIGHEST ANNUAL MEAN					1263	1992
LOWEST ANNUAL MEAN					12.9	1996
HIGHEST DAILY MEAN	13000	Dec 17	13000	Dec 17	22700	Dec 21 1991
LOWEST DAILY MEAN	0.09	Aug 11	0.03	Sep 29	0.00	Aug 6 1985
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 11	0.04	Sep 24	0.00	Aug 6 1985
MAXIMUM PEAK FLOW			18600	Dec 16	c43400	Jun 6 1986
MAXIMUM PEAK STAGE			29.93	Dec 16	32.57	Dec 21 1991
ANNUAL RUNOFF (AC-FT)	401600		229800		352900	
10 PERCENT EXCEEDS	1850		713		1220	
50 PERCENT EXCEEDS	53		49		43	
90 PERCENT EXCEEDS	0.27		0.13		0.07	

e Estimated
c From rating curve extended above 15,000 ft^3/s on basis of velocity-area study.

08064100 Chambers Creek near Rice, TX--Continued



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.
PESTICIDE DATA: Feb. 2000 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 poor. 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 for previous water years using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 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, 1,050 microsiemens/cm, Aug. 18; minimum, 115 microsiemens/cm, Oct. 13.
WATER TEMPERATURE: Maximum, 31.8°C, July 25; minimum, 5.0°C, Mar. 4.

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, DIS-SOLVED (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													
07...	0745	352	423	8.3	10.7	9.9	90	160	23	59.7	2.75	22.2	.8
MAR													
15...	0845	1680	361	8.1	14.5	8.8	88	150	21	56.5	2.65	12.6	.4
APR													
11...	1430	892	444	8.2	20.0	7.5	96	160	13	59.7	2.59	18.3	.6
MAY													
16...	1130	95	526	7.6	25.5	6.3	79	190	40	69.8	4.56	32.2	1
JUN													
14...	1100	33	828	6.8	29.0	5.5	73	250	72	88.3	6.44	73.3	2
JUL													
11...	1300	24	568	6.1	30.2	6.1	83	190	62	69.0	4.65	37.1	1
SEP													
06...	1300	332	263	6.2	25.7	6.6	--	89	9	32.4	1.82	12.0	.6

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)	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)
FEB													
07...	23	3.99	138	42.8	13.9	.4	5.01	254	238	.97	.026	1.00	<.04
MAR													
15...	15	3.02	131	30.8	7.07	.3	8.99	227	204	.72	.013	.73	E.03
APR													
11...	19	3.64	147	37.8	12.0	.3	4.22	253	230	.71	.025	.74	<.04
MAY													
16...	26	3.85	153	70.0	23.2	.4	6.35	335	306	.98	.014	1.00	<.04
JUN													
14...	39	3.71	175	135	65.3	.5	6.47	515	484	--	<.006	E.03	<.04
JUL													
11...	29	5.03	130	94.5	32.8	.5	7.62	360	329	--	<.006	<.05	<.04
SEP													
06...	22	3.21	80	26.2	8.80	.3	9.18	162	145	.55	.031	.59	E.03

08064100 Chambers Creek near Rice, TX--Continued

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

Date	NITRO-GEN, TOTAL (MG/L AS N) (00600)	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)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (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)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
FEB 07...	1.9	.37	.92	.147	.008	<.02	--	64.6	68	97	<10	<3.2	<.002
MAR 15...	2.2	.43	1.4	.59	.031	.03	.077	3620	797	98	E6	<3.2	<.002
APR 11...	1.4	.37	.65	.078	.010	<.02	--	190	79	100	<10	3.4	<.002
MAY 16...	2.1	.45	1.1	.162	.013	<.02	--	40.8	159	100	<10	3.5	<.002
JUN 14...	--	.27	.67	.096	.009	<.02	--	11.0	123	84	<10	10.1	<.002
JUL 11...	--	.41	.79	.121	.011	<.02	--	4.2	65	100	<10	3.2	<.002
SEP 06...	2.7	.42	2.1	.79	.028	E.01	--	898	1000	100	E9	<3.0	<.002

Date	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
FEB 07...	<.004	<.002	<.005	.418	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003
MAR 15...	<.004	<.002	<.005	.088	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003
APR 11...	<.004	.012	<.005	.506	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003
MAY 16...	<.004	.015	<.005	2.80	<.050	<.010	<.002	E.050	<.020	<.005	<.006	<.018	<.003
JUN 14...	<.004	<.002	<.005	.364	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003
JUL 11...	<.004	<.002	<.005	.263	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003
SEP 06...	<.004	<.002	<.005	.016	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003

Date	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	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 SENCOR WATER DISSOLV (UG/L) (82630)
FEB 07...	E.075	<.005	<.005	<.02	.008	<.009	<.005	<.003	<.004	<.035	<.027	.025	<.006
MAR 15...	E.029	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.024	<.006
APR 11...	E.032	.008	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.073	<.006
MAY 16...	E.188	E.003	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	1.45	<.006
JUN 14...	E.063	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.138	<.006
JUL 11...	<.006	.008	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.025	<.006
SEP 06...	E.006	.015	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.007	<.006

08064100 Chambers Creek near Rice, TX--Continued

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

Date	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' DDE 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)	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)
FEB 07...	<.002	<.007	E.001	<.007	<.006	<.002	<.010	<.011	M	<.010	<.011	<.02	<.004
MAR 15...	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004
APR 11...	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.40	<.004
MAY 16...	<.002	<.007	<.003	<.007	<.006	<.002	.050	<.011	M	<.010	<.011	<.02	<.004
JUN 14...	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004
JUL 11...	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004
SEP 06...	<.002	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004

Date	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)
FEB 07...	.038	.02	<.034	<.02	<.005	<.002	<.009
MAR 15...	.018	E.01	<.034	<.02	<.005	<.002	<.009
APR 11...	.056	.02	<.034	<.02	<.005	<.002	<.009
MAY 16...	.034	E.01	<.034	<.02	<.005	<.002	<.009
JUN 14...	E.009	E.01	<.034	<.02	<.005	<.002	<.009
JUL 11...	E.007	<.02	<.034	<.02	<.005	<.002	<.009
SEP 06...	<.011	<.02	<.034	<.02	<.005	<.002	<.009

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT													
25...	1130	20	--	7.7	20.0	5.9	--	<2.0	190	48	68.2	3.85	37.2
NOV													
08...	1200	12	708	7.7	16.9	5.9	61	--	--	--	--	--	--
DEC													
03...	1300	21	764	7.7	10.9	9.7	89	--	--	--	--	--	--
13...	0920	34	--	8.1	10.0	9.2	--	2.2	230	41	84.5	5.21	53.8
JAN													
07...	1200	618	315	8.2	7.3	12.5	104	--	--	--	--	--	--
FEB													
12...	1230	888	361	8.1	9.1	12.1	105	--	--	--	--	--	--
MAR													
04...	1500	68	571	8.2	6.4	12.8	103	--	--	--	--	--	--
12...	1500	59	604	8.2	14.6	10.9	108	--	--	--	--	--	--
19...	1300	60	630	8.0	16.8	9.0	94	--	--	--	--	--	--
25...	1230	443	423	8.1	15.5	9.5	96	--	--	--	--	--	--
APR													
01...	1300	1480	381	8.0	16.6	8.9	92	--	--	--	--	--	--
04...	0945	758	394	8.1	16.0	11.5	116	2.5	150	17	55.9	2.59	17.8
08...	1300	888	396	8.1	16.2	9.3	97	--	--	--	--	--	--
15...	1200	575	419	8.2	19.9	9.2	104	--	--	--	--	--	--
22...	1200	797	399	8.3	22.2	9.0	103	--	--	--	--	--	--
MAY													
06...	1130	317	445	7.9	24.7	7.1	86	--	--	--	--	--	--
13...	1130	298	451	7.8	16.2	7.9	80	--	--	--	--	--	--
20...	1100	59	583	7.9	21.6	8.7	99	--	--	--	--	--	--
21...	1015	49	592	8.0	21.5	7.1	80	--e	220	52	80.0	5.07	39.0
28...	1230	32	690	7.5	24.5	5.8	71	--	--	--	--	--	--
JUN													
03...	1500	52	535	7.3	28.0	6.5	85	--	--	--	--	--	--
10...	1115	24	650	7.0	27.8	5.1	66	--	--	--	--	--	--
18...	1000	16	735	7.4	25.7	5.2	65	--	--	--	--	--	--
26...	1045	7.7	721	7.4	27.9	5.3	68	--	--	--	--	--	--
JUL													
08...	1130	36	459	7.6	29.0	5.4	70	--	--	--	--	--	--
09...	1002	28	482	7.6	29.0	9.3	124	3.2	180	70	65.7	4.28	29.4
22...	1100	102	383	7.8	29.4	6.6	86	--	--	--	--	--	--

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
OCT													
25...	1	30	4.19	<1	168	138	2.5	14.1	.4	9.18	330	228	80
NOV													
08...	--	--	--	--	--	172	109	55.3	--	--	--	--	--
DEC													
03...	--	--	--	--	--	190	121	52.7	--	--	--	--	--
13...	2	33	3.67	1	232	192	92.1	50.1	.5	4.94	434	411	24
JAN													
07...	--	--	--	--	--	114	36.1	14.3	--	--	--	--	--
FEB													
12...	--	--	--	--	--	116	41.3	12.6	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	183	81.6	27.8	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	.6	20	3.32	1	161	134	38.4	12.2	.3	5.74	230	222	274
08...	--	--	--	--	--	144	38.6	12.3	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	136	65.5	14.6	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	1	27	3.58	2	202	169	85.7	29.1	.4	5.95	358	351	44
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	151	102	37.3	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
08...	--	--	--	--	--	112	71.8	18.5	--	--	--	--	--
09...	.9	25	4.86	<1	136	113	76.5	19.8	.5	10.6	297	280	105
22...	--	--	--	--	--	--	--	--	--	--	--	--	--

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, TOTAL (MG/L AS N) (00600)	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)	ORTHO-PHOS-PHATE, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)
OCT													
25...	1.17	.022	1.20	<.04	--	--	--	.48	--	--	<.06	<.02	--
NOV													
08...	--	<.008	.10	<.04	.62	--	--	--	.52	.058	--	<.02	--
DEC													
03...	--	<.008	.12	<.04	.65	--	--	--	.53	.055	--	<.02	--
13...	--	E.006	.34	E.03	--	--	--	.33	--	--	.007	<.02	--
JAN													
07...	.48	.009	.49	E.03	1.1	--	--	--	.61	.081	--	.02	.055
FEB													
12...	.79	.057	.85	<.04	1.5	--	--	--	.69	.092	--	<.02	--
MAR													
04...	--	<.008	1.02	<.04	1.3	--	--	--	.25	.020	--	<.02	--
12...	--	E.004	.75	<.04	1.0	--	--	--	.30	.023	--	<.02	--
19...	--	E.004	.49	<.04	.84	--	--	--	.35	.033	--	<.02	--
25...	.98	.039	1.02	E.04	2.0	--	--	--	.93	.178	--	<.02	--
APR													
01...	1.75	.098	1.84	.06	3.4	1.5	--	--	1.6	.67	--	.02	.061
04...	1.19	.109	1.30	.11	--	--	.36	.47	--	--	E.04	.09	.276
08...	1.28	.051	1.33	<.04	2.5	--	--	--	1.1	.35	--	<.02	--
15...	.77	.013	.78	<.04	1.5	--	--	--	.76	.126	--	<.02	--
22...	.66	.015	.68	<.04	1.3	--	--	--	.58	.113	--	<.02	--
MAY													
06...	1.22	.078	1.30	.07	2.7	1.3	--	--	1.4	.31	--	E.01	--
13...	.84	.026	.87	<.04	1.7	--	--	--	.81	.144	--	<.02	--
20...	--	<.008	.36	<.04	.92	--	--	--	.56	.070	--	<.02	--
21...	--	<.008	.33	<.04	--	--	--	.29	--	--	.006	<.02	--
28...	--	<.008	.15	<.04	.74	--	--	--	.58	.084	--	<.02	--
JUN													
03...	1.19	.014	1.20	<.04	2.0	--	--	--	.81	.141	--	<.02	--
10...	--	E.004	.12	<.04	.87	--	--	--	.75	.097	--	<.02	--
18...	--	<.008	<.05	<.04	--	--	--	--	.61	.091	--	<.02	--
26...	--	<.008	<.05	<.04	--	--	--	--	.76	.077	--	<.02	--
JUL													
08...	.41	.010	.42	<.04	1.3	--	--	--	.86	.159	--	E.01	--
09...	--	E.006	.37	<.04	--	--	--	.42	--	--	.019	E.01	--
22...	--	<.008	<.05	<.04	--	--	--	--	.69	.111	--	<.02	--

Date	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	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)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT													
25...	9.8	--	--	--	--	<1	.31	4	64	<.06	<.04	<.8	.28
NOV													
08...	--	5.7	1.9	1.5	47	--	--	--	--	--	--	--	--
DEC													
03...	--	4.8	2.1	2.7	47	--	--	--	--	--	--	--	--
13...	65.1	--	--	--	--	<1	.15	2	73	<.06	<.04	<.8	.34
JAN													
07...	--	3.6	2.4	81.8	49	--	--	--	--	--	--	--	--
FEB													
12...	--	4.1	4.1	189	79	--	--	--	--	--	--	--	--
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	2.8	1.2	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
04...	10.0	--	--	--	--	<1	.20	3	49	<.06	<.04	<.8	.24
08...	--	4.5	--i	1200	499	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
06...	--	--	--	239	279	--	--	--	--	--	--	--	--
13...	--	4.5	5.4	200	249	--	--	--	--	--	--	--	--
20...	--	--	--	13.4	84	--	--	--	--	--	--	--	--
21...	5.7	--	--	--	--	2	.15	E1	62	<.06	<.04	<.8	.37
28...	--	--	--	10.4	120	--	--	--	--	--	--	--	--
JUN													
03...	--	--	--	12.5	89	--	--	--	--	--	--	--	--
10...	--	4.5	2.4	5.2	81	--	--	--	--	--	--	--	--
18...	--	--	--	5.4	124	--	--	--	--	--	--	--	--
26...	--	--	--	1.6	76	--	--	--	--	--	--	--	--
JUL													
08...	--	5.8	4.2	10.2	105	--	--	--	--	--	--	--	--
09...	8.5	--	--	--	--	<1	.28	3	56	<.06	E.03	<.8	.32
22...	--	--	--	24.0	87	--	--	--	--	--	--	--	--

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)
OCT													
25...	2.1	E6	<.08	7.5	<.01	4.5	1.89	<2	<1	<1	1.60	--	--
NOV													
08...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
DEC													
03...	--	--	--	--	--	--	--	--	--	--	--	<.002	<.004
13...	1.9	<10	<.08	8.8	--	2.5	3.16	<2	<1	2	2.01	--	--
JAN													
07...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
FEB													
12...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
MAR													
04...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
19...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
25...	--	--	--	--	--	--	--	--	--	--	--	<.006	.029
APR													
01...	--	--	--	--	--	--	--	--	--	--	--	<.006	.053
04...	1.7	<10	<.08	.6	<.01	2.4	2.44	<2	<1	<1	1.11	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
15...	--	--	--	--	--	--	--	--	--	--	--	<.006	.006
22...	--	--	--	--	--	--	--	--	--	--	--	<.006	.040
MAY													
06...	--	--	--	--	--	--	--	--	--	--	--	<.030	<.030
13...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
20...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
21...	2.0	<10	<.08	3.8	E.01n	3.2	3.14	<2	<1	1	1.92	--	--
28...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
JUN													
03...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
10...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
18...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
26...	--	--	--	--	--	--	--	--	--	--	--	--r	--r
JUL													
08...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006
09...	2.6	<10	<.08	4.5	<.01	6.3	3.93	<2	<1	1	1.30	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	<.006	<.006

Date	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
08...	<.002	<.005	2.62	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.166
DEC													
03...	<.002	<.005	.518	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.064
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	<.004	<.005	.498	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.051
FEB													
12...	<.004	<.005	.916	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.059
MAR													
04...	<.004	<.005	.414	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.037
12...	<.010	<.005	.400	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.021
19...	.010	<.005	.382	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.015
25...	.407	<.005	3.76	<.050	<.010	<.002	<.041	E.070	<.005	<.006	<.018	<.003	E.062
APR													
01...	1.61	<.005	7.49	<.050	<.010	<.002	<.041	E.174	<.005	<.006	<.018	<.003	E.186
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	.111	<.005	4.71	<.050	<.010	<.002	<.041	E.050	<.005	<.006	<.018	<.003	E.104
15...	.069	<.005	1.97	<.050	<.010	<.002	<.041	E.032	<.005	<.006	<.018	<.003	E.060
22...	.166	<.005	1.45	<.050	<.010	<.002	E.010	<.020	<.005	<.006	<.018	<.003	E.041
MAY													
06...	.599	<.023	4.53	<.250	<.050	<.010	<.205	E.228	<.025	<.030	<.090	<.015	E.227
13...	.039	<.005	1.56	<.050	<.010	<.002	<.041	E.007	<.005	<.006	<.018	<.003	E.157
20...	.058	<.005	.546	<.050	<.010	<.002	<.041	E.003	<.005	<.006	<.018	<.003	E.097
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	.025	<.005	.963	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.122
JUN													
03...	.238	<.005	1.22	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.312
10...	.032	<.005	.793	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.245
18...	.007	<.005	.443	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.142
26...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
08...	<.004	<.005	.633	<.050	<.010	<.002	E.015	<.020	<.005	<.006	<.018	<.003	E.106
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.004	<.005	.800	<.050	<.010	<.002	<.041	<.020	<.005	<.006	<.018	<.003	E.143

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	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 SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
08...	<.007	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.017	<.006	<.002
DEC													
03...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.007	<.006	<.002
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	E.004	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.023	<.006	<.002
FEB													
12...	<.007	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.041	<.006	<.002
MAR													
04...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.011n	<.006	<.002
12...	E.004n	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.008n	<.006	<.002
19...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.028	<.006	<.002
25...	.012	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.302	<.006	<.002
APR													
01...	.009	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.540	<.006	<.002
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	.007	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.442	<.006	<.002
15...	.009	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.259	<.006	<.002
22...	.031	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.050	<.006	<.002
MAY													
06...	.026	<.024	<.10	<.010	<.045	<.025	<.013	<.020	<.175	<.135	.148	<.030	<.008
13...	.009	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.248	<.006	<.002
20...	E.003n	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.026	<.006	<.002
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	E.004n	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.024	<.006	<.002
JUN													
03...	.008	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.024	<.006	<.002
10...	<.009	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.018	<.006	<.002
18...	<.005	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	E.011n	<.006	<.002
26...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
08...	.006	<.005	<.02	<.002	<.009	<.005	<.003	<.004	<.035	<.027	.013	<.006	<.002
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.005	<.005	<.02	<.020	<.009	<.005	<.003	<.004	<.035	<.027	.129	<.006	<.002

Date	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P’ DDE 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)	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)
OCT													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
08...	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004	<.011
DEC													
03...	<.007	<.003	<.007	<.006	<.002	<.010	<.011	<.01	<.010	<.011	<.02	<.004	<.011
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
07...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	E.01	<.010	<.011	<.02	<.004	.051
FEB													
12...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.054
MAR													
04...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.006
12...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
19...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	<.005
25...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.057
APR													
01...	<.007	<.003	<.010	<.006	<.004	E.013n	<.011	<.01	<.010	<.011	<.02	<.004	.051
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	Mn	<.010	<.011	<.02	<.004	.058
15...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.089
22...	<.007	<.003	<.010	<.006	<.004	E.013n	<.011	E.01n	<.010	<.011	<.02	<.004	.264
MAY													
06...	<.035	<.013	<.050	<.030	<.021	<.110	<.055	<.07	<.050	<.055	<.12	<.021	.065
13...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	E.01n	<.010	<.011	<.02	<.004	.065
20...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	Mn	<.010	<.011	<.02	<.004	.028
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.028
JUN													
03...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.012
10...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.019
18...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.018
26...	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r	--r
JUL													
08...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	<.01	<.010	<.011	<.02	<.004	.024
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	<.007	<.003	<.010	<.006	<.004	<.022	<.011	.02	<.010	<.011	<.02	<.004	.039

08064100 Chambers Creek near Rice, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)
OCT						
25...	--	--	--	--	--	--
NOV						
08...	E.01	<.041	<.02	<.005	<.002	<.009
DEC						
03...	E.02	<.034	<.02	<.005	<.002	<.009
13...	--	--	--	--	--	--
JAN						
07...	.02	<.034	<.02	<.005	<.002	<.009
FEB						
12...	E.01n	<.034	<.02	<.005	<.002	<.009
MAR						
04...	<.02	<.034	<.02	<.005	<.002	<.009
12...	E.01	<.034	<.02	<.005	<.002	<.009
19...	<.02	<.034	<.02	<.005	<.002	<.009
25...	E.01	<.034	<.02	<.005	<.002	<.009
APR						
01...	E.01n	<.034	<.02	<.005	<.002	<.009
04...	--	--	--	--	--	--
08...	E.01n	<.034	<.02	<.005	<.002	<.009
15...	.02	<.034	<.02	<.005	<.002	<.009
22...	E.03	<.034	<.02	<.005	<.002	<.009
MAY						
06...	E.05	<.170	<.09	<.024	<.011	<.045
13...	<.02	<.034	<.02	<.005	<.002	<.009
20...	E.01n	<.034	<.02	<.005	<.002	<.009
21...	--	--	--	--	--	--
28...	.03	<.034	<.02	<.005	<.002	<.009
JUN						
03...	E.02	<.034	<.02	<.005	<.002	<.009
10...	E.03	<.034	<.02	<.005	<.002	<.009
18...	E.02	<.034	<.02	<.005	<.002	<.009
26...	--r	--r	--r	--r	--r	--r
JUL						
08...	E.03	<.034	<.02	<.005	<.002	<.009
09...	--	--	--	--	--	--
22...	.03	<.034	<.02	<.005	<.002	<.009

Remark codes used in this report:
- < -- Less than
- E -- Estimated value
- M -- Presence verified, not quantified

Value qualifier codes used in this report:
- n -- Below the NDV

Null value qualifier codes used in this report:
- e -- Required equipment not functional/avail
- i -- Required sample type not received
- r -- Sample ruined in preparation

08064100 Chambers Creek near Rice, TX--Continued

SPECIFIC CONDUCTANCE (DCP 1788E306), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	799	761	785	641	637	639	740	722	728	---	---	e292
2	794	761	777	652	641	646	752	724	735	---	---	e292
3	825	767	798	664	652	657	783	752	768	292	291	291
4	873	825	837	672	664	668	784	777	781	314	291	297
5	875	723	801	686	672	680	781	769	777	306	304	305
6	723	683	697	700	686	694	786	768	774	308	305	307
7	683	647	663	710	700	706	803	786	798	307	305	306
8	654	646	650	725	707	719	---	---	e798	350	305	313
9	650	633	644	722	706	712	---	---	e753	350	341	343
10	634	628	630	732	708	726	---	---	e721	343	342	343
11	639	616	632	731	705	719	719	713	716	344	342	343
12	673	528	653	705	631	678	724	709	718	343	338	341
13	528	115	273	685	631	659	713	655	697	340	338	339
14	326	228	299	674	641	659	---	---	e650	378	336	343
15	324	316	320	678	649	663	673	614	649	378	368	370
16	318	315	316	680	643	659	622	132	211	369	365	367
17	319	315	316	647	619	638	251	143	198	378	366	369
18	348	319	332	628	582	612	257	239	248	---	---	e393
19	392	348	368	588	574	582	246	239	241	---	---	e407
20	425	392	408	617	582	603	244	237	240	---	---	e425
21	457	425	442	605	575	587	248	244	246	---	---	e453
22	488	457	473	612	575	587	---	---	e247	---	---	e487
23	513	488	504	671	612	649	---	---	e246	---	---	e514
24	543	513	529	688	671	679	---	---	e249	---	---	e548
25	560	543	550	706	683	689	---	---	e251	---	---	e582
26	576	560	567	---	---	e719	---	---	e259	548	427	467
27	588	576	581	---	---	e774	---	---	e265	462	426	440
28	607	587	594	---	---	e786	---	---	e270	492	462	476
29	621	607	615	---	---	e779	---	---	e276	523	492	509
30	634	621	627	---	740	e753	---	---	e282	536	523	529
31	640	634	636	---	---	---	---	---	e287	538	320	515
MONTH	875	115	559	---	---	677	---	---	486	---	---	397

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	483	321	385	469	441	447	412	384	399	---	---	e599
2	373	330	353	600	469	568	407	393	401	---	---	e618
3	400	373	389	600	592	597	418	407	412	---	---	e621
4	422	400	412	594	592	593	416	410	413	---	---	e400
5	551	327	378	607	594	602	420	414	418	---	---	e244
6	346	315	324	616	607	613	423	418	420	---	---	e445
7	---	---	e273	619	614	616	432	419	427	---	---	e435
8	---	---	e235	624	615	620	501	425	443	---	---	e424
9	---	---	e265	616	609	614	567	443	479	---	---	e433
10	---	---	e285	609	600	607	475	458	471	---	---	e438
11	---	---	e310	604	597	600	480	472	476	---	---	e447
12	---	---	e361	618	600	606	509	429	474	---	---	e453
13	---	---	e392	626	616	619	434	426	430	---	---	e456
14	---	---	e379	631	620	624	436	426	430	---	---	e462
15	---	---	e376	630	618	623	440	430	433	---	---	e474
16	---	---	e366	627	619	622	440	428	432	---	---	e469
17	---	---	e396	627	615	620	511	365	443	---	---	e483
18	---	---	e442	635	625	627	415	317	356	---	---	e530
19	---	---	e463	640	607	633	412	402	407	---	---	e553
20	---	---	e356	626	348	473	410	401	405	---	---	e583
21	---	---	e384	597	421	488	413	407	409	---	---	e593
22	---	---	e399	500	426	438	434	409	418	---	---	e610
23	---	---	e411	433	430	431	435	428	430	---	---	e635
24	---	---	e425	432	430	431	433	428	431	---	---	e660
25	---	---	e434	435	431	433	431	424	428	---	---	e680
26	---	---	e440	438	435	436	508	424	438	---	---	e694
27	---	---	e440	447	428	432	577	508	567	---	---	e703
28	441	439	440	460	447	457	581	560	577	---	---	e485
29	---	---	---	462	459	461	574	560	565	---	---	e313
30	---	---	---	464	295	427	---	---	e584	---	---	e238
31	---	---	---	427	275	340	---	---	---	---	---	e299
MONTH	---	---	375	640	275	539	---	---	447	---	---	499

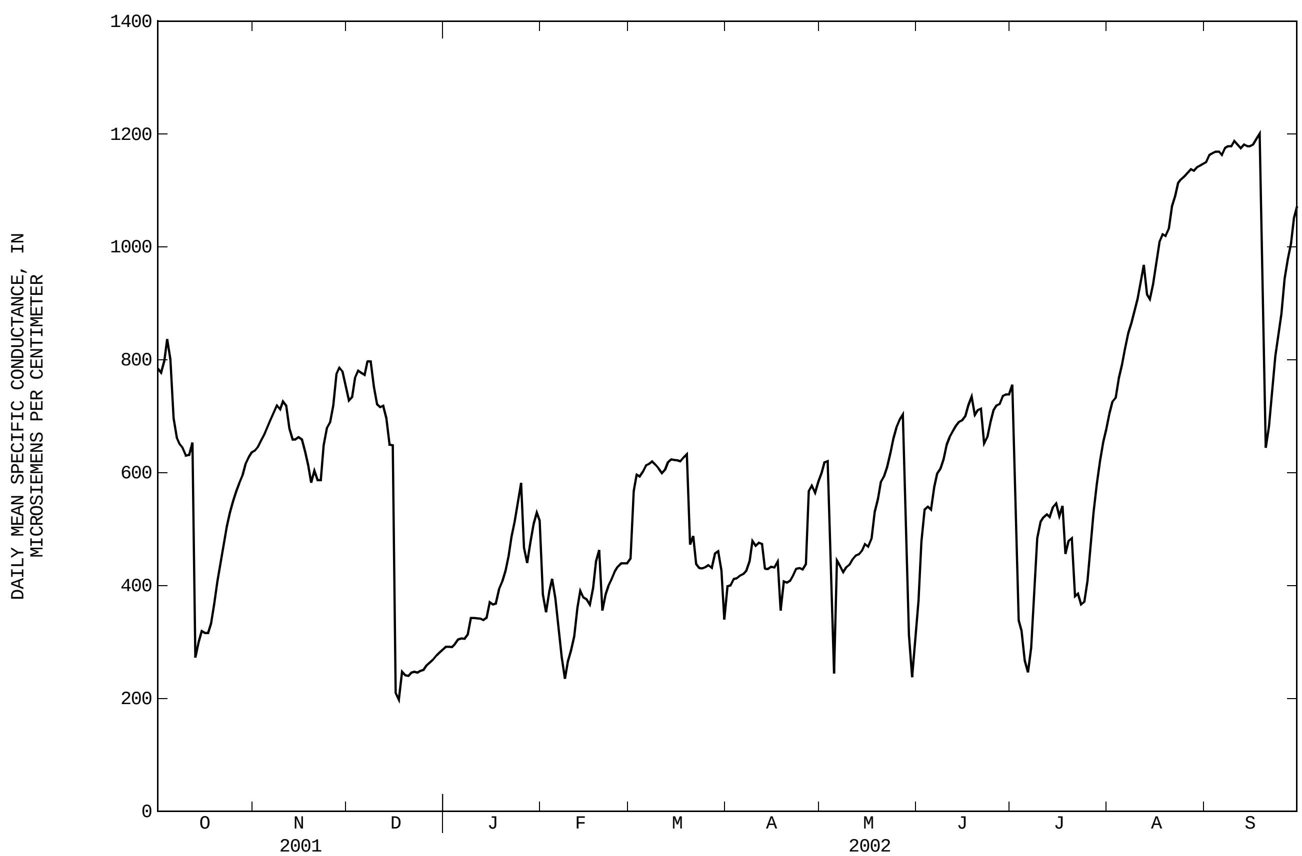
08064100 Chambers Creek near Rice, TX--Continued

SPECIFIC CONDUCTANCE (DCP 1788E306), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	e374	---	---	e756	719	686	704	---	---	e1150
2	---	---	e478	---	---	e562	745	717	726	---	---	e1160
3	---	---	e535	---	---	e338	757	718	733	---	---	e1170
4	---	---	e540	---	---	e320	782	757	768	---	---	e1170
5	---	---	e535	---	---	e267	803	782	789	---	---	e1170
6	---	---	e575	---	---	e246	831	803	819	---	---	e1160
7	---	---	e598	---	---	e290	854	831	846	---	---	e1180
8	---	---	e606	---	---	e382	873	851	865	---	---	e1180
9	---	---	e623	---	---	e485	897	871	887	---	---	e1180
10	---	---	e650	---	---	e512	919	897	907	---	---	e1190
11	---	---	e663	525	515	521	947	919	936	---	---	e1180
12	---	---	e673	536	518	527	991	947	969	---	---	e1180
13	---	---	e683	528	516	522	962	895	916	---	---	e1180
14	---	---	e690	546	528	539	917	897	908	---	---	e1180
15	---	---	e693	557	540	546	948	917	934	---	---	e1180
16	---	---	e700	558	474	523	994	948	972	---	---	e1180
17	---	---	e720	643	497	541	1020	994	1010	---	---	e1190
18	---	---	e735	602	376	456	1050	1010	1020	---	---	e1200
19	---	---	e702	497	468	480	---	---	e1020	---	---	e904
20	---	---	e711	1040	367	484	---	---	e1030	---	---	e644
21	---	---	e713	393	367	381	---	---	e1070	---	---	e682
22	---	---	e652	393	376	386	---	---	e1090	---	---	e744
23	---	---	e663	376	361	367	---	---	e1110	---	---	e807
24	---	---	e690	389	362	371	---	---	e1120	---	---	e844
25	---	---	e710	437	389	408	---	---	e1130	---	---	e882
26	---	---	e719	493	437	475	---	---	e1130	---	---	e944
27	---	---	e722	555	493	531	---	---	e1140	---	---	e978
28	---	---	e736	597	555	580	---	---	e1130	---	---	e1010
29	---	---	e739	642	597	620	---	---	e1140	---	---	e1050
30	---	---	e739	667	642	654	---	---	e1140	---	---	e1070
31	---	---	---	686	665	675	---	---	e1150	---	---	---
MONTH	---	---	652	---	---	476	---	---	971	---	---	1060

e Estimated

WATER YEAR



08064100 Chambers Creek near Rice, TX--Continued

WATER TEMPERATURE (DCP 1788E306), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.9	18.4	19.2	17.4	15.7	16.6	8.9	8.0	8.5	---	---	---
2	19.8	18.2	19.1	18.4	17.3	17.8	10.0	8.5	9.2	7.5	---	---
3	20.3	18.6	19.5	19.0	18.0	18.5	11.4	10.0	10.6	7.4	6.7	7.1
4	21.0	19.5	20.3	19.1	18.2	18.7	13.4	11.4	12.5	7.0	6.5	6.7
5	21.4	20.3	20.9	19.0	18.2	18.6	15.5	13.4	14.5	7.4	6.8	7.2
6	20.3	18.8	19.5	18.3	17.2	17.7	17.1	15.4	16.3	7.7	6.8	7.2
7	18.8	17.1	18.0	17.5	16.6	17.1	17.9	17.0	17.4	7.7	6.7	7.1
8	18.4	16.8	17.6	17.8	16.6	17.2	---	---	---	7.6	6.8	7.2
9	19.6	18.0	18.6	17.7	16.4	17.1	---	---	---	8.8	7.0	7.7
10	21.4	19.4	20.2	16.5	16.0	16.2	---	---	---	9.5	8.2	8.9
11	21.2	20.2	20.6	16.9	16.0	16.4	10.7	10.4	10.5	9.6	8.8	9.3
12	20.8	19.0	19.8	17.1	16.7	16.9	11.3	10.5	10.8	9.4	8.3	8.8
13	19.6	---	---	17.5	16.6	17.0	10.9	10.1	10.3	9.1	8.0	8.6
14	---	16.9	---	18.1	17.0	17.6	10.1	9.4	9.8	9.1	8.1	8.5
15	18.4	17.4	17.8	18.2	17.9	18.1	10.4	9.6	9.8	8.7	8.1	8.4
16	18.0	16.3	17.5	18.3	17.8	18.1	13.4	10.3	12.6	9.6	8.5	9.0
17	16.3	15.2	15.9	18.3	17.9	18.1	13.5	12.9	13.3	9.9	9.2	9.5
18	16.2	15.0	15.6	18.5	17.5	18.0	12.9	12.1	12.4	9.7	9.1	9.4
19	17.4	16.1	16.7	18.3	17.1	17.9	12.4	11.4	11.7	---	---	---
20	18.9	17.2	18.1	17.1	14.7	15.8	11.8	10.4	10.8	---	---	---
21	19.5	18.1	18.9	14.7	13.2	13.6	11.0	9.8	10.3	---	---	---
22	20.7	19.3	19.9	13.7	13.2	13.4	---	---	---	---	---	---
23	21.7	20.6	21.1	15.1	13.4	14.4	---	---	---	---	---	---
24	22.6	21.6	22.0	15.2	14.4	14.8	---	---	---	---	---	---
25	21.6	19.7	20.4	14.7	13.7	14.3	---	---	---	10.9	---	---
26	19.7	18.3	18.9	---	---	---	---	---	---	8.9	7.8	8.4
27	18.3	17.2	17.7	---	---	---	---	---	---	8.9	7.2	8.1
28	17.2	16.2	16.6	---	---	---	---	---	---	11.0	8.9	9.8
29	16.2	15.5	15.9	---	---	---	---	---	---	13.9	11.0	12.5
30	15.6	14.8	15.2	8.8	---	---	---	---	---	16.2	13.9	15.2
31	15.7	14.7	15.3	---	---	---	---	---	---	15.9	9.6	14.7
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

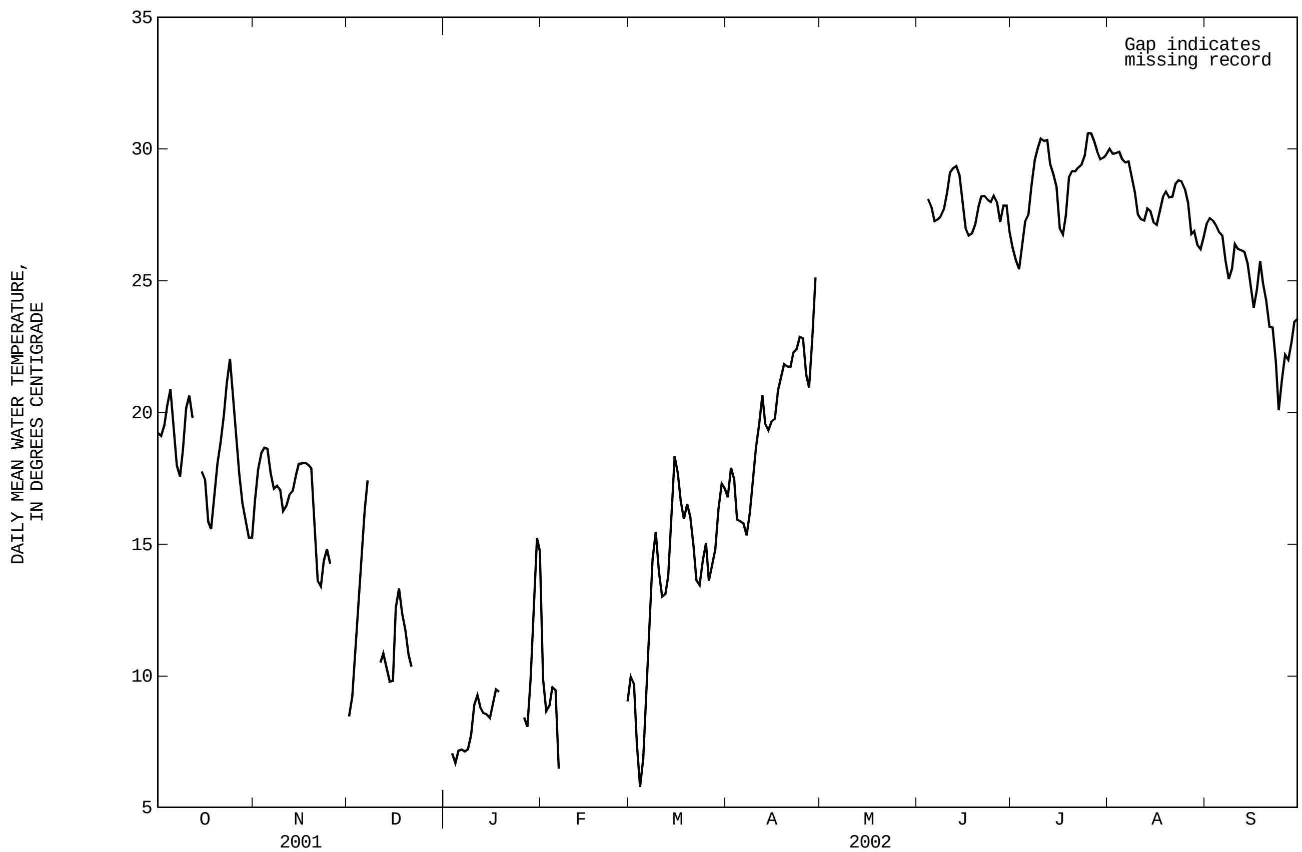
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.9	9.5	9.9	10.4	9.6	10	18.3	15.9	16.8	---	---	---
2	9.6	8.2	8.7	10.5	8.4	9.7	18.8	16.9	17.9	---	---	---
3	9.1	8.7	8.9	8.4	6.0	7.4	18.8	16.5	17.5	---	---	---
4	9.9	9.0	9.6	6.4	5.0	5.8	16.5	15.5	15.9	---	---	---
5	10.0	7.6	9.5	7.9	5.6	6.9	16.5	15.4	15.9	---	---	---
6	7.6	6.0	6.5	10.4	7.8	9.0	16.2	15.2	15.8	---	---	---
7	---	---	---	13.3	10.4	11.8	15.6	15.1	15.3	---	---	---
8	---	---	---	15.2	13.3	14.4	18.0	15.5	16.2	---	---	---
9	---	---	---	16.1	14.8	15.5	18.8	16.4	17.4	---	---	---
10	---	---	---	14.8	13.4	14.0	19.3	17.8	18.7	---	---	---
11	---	---	---	13.5	12.7	13.0	20.1	19.2	19.6	---	---	---
12	---	---	---	14.3	12.5	13.1	21.3	19.4	20.7	---	---	---
13	---	---	---	15.3	12.8	13.8	20.2	18.6	19.6	---	---	---
14	---	---	---	17.8	14.8	16.0	19.9	18.7	19.3	---	---	---
15	---	---	---	19.4	17.3	18.3	20.3	19.0	19.7	---	---	---
16	---	---	---	18.1	17.2	17.7	20.3	18.9	19.8	---	---	---
17	---	---	---	17.2	16.0	16.6	22.5	19.5	20.8	---	---	---
18	---	---	---	16.4	15.6	16.0	22.5	20.0	21.3	---	---	---
19	---	---	---	17.0	16.0	16.5	22.4	21.4	21.9	---	---	---
20	---	---	---	16.9	15.4	16.0	22.1	21.4	21.7	---	---	---
21	---	---	---	15.5	14.4	14.9	22.0	21.4	21.7	---	---	---
22	---	---	---	15.4	12.8	13.6	22.9	21.6	22.3	---	---	---
23	---	---	---	13.8	13.1	13.5	23.2	21.6	22.4	---	---	---
24	---	---	---	14.9	13.7	14.4	23.9	21.8	22.9	---	---	---
25	---	---	---	15.5	14.1	15.0	23.4	22.1	22.8	---	---	---
26	---	---	---	14.1	13.0	13.6	22.1	20.8	21.4	---	---	---
27	9.3	---	---	15.2	13.3	14.2	21.8	20.3	20.9	---	---	---
28	10.2	8.0	9.0	15.9	14.0	14.8	24.1	21.7	22.8	---	---	---
29	---	---	---	17.6	15.4	16.3	26.6	23.9	25.1	---	---	---
30	---	---	---	17.6	16.8	17.3	---	26.1	---	---	---	---
31	---	---	---	17.6	16.6	17.1	---	---	---	---	---	---
MONTH	---	---	---	19.4	5.0	13.7	---	15.1	---	---	---	---

08064100 Chambers Creek near Rice, TX--Continued

WATER TEMPERATURE (DCP 1788E306), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	26.6	25.9	26.2	31.7	28.9	30.0	29.3	25.0	27.2
2	---	---	---	26.2	25.3	25.8	31.7	28.5	29.8	29.9	25.2	27.4
3	28.3	---	---	25.6	25.0	25.4	31.2	28.8	29.8	29.3	25.4	27.3
4	28.7	27.6	28.1	27.5	25.6	26.2	31.5	28.8	29.9	29.0	25.7	27.1
5	28.1	27.4	27.8	28.1	26.2	27.2	31.0	28.3	29.6	28.4	25.2	26.8
6	27.8	26.4	27.3	28.3	26.6	27.5	31.3	28.0	29.5	28.6	24.9	26.7
7	27.9	26.7	27.3	29.4	27.9	28.6	31.3	28.0	29.5	26.9	24.9	25.8
8	28.1	26.8	27.4	30.7	28.6	29.6	29.7	28.1	29.0	25.6	24.7	25.1
9	28.4	27.3	27.7	30.9	29.0	30.0	29.8	26.9	28.3	27.0	24.3	25.5
10	29.3	27.7	28.3	31.1	29.6	30.4	28.7	26.7	27.5	28.5	24.5	26.4
11	30.1	28.4	29.1	31.0	29.5	30.3	29.1	25.9	27.3	28.2	24.4	26.2
12	30.1	28.6	29.3	31.4	29.7	30.3	28.7	26.1	27.3	28.3	24.3	26.2
13	30.3	28.6	29.4	30.0	28.8	29.4	29.3	26.5	27.7	27.7	24.6	26.1
14	29.9	27.9	29.0	29.9	28.2	29.0	28.6	26.8	27.7	27.4	23.9	25.6
15	28.8	27.0	28.0	29.3	28.1	28.6	27.8	26.7	27.2	25.6	23.7	24.8
16	28.0	26.4	27.0	28.1	26.4	27.0	28.8	25.8	27.1	25.2	23.3	24.0
17	27.8	25.6	26.7	27.3	26.3	26.8	29.2	26.3	27.7	27.4	22.8	24.7
18	27.9	25.7	26.8	28.7	26.2	27.5	30.2	26.6	28.2	27.3	24.6	25.8
19	28.1	26.2	27.1	29.9	28.2	28.9	29.9	26.9	28.4	25.3	24.3	24.9
20	28.8	26.9	27.8	29.6	28.4	29.2	29.8	26.6	28.2	26.3	22.4	24.2
21	29.3	27.2	28.2	29.3	28.9	29.1	30.0	26.6	28.2	25.6	21.0	23.3
22	29.1	27.3	28.2	29.6	29.0	29.3	30.5	27.0	28.7	25.5	21.5	23.2
23	29.0	27.1	28.1	29.8	29.2	29.4	31.2	26.8	28.8	23.9	19.9	21.9
24	28.8	27.1	28.0	31.0	28.6	29.7	30.8	26.9	28.8	22.4	17.0	20.1
25	29.1	27.2	28.2	31.8	29.6	30.6	31.0	26.8	28.5	23.9	18.9	21.2
26	28.7	27.4	28.0	31.6	29.6	30.6	30.2	26.3	28.0	24.9	20.2	22.2
27	28.1	26.4	27.2	31.1	29.3	30.3	28.3	25.8	26.8	25.2	18.7	22.0
28	28.7	27.2	27.9	30.4	29.2	29.9	28.9	25.1	26.9	25.7	19.4	22.7
29	28.3	27.4	27.9	30.0	29.1	29.6	27.5	24.9	26.4	26.1	20.9	23.5
30	27.6	26.5	26.9	31.1	28.7	29.7	28.0	24.0	26.2	26.1	21.6	23.6
31	---	---	---	31.3	28.8	29.8	28.6	24.6	26.7	---	---	---
MONTH	---	---	---	31.8	25.0	28.8	31.7	24.0	28.2	29.9	17.0	24.7

WATER YEAR



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^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. 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, 5,530 acre-ft, Apr. 8, 2002, elevation, 367.12 ft; minimum contents, 2,670 acre-ft, Feb. 17, 18, 2000, elevation, 361,17 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 5,530 acre-ft, Apr. 8, elevation, 367.12 ft; minimum contents, 3,420 acre-ft, Nov. 27, elevation, 362.97 ft.

RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

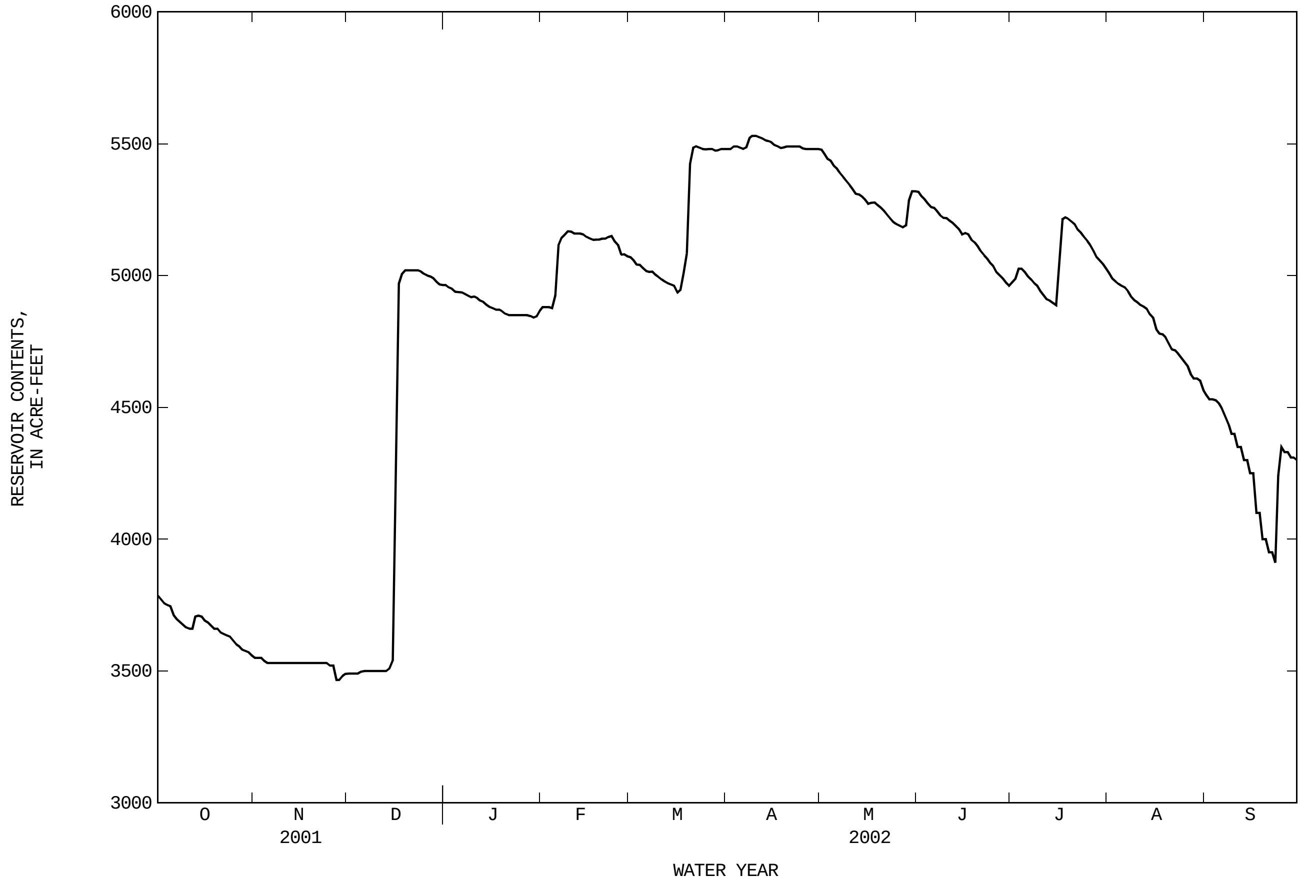
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3780	3550	3490	4960	4880	5070	5480	5480	5320	4970	5010	4550
2	3770	3550	3490	4950	4880	5060	5480	5460	5300	4990	4990	4530
3	3760	3550	3490	4950	4880	5040	5490	5440	5290	5030	4980	4530
4	3750	3540	3490	4940	4880	5040	5490	5440	5270	5030	4970	4530
5	3740	3530	3500	4940	4920	5030	5480	5420	5260	5010	4960	4510
6	3710	3530	3500	4940	5120	5020	5480	5410	5260	5000	4950	4500
7	3700	3530	3500	4930	5140	5010	5490	5390	5240	4980	4940	4470
8	3690	3530	3500	4920	5160	5010	5520	5370	5230	4970	4920	4440
9	3680	3530	3500	4920	5170	5000	5530	5360	5220	4960	4910	e4400
10	3660	3530	3500	4920	5170	4990	5530	5340	5220	4940	4900	e4400
11	3660	3530	3500	4910	5160	4980	5520	5330	5210	4930	4890	e4350
12	3660	3530	3500	4900	5160	4980	5520	5310	5200	4910	4880	e4350
13	3710	3530	3500	4900	5160	4970	5510	5310	5190	4900	4870	e4300
14	3710	3530	3510	4890	5160	4960	5510	5300	5170	4900	4850	e4300
15	3710	3530	3540	4880	5150	4960	5510	5290	5160	4890	4840	e4250
16	3690	3530	4160	4870	5140	4940	5500	5270	5160	5060	4800	e4250
17	3680	3530	4970	4870	5140	4950	5490	5280	5160	5210	4780	e4100
18	3670	3530	5010	4870	5140	5010	5480	5280	5140	5220	4780	e4100
19	3660	3530	5020	4860	5140	5080	5490	5270	5130	5210	4770	e4000
20	3660	3530	5020	4850	5140	5420	5490	5260	5110	5200	4740	e4000
21	3650	3530	5020	4850	5140	5480	5490	5250	5090	5190	4720	e3950
22	3640	3530	5020	4850	5150	5490	5490	5230	5080	5170	4720	e3950
23	3640	3530	5020	4850	5150	5480	5490	5210	5060	5160	4700	e3910
24	3630	3530	5020	4850	5130	5480	5490	5200	5050	5140	4690	e4240
25	3620	3520	5010	4850	5120	5480	5480	5190	5040	5130	4670	e4350
26	3600	3520	5000	4850	5080	5480	5480	5190	5010	5110	4660	e4330
27	3590	3470	5000	4850	5080	5480	5480	5180	5000	5090	4620	e4330
28	3580	3470	4990	4850	5070	5470	5480	5190	4990	5070	4610	e4310
29	3580	3480	4980	4840	---	5480	5480	5290	4970	5060	4610	e4310
30	3570	3490	4970	4850	---	5480	5480	5320	4960	5040	4600	e4300
31	3560	---	4960	4860	---	5480	---	5320	---	5030	4570	---
MEAN	3670	3520	4250	4890	5090	5190	5490	5310	5150	5050	4800	4290
MAX	3780	3550	5020	4960	5170	5490	5530	5480	5320	5220	5010	4550
MIN	3560	3470	3490	4840	4880	4940	5480	5180	4960	4890	4570	3910
(+)	363.26	363.11	366.07	365.88	366.28	367.03	367.03	366.74	366.07	366.19	365.31	e364.80
(@)	-220	-70	+1470	-100	+210	+410	0	-160	-360	+70	-460	-270

CAL YR 2001 MAX 5410 MIN 3470 (@) +140
WTR YR 2002 MAX 5530 MIN 3470 (@) +520

e Estimated

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

08064510 Halbert Lake near Corsicana, TX--Continued



08064550 Richland-Chambers Reservoir near Kerens, TX

LOCATION.--Lat 32°02'25", long 96°12'23", Navarro County, Hydrologic Unit 12030109, on upper floor of pumphouse, on left bank of Chambers Creek arm of Richland-Chambers Reservoir, 7.0 mi south of intersection of State Highway 31 and Farm Road 309 in Kerens, and 14.4 mi upstream from dam on Richland Creek.

DRAINAGE AREA.--1,957 mi^2.

PERIOD OF RECORD.--Nov. 1988 to current year.

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

REMARKS.--Records good, except for estimated daily mean contents, which are fair. The reservoir is formed by a rolled earthfill dam 31,000 ft long. Deliberate impoundment of water began Jul. 14, 1987, and the dam was completed in Dec. 1988. A gated concrete spillway is located near the left end of dam. The spillway is 1,155 ft long and contains twenty-four 40- x 29.4-ft radial gates. The low flow outlet works consist of two 3- x 5-ft outlets at elevation 266.0 ft, one 1.5 x 2.5 ft outlet, and one 1 x 1 ft outlet at elevation 285.0 ft. Each of the low flow outlets is controlled by sluice gates. The dam is owned by Tarrant Regional Water District, and was built for municipal and industrial water supply and for recreation. Flow from 464 mi^2 above the dam is controlled by Bardwell and Navarro Mills Lakes. Conservation pool storage is 1,136,600 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam...	330.0
Top of gates...	317.3
Top of conservation pool...	314.2
Crest of spillway..	290.0
Lowest gated outlet..	266.0

COOPERATION.--Capacity table No. 1-C was prepared by Freese and Nichols, consulting engineers for Tarrant Regional Water District. A new capacity table, No. 2-C, was prepared by the Texas Water Development Board and put into use Oct. 1, 1995.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,267,000 acre-ft, Dec. 22, 1991 elevation 316.85 ft; minimum contents after initial filling, 862,000 acre-ft, Nov. 23, 1996 elevation, 308.05 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,204,000 acre-ft, Mar. 2, elevation, 316.61 ft; minimum contents, 1,023,000 acre-ft, Oct. 15, elevation, 312.22 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,192,000 acre-ft, Dec. 19, elevation, 316.32 ft; minimum contents, 1,033,000 acre-ft, Nov. 27, 28, Dec. 11, elevation, 312.47 ft.

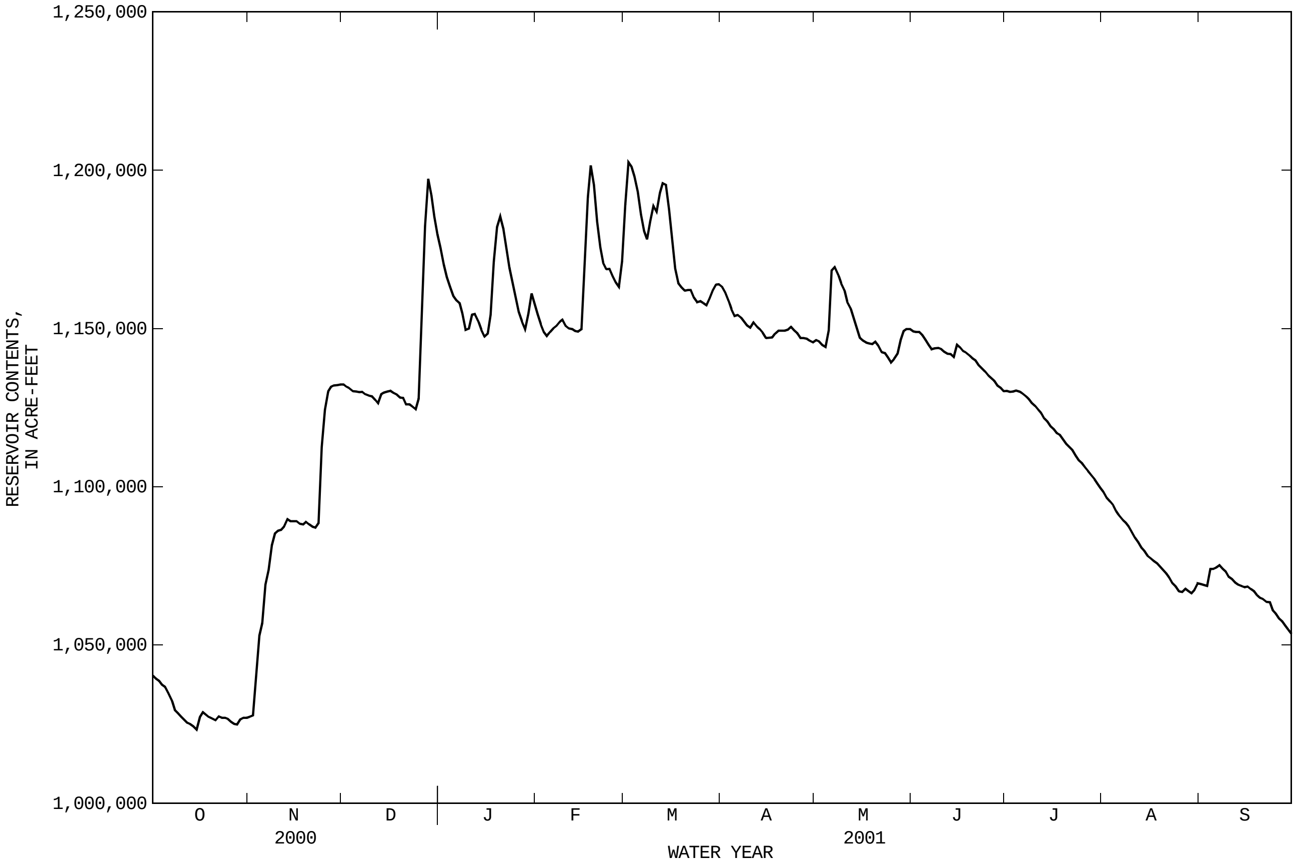
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040000	1027000	1132000	1175000	1154000	1189000	1163000	1146000	1149000	1130000	1098000	1069000
2	1039000	1028000	1131000	1170000	1151000	1202000	1161000	1146000	1149000	1130000	1096000	1069000
3	1039000	1039000	1131000	1166000	1149000	1201000	1159000	1145000	1149000	1130000	1095000	1069000
4	1037000	1053000	1130000	1163000	1148000	1198000	1156000	1144000	1148000	1130000	1094000	1074000
5	1037000	1057000	1130000	1160000	1149000	1193000	1154000	1149000	1146000	1130000	1092000	1074000
6	1035000	1069000	1130000	1159000	1150000	1186000	1154000	1168000	1145000	1129000	1091000	1074000
7	1033000	1074000	1130000	1158000	1151000	1181000	1153000	1169000	1143000	1129000	1090000	1075000
8	1029000	1081000	1129000	1155000	1152000	1178000	1152000	1167000	1144000	1128000	1089000	1074000
9	1028000	1085000	1129000	1150000	1153000	1184000	1151000	1164000	1144000	1126000	1087000	1073000
10	1027000	1086000	1129000	1150000	1151000	1189000	1150000	1162000	1143000	1126000	1086000	1072000
11	1026000	1086000	1127000	1154000	1150000	1187000	1152000	1158000	1143000	1124000	1084000	1071000
12	1025000	1088000	1126000	1155000	1150000	1193000	1151000	1156000	1142000	1123000	1082000	1070000
13	1025000	1090000	1129000	1152000	1149000	1196000	1150000	1153000	1142000	1122000	1081000	1069000
14	1024000	1089000	1130000	1150000	1149000	1195000	1149000	1150000	1141000	1121000	1080000	1069000
15	1023000	1089000	1130000	1148000	1150000	1187000	1147000	1147000	1145000	1119000	1078000	1068000
16	1027000	1089000	1130000	1148000	1171000	1177000	1147000	1146000	1144000	1118000	1077000	1068000
17	1029000	1088000	1130000	1154000	1191000	1169000	1147000	1146000	1143000	1117000	1076000	1068000
18	1028000	1088000	1129000	1171000	1201000	1164000	1148000	1145000	1142000	1116000	1076000	1067000
19	1027000	1089000	1128000	1182000	1195000	1163000	1149000	1145000	1141000	1115000	1075000	1066000
20	1027000	1088000	1128000	1185000	1184000	1162000	1149000	1146000	1140000	1113000	1074000	1065000
21	1026000	1087000	1126000	1181000	1176000	1162000	1149000	1144000	1140000	1112000	1072000	1064000
22	1027000	1087000	1126000	1175000	1171000	1162000	1150000	1143000	1138000	1112000	1071000	1064000
23	1027000	1088000	1125000	1169000	1169000	1160000	1150000	1142000	1137000	1110000	1069000	1063000
24	1027000	1113000	1124000	1165000	1169000	1158000	1149000	1141000	1136000	1108000	1068000	1061000
25	1027000	1124000	1128000	1160000	1167000	1159000	1148000	1139000	1135000	1107000	1067000	1060000
26	1026000	1130000	1154000	1155000	1165000	1158000	1147000	1140000	1134000	1106000	1067000	1058000
27	1025000	1132000	1182000	1152000	1163000	1157000	1147000	1142000	1133000	1105000	1068000	1057000
28	1025000	1132000	1197000	1150000	1171000	1160000	1147000	1146000	1132000	1104000	1067000	1056000
29	1026000	1132000	1192000	1155000	---	1162000	1146000	1149000	1131000	1102000	1066000	1055000
30	1027000	1132000	1185000	1161000	---	1164000	1146000	1150000	1130000	1101000	1067000	1053000
31	1027000	---	1180000	1158000	---	1164000	---	1150000	---	1099000	1069000	---
MEAN	1029000	1088000	1139000	1161000	1162000	1176000	1151000	1150000	1141000	1117000	1079000	1066000
MAX	1040000	1132000	1197000	1185000	1201000	1202000	1163000	1169000	1149000	1130000	1098000	1075000
MIN	1023000	1027000	1124000	1148000	1148000	1157000	1146000	1139000	1130000	1099000	1066000	1053000
(+)	312.30	314.90	316.04	315.52	315.84	315.66	315.22	315.32	314.85	314.10	313.36	312.96
(@)	-14000	+105000	+48000	-22000	+13000	-7000	-18000	+4000	-20000	-31000	-30000	-16000

CAL YR 2000 MAX 1197000 MIN 958700 (@) +209500
WTR YR 2001 MAX 1202000 MIN 1023000 (@) +12000

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

08064550 Richland-Chambers Reservoir near Kerens, TX--Continued



08064550 Richland-Chambers Reservoir near Kerens, TX--Continued

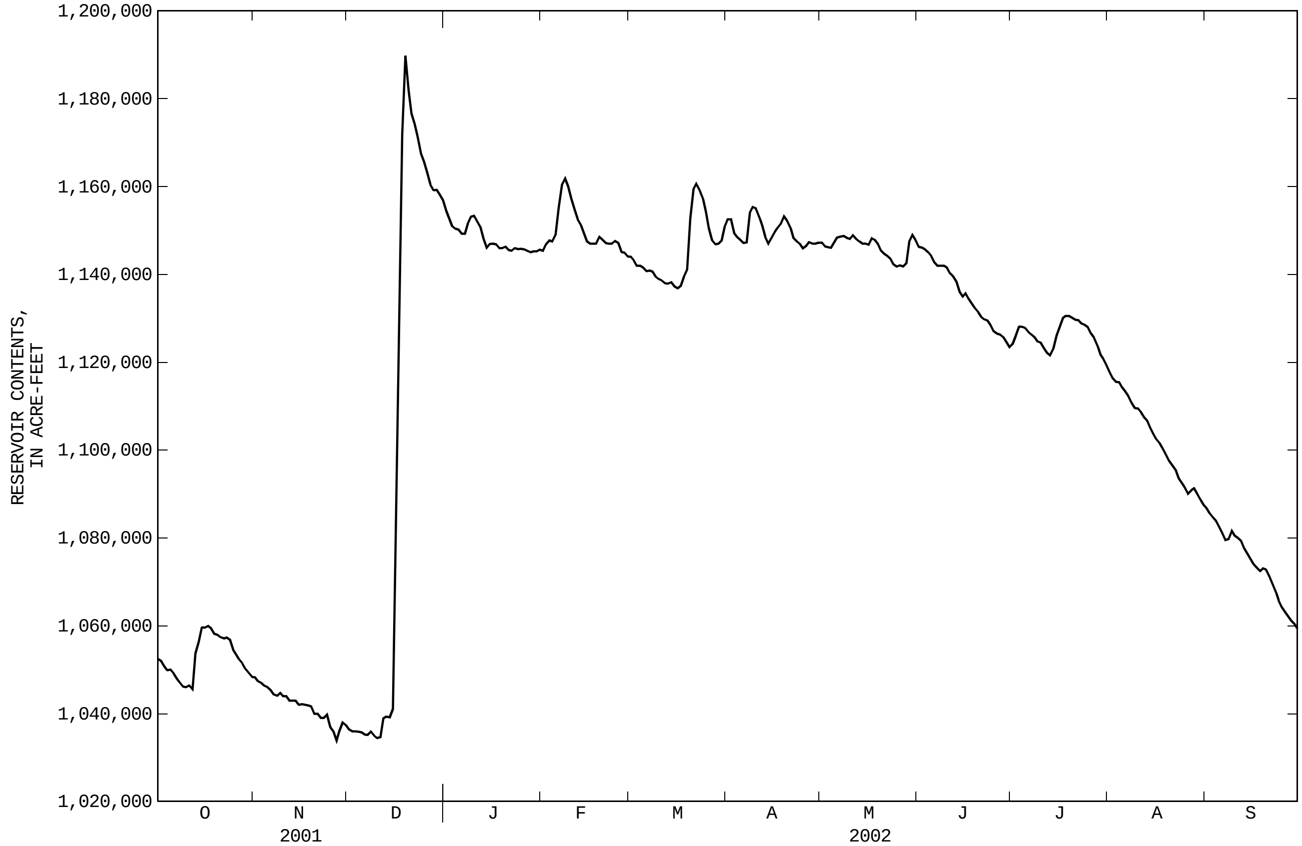
RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1052000	1048000	1036000	1155000	1145000	1144000	1153000	1147000	1146000	1124000	1118000	1087000
2	1052000	1047000	1036000	1153000	1147000	1143000	1153000	1146000	1146000	1126000	1116000	1086000
3	1051000	1047000	1036000	1151000	1148000	1142000	1149000	1146000	1146000	1128000	1116000	1085000
4	1050000	1046000	1036000	1150000	1147000	1142000	1149000	1146000	1145000	1128000	1115000	1084000
5	1050000	1046000	1036000	1150000	1149000	1142000	1148000	1147000	1144000	1128000	1114000	1082000
6	1049000	1045000	1035000	1149000	1155000	1141000	1147000	1148000	1143000	1127000	1113000	1081000
7	1048000	1044000	1035000	1149000	1160000	1141000	1147000	1149000	1142000	1126000	1112000	1080000
8	1047000	1044000	1036000	1152000	1162000	1141000	1154000	1149000	1142000	1126000	1111000	1080000
9	1046000	1045000	1035000	1153000	1160000	1139000	1155000	1148000	1142000	1125000	1110000	1082000
10	1046000	e1044000	1034000	1153000	1157000	1139000	1155000	1148000	1142000	1124000	1109000	1080000
11	1046000	e1044000	1035000	1152000	1155000	1139000	1153000	1149000	1140000	1123000	1109000	1080000
12	1046000	e1043000	1039000	1151000	1153000	1138000	1151000	1148000	1140000	1122000	1107000	1079000
13	1054000	e1043000	1039000	1148000	1151000	1138000	1149000	1148000	1138000	1122000	1107000	1078000
14	1056000	e1043000	1039000	1146000	1150000	1138000	1147000	1147000	1136000	e1123000	1105000	1076000
15	1060000	1042000	1041000	1147000	1147000	1137000	1148000	1147000	1135000	e1126000	1104000	1075000
16	1060000	1042000	1065000	1147000	1147000	1137000	1150000	1147000	1136000	e1128000	1102000	1074000
17	1060000	1042000	1117000	1147000	1147000	1137000	1151000	1148000	1134000	e1130000	1101000	1073000
18	1059000	1042000	1172000	1146000	1147000	1139000	1152000	1148000	1133000	1131000	1100000	1072000
19	1058000	1042000	1190000	1146000	1149000	1141000	1153000	1147000	1132000	1131000	1099000	1073000
20	1058000	e1040000	1182000	1146000	1148000	1153000	1152000	1145000	1131000	1130000	1098000	1073000
21	1057000	e1040000	1177000	1146000	1147000	1159000	1151000	1145000	1130000	1130000	1096000	1071000
22	1057000	e1039000	1174000	1145000	1147000	1161000	1148000	1144000	1130000	1130000	1095000	1070000
23	1057000	e1039000	1171000	1146000	1147000	1159000	1148000	1144000	1129000	1129000	1094000	1068000
24	1057000	e1040000	1167000	1146000	1148000	1157000	1147000	1142000	1128000	1128000	1093000	1066000
25	1055000	1037000	1166000	1146000	1147000	1154000	1146000	1142000	1127000	1128000	1091000	1064000
26	1053000	1036000	1163000	1146000	1145000	1150000	1146000	1142000	1127000	1127000	1090000	1063000
27	1052000	1034000	1160000	1145000	1145000	1148000	1147000	1142000	1126000	1126000	1091000	1062000
28	1051000	1036000	1159000	1145000	1144000	1147000	1147000	1143000	1126000	1124000	1091000	1061000
29	1050000	1038000	1159000	1145000	---	1147000	1147000	1147000	1125000	1122000	1090000	1060000
30	1049000	1037000	1158000	1145000	---	1148000	1147000	1149000	1123000	1121000	1089000	1059000
31	1048000	---	1157000	1146000	---	1151000	---	1148000	---	1119000	1087000	---
MEAN	1053000	1042000	1100000	1148000	1150000	1145000	1150000	1146000	1135000	1126000	1102000	1074000
MAX	1060000	1048000	1190000	1155000	1162000	1161000	1155000	1149000	1146000	1131000	1118000	1087000
MIN	1046000	1034000	1034000	1145000	1144000	1137000	1146000	1142000	1123000	1119000	1087000	1059000
(+)	312.85	312.57	315.49	315.22	315.19	315.34	315.26	315.27	314.68	314.58	313.81	313.12
(@)	-5000	-11000	+120000	-11000	-2000	+7000	-4000	+1000	-25000	-4000	-32000	-28000

CAL YR 2001 MAX 1202000 MIN 1034000 (@) -23000
WTR YR 2002 MAX 1190000 MIN 1034000 (@) +6000

e Estimated

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



RESERVOIR CONTENTS, IN ACRE-FEET
1,200,000
1,180,000
1,160,000
1,140,000
1,120,000
1,100,000
1,080,000
1,060,000
1,040,000
1,020,000
O
N
D
J
F
M
A
M
J
J
A
S
2001
2002

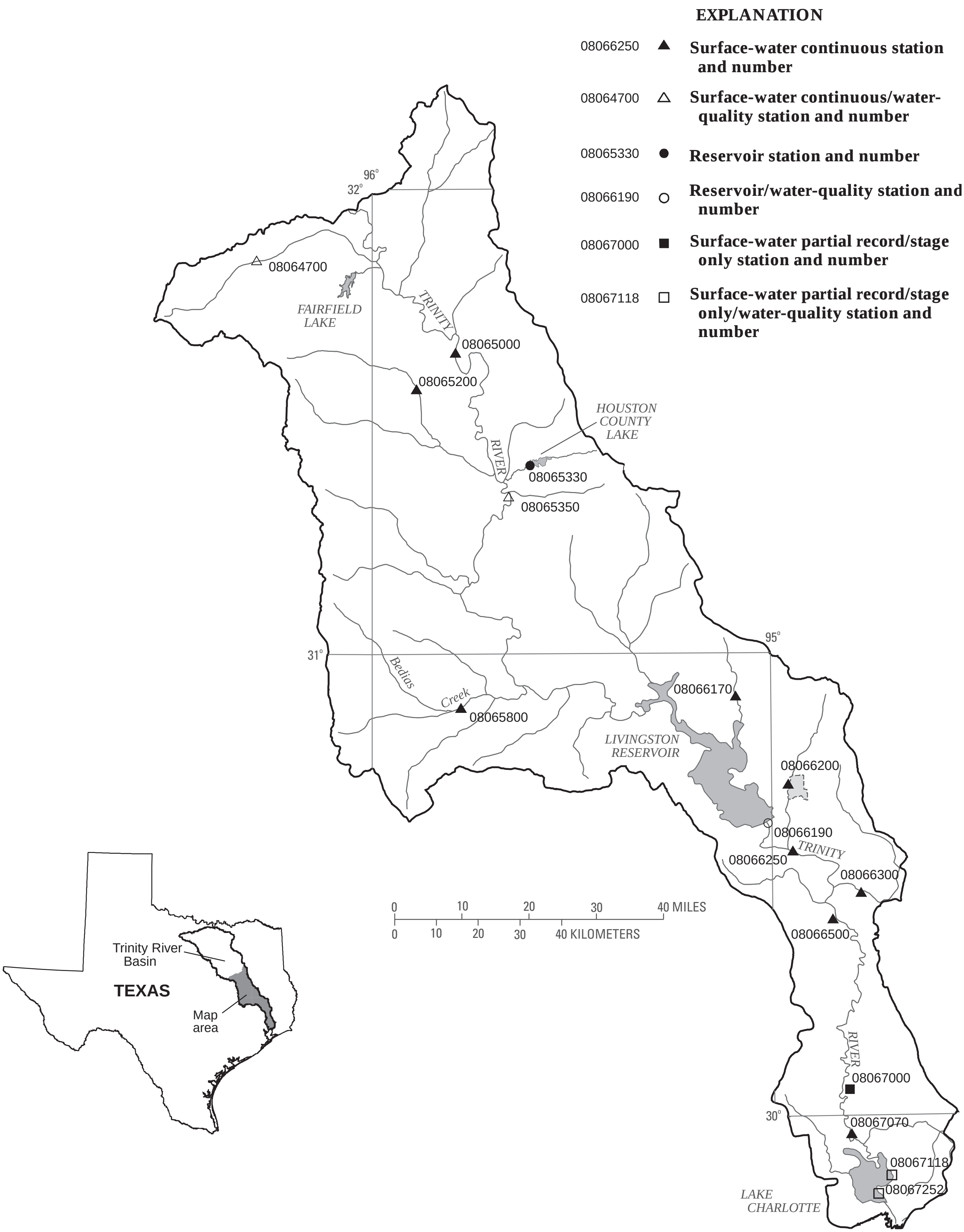


Figure 5.--Map showing location of gaging stations in the third section of the Trinity River Basin

08064700 Tehuacana Creek near Streetman, TX

LOCATION.--Lat 31°50’54", long 96°17’23", Freestone County, Hydrologic Unit 12030201, on downstream side at right 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^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 287.58 ft above NGVD of 1929. 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.--Records fair except those for estimated daily discharges, which are poor. No known regulation or diversions. No flow at times.

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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.10	0.56	5.4	1.5	e4.7	e7.8	84	15	13	0.48	0.07	0.00
2	0.09	0.60	2.7	1.5	e4.6	8.5	40	15	6.9	0.97	e0.05	0.00
3	0.08	0.61	1.9	1.5	e4.3	8.4	29	14	3.9	3.8	e0.04	0.00
4	0.07	0.64	1.5	1.6	e4.1	8.6	23	14	2.3	1.3	0.04	0.00
5	0.07	0.66	1.3	1.8	e9.7	8.8	20	15	1.3	0.75	0.04	0.00
6	0.07	0.69	1.2	2.1	854	9.0	19	14	0.66	0.59	0.03	0.00
7	0.07	0.73	1.1	2.2	199	9.1	19	14	0.56	0.53	0.03	0.00
8	0.08	0.73	17	2.2	37	9.2	780	14	0.53	0.49	0.03	0.00
9	0.09	0.93	44	2.3	19	9.4	216	15	0.51	0.46	0.02	0.00
10	0.10	0.99	4.3	2.4	e13	8.9	61	14	0.56	0.43	0.05	0.00
11	0.12	0.96	1.9	2.2	e9.3	9.1	43	14	0.54	0.41	0.05	0.00
12	0.14	1.1	401	2.1	e7.9	9.3	35	15	0.54	0.36	0.05	0.00
13	3.2	1.1	117	2.0	e7.2	9.7	29	15	0.52	0.35	0.04	0.00
14	4.5	1.1	17	2.2	e6.9	10	148	14	0.49	0.33	0.04	0.00
15	1.6	1.0	11	2.2	e6.1	10	52	13	0.50	0.33	0.04	0.00
16	0.83	1.1	2390	2.3	e6.5	9.9	33	14	0.59	0.77	0.03	0.00
17	0.62	1.1	5100	2.3	e6.5	13	26	24	0.63	9.2	0.03	0.00
18	0.57	1.1	1060	2.4	e6.4	16	22	36	0.60	3.2	0.03	0.00
19	0.58	1.2	46	2.5	e6.8	17	20	19	0.55	1.2	0.03	0.00
20	0.52	1.2	9.7	2.5	8.6	781	19	16	0.49	0.72	0.02	0.00
21	0.50	1.2	5.7	2.7	e12	158	18	14	0.44	0.54	0.02	0.00
22	0.47	1.4	4.3	2.9	e10	46	17	13	0.46	0.41	0.00	0.00
23	0.50	2.3	3.9	3.1	e8.7	28	17	13	0.47	0.32	0.00	0.00
24	0.49	2.2	3.4	3.8	e8.1	23	17	13	0.44	0.27	0.00	0.00
25	0.48	1.9	3.0	3.2	e7.7	19	17	13	0.39	0.24	0.00	0.00
26	0.47	1.9	2.2	e3.3	e7.5	16	16	13	0.41	0.21	0.00	0.00
27	0.47	1.8	1.7	e3.3	e7.3	17	15	18	0.43	0.19	0.00	0.00
28	0.51	2.6	1.7	e3.3	e7.4	16	15	186	0.40	0.17	0.00	0.00
29	0.51	44	1.6	e3.6	---	15	15	593	0.38	0.14	0.00	0.00
30	0.52	14	1.6	e3.8	---	60	15	256	0.41	0.10	0.00	0.00
31	0.53	---	1.6	e4.4	---	669	---	31	---	0.08	0.00	---
TOTAL	18.95	91.40	9264.7	79.2	1290.3	2039.7	1880	1487	39.90	29.34	0.78	0.00
MEAN	0.611	3.047	298.9	2.555	46.08	65.80	62.67	47.97	1.330	0.946	0.025	0.000
MAX	4.5	44	5100	4.4	854	781	780	593	13	9.2	0.07	0.00
MIN	0.07	0.56	1.1	1.5	4.1	7.8	15	13	0.38	0.08	0.00	0.00
AC-FT	38	181	18380	157	2560	4050	3730	2950	79	58	1.5	0.00

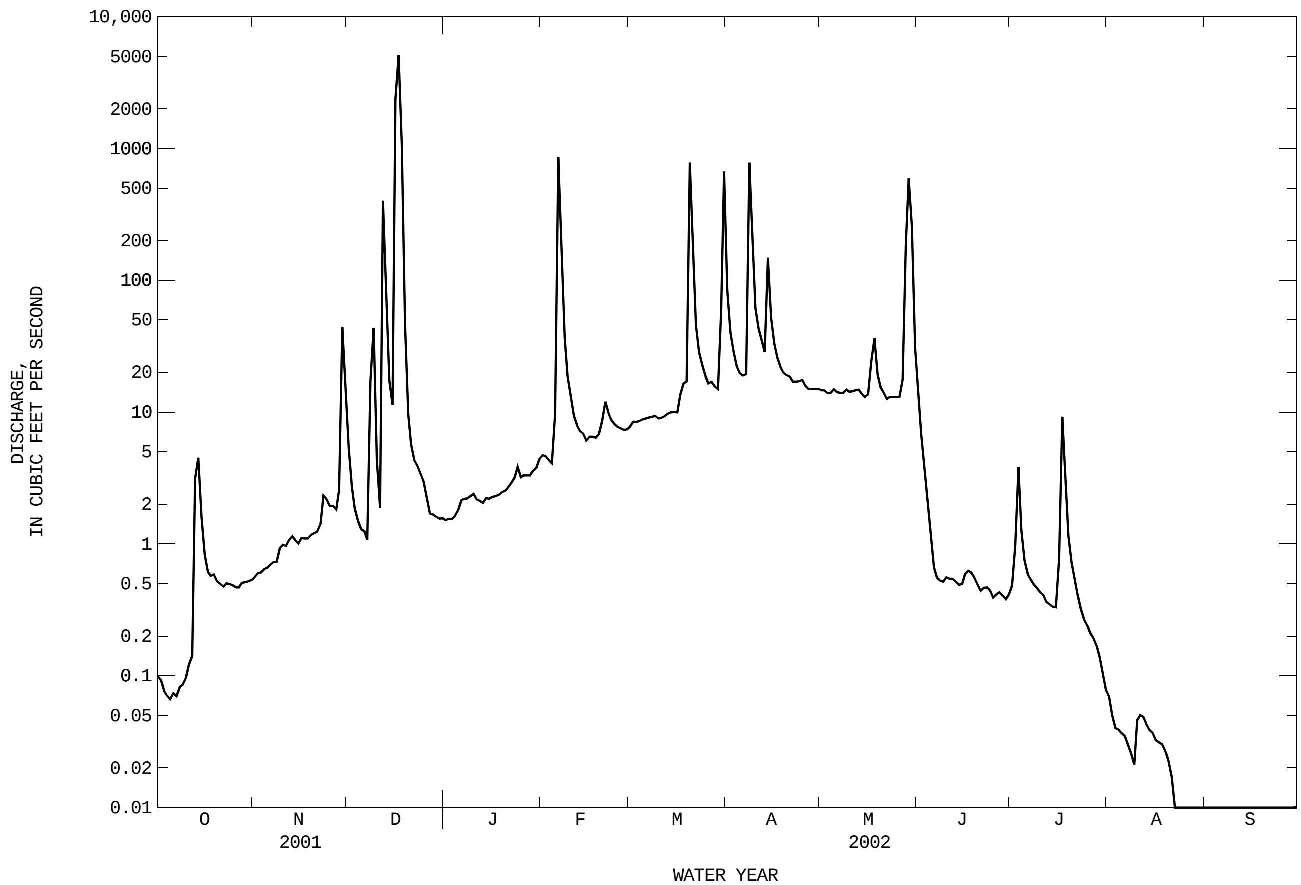
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	53.91	63.65	144.7	82.24	161.6	123.1	97.76	219.7	69.55	3.649	14.23	26.94
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	0.000	0.000	0.000	0.12	0.45	0.25	0.000	0.020	0.040	0.000	0.000	0.000
(WY)	1981	1981	2000	1971	1996	1996	1971	1971	1996	1978	1969	1980

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1968 - 2002	
ANNUAL TOTAL	46030.59		16221.27			
ANNUAL MEAN	126.1		44.44		86.70	
HIGHEST ANNUAL MEAN					274	1989
LOWEST ANNUAL MEAN					3.52	1996
HIGHEST DAILY MEAN	7530	Feb 17	5100	Dec 17	42000	May 4 1989
LOWEST DAILY MEAN	0.00	Feb 6	0.00	Aug 22	0.00	Sep 30 1968
ANNUAL SEVEN-DAY MINIMUM	0.01	Feb 6	0.00	Aug 22	0.00	Sep 30 1968
MAXIMUM PEAK FLOW			6390	Dec 17	g85700	May 17 1989
MAXIMUM PEAK STAGE			23.93	Dec 17	34.99	Feb 17 2001
ANNUAL RUNOFF (AC-FT)	91300		32170		62810	
10 PERCENT EXCEEDS	119		23		55	
50 PERCENT EXCEEDS	1.9		1.9		1.6	
90 PERCENT EXCEEDS	0.13		0.00		0.00	

e Estimated
g At site and datum then in use.

08064700 Tehuacana Creek near Streetman, TX--Continued



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 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT 23...	1005	.52	460	7.3	21.0	4.5	51	<2.0	120	42	30.3	11.6	37.6
DEC 12...	0915	231	126	7.8	10.5	8.9	81	6.9	36	7	9.15	3.25	8.38
FEB 14...	0845	6.9	520	7.5	8.0	10.4	88	2.7	150	--	38.1	13.3	46.1
APR 17...	1020	26	365	7.4	22.5	6.2	73	3.3	110	29	27.3	9.36	29.8
MAY 08...	1215	14	1270	7.4	26.5	6.3	81	4.3	340	130	83.1	31.1	139
JUN 20...	1030	.50	1200	7.6	27.5	6.5	85	2.9	320	110	80.2	29.6	124

Date	SODIUM AD-SORP-TION RATIO (00931)	SODIUM PERCENT (00932)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	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)
OCT 23...	1	38	5.74	<1	100	82	60.5	50.3	.2	6.48	272	252	24
DEC 12...	.6	31	3.95	<1	35	29	13.9	8.53	.2	5.76	96	72	912
FEB 14...	2	39	4.52	--	--	--	75.4	54.0	.2	9.59	326	--	36
APR 17...	1	37	4.79	<1	94	78	43.1	34.0	.1	8.88	233	204	32
MAY 08...	3	47	5.31	1	248	205	172	168	.4	14.1	790	737	10
JUN 20...	3	45	6.08	<1	258	213	157	152	.3	11.3	716	688	11

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,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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)
OCT 23...	--	E.005	E.04	E.02	--	.49	E.03	.02	.055	9.9	1	.11	E2
DEC 12...	.29	.009	.30	.06	.58	.64	.054	.03	.098	28.1	6	.08	<2
FEB 14...	--	E.007	.21	<.04	--	.53	.029	<.02	--	10.5	2	.09	<2
APR 17...	.09	.009	.10	.05	.76	.80	.061	.04	.117	13.0	3	.30	E1
MAY 08...	--	<.008	<.05	<.04	--	.34	.014	<.02	--	7.4	--	--	--
JUN 20...	--	<.008	<.05	<.04	--	.44	.013	<.02	--	8.3	<1	.16	2

Date	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)	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)
OCT 23...	60	<.06	<.04	<.8	.59	1.6	17	<.08	441	<.01	.5	2.18	<2
DEC 12...	17	<.06	<.04	<.8	.36	1.5	76	.11	12.6	--	.3	2.53	<2
FEB 14...	62	<.06	<.04	<.8	.90	2.6	55	.09	259	<.01	.3	2.34	<2
APR 17...	51	<.06	<.04	<.8	.44	2.7	93	.09	89.0	<.01	.3	2.98	<2
MAY 08...	--	--	--	--	--	--	<10	--	70.8	--	--	--	--
JUN 20...	97	<.06	<.04	<.8	.24	2.2	<10	<.08	16.7	<.01	.8	1.85	<2

08064700 Tehuacana Creek near Streetman, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	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)
OCT			
23...	<1	<1	.45
DEC			
12...	<1	2	.11
FEB			
14...	<1	1	1.28
APR			
17...	<1	2	.66
MAY			
08...	--	--	--
JUN			
20...	<1	1	2.67

Remark codes used in this report:
< -- Less than
E -- Estimated value

08065000 Trinity River near Oakwood, TX

LOCATION.--Lat 31°38'54", long 95°47'21", Anderson County, Hydrologic Unit 12030201, on left bank at downstream side of bridge on U.S. Highways 79 and 84, 1.5 mi upstream from Missouri Pacific Railroad Co. bridge, 6.0 mi northeast of Oakwood, and at mile 313.4.

DRAINAGE AREA.--12,833 mi^2.

PERIOD OF RECORD.--Oct. 1923 to Sept. 1924 (monthly discharge only), Oct. 1924 to current year. Records of Jan. 1905 to Sept. 1923, published in WSP 850 and 878, have been found unreliable and should not be used. Gage-height records collected in this vicinity since 1904 are contained in reports of the National Weather Service.

Water-quality records.--Sediment data: Dec. 1976 to Sept. 1981. Specific conductance: Dec. 1976 to Sept. 1981. Water temperature: Dec. 1976 to Sept. 1981. Suspended sediment data: Dec. 1976 to Sept. 1981.

REVISED RECORDS.--WSP 1442: 1934. WSP 1922: Drainage area. WDR TX-81-1: 1980 (M,m).

GAGE.--Water-stage recorder. Datum of gage is 175.06 ft above NGVD of 1929. Prior to July 1932, nonrecording gage at site 1.5 mi downstream at datum 1.06 ft lower. July 15, 1932, to Oct. 7, 1934, nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records fair. Since installation of gage in water year 1924, at least 10% of contributing drainage area has been regulated. These structures control runoff from 614 mi^2 in the Richland, Chambers, and Tehuacana Creeks drainage basins. The Industrial Generating Co. at Fairfield makes a minor diversion from the river at a site about 34 mi upstream. The diversion to Fairfield Lake (capacity 50,600 acre-ft) is used to maintain the normal pool elevation for that lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1890 reached a stage of 53 ft (discharge about 180,000 ft^3/s) and was the highest since that date, from information in local newspapers. Flood of June 4, 1908, reached a stage of 52.2 ft, present site and datum, from information by the National Weather Service (discharge, about 164,000 ft^3/s).

DISCHARGE FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	1050	1940	6330	2040	1770	25100	12200	6720	1900	973	1440
2	1090	1050	2150	5690	5020	1760	23600	10200	4460	2430	1030	1130
3	1060	1040	1770	5460	9910	1650	22400	8200	2460	2930	1220	991
4	1040	1050	1550	5080	12400	1640	21600	6510	1840	4300	1160	929
5	1050	1050	1410	4790	14200	1670	21300	6100	1630	4770	1060	888
6	1120	1070	1330	4740	16300	1800	21500	6620	1540	4770	988	890
7	1090	1040	1290	4480	17100	1770	22100	7880	1480	4390	922	886
8	1560	1050	1380	3350	17800	1680	23900	10400	1390	3070	906	885
9	1770	1050	1510	2770	18400	1640	24700	12300	1420	2340	915	954
10	1350	1030	1810	2900	18800	1590	24500	13600	1680	2100	910	938
11	1170	1050	1710	3310	19000	1560	24100	14200	1770	1630	938	1290
12	1170	1080	2480	3350	18000	1640	23600	13300	2070	1430	1090	2240
13	2120	1190	3010	3700	13300	1660	23000	12200	2130	1430	3290	1930
14	5880	1310	3230	3920	7860	1560	22500	12100	2250	2010	4220	1360
15	8810	1730	2750	2710	5200	1530	22500	12400	2120	3780	2930	1100
16	9950	1690	5330	1890	4010	1510	22700	12800	1870	3140	1650	1000
17	8560	1460	13100	1600	2630	1540	23000	12900	1990	2620	1310	942
18	e5430	1260	16800	1520	2200	1870	22900	12300	1910	7180	1850	865
19	e4080	1230	19200	1490	2130	1850	22300	11500	2430	8570	1650	873
20	e3130	1210	22600	1490	3110	3950	21600	11400	2580	6500	1260	1070
21	e2450	1250	36800	1470	4580	9410	20900	11300	1950	4360	1110	1110
22	e1950	1290	53200	1460	4220	14000	20400	9640	1440	2570	1040	1920
23	e1540	1210	51900	1470	3270	16200	20400	7000	1280	1680	1070	2260
24	1380	1140	46800	1490	2440	17500	20400	5740	1260	1360	1050	1640
25	1310	1100	42100	1580	2150	18600	20300	5390	1340	1230	982	1210
26	1250	1090	37800	2790	1990	19600	19900	4620	1230	1150	932	1060
27	e1180	1100	32300	5850	1860	20700	19000	4380	1150	1080	920	959
28	e1140	1330	22800	6470	1780	22100	17300	3540	1150	1020	944	869
29	1090	1620	11300	4450	---	23600	15200	4020	1260	985	1060	823
30	1060	1750	6590	2530	---	24900	13700	5550	1500	971	2000	808
31	1050	---	6520	1950	---	26300	---	6640	---	1000	2020	---
TOTAL	78020	36570	454460	102080	231700	248550	646400	286930	59300	88696	43400	35260
MEAN	2517	1219	14660	3293	8275	8018	21550	9256	1977	2861	1400	1175
MAX	9950	1750	53200	6470	19000	26300	25100	14200	6720	8570	4220	2260
MIN	1040	1030	1290	1460	1780	1510	13700	3540	1150	971	906	808
AC-FT	154800	72540	901400	202500	459600	493000	1282000	569100	117600	175900	86080	69940

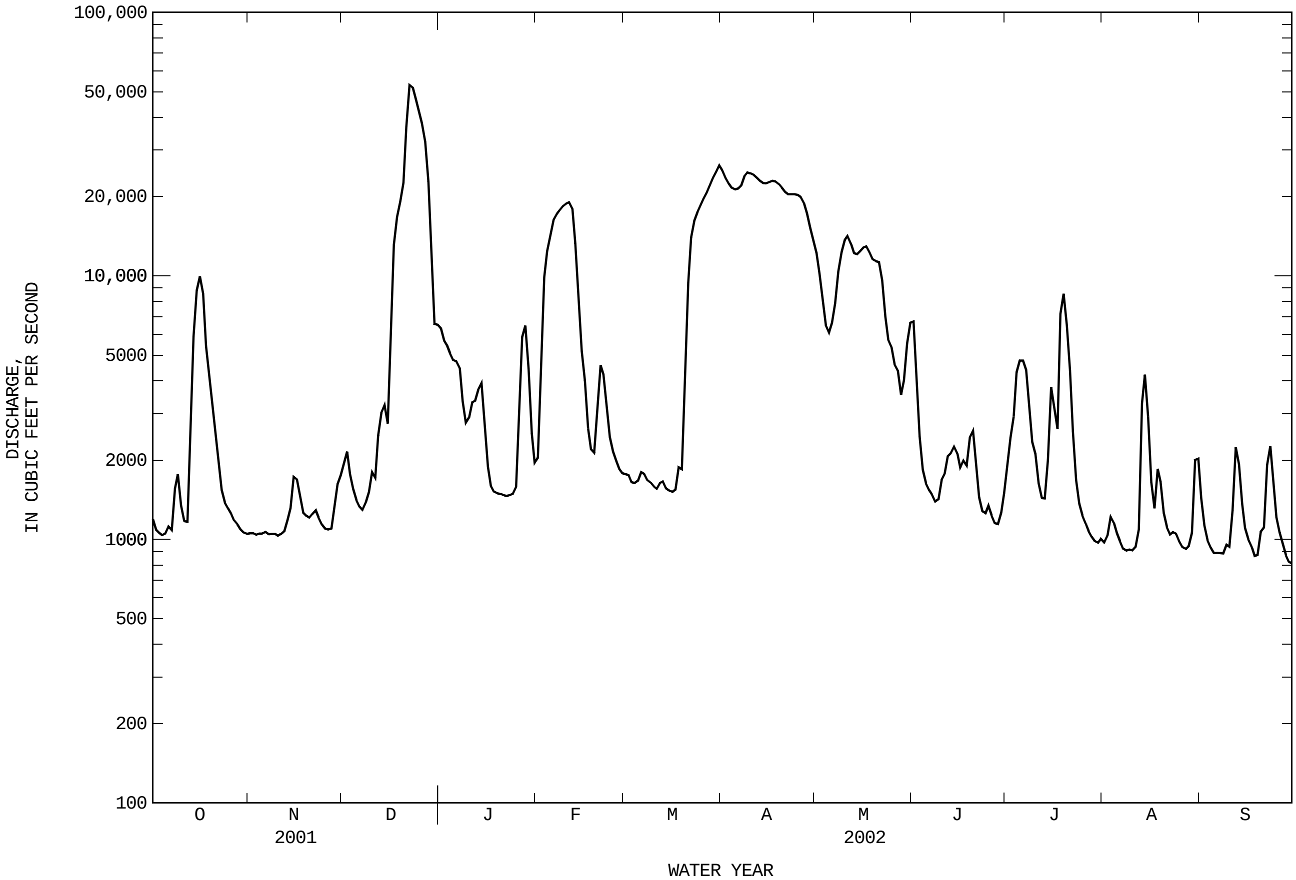
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2443	3646	5225	5269	6477	7872	7861	11400	7781	2720	1259	1459
MAX	14250	25900	33280	31870	35060	40450	45710	56050	33550	15240	7050	7361
(WY)	1974	1975	1992	1998	1932	1945	1945	1990	1957	1941	1982	1962
MIN	85.0	100	146	166	222	242	278	812	151	74.2	62.7	62.8
(WY)	1925	1925	1926	1940	1925	1925	1925	1971	1925	1925	1925	1930

08065000 Trinity River near Oakwood, TX--Continued

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1925 - 2002	
ANNUAL TOTAL	3734946		2311366			
ANNUAL MEAN	10230		6333		5276	
HIGHEST ANNUAL MEAN					15240	1992
LOWEST ANNUAL MEAN					657	1925
HIGHEST DAILY MEAN	55600	Mar 6	53200	Dec 22	153000	Apr 29 1942
LOWEST DAILY MEAN	873	Aug 11	808	Sep 30	28	Nov 1 1924
ANNUAL SEVEN-DAY MINIMUM	893	Aug 7	910	Sep 4	38	Aug 19 1925
MAXIMUM PEAK FLOW			54800	Dec 22	153000	Apr 29 1942
MAXIMUM PEAK STAGE			45.07	Dec 22	51.64	Apr 29 1942
ANNUAL RUNOFF (AC-FT)	7408000		4585000		3822000	
10 PERCENT EXCEEDS	33400		20400		15000	
50 PERCENT EXCEEDS	3230		1990		1510	
90 PERCENT EXCEEDS	1040		1040		310	

e Estimated



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, 2.0 mi southwest of Oakwood, 11 mi upstream from Buffalo Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--150 mi^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

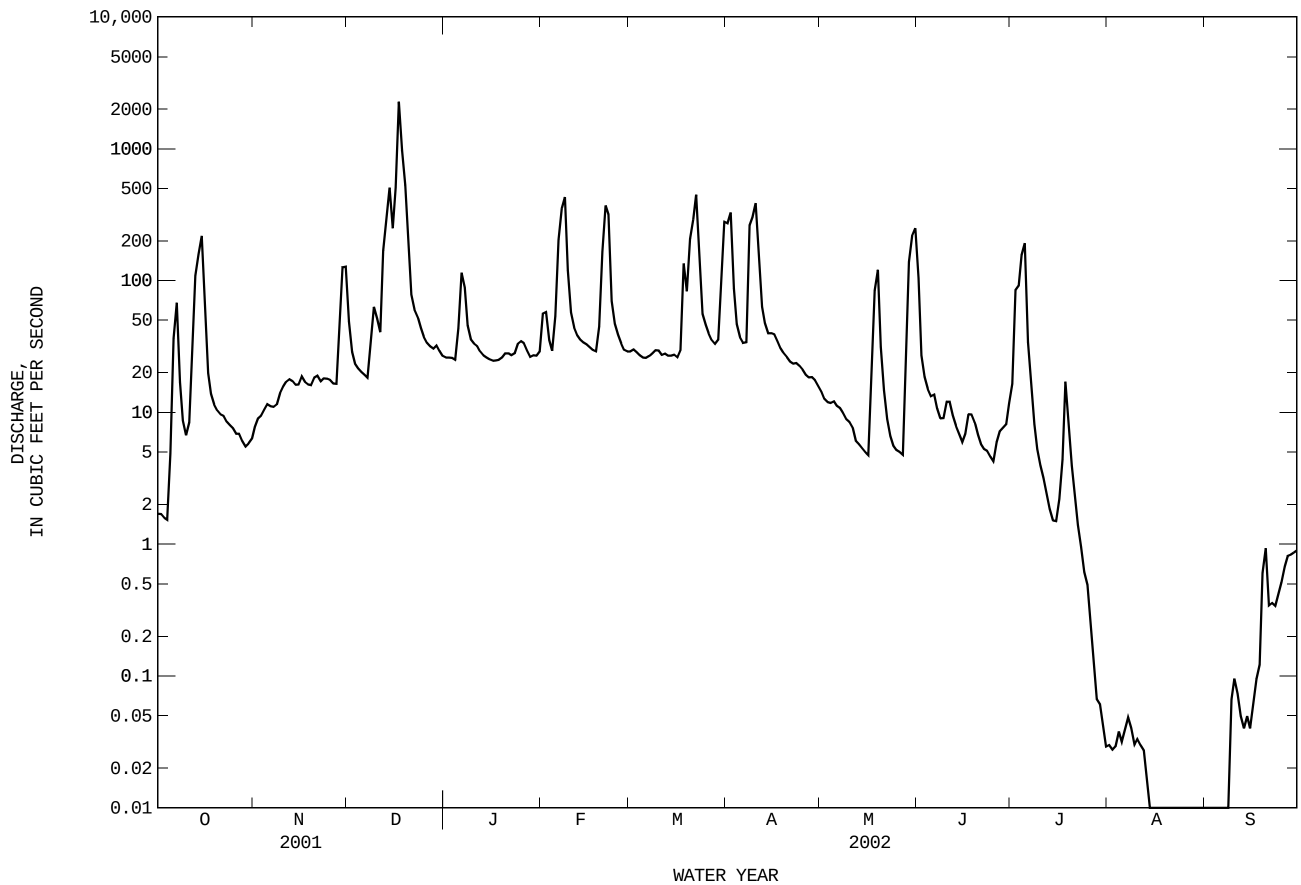
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	7.8	49	26	56	29	272	14	104	16	0.03	0.00
2	1.7	9.0	29	26	58	30	327	13	27	84	0.03	0.00
3	1.6	9.5	23	26	35	29	87	12	19	91	0.03	0.00
4	1.5	11	22	25	29	27	47	12	15	156	0.04	0.00
5	4.8	12	20	44	54	26	37	12	13	192	0.03	0.00
6	36	11	19	115	204	26	34	11	14	34	0.04	0.00
7	68	11	18	89	351	27	34	11	11	16	0.05	0.00
8	17	12	36	45	430	28	262	9.8	9.0	8.1	0.04	0.00
9	8.7	14	63	36	120	30	302	8.8	9.1	5.3	0.03	0.07
10	6.7	16	51	33	57	29	385	8.4	12	3.9	0.03	0.10
11	8.4	17	41	32	44	27	169	7.7	12	3.1	0.03	0.07
12	40	18	169	29	38	28	63	6.1	9.4	2.3	0.03	0.05
13	109	17	295	27	36	27	47	5.7	7.9	1.8	0.02	0.04
14	159	16	508	26	34	27	40	5.3	6.9	1.5	0.00	0.05
15	218	16	250	25	33	27	40	5.0	5.9	1.5	0.00	0.04
16	76	19	503	25	31	26	39	4.7	6.8	2.2	0.00	0.06
17	20	17	2270	25	30	29	34	23	9.7	4.4	0.00	0.09
18	14	16	975	25	29	135	31	84	9.6	17	0.00	0.12
19	11	16	532	26	45	83	28	121	8.4	7.8	0.00	0.60
20	10	18	178	28	165	207	26	32	6.7	3.9	0.00	0.93
21	9.6	19	78	28	371	291	24	15	5.8	2.3	0.00	0.34
22	9.3	17	60	27	317	448	23	8.9	5.3	1.4	0.00	0.36
23	8.5	18	53	28	70	142	24	6.6	5.1	0.95	0.00	0.34
24	8.0	18	43	33	47	56	23	5.6	4.6	0.61	0.00	0.41
25	7.6	18	37	35	39	46	21	5.2	4.3	0.49	0.00	0.51
26	6.9	17	34	34	33	40	19	5.0	5.9	0.23	0.00	0.67
27	6.9	16	32	30	30	35	18	4.8	7.2	0.13	0.00	0.81
28	6.1	40	30	26	29	33	18	39	7.7	0.07	0.00	0.83
29	5.5	126	32	27	---	35	18	138	8.1	0.06	0.00	0.86
30	5.8	128	29	27	---	94	16	217	12	0.04	0.00	0.90
31	6.3	---	27	29	---	279	---	249	---	0.03	0.00	---
TOTAL	893.6	700.3	6506	1057	2815	2396	2508	1100.6	382.4	658.11	0.43	8.25
MEAN	28.83	23.34	209.9	34.10	100.5	77.29	83.60	35.50	12.75	21.23	0.014	0.275
MAX	218	128	2270	115	430	448	385	249	104	192	0.05	0.93
MIN	1.5	7.8	18	25	29	26	16	4.7	4.3	0.03	0.00	0.00
AC-FT	1770	1390	12900	2100	5580	4750	4970	2180	758	1310	0.9	16
CFSM	0.19	0.16	1.40	0.23	0.67	0.52	0.56	0.24	0.08	0.14	0.00	0.00
IN.	0.22	0.17	1.61	0.26	0.70	0.59	0.62	0.27	0.09	0.16	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	43.43	54.84	110.6	107.1	122.2	125.4	114.3	136.3	65.69	12.68	5.379	13.97
MAX	371	513	878	614	425	461	574	1413	517	128	54.5	246
(WY)	1974	1975	1992	1999	1997	1973	1966	1965	1976	1981	1979	1974
MIN	0.000	0.000	0.36	4.03	8.28	8.79	8.41	1.82	0.48	0.000	0.000	0.000
(WY)	1964	1964	1964	1964	1964	1996	1971	1972	1963	1964	1963	1963

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1962 - 2002	
ANNUAL TOTAL	30759.12		19025.69			
ANNUAL MEAN	84.27		52.13		76.18	
HIGHEST ANNUAL MEAN					168	1965
LOWEST ANNUAL MEAN					4.52	1963
HIGHEST DAILY MEAN	2270	Dec 17	2270	Dec 17	11500	Jan 29 1999
LOWEST DAILY MEAN	0.09	Aug 15	0.00	Aug 14	0.00	Aug 5 1962
ANNUAL SEVEN-DAY MINIMUM	0.14	Aug 10	0.00	Aug 14	0.00	Aug 5 1962
MAXIMUM PEAK FLOW			2900	Dec 17	24000	May 16 1965
MAXIMUM PEAK STAGE			13.62	Dec 17	15.69	Jan 29 1999
ANNUAL RUNOFF (AC-FT)	61010		37740		55190	
ANNUAL RUNOFF (CFSM)	0.56		0.35		0.51	
ANNUAL RUNOFF (INCHES)	7.63		4.72		6.90	
10 PERCENT EXCEEDS	230		123		132	
50 PERCENT EXCEEDS	20		18		11	
90 PERCENT EXCEEDS	1.5		0.04		0.07	

08065200 Upper Keechi Creek near Oakwood, TX--Continued



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^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. 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 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 NGVD of 1929. 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 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, elevation, 264.87 ft; minimum contents, 15,540 acre-ft, Oct. 15, 2000, elevation, 258.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 19,280 acre-ft, Dec. 17, elevation, 261.36 ft; minimum contents, 17,120 acre-ft, Sept. 7, 8, elevation, 259.54 ft.

RESERVOIR STORAGE FROM DCP, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

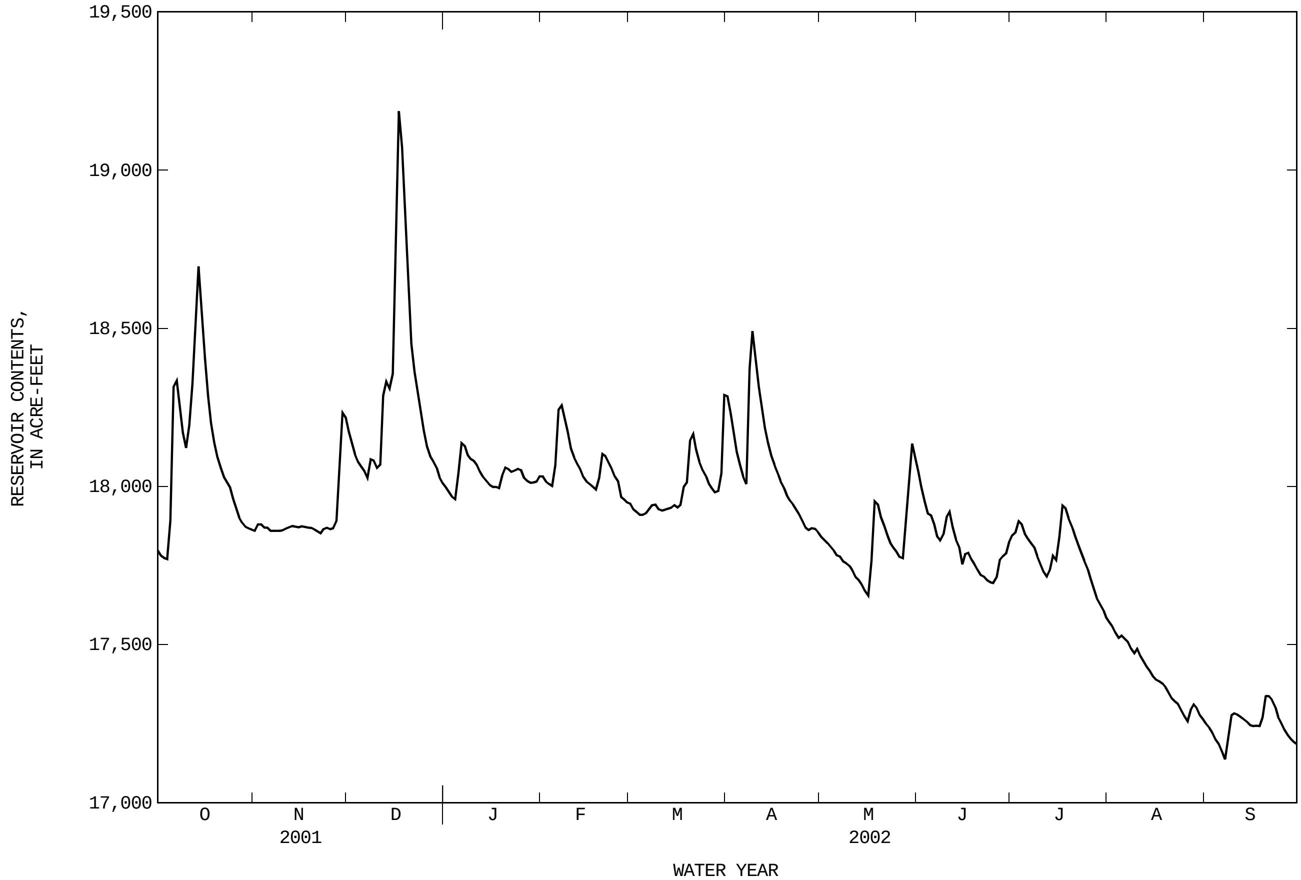
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17800	17860	18170	18000	18030	17940	18280	17840	18040	17850	17570	17250
2	17780	e17880	18130	17980	18020	17930	18230	17830	18000	17850	17560	17240
3	17770	e17880	18100	17970	18010	17920	18170	17820	17950	17890	17540	17220
4	17770	e17870	18080	17960	18000	17910	18110	17810	17910	17880	17520	17200
5	17890	e17870	18060	18040	18070	17910	18070	17800	17910	17850	17530	17180
6	18310	17860	18050	18140	18240	17920	18030	17780	17880	17830	17520	17160
7	18330	17860	18030	18130	18260	17930	18010	17780	17840	17820	17510	17140
8	18240	17860	18080	18100	18210	17940	18370	17760	17830	17810	17490	17210
9	18170	17860	18080	18090	18170	17940	18490	17760	17850	17780	17470	17280
10	18120	17860	18060	18080	18120	17930	18400	17750	17900	17760	17490	17280
11	18190	17870	18070	18070	18090	17920	18310	17730	17920	17730	17460	17280
12	18330	17870	18290	18050	18070	17930	18240	17710	17870	17710	17450	17270
13	18520	17870	18330	18030	18050	17930	18180	17700	17830	17730	17430	17260
14	18700	17870	18310	18020	18030	17930	18140	17690	17810	17780	17420	17260
15	18570	17870	18360	18000	18020	17940	18100	17670	17750	17770	17400	17250
16	18410	17870	18640	18000	18010	17930	18070	17660	17790	17840	17390	17240
17	18280	17870	19190	18000	18000	17940	18040	17770	17790	17940	17380	17240
18	18200	17870	19070	17990	17990	18000	18020	17950	17770	17930	17380	17240
19	18140	17870	18790	18030	18030	18010	18000	17940	17750	17900	17360	17270
20	18090	17860	18590	18060	18100	18140	17970	17900	17730	17870	17350	17340
21	18060	17860	18450	18050	18100	18160	17950	17880	17720	17840	17330	17340
22	18030	17850	18360	18050	18080	18120	17940	17850	17710	17820	17320	17320
23	18020	17870	18300	18050	18060	18080	17930	17820	17700	17790	17310	17300
24	18000	17870	18240	18050	18030	18050	17910	17810	17700	17770	17290	17270
25	17960	17860	18180	18050	18020	18040	17890	17790	17690	17740	17270	17250
26	17930	17870	18130	18030	17970	18010	17870	17780	17710	17710	17260	17230
27	17900	17890	18100	18020	17960	17990	17860	17770	17770	17680	17290	17210
28	17880	18080	18080	18010	17950	17980	17870	17890	17780	17650	17310	17200
29	17870	18230	18060	18010	---	17990	17870	18020	17790	17630	17300	17190
30	17870	18220	18030	18020	---	18040	17850	18140	17820	17610	17280	17180
31	17860	---	18010	18030	---	18290	---	18090	---	17590	17260	---
MEAN	18100	17900	18270	18040	18060	17990	18070	17820	17820	17790	17400	17240
MAX	18700	18230	19190	18140	18260	18290	18490	18140	18040	17940	17570	17340
MIN	17770	17850	18010	17960	17950	17910	17850	17660	17690	17590	17260	17140
(+)	260.16	260.47	260.29	260.31	261.24	260.52	260.16	260.36	260.13	259.94	259.66	259.59
(@)	+60	+360	-210	+20	-80	+340	-440	+240	-270	-230	-330	-80

CAL YR 2001 MAX 23140 MIN 17360 (@) -510
WTR YR 2002 MAX 19190 MIN 17140 (@) -620

e Estimated

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

08065330 Houston County Lake near Crockett, TX--Continued



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^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 141.15 ft above NGVD of 1929. 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 From DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1660	1400	1850	6570	2200	2110	24000	13300	7190	1980	952	1890
2	1540	1410	1850	5720	2500	2120	23100	11700	6250	2390	919	1510
3	1460	1420	1770	5370	6190	2080	22100	9540	3890	2830	1050	1200
4	1430	1430	1560	4700	10700	2010	21200	7250	2630	3140	1290	996
5	1740	1470	1410	4910	13000	2000	20300	5740	2300	3900	1220	904
6	3020	1480	1310	5320	15900	2050	19700	5650	2170	4170	1060	846
7	2490	1480	1300	4830	17300	2120	19600	6280	2090	4260	953	851
8	1880	1460	1300	4090	17500	2110	21300	8210	2000	3720	851	892
9	2410	1470	1360	3190	17900	2080	23400	10900	2030	2830	825	958
10	2320	1470	1400	2860	18400	2030	23400	12500	2200	2500	846	1010
11	2010	1470	1540	3050	18700	1990	22900	13600	2230	2270	843	947
12	2070	1490	2730	3240	18400	2000	22500	13800	2260	1980	864	1550
13	4340	1520	3510	3260	16900	2070	21900	12900	2380	1860	1400	2070
14	7410	1570	3190	3530	12400	2040	21200	12100	2410	1850	2920	1820
15	9160	1640	3350	3330	7120	1960	20600	12100	2450	2540	3050	1460
16	10300	1780	6790	2580	4500	1900	20400	12400	2360	3240	2300	1190
17	10700	1740	14100	2200	3340	1870	20400	13000	2270	2830	1670	1050
18	8030	1630	19100	2070	2600	1970	20500	13300	2330	3410	1550	958
19	3770	1550	21400	2040	2420	2140	20400	12700	2330	7130	1880	872
20	2660	1530	21600	2060	2800	2670	20100	12100	2670	7270	1670	961
21	2230	1520	22000	2040	3580	5320	19600	12100	2550	4950	1400	1220
22	2040	1570	e26900	2030	4270	10900	19200	11600	2120	3250	1210	1330
23	1930	1620	e31500	e2020	3880	14400	18900	9250	1810	2340	1130	2010
24	1770	1550	36600	e2040	3240	16100	18800	6580	1670	1850	1140	2040
25	1550	1500	38200	e2500	2740	17100	18800	5510	1640	1600	1110	1650
26	1470	1480	38300	e3000	2400	17600	18700	4870	1680	1450	991	1320
27	1420	1490	36200	e3500	2250	18100	18400	3820	1770	1320	918	1110
28	1410	1810	32000	6100	2150	18800	17600	3290	1660	1180	965	933
29	1410	2500	25000	5430	---	19700	16300	3210	1610	1080	980	804
30	1400	2080	14000	3430	---	20700	14800	4290	1760	993	1270	730
31	1410	---	7460	2460	---	23200	---	5940	---	944	2000	---
TOTAL	98440	47530	420580	109470	235280	223240	610100	289530	74710	87057	41227	37082
MEAN	3175	1584	13570	3531	8403	7201	20340	9340	2490	2808	1330	1236
MAX	10700	2500	38300	6570	18700	23200	24000	13800	7190	7270	3050	2070
MIN	1400	1400	1300	2020	2150	1870	14800	3210	1610	944	825	730
AC-FT	195300	94280	834200	217100	466700	442800	1210000	574300	148200	172700	81770	73550

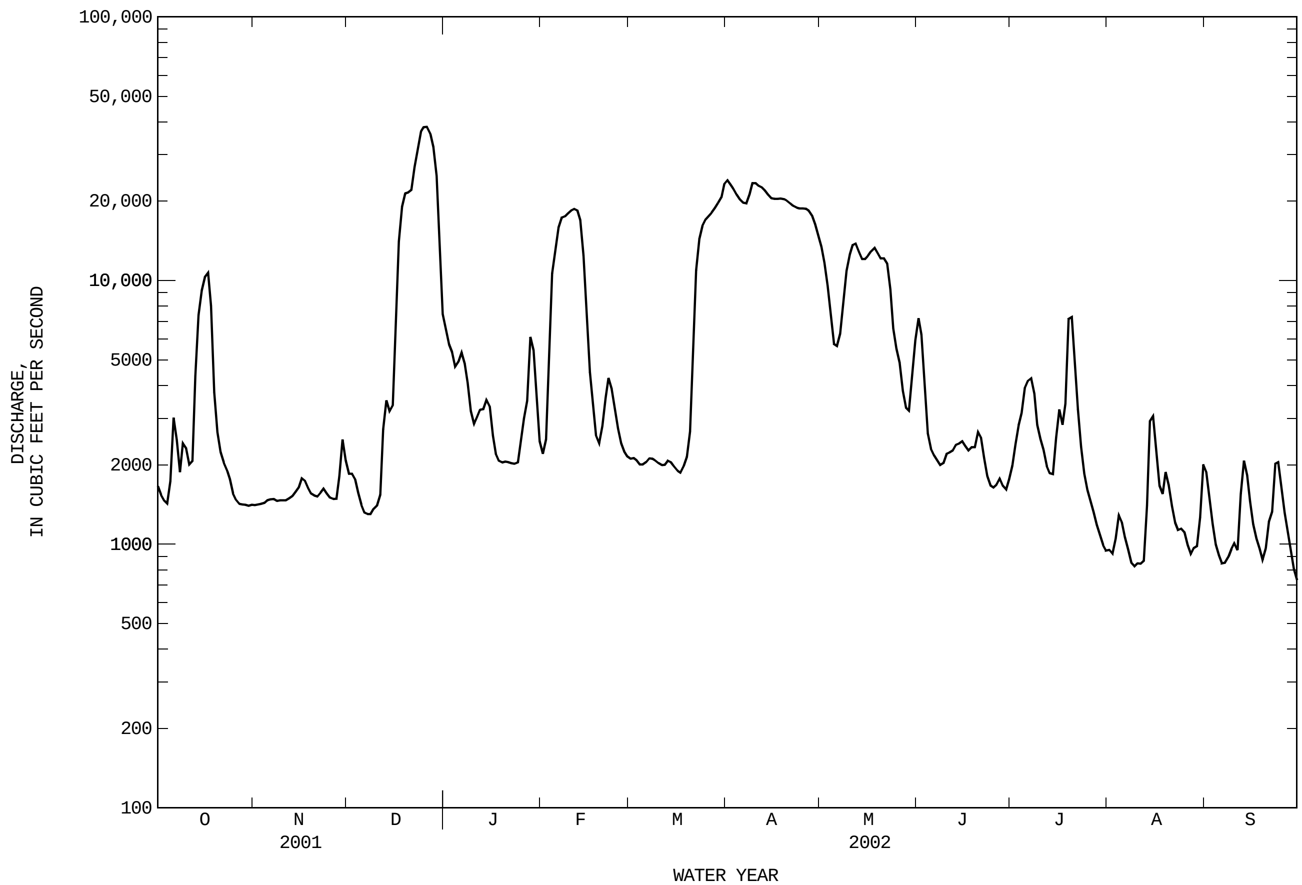
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3160	5566	7595	6545	8145	10450	9115	12880	9298	3311	1790	1795
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1964 - 2002	
ANNUAL TOTAL	3849563		2274246			
ANNUAL MEAN	10550		6231		6745	
HIGHEST ANNUAL MEAN					16810	1992
LOWEST ANNUAL MEAN					1352	1971
HIGHEST DAILY MEAN	58400	Mar 9	38300	Dec 26	109000	May 10 1990
LOWEST DAILY MEAN	984	Aug 12	730	Sep 30	278	Aug 12 1964
ANNUAL SEVEN-DAY MINIMUM	1010	Aug 9	892	Aug 6	293	Aug 10 1964
MAXIMUM PEAK FLOW			38700	Dec 25	109000	May 10 1990
MAXIMUM PEAK STAGE			40.11	Dec 25	48.54	May 10 1990
ANNUAL RUNOFF (AC-FT)	7636000		4511000		4886000	
10 PERCENT EXCEEDS	30500		19100		19200	
50 PERCENT EXCEEDS	4090		2340		2450	
90 PERCENT EXCEEDS	1260		1160		765	

e Estimated

08065350 Trinity River near Crockett, TX--Continued



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. 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 years 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. 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, 2,370 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, 820 microsiemens/cm, Dec. 31; minimum, 142 microsiemens/cm, July 19.
pH: Maximum, 8.5 units, Mar. 12, 13; minimum, 6.4 units, Dec. 13.
WATER TEMPERATURE: Maximum, 32.7°C, Aug. 4, 6; minimum, 7.8°C, Nov. 30, Jan. 6, 8.
DISSOLVED OXYGEN: Maximum, 13.1 mg/L, Mar. 13; minimum, 4.6 mg/L, June 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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, 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)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
FEB													
07...	1204	17400	340	7.9	8.8	770	10.4	89	2.3	120	32	40.8	3.69
MAR													
27...	1615	18200	328	7.8	15.0	766	8.1	80	2.2	120	25	41.9	3.46
MAY													
14...	1515	12000	342	7.7	24.3	765	8.3	99	2.1	120	23	41.3	3.13
JUN													
17...	1622	2260	572	7.7	29.0	760	6.6	86	1.5	160	47	55.1	5.72
JUL													
17...	0842	2900	520	7.7	28.3	762	6.3	81	2.6	150	48	50.6	5.26
AUG													
30...	1200	1190	618	7.9	29.0	763	7.3	95	1.6	160	63	54.6	6.02

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 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)
FEB													
07...	18.3	.7	4.32	85	40.8	19.8	.3	6.3	190	.94	.014	.95	.05
MAR													
27...	15.2	.6	4.47	94	36.3	15.3	.3	5.9	183	.67	.024	.70	.05
MAY													
14...	17.8	.7	4.25	93	32.0	16.9	.3	6.5	186	1.62	.029	1.65	<.04
JUN													
17...	47.3	2	6.98	114	65.6	47.0	.7	7.6	325	4.27	.016	4.29	<.04
JUL													
17...	47.3	2	6.38	100	66.9	46.8	.7	8.6	320	5.90	.022	5.92	<.04
AUG													
30...	56.8	2	7.41	98	70.6	60.6	.9	8.9	351	5.41	.012	5.42	<.04

08065350 Trinity River near Crockett, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

Date	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)
FEB					
07...	.37	.42	.10	.08	.245
MAR					
27...	.39	.44	.08	.07	.227
MAY					
14...	--	.36	.11	.10	.310
JUN					
17...	--	.60	.51	.49	1.50
JUL					
17...	--	.54	.46	.47	1.44
AUG					
30...	--	.42	.69	.65	1.98

Remark codes used in this report:
< -- Less than

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	517	483	500	581	555	568	463	376	436	433	393	407
2	516	507	510	595	579	585	510	463	485	442	374	408
3	515	499	508	610	595	602	586	509	544	374	296	319
4	519	499	508	618	610	615	568	538	552	329	297	316
5	544	472	519	624	618	622	568	561	565	340	329	334
6	472	243	319	638	622	629	561	556	558	356	324	341
7	395	353	376	638	636	637	562	550	557	348	326	340
8	492	392	447	654	637	645	550	529	537	350	347	348
9	535	492	519	671	654	661	533	520	524	349	348	348
10	611	535	573	676	670	672	521	500	510	395	346	361
11	629	558	591	679	672	675	508	457	500	407	395	403
12	560	491	522	672	663	666	457	373	402	416	407	411
13	534	283	413	669	663	665	380	285	316	419	409	414
14	341	292	315	671	665	668	377	300	361	418	416	417
15	586	312	454	689	670	678	392	293	357	416	410	414
16	493	336	387	690	684	687	293	228	258	420	414	417
17	336	309	317	685	672	677	287	226	251	435	420	424
18	352	312	331	676	672	673	282	239	264	481	435	470
19	367	343	358	675	656	665	243	201	222	541	481	521
20	362	354	356	674	654	662	229	210	218	548	541	544
21	362	337	345	674	575	630	248	229	237	561	548	555
22	345	340	342	596	575	588	369	248	271	570	561	566
23	353	339	344	588	581	585	449	369	417	581	568	574
24	413	353	390	608	578	586	482	449	470	582	522	563
25	447	413	431	615	583	605	537	482	513	550	511	526
26	466	447	456	583	570	572	593	537	567	567	548	555
27	500	466	484	578	570	574	627	593	608	640	567	594
28	514	500	509	578	456	547	652	627	642	665	536	602
29	531	508	515	456	271	380	656	650	653	581	433	491
30	553	531	543	377	261	315	820	656	712	433	417	424
31	555	552	554	---	---	---	820	390	504	417	410	413
MONTH	629	243	443	690	261	611	820	201	452	665	296	446

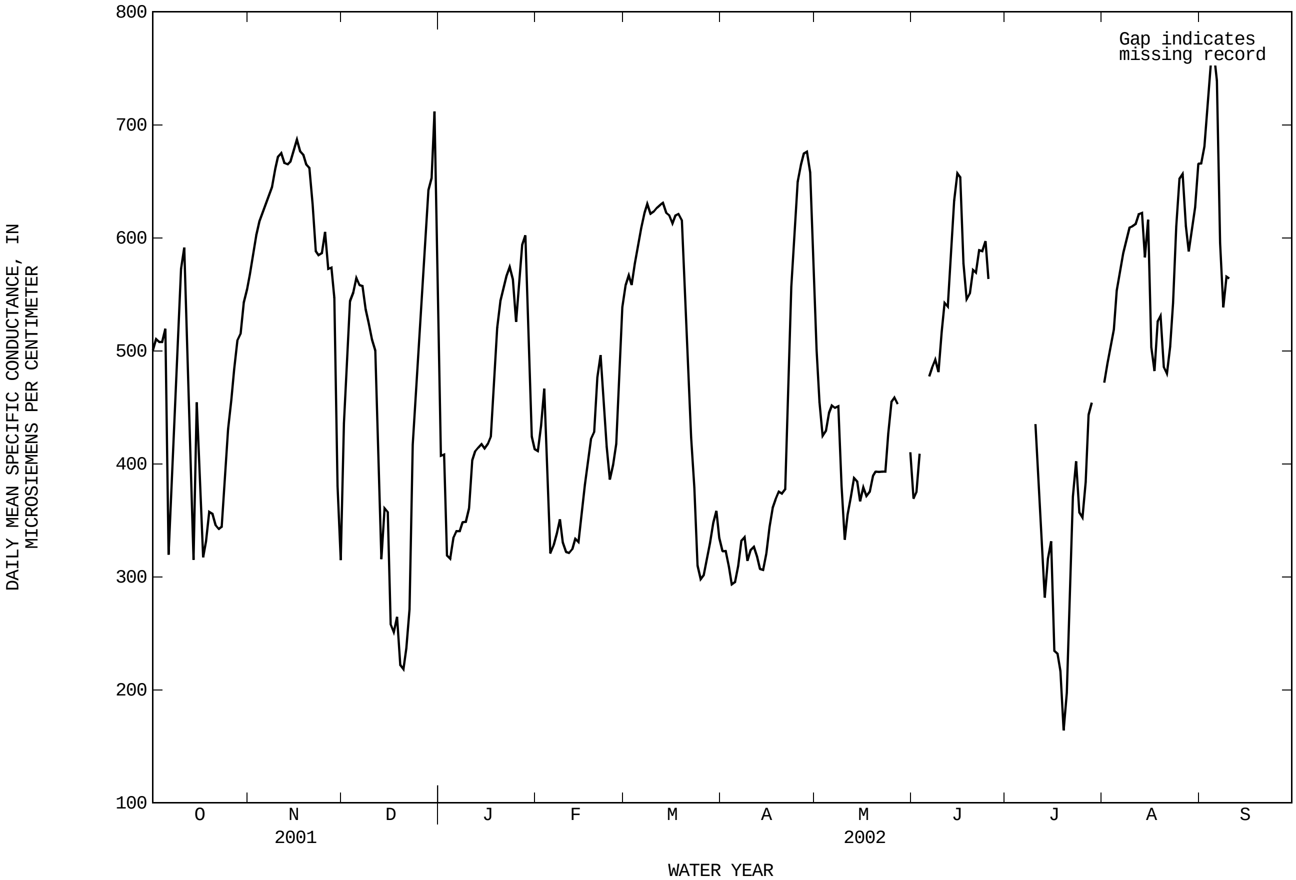
08065350 Trinity River near Crockett, TX--Continued

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	413	408	411	568	549	558	330	316	322	540	476	501
2	456	408	434	574	554	567	330	318	323	476	432	455
3	521	386	467	568	552	558	318	294	309	432	421	425
4	564	323	413	586	568	577	295	291	293	441	420	429
5	328	318	321	603	585	592	300	291	295	448	441	445
6	338	319	328	617	603	609	321	300	309	455	448	452
7	344	335	338	629	617	622	338	321	332	453	447	449
8	361	331	351	631	628	630	340	324	335	468	446	451
9	334	322	330	628	617	621	324	308	314	476	312	381
10	324	320	322	628	620	623	331	311	324	345	320	333
11	323	320	321	629	624	626	331	324	326	366	345	355
12	332	320	325	634	621	629	326	312	318	374	366	370
13	336	332	334	635	626	631	312	303	307	418	374	387
14	338	329	331	626	616	622	310	303	306	420	354	384
15	360	338	355	626	613	620	333	310	321	389	351	367
16	399	359	381	616	610	613	354	333	344	382	373	379
17	415	399	404	625	612	620	366	354	361	379	364	371
18	426	415	422	624	619	621	372	365	369	381	369	375
19	478	419	428	620	602	616	376	372	375	398	377	389
20	483	470	477	602	526	552	377	366	374	400	379	393
21	522	470	496	537	409	490	416	362	377	408	379	393
22	498	409	456	517	351	423	522	416	471	399	390	393
23	433	380	416	409	336	379	584	522	556	410	389	393
24	393	380	386	336	302	310	634	584	609	442	410	427
25	411	392	399	304	293	298	660	634	650	463	442	454
26	423	411	418	307	298	301	672	656	665	463	456	459
27	531	423	464	321	307	315	680	669	674	457	442	453
28	549	531	539	338	321	330	685	661	676	---	---	---
29	---	---	---	355	338	348	674	634	658	---	---	---
30	---	---	---	361	348	358	634	540	594	---	---	---
31	---	---	---	349	319	334	---	---	---	428	396	410
MONTH	564	318	395	635	293	516	685	291	416	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	426	339	369	---	---	---	481	463	472	678	654	666
2	392	353	375	---	---	---	503	481	489	704	670	681
3	424	392	409	---	---	---	518	488	504	731	704	718
4	---	---	---	---	---	---	539	505	519	764	728	754
5	---	---	---	---	---	---	561	536	554	764	761	763
6	485	471	477	---	---	---	586	560	571	762	684	739
7	488	482	485	---	---	---	593	583	586	684	525	595
8	500	487	492	---	---	---	606	590	597	553	526	538
9	507	445	481	---	---	---	613	602	609	575	553	566
10	546	468	517	465	424	435	613	605	610	569	559	564
11	552	523	542	444	337	383	616	606	612	---	---	---
12	550	520	539	369	278	325	632	615	621	---	---	---
13	615	550	591	298	256	281	635	589	622	---	---	---
14	655	615	633	356	295	316	598	576	583	---	---	---
15	662	653	657	406	251	331	630	597	616	---	---	---
16	664	615	654	255	213	234	597	450	503	---	---	---
17	615	555	578	234	223	232	531	450	482	---	---	---
18	555	535	545	235	184	217	534	522	526	---	---	---
19	578	535	551	184	142	164	551	493	531	---	---	---
20	588	550	572	268	143	197	493	471	486	---	---	---
21	583	550	569	323	268	303	491	472	480	---	---	---
22	596	582	589	412	323	371	525	490	504	---	---	---
23	599	583	588	414	388	402	566	518	542	---	---	---
24	602	585	597	393	323	357	627	584	610	---	---	---
25	585	552	564	370	332	353	662	627	652	---	---	---
26	---	---	---	409	365	384	666	643	656	---	---	---
27	---	---	---	461	401	443	643	585	611	---	---	---
28	---	---	---	474	431	454	591	586	588	---	---	---
29	---	---	---	---	---	---	612	604	607	---	---	---
30	---	---	---	---	---	---	650	612	627	---	---	---
31	---	---	---	---	---	---	695	648	666	---	---	---
MONTH	---	---	---	---	---	---	695	450	569	---	---	---

08065350 Trinity River near Crockett, TX--Continued



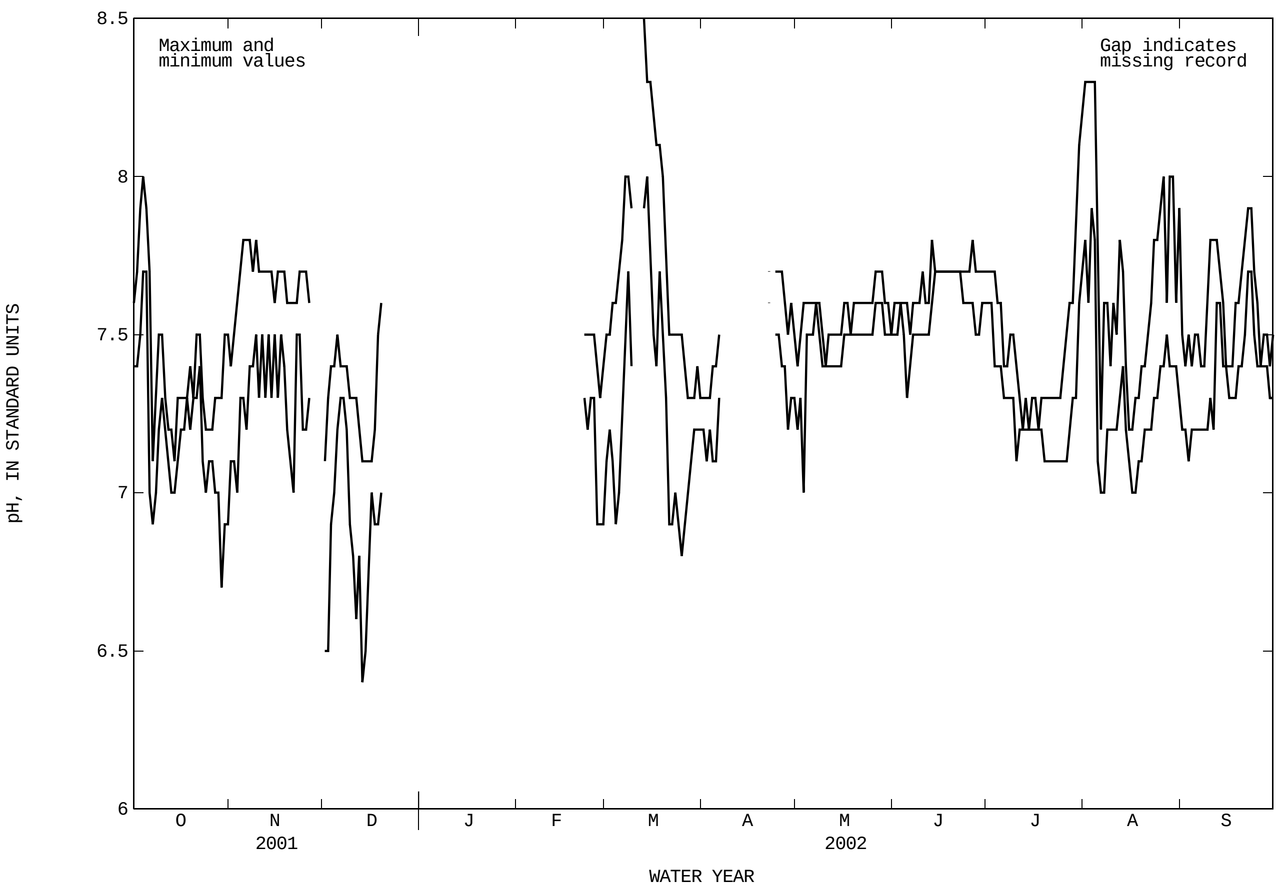
PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.6	7.4	7.4	7.1	7.1	6.5	---	---	---	---	7.5	7.1
2	7.7	7.4	7.5	7.1	7.3	6.5	---	---	---	---	7.5	7.2
3	7.9	7.5	7.6	7.0	7.4	6.9	---	---	---	---	7.6	7.1
4	8.0	7.7	7.7	7.3	7.4	7.0	---	---	---	---	7.6	6.9
5	7.9	7.7	7.8	7.3	7.5	7.2	---	---	---	---	7.7	7.0
6	7.7	7.0	7.8	7.2	7.4	7.3	---	---	---	---	7.8	7.3
7	7.1	6.9	7.8	7.4	7.4	7.3	---	---	---	---	8.0	7.5
8	7.3	7.0	7.7	7.4	7.4	7.2	---	---	---	---	8.0	7.7
9	7.5	7.2	7.8	7.5	7.3	6.9	---	---	---	---	7.9	7.4
10	7.5	7.3	7.7	7.3	7.3	6.8	---	---	---	---	---	---
11	7.3	7.2	7.7	7.5	7.3	6.6	---	---	---	---	---	---
12	7.2	7.1	7.7	7.3	7.2	6.8	---	---	---	---	---	---
13	7.2	7.0	7.7	7.5	7.1	6.4	---	---	---	---	8.5	7.9
14	7.1	7.0	7.7	7.3	7.1	6.5	---	---	---	---	8.3	8.0
15	7.3	7.1	7.6	7.5	7.1	6.8	---	---	---	---	8.3	7.7
16	7.3	7.2	7.7	7.3	7.1	7.0	---	---	---	---	8.2	7.5
17	7.3	7.2	7.7	7.5	7.2	6.9	---	---	---	---	8.1	7.4
18	7.3	7.3	7.7	7.4	7.5	6.9	---	---	---	---	8.1	7.7
19	7.4	7.2	7.6	7.2	7.6	7.0	---	---	---	---	8.0	7.5
20	7.3	7.3	7.6	7.1	---	---	---	---	---	---	7.8	7.3
21	7.5	7.3	7.6	7.0	---	---	---	---	---	---	7.5	6.9
22	7.5	7.4	7.6	7.5	---	---	---	---	7.5	7.3	7.5	6.9
23	7.3	7.1	7.7	7.5	---	---	---	---	7.5	7.2	7.5	7.0
24	7.2	7.0	7.7	7.2	---	---	---	---	7.5	7.3	7.5	6.9
25	7.2	7.1	7.7	7.2	---	---	---	---	7.5	7.3	7.5	6.8
26	7.2	7.1	7.6	7.3	---	---	---	---	7.4	6.9	7.4	6.9
27	7.3	7.0	---	---	---	---	---	---	7.3	6.9	7.3	7.0
28	7.3	7.0	---	---	---	---	---	---	7.4	6.9	7.3	7.1
29	7.3	6.7	---	---	---	---	---	---	---	---	7.3	7.2
30	7.5	6.9	---	---	---	---	---	---	---	---	7.4	7.2
31	7.5	6.9	---	---	---	---	---	---	---	---	7.3	7.2
MONTH	8.0	6.7	---	---	---	---	---	---	---	---	---	---

08065350 Trinity River near Crockett, TX--Continued

PH, WH, FIELD FROM DCP, in (STANDARD UNITS), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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



08065350 Trinity River near Crockett, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

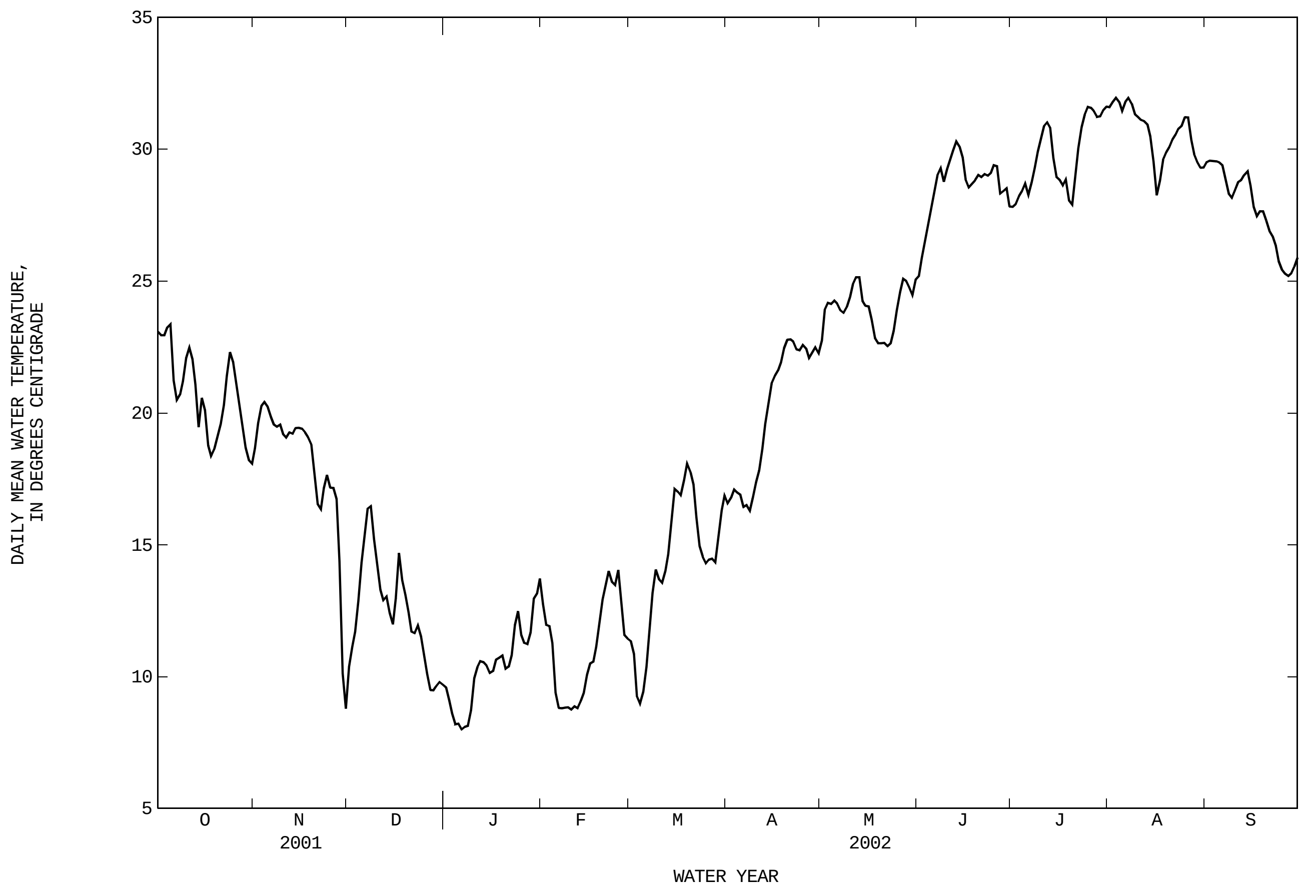
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.9	22.3	23.1	19.3	18.0	18.7	10.9	9.8	10.4	9.7	9.5	9.6
2	23.8	22.1	22.9	20.2	19.1	19.6	11.5	10.8	11.1	9.3	8.9	9.1
3	23.6	22.1	22.9	20.9	19.6	20.3	12.1	11.4	11.7	8.9	8.4	8.6
4	23.8	22.6	23.2	21.0	19.8	20.4	13.6	12.1	12.9	8.4	8.0	8.2
5	23.8	22.8	23.4	20.8	19.7	20.3	14.8	13.6	14.3	8.3	8.1	8.2
6	22.8	20.7	21.2	20.4	19.2	19.9	15.9	14.8	15.3	8.1	7.8	8.0
7	21.0	19.9	20.5	20.0	19.0	19.6	16.8	15.8	16.4	8.4	7.9	8.1
8	21.5	20.0	20.7	19.9	19.0	19.5	16.8	15.8	16.5	8.4	7.8	8.1
9	21.7	20.6	21.2	19.8	19.3	19.6	15.8	14.7	15.2	9.3	8.2	8.7
10	22.5	21.6	22.1	19.4	19.0	19.2	14.7	13.8	14.3	10.3	9.3	9.9
11	22.7	22.2	22.5	19.5	18.7	19.1	13.8	12.8	13.3	10.6	10.2	10.4
12	22.3	21.6	22.0	19.5	19.0	19.3	13.2	12.6	12.9	11.0	10.3	10.6
13	22.2	19.9	21.1	19.7	18.8	19.2	13.2	12.7	13.0	10.9	10.3	10.6
14	19.9	19.0	19.5	19.9	19.0	19.4	12.7	12.2	12.4	10.8	10.2	10.4
15	21.4	19.8	20.6	19.7	19.2	19.4	12.3	11.8	12.0	10.4	9.9	10.1
16	21.0	19.4	20.1	19.5	19.2	19.4	14.7	11.9	13.0	10.5	9.9	10.2
17	19.4	18.5	18.8	19.6	19.0	19.3	15.0	14.4	14.7	10.8	10.4	10.6
18	18.7	18.0	18.4	19.6	18.7	19.1	14.6	13.3	13.7	10.8	10.7	10.7
19	19.1	18.2	18.6	19.1	18.3	18.8	13.5	12.9	13.1	11.2	10.6	10.8
20	19.6	18.7	19.1	18.3	17.1	17.7	12.9	12.0	12.4	10.6	10.1	10.3
21	20.1	19.1	19.6	17.1	16.1	16.6	12.0	11.5	11.7	10.9	10.0	10.4
22	21.0	19.8	20.3	16.8	15.9	16.4	11.9	11.3	11.6	11.2	10.4	10.8
23	22.0	20.8	21.4	17.7	16.5	17.1	12.0	11.7	11.9	12.6	11.2	11.9
24	23.1	21.7	22.3	18.1	17.3	17.6	11.7	11.1	11.5	12.7	11.9	12.5
25	22.4	21.4	21.9	17.6	16.7	17.2	11.1	10.5	10.8	12.0	11.2	11.6
26	21.6	20.6	21.0	17.6	16.7	17.2	10.5	9.7	10.1	11.7	10.9	11.3
27	20.8	19.8	20.3	17.4	15.9	16.7	9.7	9.3	9.5	11.6	10.9	11.2
28	20.1	19.0	19.5	15.9	11.8	14.4	9.7	9.3	9.5	12.5	11.3	11.7
29	19.2	18.1	18.7	11.8	8.3	10.1	9.8	9.5	9.7	13.3	12.5	12.9
30	18.8	17.5	18.2	9.8	7.8	8.8	9.9	9.7	9.8	13.7	12.7	13.1
31	18.5	17.4	18.1	---	---	---	9.8	9.6	9.7	13.9	13.3	13.7
MONTH	23.9	17.4	20.7	21.0	7.8	18.0	16.8	9.3	12.4	13.9	7.8	10.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.3	12.2	12.7	11.5	11.2	11.4	16.7	16.4	16.6	23.5	22.2	22.7
2	12.2	11.8	12.0	11.5	9.8	10.9	17.2	16.4	16.8	24.3	23.5	23.9
3	12.4	11.5	11.9	9.8	8.7	9.3	17.2	17.0	17.1	24.3	24.0	24.2
4	12.6	10.0	11.3	9.7	8.3	9.0	17.2	16.8	17.0	24.6	23.7	24.1
5	10.0	9.1	9.4	10.2	8.7	9.4	17.1	16.7	16.9	24.5	24.1	24.3
6	9.1	8.7	8.8	11.0	9.6	10.4	16.7	16.3	16.4	24.6	23.8	24.1
7	9.0	8.6	8.8	12.7	10.9	11.9	16.7	16.2	16.5	24.1	23.6	23.9
8	9.0	8.6	8.8	13.8	12.6	13.2	16.5	16.1	16.3	24.2	23.3	23.8
9	9.0	8.7	8.8	14.6	13.7	14.1	17.2	16.4	16.8	24.2	23.8	24.0
10	9.0	8.5	8.8	14.3	13.2	13.7	17.6	17.1	17.4	24.8	24.0	24.4
11	9.1	8.6	8.9	13.7	13.5	13.6	18.3	17.4	17.8	25.2	24.6	24.9
12	9.0	8.5	8.8	14.7	13.5	14.0	19.3	18.2	18.6	25.5	24.8	25.1
13	9.4	8.7	9.0	15.5	13.8	14.6	20.1	19.2	19.6	25.4	24.9	25.1
14	9.7	9.0	9.4	16.6	14.8	15.8	20.9	20.0	20.4	24.9	23.9	24.2
15	10.5	9.7	10.1	17.8	16.5	17.1	21.5	20.7	21.1	24.3	23.8	24.1
16	10.9	10.1	10.5	17.3	16.8	17.0	21.7	21.2	21.4	24.4	23.8	24.0
17	10.8	10.2	10.6	17.1	16.6	16.9	21.9	21.4	21.6	24.0	22.9	23.5
18	11.6	10.7	11.1	17.9	16.9	17.4	22.3	21.5	21.9	23.1	22.7	22.8
19	12.5	11.6	12.0	18.4	17.6	18.1	22.9	22.1	22.5	23.0	22.3	22.6
20	13.5	12.4	12.9	18.1	17.4	17.8	23.1	22.5	22.8	23.0	22.3	22.6
21	13.8	13.1	13.5	17.5	16.9	17.3	23.1	22.5	22.8	23.0	22.4	22.7
22	14.4	13.8	14.0	16.9	15.1	16.0	23.0	22.6	22.7	22.8	22.2	22.5
23	13.9	13.2	13.6	15.2	14.6	15.0	22.6	22.1	22.4	23.0	22.3	22.6
24	13.9	13.0	13.5	14.6	14.3	14.5	22.7	22.1	22.4	23.5	22.6	23.1
25	14.7	13.6	14.1	14.4	14.2	14.3	22.9	22.4	22.6	24.5	23.4	23.9
26	13.8	11.8	12.7	14.8	14.1	14.4	22.6	22.2	22.4	25.1	24.0	24.6
27	12.0	11.1	11.6	14.7	14.2	14.5	22.4	21.9	22.1	25.6	24.6	25.1
28	11.9	11.0	11.5	14.8	13.9	14.3	22.7	21.9	22.3	25.5	24.6	25.0
29	---	---	---	15.9	14.6	15.3	22.6	22.3	22.5	25.2	24.4	24.8
30	---	---	---	16.8	15.9	16.3	22.5	22.0	22.3	24.8	23.9	24.5
31	---	---	---	17.0	16.7	16.9	---	---	---	25.5	24.5	25.1
MONTH	14.7	8.5	11.0	18.4	8.3	14.3	23.1	16.1	20.0	25.6	22.2	23.9

08065350 Trinity River near Crockett, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.6	24.6	25.2	28.4	27.4	27.8	32.3	30.9	31.6	30.1	28.9	29.5
2	26.3	25.4	25.9	28.6	27.4	27.9	32.6	30.9	31.8	30.1	29.1	29.6
3	27.1	26.0	26.5	28.9	27.7	28.2	32.5	31.3	31.9	30.2	28.9	29.6
4	27.8	26.5	27.1	29.1	27.7	28.4	32.7	30.9	31.8	29.9	29.1	29.5
5	28.6	27.0	27.7	29.1	28.3	28.7	32.2	30.5	31.5	30.2	28.8	29.5
6	29.2	27.6	28.4	28.8	27.7	28.3	32.7	30.9	31.8	29.9	29.0	29.4
7	29.8	28.3	29.0	29.2	28.3	28.7	32.6	31.2	31.9	29.3	28.6	28.9
8	29.9	28.8	29.3	29.8	28.8	29.3	32.2	31.2	31.7	28.7	28.0	28.3
9	29.4	28.4	28.8	30.6	29.3	29.9	31.8	31.0	31.3	28.7	27.8	28.2
10	30.2	28.3	29.2	31.2	29.7	30.4	31.8	30.7	31.2	29.1	27.7	28.4
11	30.1	29.0	29.6	31.6	30.1	30.9	31.9	30.4	31.1	29.3	27.9	28.7
12	30.6	29.3	30.0	31.5	30.7	31.0	31.7	30.5	31.1	29.5	28.0	28.8
13	31.0	29.8	30.3	31.6	30.3	30.8	31.7	30.2	30.9	29.4	28.5	29.0
14	30.7	29.7	30.1	30.3	29.2	29.7	30.8	30.2	30.5	29.6	28.8	29.2
15	30.1	29.3	29.7	29.2	28.8	28.9	30.3	28.5	29.5	29.0	28.2	28.6
16	29.3	28.5	28.9	29.0	28.5	28.8	28.7	27.8	28.3	28.2	27.4	27.8
17	29.2	27.9	28.6	29.2	28.2	28.6	29.7	28.0	28.8	27.9	27.0	27.4
18	29.3	28.1	28.7	29.4	28.4	28.9	30.4	28.9	29.6	28.0	27.2	27.7
19	29.5	28.2	28.8	28.8	27.7	28.1	30.6	29.2	29.9	27.9	27.5	27.6
20	29.4	28.8	29.0	28.5	27.3	27.9	30.9	29.4	30.1	28.0	26.6	27.3
21	29.6	28.4	28.9	29.8	28.4	29.1	31.3	29.6	30.4	27.7	26.0	26.9
22	29.8	28.4	29.1	30.7	29.4	30.0	31.4	29.7	30.6	27.4	25.9	26.7
23	29.6	28.6	29.0	31.5	30.2	30.8	31.5	30.0	30.8	26.9	25.9	26.3
24	30.1	28.3	29.1	32.2	30.5	31.3	31.6	30.1	30.9	26.2	25.4	25.8
25	30.3	28.6	29.4	32.5	30.8	31.6	32.0	30.4	31.2	26.0	24.9	25.4
26	30.2	28.7	29.4	32.3	30.8	31.6	31.9	30.5	31.2	26.0	24.7	25.3
27	29.0	27.6	28.3	32.1	30.8	31.5	31.3	29.8	30.4	26.0	24.3	25.2
28	29.4	27.5	28.4	31.9	30.5	31.2	30.7	29.1	29.8	26.1	24.5	25.3
29	29.0	28.1	28.5	32.1	30.4	31.3	30.2	28.9	29.5	26.3	24.8	25.5
30	28.1	27.7	27.8	32.2	30.8	31.5	29.8	28.6	29.3	26.5	25.3	25.9
31	---	---	---	32.4	30.9	31.6	30.0	28.6	29.3	---	---	---
MONTH	31.0	24.6	28.6	32.5	27.3	29.8	32.7	27.8	30.6	30.2	24.3	27.7
YEAR	32.7	7.8	20.7									



08065350 Trinity River near Crockett, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

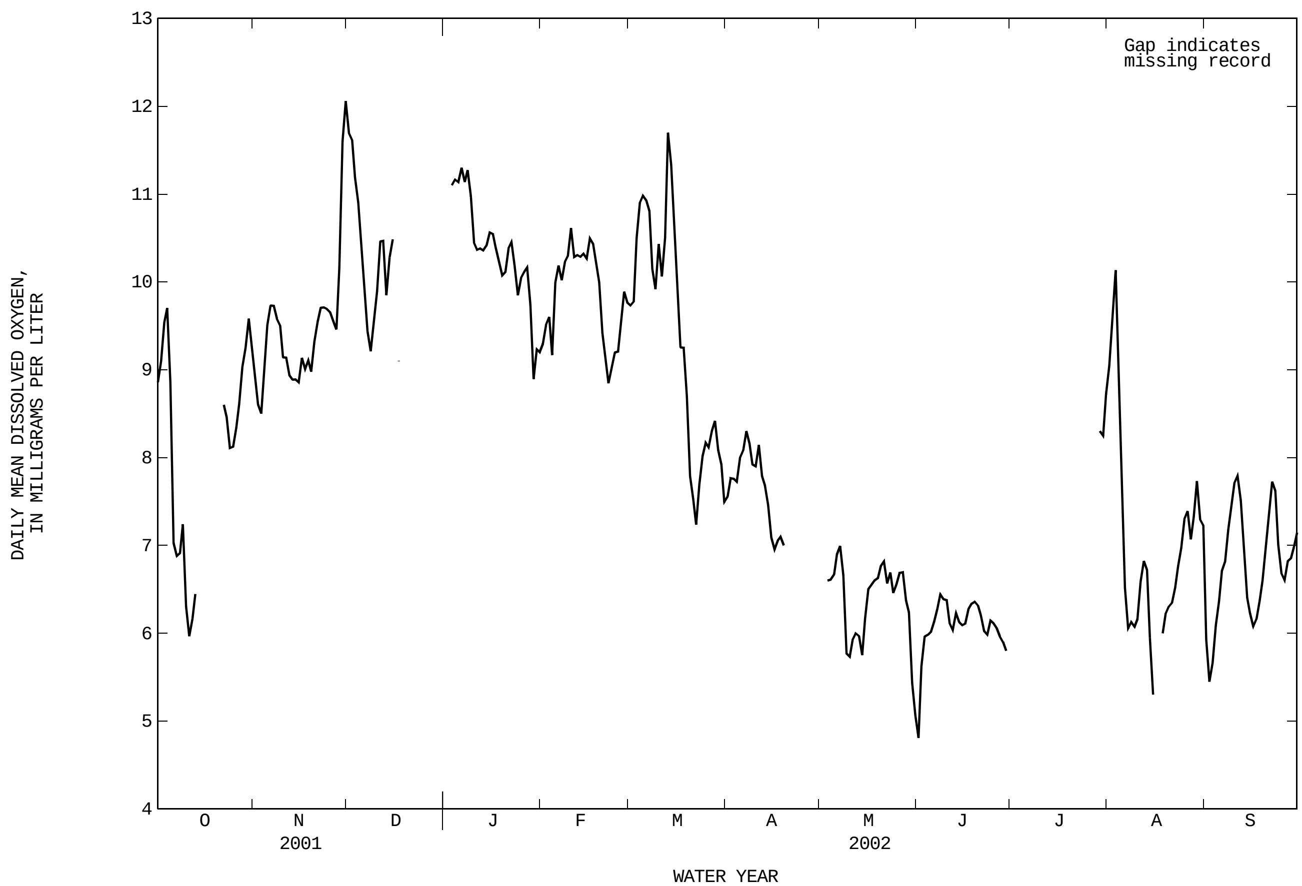
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.3	8.4	8.9	9.4	8.6	9.0	12.0	11.5	11.7	---	---	---
2	9.7	8.6	9.1	9.0	8.3	8.6	12.0	11.3	11.6	---	---	---
3	10.4	8.8	9.5	9.2	8.1	8.5	11.4	10.9	11.2	11.5	10.8	11.1
4	11.1	8.9	9.7	10.0	8.1	9.0	11.9	10.5	10.9	11.9	10.9	11.2
5	9.6	8.2	8.9	10.3	8.9	9.5	10.8	10.1	10.4	11.4	10.8	11.1
6	8.2	6.5	7.0	10.6	9.0	9.7	10.2	9.6	9.9	12.6	10.6	11.3
7	7.2	6.4	6.9	10.7	9.1	9.7	9.7	9.1	9.4	11.9	10.6	11.1
8	7.6	6.3	6.9	10.2	9.2	9.6	9.9	9.0	9.2	11.9	11.0	11.3
9	7.8	6.8	7.2	10.2	8.9	9.5	10.3	9.1	9.6	11.4	10.6	11.0
10	7.2	5.7	6.3	9.6	8.7	9.1	10.7	9.6	9.9	10.6	10.2	10.4
11	6.2	5.6	6.0	9.8	8.7	9.1	10.7	10.0	10.5	11.3	10.1	10.4
12	6.3	5.9	6.2	9.4	8.7	8.9	11.2	10.0	10.5	11.1	9.9	10.4
13	7.1	5.7	6.4	9.3	8.6	8.9	10.0	9.5	9.8	10.7	9.9	10.4
14	---	---	---	9.6	8.6	8.9	11.0	9.8	10.3	10.6	10.2	10.4
15	---	---	---	9.4	8.5	8.9	11.1	10.1	10.5	10.9	10.4	10.6
16	---	---	---	9.3	9.0	9.1	10.8	9.2	---	10.9	10.2	10.5
17	---	---	---	9.3	8.8	9.0	9.2	8.7	9.1	10.8	10.1	10.4
18	---	---	---	10.0	8.7	9.1	---	---	---	10.6	10.0	10.2
19	---	---	---	9.7	8.7	9.0	---	---	---	10.3	9.9	10.1
20	---	---	---	9.8	8.9	9.3	---	---	---	10.4	9.8	10.1
21	---	---	---	10.0	9.0	9.5	---	---	---	11.0	10.1	10.4
22	8.8	8.1	8.6	10.0	9.4	9.7	---	---	---	10.9	10.2	10.5
23	8.6	8.1	8.5	10.0	9.5	9.7	---	---	---	10.9	9.7	10.2
24	8.5	7.4	8.1	10.0	9.4	9.7	---	---	---	10.2	9.6	9.8
25	8.3	7.9	8.1	10.1	9.4	9.7	---	---	---	10.4	9.6	10.0
26	8.6	8.1	8.3	9.9	9.3	9.6	---	---	---	10.4	9.9	10.1
27	8.9	8.3	8.6	9.9	9.1	9.5	---	---	---	10.5	9.9	10.2
28	9.8	8.7	9.0	11.9	9.5	10.2	---	---	---	10.4	9.1	9.7
29	9.7	8.9	9.3	12.3	11.0	11.6	---	---	---	9.7	8.6	8.9
30	10.1	9.2	9.6	12.7	11.4	12.1	---	---	---	9.5	9.0	9.2
31	9.9	8.7	9.3	---	---	---	---	---	---	9.6	9.0	9.2
MONTH	---	---	---	12.7	8.1	9.5	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	9.5	9.0	9.3	10.1	9.5	9.7	8.1	7.3	7.5	---	---	---
2	9.8	9.3	9.5	10.3	9.4	9.8	8.5	7.5	7.8	---	---	---
3	10.0	9.3	9.6	11.1	9.9	10.5	8.1	7.5	7.8	6.6	6.5	6.6
4	9.8	8.6	9.2	11.4	10.6	10.9	8.1	7.6	7.7	6.7	6.6	6.6
5	10.5	9.7	10	11.5	10.6	11.0	8.6	7.8	8.0	6.8	6.6	6.7
6	10.6	9.9	10.2	11.5	10.5	10.9	8.4	7.9	8.1	7.0	6.8	6.9
7	10.4	9.8	10.0	12.0	10.3	10.8	8.8	8.0	8.3	7.0	6.9	7.0
8	10.9	9.8	10.2	10.5	9.5	10.2	9.4	7.9	8.2	6.9	6.5	6.7
9	10.9	10.0	10.3	10.8	9.1	9.9	8.6	7.7	7.9	6.6	5.3	5.8
10	11.3	10.2	10.6	11.7	9.4	10.4	8.7	7.7	7.9	5.8	5.5	5.7
11	10.6	10.0	10.3	10.5	9.5	10.1	9.3	7.9	8.1	6.0	5.8	5.9
12	10.8	9.9	10.3	12.3	9.0	10.5	8.2	7.5	7.8	6.0	5.9	6.0
13	11.6	9.9	10.3	13.1	10.3	11.7	8.3	7.4	7.7	6.1	5.9	6.0
14	10.7	10.0	10.3	12.7	10.4	11.3	8.0	7.2	7.5	6.1	5.5	5.8
15	10.7	9.9	10.3	11.7	9.7	10.6	7.5	6.8	7.1	6.4	6.0	6.2
16	10.7	10.1	10.5	10.6	9.1	9.9	7.3	6.7	7.0	6.6	6.3	6.5
17	10.7	10.2	10.4	10.1	8.7	9.3	7.2	6.8	7.0	6.6	6.4	6.5
18	10.9	9.9	10.2	10.5	8.3	9.2	7.4	6.8	7.1	6.7	6.5	6.6
19	10.5	9.6	10.0	9.3	8.0	8.7	7.3	6.7	7.0	6.7	6.5	6.6
20	10.3	9.0	9.4	8.1	7.4	7.8	---	---	---	6.8	6.6	6.8
21	9.7	8.9	9.1	8.1	7.2	7.5	---	---	---	6.9	6.5	6.8
22	9.3	8.1	8.8	7.8	6.9	7.2	---	---	---	6.7	6.5	6.6
23	9.3	8.9	9.0	7.9	7.4	7.7	---	---	---	6.8	6.6	6.7
24	9.4	9.0	9.2	8.7	7.7	8.0	---	---	---	6.6	6.4	6.5
25	9.4	9.1	9.2	8.7	7.9	8.2	---	---	---	6.6	6.5	6.6
26	10.0	9.2	9.6	8.5	7.8	8.1	---	---	---	6.8	6.6	6.7
27	10.2	9.7	9.9	8.5	8.0	8.3	---	---	---	6.8	6.6	6.7
28	10.1	9.6	9.8	9.2	8.2	8.4	---	---	---	6.6	6.2	6.4
29	---	---	---	8.5	7.7	8.1	---	---	---	6.4	6.0	6.2
30	---	---	---	8.5	7.6	7.9	---	---	---	6.0	4.8	5.4
31	---	---	---	8.2	7.2	7.5	---	---	---	5.3	5.0	5.1
MONTH	11.6	8.1	9.8	13.1	6.9	9.4	---	---	---	---	---	---

08065350 Trinity River near Crockett, TX--Continued

OXYGEN DISSOLVED FROM DCP, in (MG/L), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	5.1	4.6	4.8	---	---	---	10.8	7.0	9.0	6.8	5.4	5.9
2	6.0	5.0	5.6	---	---	---	11.3	7.8	9.5	5.7	5.3	5.5
3	6.1	5.9	6.0	---	---	---	11.5	8.9	10.1	6.1	5.3	5.7
4	6.1	5.9	6.0	---	---	---	10.8	7.5	9.1	6.6	5.6	6.1
5	6.2	5.8	6.0	---	---	---	8.6	6.5	7.5	6.9	6.0	6.4
6	6.3	5.8	6.1	---	---	---	7.7	5.6	6.5	7.4	6.2	6.7
7	6.4	6.0	6.3	---	---	---	7.0	5.3	6.1	7.4	6.3	6.8
8	6.7	6.1	6.4	---	---	---	7.0	5.5	6.1	7.7	6.6	7.2
9	6.6	6.0	6.4	---	---	---	6.9	5.5	6.1	8.1	7.0	7.5
10	6.7	6.0	6.4	---	---	---	7.0	5.5	6.2	8.3	7.2	7.7
11	6.5	5.8	6.1	---	---	---	7.6	5.8	6.6	8.4	7.4	7.8
12	6.4	5.6	6.0	---	---	---	7.8	6.2	6.8	8.3	7.0	7.5
13	6.8	6.0	6.2	---	---	---	7.3	6.3	6.7	7.3	6.6	6.9
14	6.5	5.9	6.1	---	---	---	6.5	5.4	5.9	6.7	6.2	6.4
15	6.4	6.0	6.1	---	---	---	5.5	5.2	5.3	6.5	6.1	6.2
16	6.3	6.0	6.1	---	---	---	---	---	---	6.2	6.0	6.1
17	6.7	6.0	6.3	---	---	---	---	---	---	6.5	6.0	6.2
18	6.6	6.2	6.3	---	---	---	6.1	5.7	6.0	6.8	6.0	6.4
19	6.7	6.2	6.4	---	---	---	6.3	6.1	6.2	7.0	6.3	6.6
20	6.6	6.2	6.3	---	---	---	6.3	6.3	6.3	7.5	6.6	7.0
21	6.4	6.0	6.2	---	---	---	6.5	6.2	6.3	8.2	6.8	7.3
22	6.1	5.8	6.0	---	---	---	6.8	6.3	6.5	8.7	7.1	7.7
23	6.3	5.8	6.0	---	---	---	7.2	6.4	6.8	8.0	7.2	7.6
24	6.7	5.9	6.1	---	---	---	7.5	6.6	7.0	7.3	6.7	7.0
25	6.6	5.9	6.1	---	---	---	8.0	6.8	7.3	6.9	6.4	6.7
26	6.4	5.9	6.1	---	---	---	8.2	6.8	7.4	7.0	6.3	6.6
27	6.3	5.6	6.0	---	---	---	7.5	6.9	7.1	7.3	6.6	6.8
28	6.4	5.6	5.9	---	---	---	8.1	6.8	7.3	7.2	6.6	6.9
29	6.0	5.6	5.8	8.7	7.8	8.3	8.6	7.0	7.7	7.5	6.6	7.0
30	---	---	---	9.3	7.4	8.2	7.7	7.0	7.3	7.7	6.8	7.1
31	---	---	---	10.0	7.7	8.7	7.9	6.6	7.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	8.7	5.3	6.8



THIS PAGE IS INTENTIONALLY BLANK

08065800 Bedias Creek near Madisonville, TX

LOCATION.--Lat 30°53'05", long 95°46'40", 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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. 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^2 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

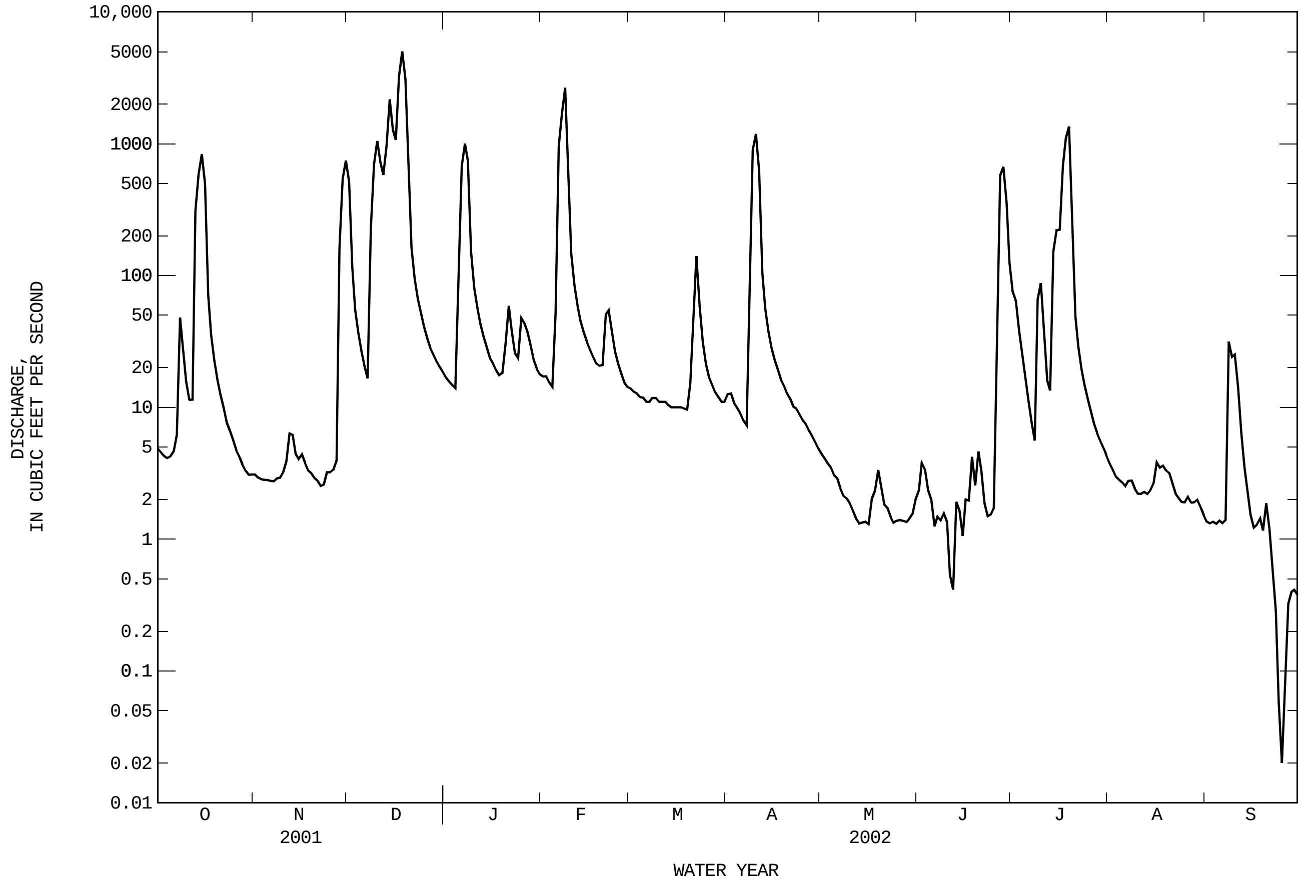
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	3.1	518	17	17	14	13	4.4	2.3	75	3.8	1.4
2	4.5	2.9	116	16	17	13	13	4.1	3.8	64	3.4	1.3
3	4.3	2.9	55	15	15	13	11	3.7	3.4	38	3.0	1.4
4	4.1	2.8	37	14	14	12	10	3.5	2.3	27	2.8	1.3
5	4.2	2.8	27	142	51	12	9.0	3.0	2.0	18	2.7	1.4
6	4.6	2.8	20	677	962	11	8.0	2.9	1.2	11	2.5	1.3
7	6.2	2.8	17	1000	1690	11	7.3	2.4	1.5	7.7	2.8	1.4
8	48	2.9	228	745	2650	12	201	2.1	1.4	5.6	2.8	31
9	27	2.9	703	152	642	12	898	2.0	1.6	66	2.4	24
10	16	3.2	1050	80	146	11	1180	1.9	1.3	88	2.2	25
11	11	3.9	722	57	85	11	621	1.7	0.53	34	2.2	14
12	11	6.3	579	43	59	11	105	1.4	0.41	16	2.3	6.5
13	309	6.1	960	34	45	10	56	1.3	1.9	13	2.2	3.5
14	589	4.5	2170	28	37	10	38	1.3	1.6	152	2.3	2.3
15	835	4.1	1270	24	32	10	28	1.4	1.1	220	2.6	1.5
16	500	4.4	1070	22	27	10	23	1.3	2.0	223	3.8	1.2
17	71	3.8	3250	19	24	10	19	2.0	2.0	686	3.5	1.3
18	36	3.3	5020	18	22	9.8	16	2.3	4.2	1100	3.6	1.4
19	23	3.2	3100	18	21	9.6	15	3.3	2.6	1350	3.3	1.2
20	16	2.9	755	31	21	15	13	2.5	4.6	207	3.2	1.9
21	12	2.8	163	59	50	54	12	1.8	3.3	49	2.6	1.2
22	9.7	2.5	94	38	54	140	10	1.7	1.9	29	2.2	0.59
23	7.6	2.6	66	26	37	59	9.7	1.5	1.5	20	2.1	0.29
24	6.6	3.2	51	24	26	31	8.8	1.3	1.5	15	1.9	0.06
25	5.6	3.2	41	48	21	21	8.0	1.4	1.7	11	1.9	0.02
26	4.7	3.4	34	44	18	17	7.4	1.4	44	9.2	2.1	0.10
27	4.3	3.9	28	37	15	15	6.7	1.4	577	7.5	1.9	0.32
28	3.7	161	25	30	14	13	6.0	1.3	666	6.4	1.9	0.40
29	3.3	541	22	23	---	12	5.4	1.4	356	5.6	2.0	0.41
30	3.1	746	20	19	---	11	4.8	1.5	126	4.9	1.8	0.38
31	3.1	---	19	18	---	11	---	2.0	---	4.3	1.5	---
TOTAL	2588.4	1541.2	22230	3518	6812	611.4	3363.1	65.2	1820.64	4563.2	79.3	128.07
MEAN	83.50	51.37	717.1	113.5	243.3	19.72	112.1	2.103	60.69	147.2	2.558	4.269
MAX	835	746	5020	1000	2650	140	1180	4.4	666	1350	3.8	31
MIN	3.1	2.5	17	14	14	9.6	4.8	1.3	0.41	4.3	1.5	0.02
AC-FT	5130	3060	44090	6980	13510	1210	6670	129	3610	9050	157	254

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	200.9	175.4	260.7	314.4	298.9	285.0	230.7	291.8	268.5	25.28	25.33	90.70
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	0.000	0.025	0.22	1.99	3.84	3.13	2.30	2.10	0.43	0.013	0.000	0.000
(WY)	1979	1989	1968	1971	2000	1971	1981	2002	1998	1977	1969	1969

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1968 - 2002	
ANNUAL TOTAL	141297.62		47320.51			
ANNUAL MEAN	387.1		129.6		205.1	
HIGHEST ANNUAL MEAN					530	2001
LOWEST ANNUAL MEAN					32.6	2000
HIGHEST DAILY MEAN	12800	Jun 8	5020	Dec 18	23000	Jan 10 1991
LOWEST DAILY MEAN	0.50	Aug 23	0.02	Sep 25	0.00	Aug 31 1968
ANNUAL SEVEN-DAY MINIMUM	0.61	Aug 20	0.23	Sep 23	0.00	Aug 31 1968
MAXIMUM PEAK FLOW			5480	Dec 18	33800	Sep 14 1974
MAXIMUM PEAK STAGE			17.84	Dec 18	25.07	Sep 14 1974
ANNUAL RUNOFF (AC-FT)	280300		93860		148600	
10 PERCENT EXCEEDS	899		225		413	
50 PERCENT EXCEEDS	27		10		8.9	
90 PERCENT EXCEEDS	1.9		1.4		0.08	

08065800 Bedias Creek near Madisonville, TX--Continued



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^2.

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 NGVD of 1929. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

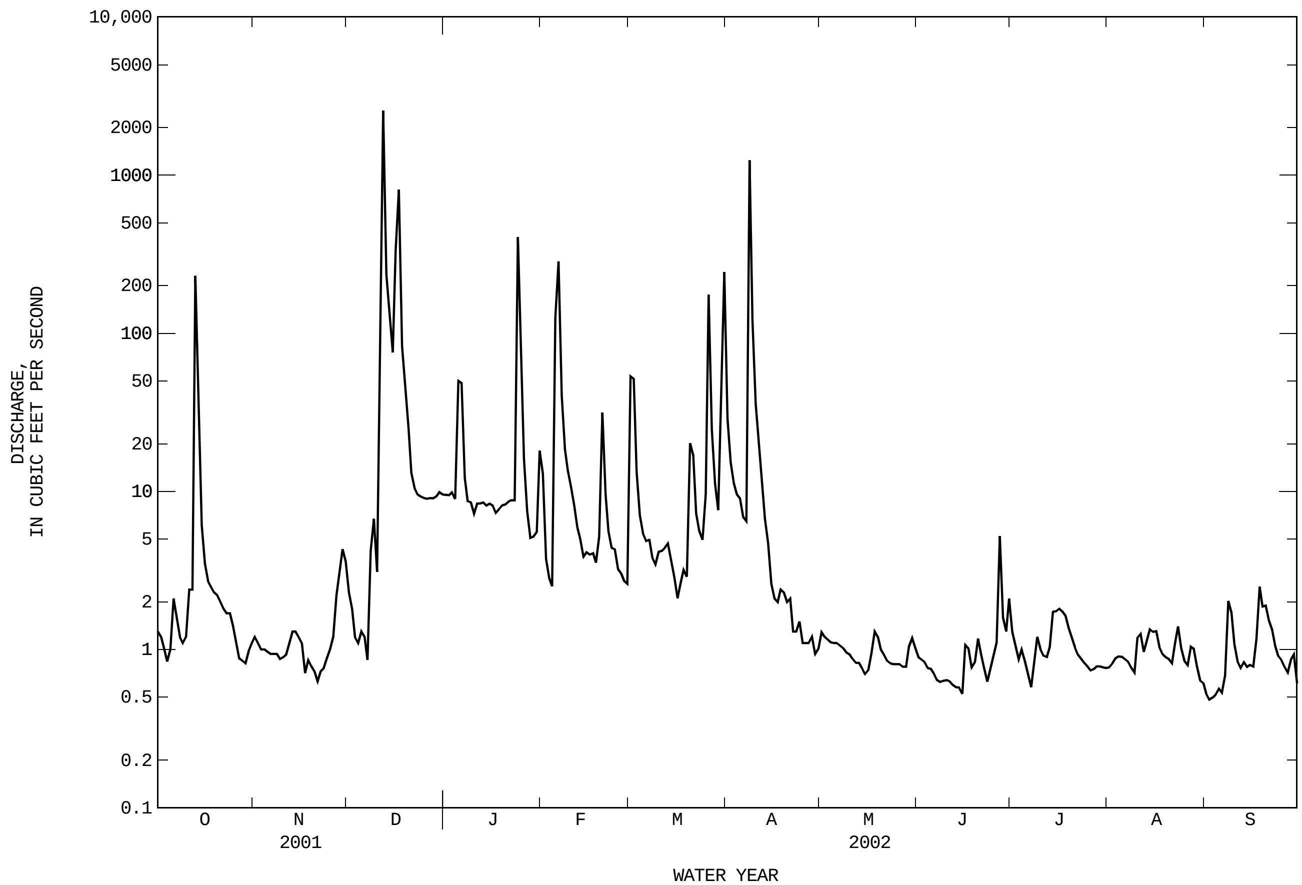
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.2	2.3	9.5	13	54	29	1.3	0.89	1.3	0.77	0.53
2	1.2	1.1	1.8	9.5	3.8	52	15	1.2	0.87	1.1	0.82	0.48
3	1.0	1.0	1.2	9.9	2.8	13	11	1.2	0.84	0.87	0.88	0.49
4	0.84	1.0	1.1	9.0	2.5	7.1	9.6	1.1	0.77	1.00	0.90	0.52
5	1.0	0.97	1.3	50	125	5.4	9.1	1.1	0.75	0.85	0.90	0.56
6	2.1	0.94	1.2	48	284	4.9	6.9	1.1	0.70	0.70	0.87	0.53
7	1.6	0.94	0.86	12	40	4.9	6.5	1.1	0.64	0.58	0.84	0.69
8	1.2	0.94	4.2	8.7	18	3.8	1240	1.0	0.62	0.84	0.77	2.0
9	1.1	0.87	6.7	8.5	14	3.5	121	0.96	0.63	1.2	0.72	1.7
10	1.2	0.89	3.1	7.2	11	4.2	36	0.93	0.64	1.0	1.2	1.1
11	2.4	0.93	36	8.4	8.2	4.2	20	0.87	0.63	0.91	1.3	0.84
12	2.4	1.1	2550	8.4	5.9	4.4	11	0.83	0.60	0.90	0.96	0.77
13	230	1.3	235	8.5	5.0	4.7	6.7	0.82	0.58	1.0	1.1	0.83
14	29	1.3	126	8.1	3.9	3.7	4.7	0.76	0.57	1.7	1.3	0.78
15	6.1	1.2	76	8.3	4.1	2.9	2.6	0.70	0.52	1.7	1.3	0.80
16	3.5	1.1	335	8.1	4.0	2.1	2.1	0.74	1.1	1.8	1.3	0.78
17	2.7	0.71	807	7.3	4.1	2.6	2.0	0.95	1.0	1.7	1.0	1.2
18	2.5	0.86	83	7.7	3.5	3.2	2.4	1.3	0.77	1.6	0.93	2.5
19	2.3	0.79	44	8.1	5.2	2.9	2.3	1.2	0.83	1.4	0.90	1.9
20	2.2	0.73	26	8.3	32	20	2.0	1.0	1.2	1.2	0.87	1.9
21	2.0	0.63	13	8.6	9.6	17	2.1	0.93	0.94	1.0	0.82	1.5
22	1.8	0.73	11	8.8	5.6	7.3	1.3	0.85	0.76	0.93	1.1	1.3
23	1.7	0.76	9.6	8.8	4.4	5.6	1.3	0.82	0.63	0.88	1.4	1.0
24	1.7	0.88	9.2	404	4.3	4.9	1.5	0.81	0.75	0.82	1.0	0.91
25	1.4	1.0	9.1	93	3.2	9.6	1.1	0.81	0.90	0.78	0.85	0.86
26	1.1	1.2	9.0	16	3.0	175	1.1	0.81	1.1	0.74	0.80	0.78
27	0.88	2.2	9.1	7.5	2.7	25	1.1	0.78	5.2	0.75	1.0	0.72
28	0.85	3.0	9.0	5.1	2.6	11	1.2	0.78	1.6	0.78	1.0	0.86
29	0.82	4.3	9.3	5.2	---	7.6	0.94	1.0	1.3	0.78	0.78	0.92
30	0.98	3.6	9.9	5.5	---	51	1.0	1.2	2.1	0.77	0.64	0.61
31	1.1	---	9.5	18	---	243	---	1.0	---	0.76	0.61	---
TOTAL	309.97	38.17	4449.46	834.0	625.4	760.5	1552.54	29.95	30.43	32.34	29.63	30.36
MEAN	9.999	1.272	143.5	26.90	22.34	24.53	51.75	0.966	1.014	1.043	0.956	1.012
MAX	230	4.3	2550	404	284	243	1240	1.3	5.2	1.8	1.4	2.5
MIN	0.82	0.63	0.86	5.1	2.5	2.1	0.94	0.70	0.52	0.58	0.61	0.48
AC-FT	615	76	8830	1650	1240	1510	3080	59	60	64	59	60
CFSM	0.18	0.02	2.52	0.47	0.39	0.43	0.91	0.02	0.02	0.02	0.02	0.02
IN.	0.20	0.02	2.90	0.54	0.41	0.50	1.01	0.02	0.02	0.02	0.02	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.82	39.13	56.89	78.82	72.24	65.82	54.06	56.32	55.48	10.53	6.534	11.23
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	0.31	0.82	1.67	1.17	1.00	0.76	1.13	0.86	0.31	0.083	0.25	0.37
(WY)	1988	1991	2000	2000	2000	1971	1971	1988	1971	1971	2000	1989

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	24001.40		8722.75			
ANNUAL MEAN	65.76		23.90		47.77	
HIGHEST ANNUAL MEAN					223	1995
LOWEST ANNUAL MEAN					1.53	2000
HIGHEST DAILY MEAN	2550	Dec 12	2550	Dec 12	38800	Oct 17 1994
LOWEST DAILY MEAN	0.63	Nov 21	0.48	Sep 2	0.02	Sep 27 1967
ANNUAL SEVEN-DAY MINIMUM	0.74	Nov 17	0.53	Aug 31	0.02	Sep 27 1967
MAXIMUM PEAK FLOW			5480	Dec 12	84600	Oct 17 1994
MAXIMUM PEAK STAGE			16.79	Dec 12	41.85	Oct 17 1994
ANNUAL RUNOFF (AC-FT)	47610		17300		34610	
ANNUAL RUNOFF (CFSM)	1.15		0.42		0.84	
ANNUAL RUNOFF (INCHES)	15.66		5.69		11.39	
10 PERCENT EXCEEDS	75		15		59	
50 PERCENT EXCEEDS	4.1		1.3		3.3	
90 PERCENT EXCEEDS	1.2		0.76		0.50	

08066170 Kickapoo Creek near Onalaska, TX--Continued



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^2.

WATER-CONTENT RECORDS

PERIOD OF RECORD.--Sept. 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (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.--Records good except those for estimated daily contents, which are fair. 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 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^2 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	l35.0
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, 1,861,000 acre-ft, Dec. 26, 29, elevation, 132.39 ft; minimum contents, 1,717,000 acre-ft, May 6, elevation, 130.70 ft.

RESERVOIR STORAGE, in (ACRE-FEET), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

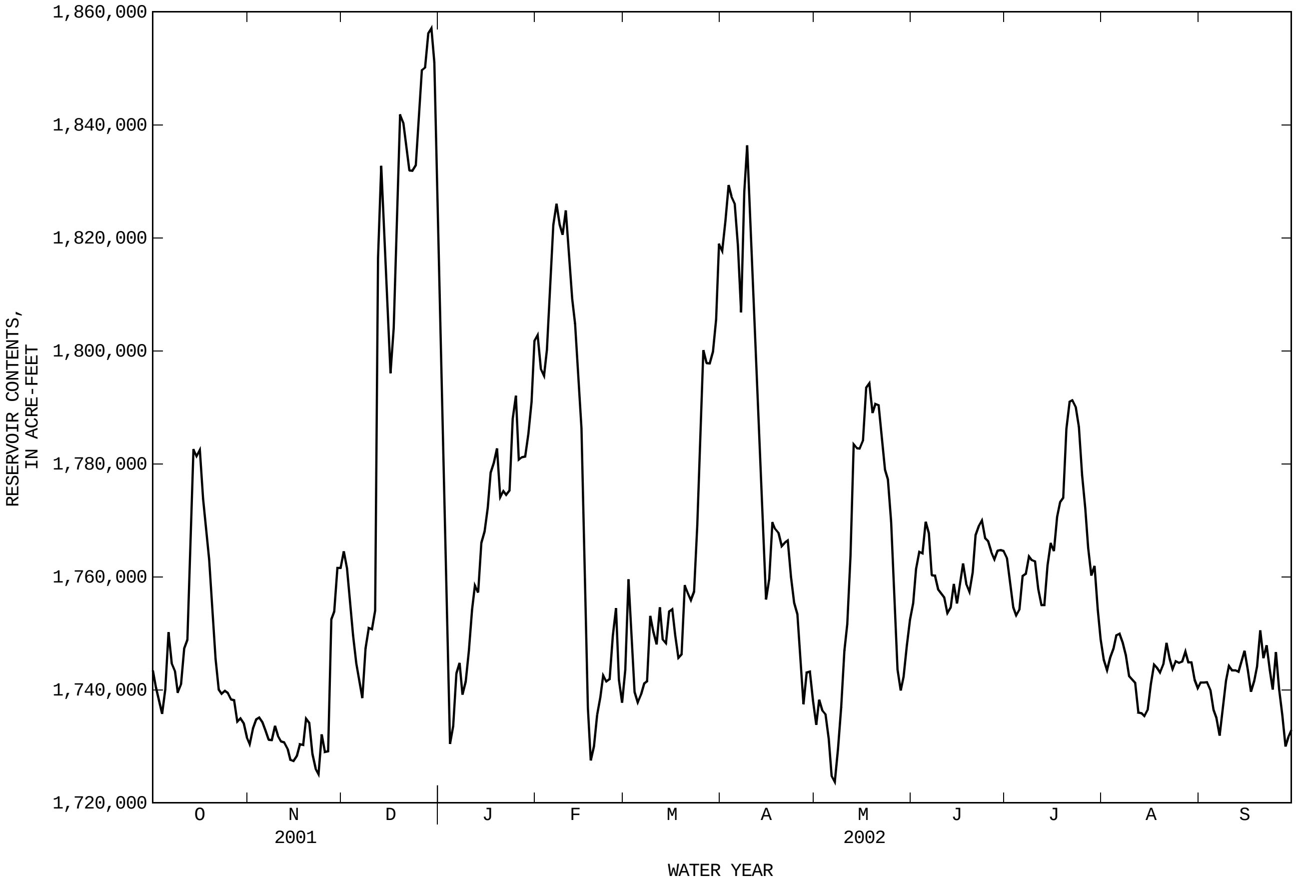
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1743000	1730000	1765000	1799000	1803000	1744000	1818000	1734000	1755000	1763000	1745000	1741000
2	1740000	1733000	1761000	1771000	1797000	1760000	1823000	1738000	1761000	1759000	1743000	1741000
3	1738000	1735000	1755000	1750000	1796000	1751000	1829000	1736000	1764000	1755000	1746000	1741000
4	1736000	1735000	1750000	1730000	1800000	1740000	1827000	1736000	1764000	1753000	1747000	1740000
5	1740000	1734000	1745000	1734000	1810000	1738000	1826000	1731000	1770000	1754000	1750000	1736000
6	1750000	1733000	1741000	1743000	1822000	1739000	1819000	1725000	1768000	1760000	1750000	1735000
7	1745000	1731000	1738000	1745000	1826000	1741000	1807000	1724000	1760000	1761000	1748000	1732000
8	1743000	1731000	1747000	1739000	1822000	1741000	1828000	1730000	1760000	1764000	1746000	1737000
9	1739000	1734000	1751000	1741000	1821000	1753000	1836000	1737000	1758000	1763000	1742000	1742000
10	1741000	1732000	1751000	1747000	1825000	1750000	1823000	1747000	1757000	1763000	1742000	1744000
11	1747000	1731000	1754000	1754000	1816000	1748000	1810000	1752000	1756000	1758000	1741000	1743000
12	1749000	1731000	1816000	1759000	1809000	1755000	1797000	1764000	1753000	1755000	1736000	1743000
13	1766000	1730000	1833000	1757000	1805000	1749000	1780000	1783000	1754000	e1755000	1736000	1743000
14	1783000	1728000	1820000	1766000	1796000	1748000	1766000	1783000	1759000	e1762000	1735000	1745000
15	1781000	1727000	e1807000	1768000	1786000	1754000	1756000	1783000	1755000	1766000	1736000	1747000
16	1782000	1728000	e1796000	1772000	1765000	1754000	1760000	1784000	1759000	1765000	1741000	1744000
17	1774000	1730000	1804000	1778000	1737000	1750000	1770000	1793000	1762000	1771000	1744000	1740000
18	1769000	1730000	1819000	1780000	1727000	1746000	1768000	1794000	1759000	1773000	1744000	1742000
19	1763000	1735000	1842000	1783000	1730000	1746000	1768000	1789000	1757000	1774000	1743000	1744000
20	1754000	1734000	1840000	1774000	1736000	1759000	1765000	1791000	1761000	1786000	1744000	1751000
21	1746000	1729000	1836000	1775000	1739000	1757000	1766000	1790000	1767000	1791000	1748000	1746000
22	1740000	1726000	1832000	1775000	1743000	1756000	1766000	1785000	1769000	1791000	1745000	1748000
23	1739000	1725000	1832000	1775000	1741000	1757000	1760000	1779000	1770000	1790000	1744000	1743000
24	1740000	1732000	1833000	1788000	1742000	1769000	1755000	1777000	1767000	1787000	1745000	1740000
25	1739000	1729000	1841000	1792000	1750000	1789000	1753000	1770000	1766000	1778000	1745000	1747000
26	1738000	1729000	1850000	1781000	1754000	1800000	1745000	1755000	1764000	1772000	1745000	1740000
27	1738000	1752000	1850000	1781000	1742000	1798000	1737000	1744000	1763000	1765000	1747000	1735000
28	1734000	1754000	1856000	1781000	1738000	1798000	1743000	1740000	1765000	1760000	1745000	1730000
29	1735000	1762000	1857000	1785000	---	1800000	1743000	1742000	1765000	1762000	1745000	1732000
30	1734000	1762000	1851000	1791000	---	1806000	1738000	1748000	1765000	1754000	1742000	1733000
31	1732000	---	1832000	1802000	---	1819000	---	1752000	---	1749000	1740000	---
MEAN	1748000	1734000	1803000	1768000	1778000	1762000	1783000	1759000	1762000	1766000	1744000	1741000
MAX	1783000	1762000	1857000	1802000	1826000	1819000	1836000	1794000	1770000	1791000	1750000	1751000
MIN	1732000	1725000	1738000	1730000	1727000	1738000	1737000	1724000	1753000	1749000	1735000	1730000
(+)	130.87	131.23	132.06	131.71	130.95	131.91	130.95	131.04	131.27	131.08	130.98	130.89
(@)	-15000	+30000	+70000	-30000	-64000	+81000	-81000	+8000	+19000	-16000	-9000	-7000

CAL YR 2001 MAX 1906000 MIN 1706000 (@) -4000
WTR YR 2002 MAX 1857000 MIN 1724000 (@) -14000

e Estimated

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

08066190 Livingston Reservoir near Goodrich, TX--Continued



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 2001 TO SEPTEMBER 2002

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 WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (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)
MAR													
12...	1300	1760000	1.00	320	8.1	12.0	760	10.5	98	110	14	36.4	3.67
12...	1302	--	10.0	310	8.1	12.0	760	10.4	97	--	--	--	--
12...	1304	--	20.0	315	8.0	11.5	760	10.3	95	--	--	--	--
12...	1306	--	30.0	315	8.0	11.5	760	10.3	95	--	--	--	--
12...	1308	--	40.0	310	8.0	11.5	760	10.3	95	--	--	--	--
12...	1310	--	50.0	325	8.0	11.5	760	10.4	96	--	--	--	--
12...	1312	--	60.0	330	8.0	11.5	760	10.4	96	--	--	--	--
12...	1314	--	73.0	335	8.0	11.5	760	10.3	95	110	19	36.7	3.70
AUG													
22...	1305	1750000	1.00	325	8.7	29.0	765	6.7	87	100	--	34.0	4.06
22...	1307	--	10.0	330	7.8	28.5	765	3.5	45	--	--	--	--
22...	1309	--	20.0	330	7.5	28.0	765	2.3	29	--	--	--	--
22...	1311	--	30.0	330	7.5	28.0	765	2.3	29	--	--	--	--
22...	1313	--	40.0	330	7.5	28.0	765	2.3	29	--	--	--	--
22...	1315	--	50.0	335	7.3	28.0	765	.6	8	--	--	--	--
22...	1317	--	60.0	345	7.2	28.0	765	.6	8	--	--	--	--
22...	1319	--	68.0	385	7.0	27.5	765	.6	8	130	--	43.4	4.42

303807095011101 -- Livingston Res 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 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...	19.0	.8	27	4.73	92	33.6	21.3	.3	7.0	186	--	<.008	1.00
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	<.008	1.00
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	19.1	.8	27	4.73	88	33.6	21.5	.3	7.0	184	--	<.008	1.00
AUG													
22...	23.1	1	32	4.82	133	15.4	12.0	.3	2.5	176	--	<.008	<.05
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	.14	.009	.15
22...	--	--	--	--	--	--	--	--	--	--	--	<.008	E.03
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
22...	21.5	.8	26	4.73	147	15.4	22.2	.3	9.9	222	--	<.008	<.05

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

303807095011101 -- Livingston Res Site AC

Date	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR								
12...	<.04	--	.44	.09	.09	.261	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	<.04	--	.43	.09	.09	.261	E6	<2.0
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	<.04	--	.40	.10	.09	.267	--	--
AUG								
22...	<.04	--	.33	E.05	.03	.104	<10	<2.0
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	.05	.32	.38	.07	.06	.175	<10	13.9
22...	.30	.36	.65	.14	.13	.399	15	336
22...	--	--	--	--	--	--	--	--
22...	3.77	.37	4.1	1.86	1.66	5.08	733	1410

303821095005001 -- Livingston Res Site AL

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
MAR								
12...	1400	1.00	315	8.1	12.0	760	10.5	98
12...	1402	10.0	315	8.1	12.0	760	10.5	98
12...	1404	20.0	315	8.1	12.0	760	10.4	97
12...	1406	30.0	315	8.0	12.0	760	10.4	97
12...	1408	40.0	315	8.0	11.5	760	10.6	98
12...	1410	47.0	315	8.0	11.5	760	10.6	98
AUG								
22...	1439	1.00	325	8.7	29.5	759	7.3	96
22...	1441	10.0	330	7.7	30.0	759	3.4	45
22...	1443	20.0	330	7.5	--	759	29.0	--
22...	1445	30.0	330	7.5	28.5	759	2.2	29
22...	1447	40.0	330	7.5	28.5	759	2.1	27
22...	1449	49.0	335	7.5	28.5	759	1.9	25

303935095055401 -- Livingston Res Site BC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
MAR								
12...	1215	1.00	320	8.0	12.0	760	10.5	98
12...	1217	10.0	320	8.0	12.0	760	10.5	98
12...	1219	20.0	320	8.0	12.0	760	10.5	98
12...	1221	30.0	320	8.0	12.0	760	10.5	98
12...	1223	40.0	320	8.0	12.0	760	10.5	98
12...	1225	50.0	320	8.0	12.0	760	10.5	98
12...	1227	59.0	320	8.0	12.0	760	10.5	98
AUG								
22...	1203	1.00	330	8.6	30.0	765	6.6	87
22...	1205	10.0	335	8.2	29.0	765	5.0	65
22...	1207	20.0	335	8.3	29.0	765	5.0	65
22...	1209	30.0	335	8.3	29.0	765	4.9	64
22...	1211	40.0	340	7.9	29.0	765	3.6	47
22...	1213	47.0	345	7.4	29.0	765	.4	5

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

304144095073001 -- Livingston Res Site CC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
MAR								
12...	1148	1.00	320	8.1	12.0	760	10.5	98
12...	1150	10.0	320	8.1	12.0	760	10.5	98
12...	1152	20.0	320	8.1	12.0	760	10.5	98
12...	1154	30.0	325	8.1	12.0	760	10.5	98
12...	1156	40.0	325	8.1	12.0	760	10.5	98
12...	1158	52.0	320	8.1	12.0	760	10.6	99
AUG								
22...	1127	1.00	330	8.7	30.0	765	6.4	84
22...	1129	10.0	335	8.4	29.5	765	4.6	60
22...	1131	20.0	335	8.2	29.0	765	4.4	57
22...	1133	30.0	340	8.0	29.0	765	3.5	45
22...	1135	40.0	340	7.6	29.0	765	2.0	26
22...	1137	46.0	345	7.5	29.0	765	.7	9

304521095075501 -- Livingston Res Site DC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)
MAR													
12...	1105	1.00	320	8.2	12.5	760	10.4	98	--	<.008	1.02	<.04	--
12...	1107	10.0	320	8.2	12.5	760	10.4	98	--	--	--	--	--
12...	1109	20.0	320	8.1	12.5	760	10.4	98	--	--	--	--	--
12...	1111	30.0	325	8.1	12.5	760	10.4	98	--	--	--	--	--
12...	1113	40.0	330	8.0	12.0	760	10.5	98	--	--	--	--	--
12...	1115	53.0	330	8.0	12.0	760	10.6	99	--	<.008	1.01	<.04	--
AUG													
22...	1015	1.00	330	8.7	30.0	765	6.7	88	--	<.008	<.05	<.04	--
22...	1019	10.0	330	8.7	30.0	765	6.3	83	--	--	--	--	--
22...	1023	20.0	335	8.6	29.5	765	5.6	73	--	--	--	--	--
22...	1029	30.0	335	8.5	29.5	765	5.2	68	--	<.008	<.05	<.04	--
22...	1032	40.0	340	8.3	29.5	765	4.1	54	--	--	--	--	--
22...	1036	49.0	355	7.6	29.5	765	1.1	14	.15	.029	.18	.07	.38

304521095075501 -- Livingston Res Site DC

Date	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR						
12...	.40	.07	.08	.239	E8	E1.6n
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	.39	.09	.08	.242	E6	E.9n
AUG						
22...	.30	E.03	.02	.074	<10	E1.3
22...	--	--	--	--	--	--
22...	--	--	--	--	--	--
22...	.34	E.04	.04	.110	<10	<2.0
22...	--	--	--	--	--	--
22...	.45	.10	.09	.285	<10	19.8

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

304453095064901 -- Livingston Res Site DL

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)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR								
12...	1034	1.00	315	8.1	12.5	760	10.5	99
12...	1036	10.0	320	8.1	12.5	760	10.5	99
12...	1038	18.0	325	8.0	12.0	760	10.7	100
AUG								
22...	0948	1.00	330	8.8	30.0	765	6.3	83
22...	0950	10.0	330	8.7	30.0	765	5.9	78
22...	0953	18.0	340	8.0	29.5	765	3.4	44

304659095052001 -- Livingston Res Site EC

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)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (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, ORGANIC DIS-SOLVED (MG/L AS N) (00607)
MAR													
12...	1000	1.00	310	8.1	12.5	760	10.5	99	--	<.008	1.01	<.04	--
12...	1002	10.0	310	8.1	12.5	760	10.5	99	--	--	--	--	--
12...	1004	27.0	320	8.0	12.5	760	10.5	99	--	--	--	--	--
12...	1006	27.0	320	8.0	12.5	760	10.6	100	--	<.008	1.00	<.04	--
AUG													
22...	0911	1.00	335	8.8	30.0	765	6.2	82	--	<.008	<.05	<.04	--
22...	0918	10.0	335	8.8	30.0	765	5.8	77	--	--	--	--	--
22...	0920	20.0	340	8.3	29.5	765	4.0	52	--	--	--	--	--
22...	0928	25.0	345	7.7	29.0	765	2.2	29	.08	.016	.10	.06	.35

304659095052001 -- Livingston Res Site EC

Date	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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...	.45	.08	.08	.233	E6	E.9n
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	.43	.07	.07	.218	E8	38.1
AUG						
22...	.35	E.06	.04	.129	<10	<2.0
22...	--	--	--	--	--	--
22...	--	--	--	--	--	--
22...	.41	.08	.07	.227	<10	35.7

304843095104001 -- Livingston Res Site FC

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)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR								
12...	1530	1.00	350	8.2	13.0	760	10.3	98
12...	1532	10.0	350	8.2	13.0	760	10.3	98
12...	1534	20.0	350	8.2	13.0	760	10.3	98
12...	1536	30.0	350	8.3	13.0	760	10.3	98
12...	1538	40.0	350	8.2	13.0	760	10.3	98
12...	1540	50.0	350	8.2	13.0	760	10.3	98
AUG								
22...	1540	1.00	360	8.7	30.0	759	5.1	68
22...	1542	10.0	360	8.4	30.0	759	2.8	37
22...	1544	20.0	370	7.8	30.0	759	1.6	21
22...	1546	30.0	370	7.8	30.0	759	1.0	13
22...	1548	40.0	375	7.6	30.0	759	.4	5
22...	1550	48.0	375	7.7	30.0	759	.5	7

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

305411095144901 -- Livingston Res Site GC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
MAR													
13...	1100	1.00	400	8.2	14.0	760	9.9	96	130	33	44.7	5.40	29.3
13...	1102	10.0	385	8.2	14.0	760	9.8	95	--	--	--	--	--
13...	1104	20.0	410	8.1	14.0	760	9.9	96	--	--	--	--	--
13...	1106	30.0	410	8.1	13.5	760	10.0	96	--	--	--	--	--
13...	1108	38.0	425	8.1	13.5	760	10.2	98	140	26	45.2	5.40	30.5
AUG													
23...	0925	1.00	420	9.0	30.5	765	7.9	105	130	34	44.5	4.64	36.8
23...	0927	10.0	415	8.7	30.0	765	5.2	69	--	--	--	--	--
23...	0929	20.0	425	8.6	30.0	765	4.7	62	--	--	--	--	--
23...	0931	30.0	410	8.6	30.0	765	4.5	59	--	--	--	--	--
23...	0933	32.0	405	8.5	30.0	765	4.4	58	120	26	40.1	4.47	33.8

305411095144901 -- Livingston Res Site GC

Date	SODIUM AD-SORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
MAR													
13...	1	31	5.27	100	56.0	36.2	.3	7.9	252	1.50	.014	1.51	<.04
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	1.49	.010	1.50	<.04
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	1	32	4.91	109	56.0	35.7	.3	8.1	258	1.52	.015	1.54	<.04
AUG													
23...	1	37	5.85	96	49.1	38.7	.5	6.4	247	.43	.055	.49	<.04
23...	--	--	--	--	--	--	--	--	--	.47	.049	.52	<.04
23...	--	--	--	--	--	--	--	--	--	.88	.081	.96	E.04
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	1	37	5.62	92	46.5	34.4	.5	6.7	230	.48	.050	.53	.06

305411095144901 -- Livingston Res Site GC

Date	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR							
13...	--	.45	.10	.11	.334	--	--
13...	--	--	--	--	--	--	--
13...	--	.41	.10	.11	.328	E7	E.9n
13...	--	--	--	--	--	--	--
13...	--	.44	.12	.11	.340	--	--
AUG							
23...	--	.43	.14	.12	.380	<10	E1.9b
23...	--	.42	.16	.14	.423	<10	E.9
23...	--	.47	.17	.15	.475	<10	E1.7
23...	--	--	--	--	--	--	--
23...	.40	.46	.17	.14	.432	<10	19.6

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

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)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (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, ORGANIC DIS-SOLVED (MG/L AS N) (00607)
MAR													
13...	1150	1.00	390	8.3	14.5	760	10.6	104	.89	.009	.90	<.04	--
13...	1152	10.0	390	8.3	14.5	760	10.6	104	--	--	--	--	--
13...	1154	20.0	395	8.3	14.5	760	10.6	104	--	--	--	--	--
13...	1156	30.0	415	8.2	14.0	760	10.1	98	--	--	--	--	--
13...	1158	38.0	420	8.2	14.0	760	10.0	97	1.17	.011	1.18	<.04	--
AUG													
23...	1008	1.00	405	8.8	30.0	765	6.3	83	1.10	.122	1.22	<.04	--
23...	1010	10.0	405	8.0	29.5	765	2.9	38	--	--	--	--	--
23...	1012	20.0	405	7.9	29.5	765	2.7	35	--	--	--	--	--
23...	1014	30.0	405	7.8	29.5	765	2.2	29	.24	.110	.35	.22	.44

305447095161401 -- Livingston Res Site HC

Date	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	ORTHO-PHOS-PHATE, 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						
13...	.39	.07	.05	.153	20	E1.6n
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	--	--	--	--	--	--
13...	.35	.09	.07	.230	11	E3.1b
AUG						
23...	.48	.15	.14	.432	<10	E1.6
23...	--	--	--	--	--	--
23...	--	--	--	--	--	--
23...	.66	.12	.12	.353	<10	42.4

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)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR								
13...	0850	1.00	210	8.1	13.5	760	10.4	100
13...	0852	10.0	425	8.0	13.0	760	10.4	99
13...	0854	20.0	535	7.9	13.0	760	10.3	98
13...	0856	30.0	555	7.7	12.5	760	9.9	93
13...	0858	42.0	555	7.7	12.5	760	9.9	93
AUG								
23...	0842	1.00	665	8.2	30.0	765	5.9	78
23...	0844	10.0	665	8.2	30.0	765	5.6	74
23...	0846	20.0	675	7.8	30.0	765	4.0	53
23...	0848	30.0	680	7.8	30.0	765	3.8	50
23...	0850	35.0	680	7.8	30.0	765	3.8	50

08066190 Livingston Reservoir near Goodrich, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

305135095235401 -- Livingston Res Site JC

Date	Time	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
MAR													
13...	0930	1.00	520	8.3	13.5	760	12.2	118	170	67	56.2	6.62	42.1
13...	0932	10.0	535	8.3	13.5	760	12.2	118	--	--	--	--	--
13...	0934	20.0	565	8.2	13.0	760	12.0	114	--	--	--	--	--
13...	0936	30.0	570	8.0	12.5	760	11.6	109	--	--	--	--	--
13...	0938	40.0	560	8.0	12.5	760	11.5	108	--	--	--	--	--
13...	0940	47.0	565	8.0	12.5	760	11.2	106	170	73	57.8	6.98	44.2
AUG													
23...	0756	1.00	655	8.6	30.0	765	8.5	112	180	62	61.8	6.14	67.5
23...	0758	10.0	645	8.2	30.0	765	5.7	75	--	--	--	--	--
23...	0800	20.0	665	7.8	30.0	765	4.3	57	--	--	--	--	--
23...	0802	30.0	670	7.8	30.0	765	3.8	50	--	--	--	--	--
23...	0804	35.0	670	7.7	30.0	765	3.7	49	180	63	62.6	6.25	68.1

305135095235401 -- Livingston Res Site JC

Date	SODIUM ADSORPTION RATIO (00931)	SODIUM PERCENT (00932)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
MAR													
13...	1	34	5.76	101	73.4	50.2	.5	7.3	317	3.04	.012	3.05	<.04
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	E.006	3.40	<.04
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	1	35	5.88	100	77.5	52.9	.5	8.3	330	3.46	.011	3.47	E.02
AUG													
23...	2	44	8.36	118	78.8	67.0	1.1	8.1	398	5.88	.131	6.01	.04
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	6.20	.157	6.36	E.02
23...	--	--	--	--	--	--	--	--	--	6.31	.165	6.47	E.02
23...	2	43	8.47	119	79.3	66.5	1.1	8.3	401	5.94	.198	6.14	.05

305135095235401 -- Livingston Res Site JC

Date	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	ORTHOPHOSPHATE, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	IRON, DISSOLVED (UG/L AS FE) (01046)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
MAR							
13...	--	.55	.29	.28	.859	--	--
13...	--	--	--	--	--	--	--
13...	--	.49	.33	.31	.960	<10	<2.0
13...	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--
13...	--	.48	.32	.32	.966	--	--
AUG							
23...	.60	.64	.63	.62	1.90	<10	E1.5n
23...	--	--	--	--	--	--	--
23...	--	.57	.67	.66	2.01	<10	E1.9
23...	--	.61	.69	.64	1.97	<10	E2.8
23...	.58	.64	.67	.66	2.01	<10	28.1

Remark codes used in this report:
- < -- Less than
- E -- Estimated value

Value qualifier codes used in this report:
- b -- Value was extrapolated below
- n -- Below the NDV

THIS PAGE IS INTENTIONALLY BLANK

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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

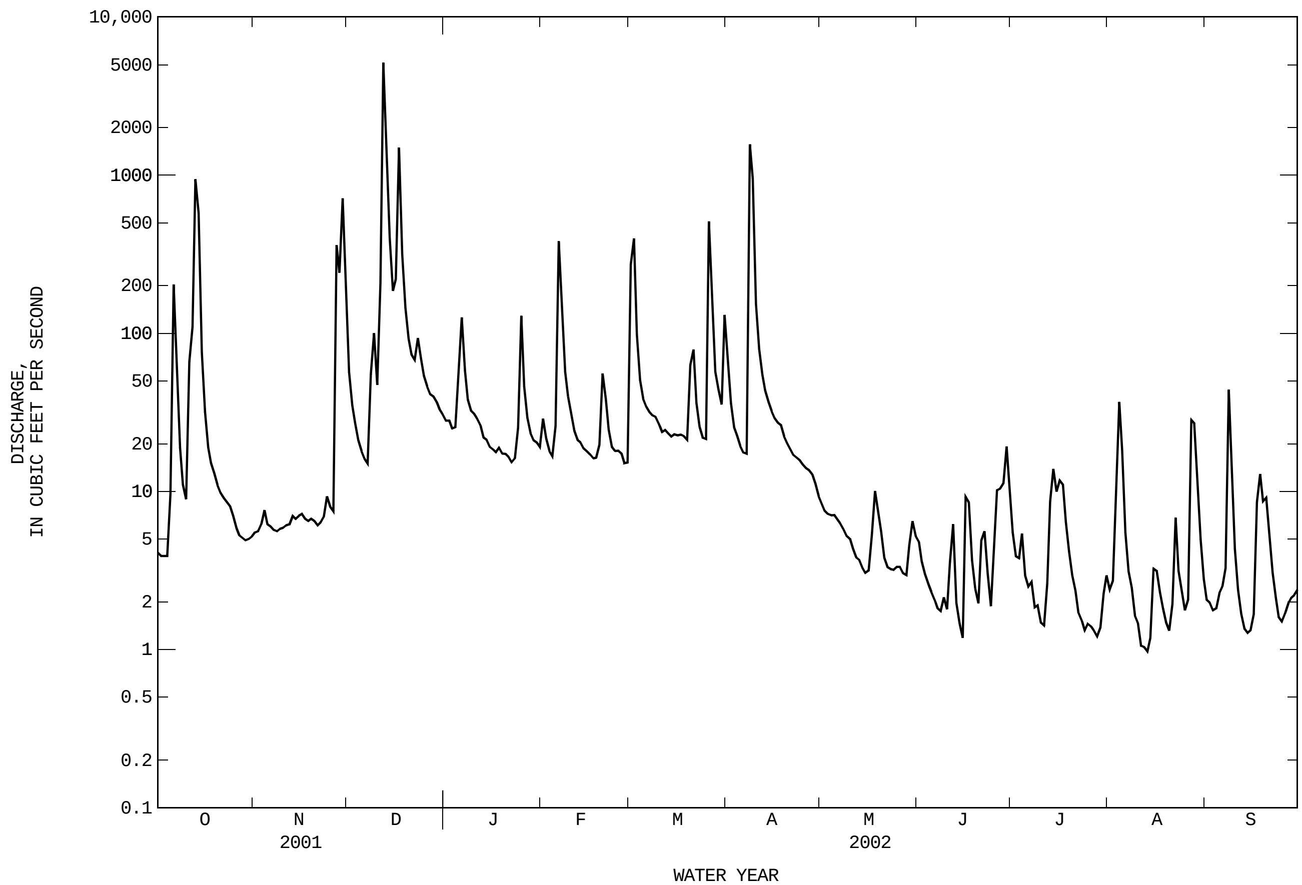
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	5.5	57	28	29	272	68	8.3	4.8	5.5	2.4	2.1
2	3.9	5.6	35	28	22	397	36	7.6	3.6	3.9	2.7	2.0
3	3.9	6.2	27	25	18	98	25	7.2	3.0	3.8	9.4	1.8
4	3.9	7.6	21	25	17	51	23	7.1	2.6	5.4	37	1.8
5	9.6	6.2	18	51	26	39	19	7.1	2.3	2.9	18	2.3
6	203	6.0	16	126	381	34	18	6.7	2.1	2.5	5.5	2.5
7	49	5.7	15	58	126	32	17	6.2	1.8	2.7	3.1	3.3
8	19	5.6	55	38	57	30	1570	5.7	1.8	1.8	2.5	44
9	11	5.8	100	32	40	29	956	5.2	2.1	1.9	1.6	16
10	8.9	5.9	47	31	31	27	154	5.0	1.8	1.5	1.5	4.3
11	66	6.1	208	29	24	24	79	4.4	3.6	1.4	1.1	2.4
12	110	6.2	5140	26	21	24	55	3.8	6.2	2.6	1.0	1.7
13	942	7.0	1320	22	20	23	43	3.7	2.0	8.7	0.97	1.4
14	577	6.7	399	21	19	22	37	3.3	1.5	14	1.2	1.3
15	76	7.0	185	19	18	23	32	3.1	1.2	10	3.2	1.3
16	32	7.2	220	18	17	23	29	3.1	9.3	12	3.1	1.7
17	19	6.7	1490	18	16	23	27	5.3	8.5	11	2.3	8.6
18	15	6.5	316	19	16	22	26	10	3.7	6.4	1.8	13
19	13	6.7	146	17	20	21	22	7.3	2.4	4.2	1.5	8.7
20	11	6.5	92	17	56	63	20	5.6	2.0	3.0	1.3	9.1
21	9.8	6.1	74	16	39	79	18	3.8	4.9	2.4	1.9	5.2
22	9.1	6.4	68	15	25	36	17	3.3	5.6	1.7	6.8	3.1
23	8.6	6.9	93	16	19	25	16	3.2	3.0	1.5	3.2	2.1
24	8.1	9.3	68	25	18	22	16	3.2	1.9	1.3	2.3	1.6
25	7.0	8.0	54	129	18	21	15	3.3	4.6	1.5	1.8	1.5
26	5.9	7.5	46	46	17	509	14	3.3	10	1.4	2.1	1.7
27	5.3	360	41	29	15	141	14	3.0	10	1.3	28	1.9
28	5.1	241	40	23	15	57	13	3.0	11	1.2	27	2.1
29	4.9	710	37	21	---	44	11	4.6	19	1.4	12	2.2
30	5.0	189	33	20	---	35	9.3	6.5	11	2.3	5.0	2.4
31	5.2	---	31	19	---	130	---	5.2	---	2.9	2.8	---
TOTAL	2251.3	1670.9	10492	1007	1140	2376	3399.3	158.1	147.3	124.1	194.07	153.1
MEAN	72.62	55.70	338.5	32.48	40.71	76.65	113.3	5.100	4.910	4.003	6.260	5.103
MAX	942	710	5140	129	381	509	1570	10	19	14	37	44
MIN	3.9	5.5	15	15	15	21	9.3	3.0	1.2	1.2	0.97	1.3
AC-FT	4470	3310	20810	2000	2260	4710	6740	314	292	246	385	304
CFSM	0.52	0.40	2.40	0.23	0.29	0.54	0.80	0.04	0.03	0.03	0.04	0.04
IN.	0.59	0.44	2.77	0.27	0.30	0.63	0.90	0.04	0.04	0.03	0.05	0.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	68.20	97.82	161.8	193.3	172.9	160.2	134.2	127.9	144.7	33.26	16.44	29.77
MAX	1342	920	626	1026	629	640	844	662	869	493	191	288
(WY)	1995	1999	1995	1998	1992	1990	1979	1969	1989	1989	1983	1996
MIN	0.18	0.92	2.83	2.79	5.53	3.75	4.06	2.58	0.72	0.000	0.000	0.15
(WY)	1966	1989	1971	1971	1971	1971	1971	1963	1971	1971	1971	1967

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1963 - 2002	
ANNUAL TOTAL	63013.50		23113.17			
ANNUAL MEAN	172.6		63.32		112.8	
HIGHEST ANNUAL MEAN					318	1995
LOWEST ANNUAL MEAN					12.3	1970
HIGHEST DAILY MEAN	5140	Dec 12	5140	Dec 12	30100	Oct 17 1994
LOWEST DAILY MEAN	0.76	Aug 26	0.97	Aug 13	0.00	Aug 5 1965
ANNUAL SEVEN-DAY MINIMUM	1.0	Aug 20	1.4	Jul 23	0.00	Jun 28 1971
MAXIMUM PEAK FLOW			6880	Dec 12	50900	Oct 17 1994
MAXIMUM PEAK STAGE			16.19	Dec 12	30.49	Oct 17 1994
ANNUAL RUNOFF (AC-FT)	125000		45840		81730	
ANNUAL RUNOFF (CFSM)	1.22		0.45		0.80	
ANNUAL RUNOFF (INCHES)	16.62		6.10		10.87	
10 PERCENT EXCEEDS	355		75		155	
50 PERCENT EXCEEDS	27		10		13	
90 PERCENT EXCEEDS	4.1		1.9		1.0	

08066200 Long King Creek at Livingston, TX--Continued



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^2.

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 NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good. Since installation of gage in Dec. 1965, at least 10% of contributing drainage area has been regulated. Livingston Reservoir (station 08066190) 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1960	1600	6350	29800	3870	2440	20600	14200	3710	3610	2130	1400
2	1350	1600	6220	21300	3850	4970	21300	14400	3700	3600	1940	1400
3	1320	1590	6150	15500	3820	4810	22800	14300	3700	3610	1560	1380
4	1310	1590	5900	13500	3820	3850	21500	10500	3700	3610	1580	1220
5	1330	1590	5280	10800	e7000	2260	22500	9110	3690	3580	1610	1210
6	2700	1590	4430	10700	18100	2150	22900	8140	3690	3570	1470	1350
7	2960	1580	3620	10900	20100	2140	22800	5390	3500	3580	1330	1390
8	2320	1580	3130	9210	21100	2130	25900	3910	2260	3580	1310	1540
9	2270	1580	3190	6610	21100	2100	33000	3870	2120	3580	1330	1570
10	2270	1580	3150	3590	21100	2080	32200	4680	2120	3570	1320	1370
11	2330	1570	3260	2310	21100	2070	31800	6490	2110	3560	1300	1340
12	2460	1580	17300	2200	21000	2040	31600	8110	2120	3560	1290	1320
13	5770	1620	26900	2190	21000	2040	31200	9730	2090	3660	1310	1320
14	11300	1630	24500	2170	21000	2040	28800	9800	1930	3660	1310	1300
15	12200	1630	23300	2160	21000	2120	25100	9800	2240	3610	1360	1290
16	12000	1630	19000	2150	20900	3380	16500	9800	2100	3620	1330	1240
17	11800	1620	20400	2210	17500	3570	19200	10800	2080	3840	1310	1230
18	11900	1620	16700	2350	6180	3030	20700	12300	2070	4210	1280	1590
19	11900	1620	19100	4360	4010	2100	20700	12400	2070	4210	1390	1440
20	10800	1610	25100	4620	3940	3250	20700	12400	2070	4210	1410	1550
21	7630	1610	25600	3570	3930	4330	20700	12400	2070	4210	1400	1210
22	4520	1620	26200	2210	3880	4880	20600	12400	2060	4200	1410	1120
23	3410	1620	26200	2140	3850	5070	20700	12400	2050	4190	1400	1110
24	3120	1610	26200	2540	3850	7280	20600	12400	2040	3950	1360	1070
25	2260	1610	26200	3880	3830	11100	20600	12300	2050	4280	1360	1200
26	1670	1640	29200	3960	3820	14300	20600	12300	2070	4370	1350	1180
27	1620	3770	32700	3910	3450	16900	19500	8670	2120	3660	1380	1180
28	1610	5640	34500	3880	2210	17000	17700	5800	2560	2230	1400	1170
29	1600	6570	36600	3880	---	17000	17600	3850	3560	2150	1380	1200
30	1600	6310	36700	3880	---	17400	17600	3740	3630	2140	1330	1120
31	1600	---	36000	3880	---	18100	---	3730	---	2130	1380	---
TOTAL	142890	64010	579080	196360	310310	187930	688000	290120	77280	111540	44020	39010
MEAN	4609	2134	18680	6334	11080	6062	22930	9359	2576	3598	1420	1300
MAX	12200	6570	36700	29800	21100	18100	33000	14400	3710	4370	2130	1590
MIN	1310	1570	3130	2140	2210	2040	16500	3730	1930	2130	1280	1070
AC-FT	283400	127000	1149000	389500	615500	372800	1365000	575500	153300	221200	87310	77380

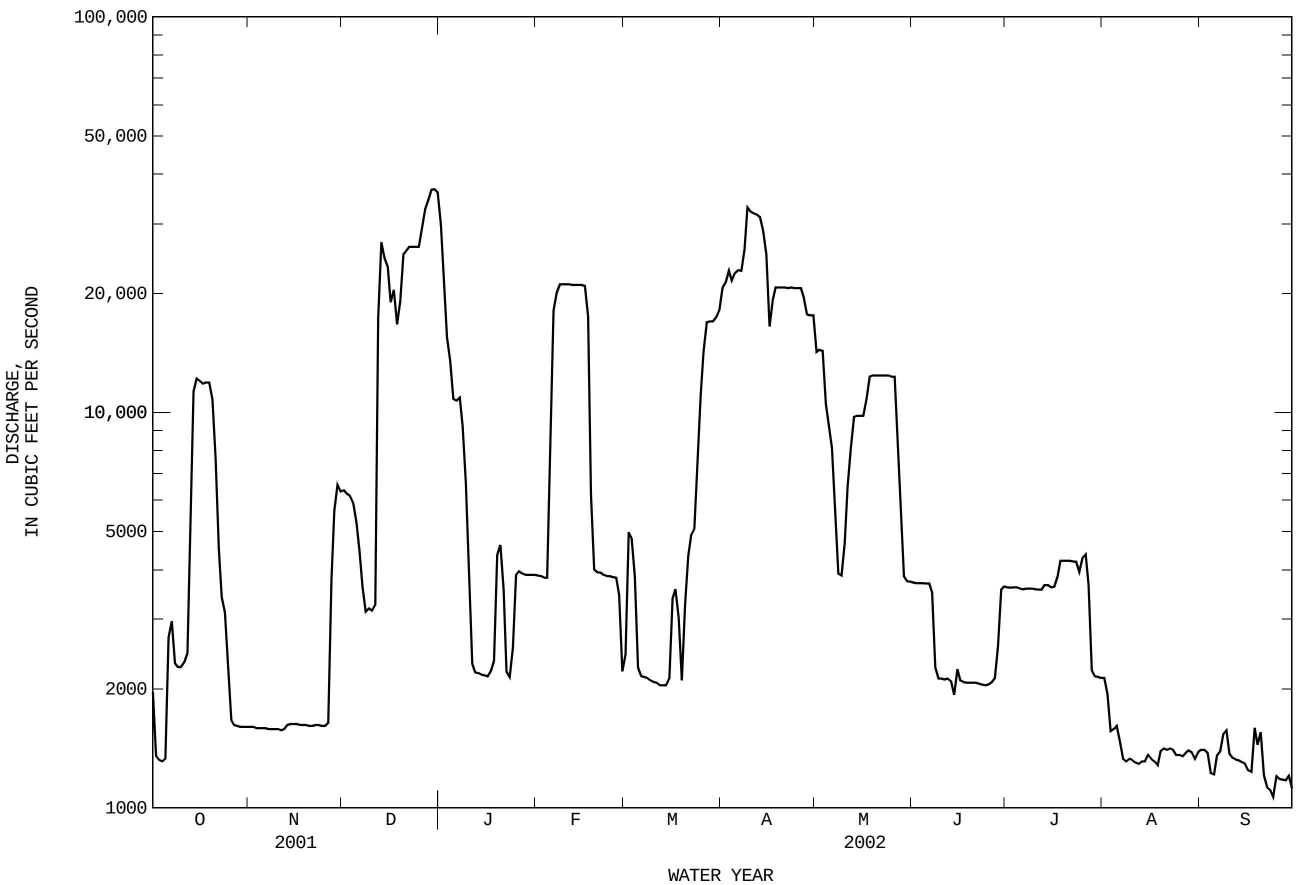
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3508	6568	9118	9569	10050	12720	11620	14350	12020	4436	2173	2143
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	5068440		2730550			
ANNUAL MEAN	13890		7481		8132	
HIGHEST ANNUAL MEAN					18310	1992
LOWEST ANNUAL MEAN					746	1971
HIGHEST DAILY MEAN	78700	Jun 10	36700	Dec 30	120000	Oct 18 1994
LOWEST DAILY MEAN	685	Aug 14	1070	Sep 24	191	Aug 6 1971
ANNUAL SEVEN-DAY MINIMUM	1040	Aug 21	1150	Sep 22	240	Aug 16 1972
MAXIMUM PEAK FLOW			36800	Dec 29-31	125000	Oct 18 1994
MAXIMUM PEAK STAGE			28.90	Dec 30	48.97	Oct 18 1994
ANNUAL RUNOFF (AC-FT)	10050000		5416000		5891000	
10 PERCENT EXCEEDS	35900		21000		23500	
50 PERCENT EXCEEDS	6350		3610		2750	
90 PERCENT EXCEEDS	1420		1350		776	

e Estimated

08066250 Trinity River near Goodrich, TX--Continued



08066300 Menard Creek near Rye, TX

LOCATION.--Lat 30°28’53", long 94°46’47", 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^2.

PERIOD OF RECORD.--Dec. 1965 to current year.
Water-quality records.--Chemical data: Aug. 1950 to Aug. 1994.

REVISED RECORD.--WRD-TX-99-2: 1999 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 62.32 ft above NGVD of 1929. Sept. 1974 to Aug. 1976, wire-weight gage read twice daily. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since installation of gage in water year 1966, at least 10% of 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	30	375	101	76	57	49	27	19	42	e16	e14
2	26	29	389	90	91	67	48	e26	19	35	e15	e13
3	25	29	153	84	90	100	45	e26	18	31	e15	e13
4	24	28	98	80	78	159	42	e25	18	29	e15	e14
5	25	27	82	96	73	98	40	e24	16	27	e15	e14
6	41	26	71	147	122	75	38	e23	16	30	e16	e15
7	39	25	65	167	161	69	38	e22	16	28	16	16
8	45	25	73	162	214	66	216	e21	15	24	18	48
9	45	24	93	118	152	64	312	e21	14	29	18	27
10	36	24	102	101	106	60	311	e20	13	29	17	20
11	58	24	111	94	87	58	361	e20	16	24	e16	30
12	116	24	1280	89	78	56	158	e19	15	22	e15	25
13	401	24	2380	83	71	54	94	e19	13	27	17	20
14	538	24	2500	77	67	55	74	18	12	32	22	17
15	318	24	1360	72	65	53	65	18	12	34	21	16
16	405	24	825	69	63	52	58	18	16	43	21	e15
17	181	24	851	67	61	52	52	18	16	44	18	17
18	93	24	684	66	59	52	50	20	15	44	17	18
19	73	24	930	68	61	51	46	19	16	42	17	26
20	62	23	767	71	70	52	43	20	23	33	17	49
21	56	22	373	74	82	54	41	21	18	27	16	39
22	51	22	226	71	115	57	38	20	14	23	16	37
23	48	23	264	68	85	65	35	18	12	21	19	31
24	44	23	266	69	70	54	34	18	14	20	17	24
25	30	22	336	77	63	49	32	17	25	18	19	21
26	24	24	238	108	59	48	31	17	19	17	16	18
27	23	32	166	161	56	63	30	17	41	18	e15	17
28	21	101	150	101	55	75	29	16	43	17	e15	e15
29	25	288	137	82	---	64	29	22	86	16	e14	e13
30	31	323	124	75	---	55	28	22	66	17	e14	e12
31	30	---	113	74	---	51	---	20	---	16	e14	---
TOTAL	2961	1386	15582	2862	2430	1985	2467	632	656	859	517	654
MEAN	95.52	46.20	502.6	92.32	86.79	64.03	82.23	20.39	21.87	27.71	16.68	21.80
MAX	538	323	2500	167	214	159	361	27	86	44	22	49
MIN	21	22	65	66	55	48	28	16	12	16	14	12
AC-FT	5870	2750	30910	5680	4820	3940	4890	1250	1300	1700	1030	1300

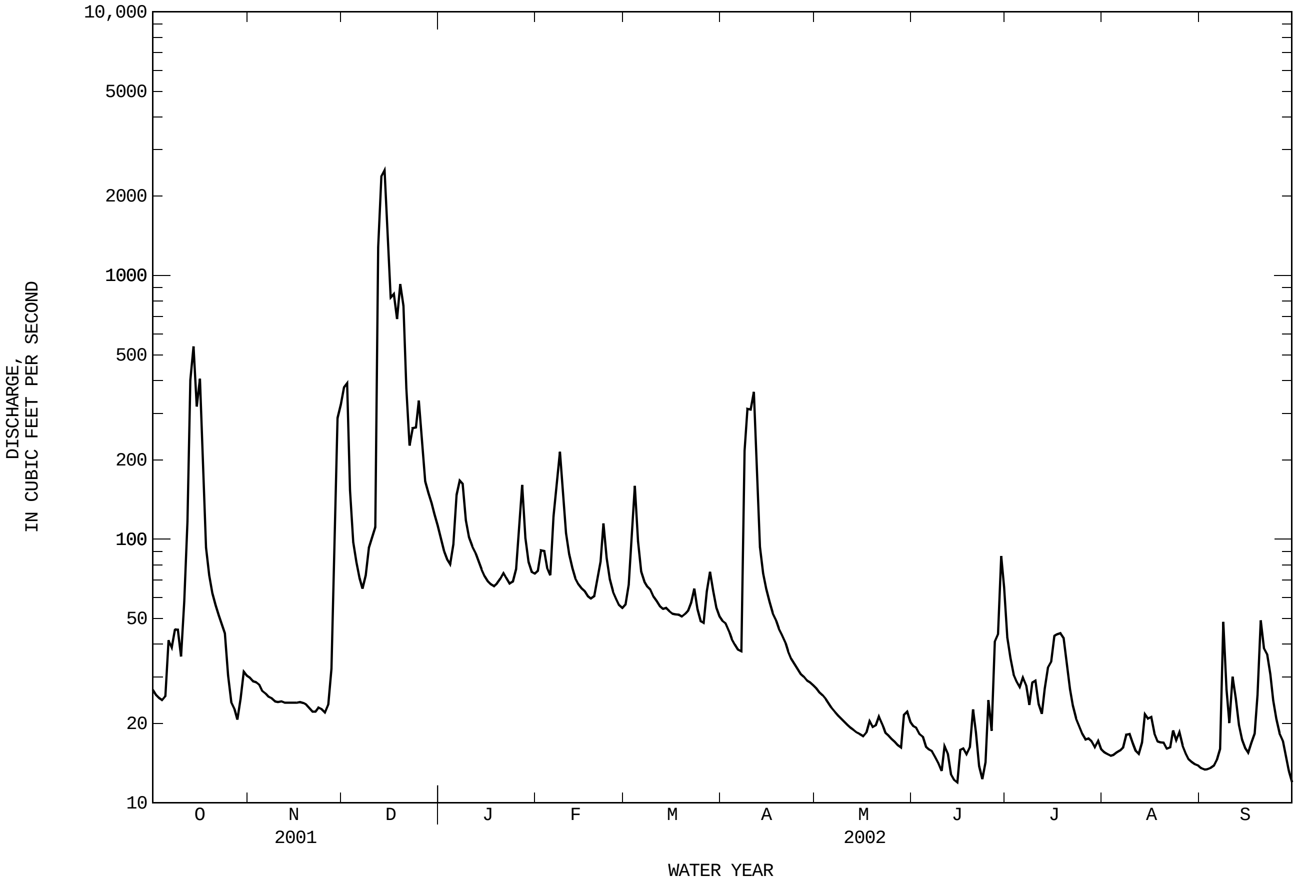
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	77.23	94.25	164.3	209.2	214.8	183.4	176.4	175.7	144.3	61.39	43.35	48.56
MAX	1092	595	503	777	727	528	977	757	788	464	354	192
(WY)	1995	1999	2002	1974	1992	1997	1979	1983	1986	1989	1983	1983
MIN	3.42	3.55	8.05	14.6	14.0	13.5	9.77	20.4	8.72	4.52	5.47	4.43
(WY)	1968	1968	1968	1971	1971	1971	1971	2002	1971	1971	1967	1967

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1966 - 2002	
ANNUAL TOTAL	49938		32991			
ANNUAL MEAN	136.8		90.39		133.6	
HIGHEST ANNUAL MEAN					279	1975
LOWEST ANNUAL MEAN					14.7	1971
HIGHEST DAILY MEAN	2500	Dec 14	2500	Dec 14	12000	Oct 18 1994
LOWEST DAILY MEAN	13	Aug 22	12	Jun 14	2.6	Nov 1 1967
ANNUAL SEVEN-DAY MINIMUM	13	Aug 19	14	Jun 9	2.9	Nov 1 1967
MAXIMUM PEAK FLOW			4120	Dec 13	14200	Apr 5 1999
MAXIMUM PEAK STAGE			23.54	Dec 13	31.41	Apr 5 1999
ANNUAL RUNOFF (AC-FT)	99050		65440		96760	
10 PERCENT EXCEEDS	357		155		282	
50 PERCENT EXCEEDS	45		33		48	
90 PERCENT EXCEEDS	20		16		14	

e Estimated

08066300 Menard Creek near Rye, TX--Continued



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^2.

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 NGVD of 1929. 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.--Records good. 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 FROM DCP, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3190	1590	7200	34200	4050	2060	21500	17100	4090	3870	2050	1340
2	2580	1590	7100	26600	4020	4120	23000	14400	4040	3880	2010	1360
3	2430	1580	6810	18400	4010	4890	24900	15600	4010	3930	1560	1380
4	2430	1580	6560	15500	3970	4420	24600	12200	3990	3950	1510	1290
5	2440	1570	6080	11800	5600	2510	24000	9690	3970	3940	1550	1250
6	3010	1560	5180	11200	16700	2080	25500	9150	3950	3930	1480	1360
7	3660	1560	4230	11300	21600	2030	25600	6760	3920	3940	1290	1460
8	2960	1570	3470	10800	23200	2010	27900	4680	2850	3920	1240	1830
9	2830	1570	3460	8010	23400	2020	38500	4360	2310	3920	1260	2120
10	2810	1560	3460	4490	23300	1980	39700	4580	2290	3920	1240	1730
11	2880	1560	3450	2680	23200	1970	39000	6440	2280	3900	1210	1450
12	3050	1560	15700	2320	23100	1990	38500	7720	2270	3890	1200	1380
13	5080	1590	31400	2260	23000	1960	38000	9720	2240	4030	1190	1320
14	11400	1610	31000	2250	23000	1950	35200	10000	2170	4110	1220	1290
15	13400	1610	28400	2210	23000	1960	31000	10000	2230	4040	1230	1260
16	13100	1610	23800	2190	22900	2770	22600	10000	2310	4030	1260	1260
17	12800	1610	23800	2210	20900	3360	18900	10500	2280	4090	1210	1210
18	12400	1610	21900	2260	9470	3230	23100	12500	2240	4590	1180	1610
19	12500	1620	19100	3830	4230	2170	23200	12700	2240	4630	1160	1580
20	11900	1610	28100	4850	3900	2630	23200	12700	2200	4540	1220	2080
21	9040	1600	28800	4460	3860	3810	23200	12700	2110	4470	1210	1810
22	5680	1610	29200	2530	3840	4760	23200	12700	2070	4450	1230	1600
23	3540	1620	29300	2210	3770	4890	23200	12700	2060	4400	1260	1490
24	3380	1630	29200	2260	3710	6340	e23000	12700	2050	4230	1230	1420
25	2610	1600	29100	3700	3680	9600	23000	12700	2040	4300	1230	1320
26	1810	1640	30800	4200	3640	13900	23300	12700	2060	4540	1230	1360
27	1630	2710	34300	4200	3560	17300	22500	10500	2100	4320	1230	1360
28	1600	5790	35700	4110	2360	18200	20200	7080	2230	2560	1280	1360
29	1600	7160	38000	4060	---	18200	19500	4610	3520	2160	1290	1370
30	1590	7240	38300	4030	---	18300	19200	4190	3850	2120	1290	1360
31	1590	---	38100	4060	---	19200	---	4110	---	2090	1280	---
TOTAL	160920	64320	641000	219180	334970	186610	788200	307490	81970	120690	41030	44010
MEAN	5191	2144	20680	7070	11960	6020	26270	9919	2732	3893	1324	1467
MAX	13400	7240	38300	34200	23400	19200	39700	17100	4090	4630	2050	2120
MIN	1590	1560	3450	2190	2360	1950	18900	4110	2040	2090	1160	1210
AC-FT	319200	127600	1271000	434700	664400	370100	1563000	609900	162600	239400	81380	87290

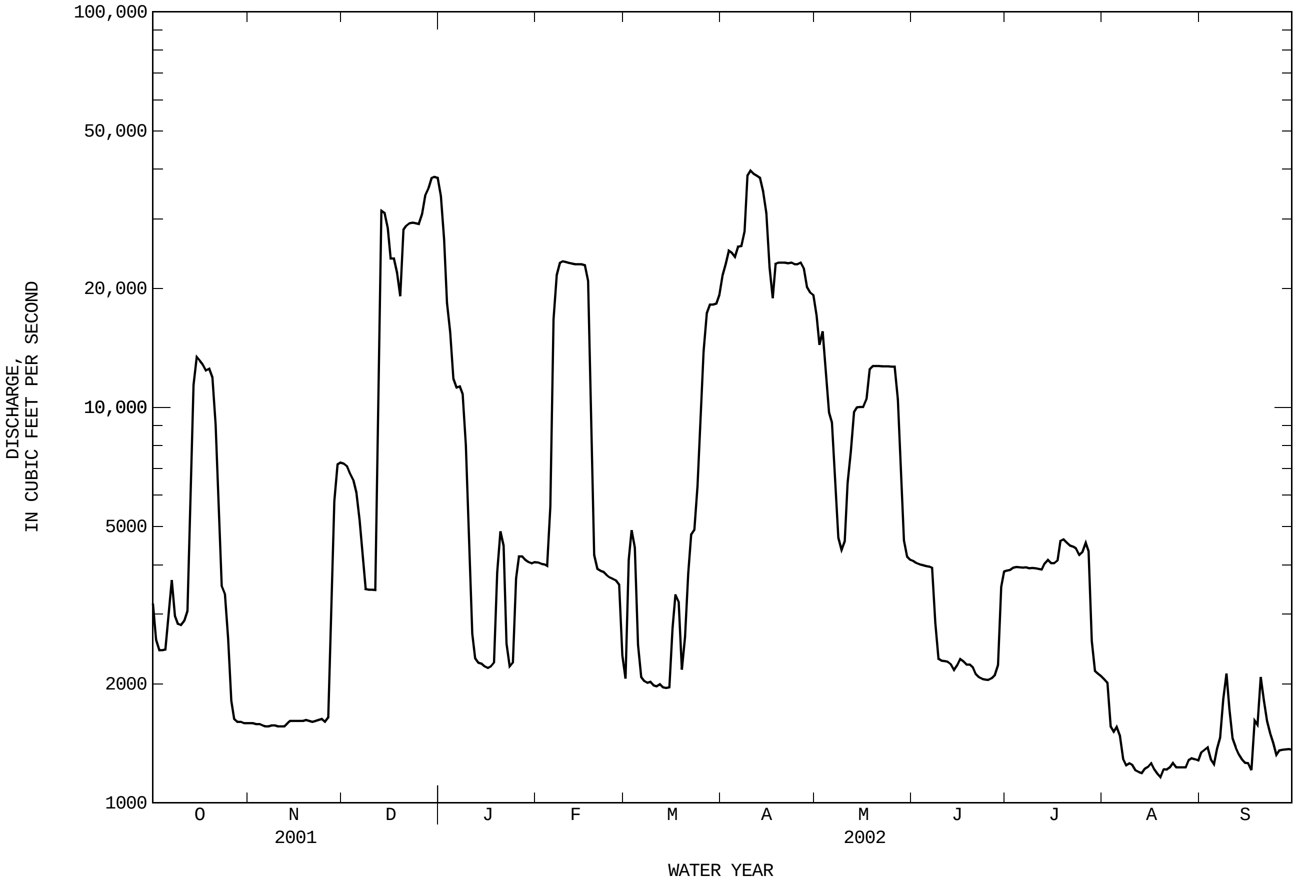
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3343	5540	8058	9536	10000	11840	11050	15150	11490	4456	1878	2092
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 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1924 - 2002	
ANNUAL TOTAL	5530770		2990390			
ANNUAL MEAN	15150		8193		7867	
HIGHEST ANNUAL MEAN					20630	1992
LOWEST ANNUAL MEAN					730	1971
HIGHEST DAILY MEAN	74600	Jun 11	39700	Apr 10	117000	Oct 19 1994
LOWEST DAILY MEAN	1210	Aug 14	1160	Aug 19	104	Aug 23 1956
ANNUAL SEVEN-DAY MINIMUM	1450	Aug 10	1210	Aug 13	106	Aug 20 1956
MAXIMUM PEAK FLOW			40500	Apr 9	122000	Oct 19 1994
MAXIMUM PEAK STAGE			30.07	Dec 30	45.80	May 9 1942
ANNUAL RUNOFF (AC-FT)	10970000		5931000		5699000	
10 PERCENT EXCEEDS	38100		23200		22500	
50 PERCENT EXCEEDS	7160		3900		2720	
90 PERCENT EXCEEDS	1600		1360		571	

e Estimated

08066500 Trinity River at Romayor, TX--Continued



08067000 Trinity River at Liberty, TX
(Partial-record 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^2.

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^3/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 NGVD of 1929; 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 good. 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^3/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, 36,100 ft^3/s, Dec. 31, gage height, 26.48 ft; minimum discharge not determined (affected by tides); minimum gage height, 5.10 ft, Sept. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	35400	---	---	17400	17500	---	---	---	---
2	---	---	---	32900	---	---	19200	15000	---	---	---	---
3	---	---	---	28200	---	---	20400	13900	---	---	---	---
4	---	---	---	22200	---	---	21700	13800	---	---	---	---
5	---	---	---	18400	---	---	21500	11400	---	---	---	---
6	---	---	---	15200	---	---	21700	10100	---	---	---	---
7	---	---	---	13400	13800	---	22500	---	---	---	---	---
8	---	---	---	12600	18100	---	24600	---	---	---	---	---
9	---	---	---	11200	19900	---	28700	---	---	---	---	---
10	---	---	---	---	20300	---	31500	---	---	---	---	---
11	---	---	---	---	20500	---	32100	---	---	---	---	---
12	---	---	---	---	20600	---	32200	---	---	---	---	---
13	---	---	18900	---	20700	---	32300	---	---	---	---	---
14	10200	---	28300	---	20700	---	32100	---	---	---	---	---
15	12400	---	28800	---	20800	---	31200	---	---	---	---	---
16	13900	---	27500	---	20800	---	29200	---	---	---	---	---
17	13400	---	25400	---	20700	---	23100	---	---	---	---	---
18	12800	---	25200	---	18000	---	21900	10100	---	---	---	---
19	12300	---	22000	---	12000	---	22600	10700	---	---	---	---
20	12000	---	22400	---	---	---	22300	11000	---	---	---	---
21	11100	---	26000	---	---	---	21900	11100	---	---	---	---
22	---	---	27100	---	---	---	21600	11100	---	---	---	---
23	---	---	28500	---	---	---	21300	11100	---	---	---	---
24	---	---	28800	---	---	---	21100	11100	---	---	---	---
25	---	---	28700	---	---	---	21000	11100	---	---	---	---
26	---	---	28700	---	---	10200	21000	11100	---	---	---	---
27	---	---	30000	---	---	11800	20900	11100	---	---	---	---
28	---	---	31700	---	---	14400	20000	10400	---	---	---	---
29	---	---	33100	---	---	15400	18400	---	---	---	---	---
30	---	---	34500	---	---	15700	17800	---	---	---	---	---
31	---	---	35400	---	---	16600	---	---	---	---	---	---

THIS PAGE IS INTENTIONALLY BLANK

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. Datum of gage not determined. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. 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 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

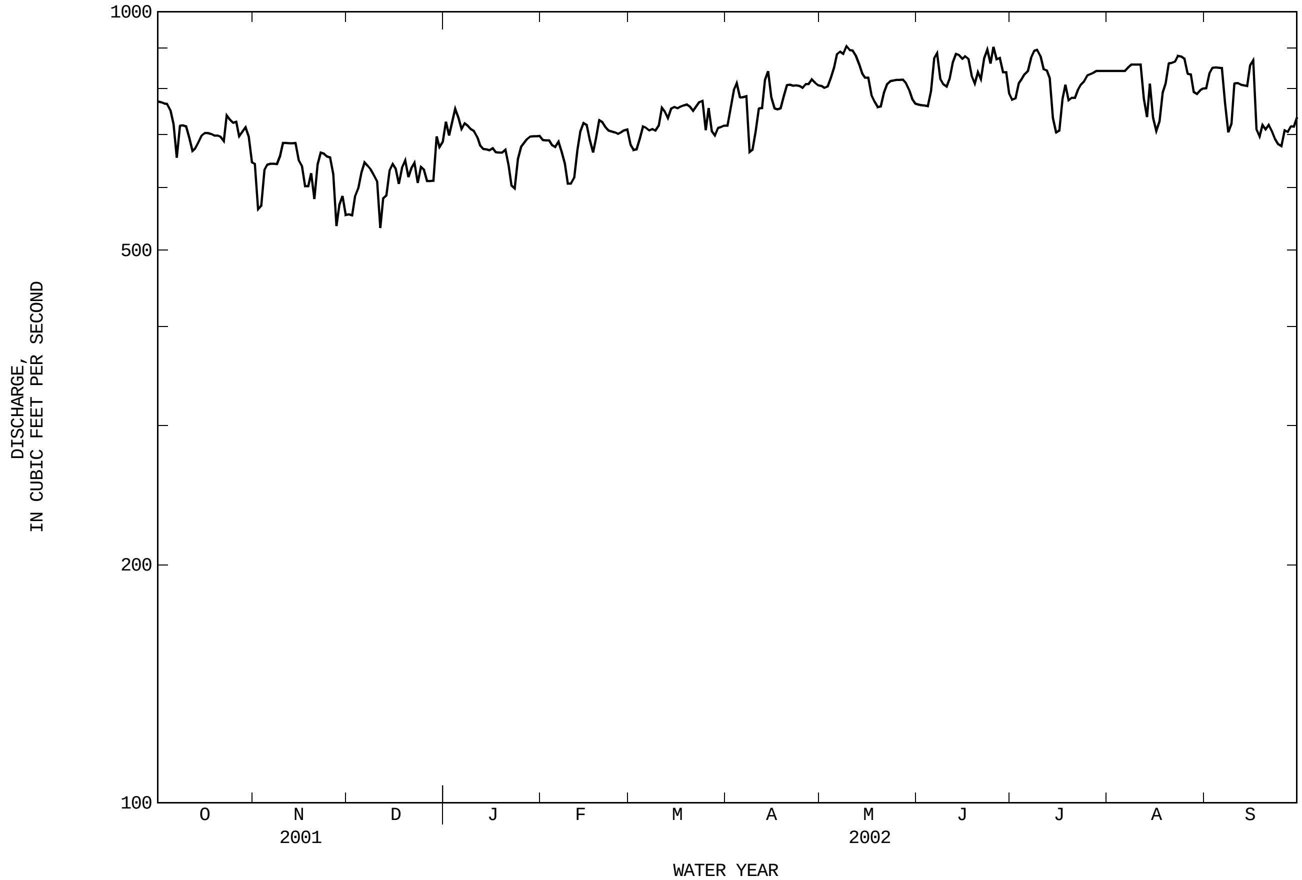
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	771	642	555	726	689	680	718	807	764	774	842	801
2	769	563	553	698	688	669	756	802	762	778	842	836
3	766	569	584	723	688	670	796	804	762	811	842	850
4	765	631	598	754	679	691	812	825	760	821	842	851
5	752	641	626	735	675	716	780	850	794	835	842	850
6	721	643	645	711	685	714	780	884	873	842	842	850
7	654	643	639	723	665	709	782	891	887	875	851	766
8	718	642	632	718	642	711	665	885	824	894	858	704
9	719	658	622	711	607	707	669	905	810	896	858	722
10	717	683	611	707	607	717	706	895	805	880	858	812
11	693	683	533	695	617	757	755	894	823	846	858	813
12	667	682	581	678	669	748	756	881	863	843	778	809
13	672	682	586	671	706	734	820	860	885	825	737	807
14	684	683	630	670	724	754	841	836	882	734	811	806
15	698	650	642	669	719	758	779	826	873	704	734	855
16	703	639	634	672	688	755	755	826	879	707	707	868
17	703	602	606	664	664	759	753	785	873	777	727	712
18	701	602	635	664	692	762	755	770	831	809	791	696
19	698	625	649	664	730	764	783	758	812	773	811	719
20	698	580	618	670	726	759	809	759	840	779	862	710
21	695	641	634	640	715	750	809	791	823	779	862	719
22	687	664	644	603	708	759	807	811	874	796	865	706
23	740	662	608	598	706	769	808	818	896	810	880	690
24	731	657	637	651	704	771	806	819	860	817	878	680
25	724	655	632	674	701	709	802	820	903	831	872	677
26	726	624	611	682	704	756	810	821	871	835	835	708
27	696	536	611	690	708	707	810	821	874	837	833	705
28	705	570	612	696	710	698	821	813	839	842	792	717
29	714	585	696	697	---	713	813	798	839	842	788	716
30	695	554	674	697	---	716	808	777	790	842	796	736
31	645	---	684	697	---	718	---	766	---	842	800	---
TOTAL	22027	18891	19222	21248	19216	22600	23364	25598	25171	25276	25494	22891
MEAN	710.5	629.7	620.1	685.4	686.3	729.0	778.8	825.7	839.0	815.4	822.4	763.0
MAX	771	683	696	754	730	771	841	905	903	896	880	868
MIN	645	536	533	598	607	669	665	758	760	704	707	677
AC-FT	43690	37470	38130	42150	38110	44830	46340	50770	49930	50130	50570	45400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2002, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	498.1	473.4	457.0	459.1	466.3	483.4	514.9	538.8	570.2	586.8	565.1	535.2
MAX	757	734	718	710	716	729	779	831	973	888	875	814
(WY)	2000	2000	2000	1999	1999	2002	2002	1998	1998	1998	1999	2000
MIN	226	236	219	233	226	235	275	273	303	293	237	251
(WY)	1985	1985	1983	1983	1983	1985	1982	1986	1983	1983	1983	1983

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1981 - 2002	
ANNUAL TOTAL	252306		270998			
ANNUAL MEAN	691.2		742.5		517.4	
HIGHEST ANNUAL MEAN					764	1998
LOWEST ANNUAL MEAN					259	1983
HIGHEST DAILY MEAN	902	Aug 21	905	May 9	1080	Jun 24 1998
LOWEST DAILY MEAN	340	May 15	533	Dec 11	52	Aug 18 1983
ANNUAL SEVEN-DAY MINIMUM	562	Nov 27	562	Nov 27	167	Aug 18 1983
MAXIMUM PEAK FLOW			1050	May 8	1220	Jun 2 1998
MAXIMUM PEAK STAGE			3.00	May 8	3.07	Jun 2 1998
ANNUAL RUNOFF (AC-FT)	500400		537500		374800	
10 PERCENT EXCEEDS	818		858		770	
50 PERCENT EXCEEDS	680		734		522	
90 PERCENT EXCEEDS	606		633		256	

08067070 CWA Canal near Dayton, TX--Continued



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^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--Dec. 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.81 ft below NGVD of 1929. 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, 11.94 acre-ft, Jan. 2, 3.

GAGE HEIGHT FROM DCP, in FEET, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.94	7.20	8.06	11.85	<6.88	7.10	10.19	11.10	7.89	7.41	<6.88	<6.88
2	6.93	7.17	8.27	11.9	<6.88	7.72	10.36	11.04	7.70	7.33	<6.88	7.02
3	6.89	7.15	8.30	11.92	<6.88	7.32	10.57	10.81	7.64	7.31	<6.88	7.16
4	6.92	7.08	8.25	11.80	<6.88	<6.88	10.66	10.60	7.65	7.27	<6.88	7.34
5	7.05	6.94	8.16	11.66	<6.88	6.92	10.79	10.36	7.60	7.06	<6.88	7.59
6	6.99	7.02	8.08	11.41	<6.88	6.90	10.92	9.98	7.52	<6.88	<6.88	7.75
7	6.86	7.03	7.90	11.01	7.31	<6.88	11.08	9.60	7.40	<6.88	<6.88	8.12
8	7.06	6.94	7.60	10.61	8.03	<6.88	11.50	9.37	7.36	<6.88	<6.88	8.86
9	7.38	6.91	7.08	10.24	8.90	7.00	11.64	9.12	7.45	7.10	<6.88	9.51
10	7.62	<6.88	<6.88	9.73	9.68	<6.88	11.66	8.61	7.46	7.24	7.03	9.14
11	7.97	<6.88	<6.88	9.12	10.10	<6.88	11.73	8.26	7.57	7.13	7.40	8.66
12	8.24	<6.88	7.36	8.48	10.38	7.00	11.79	8.34	7.62	7.09	7.54	8.17
13	8.48	<6.88	8.14	7.88	10.59	<6.88	11.81	8.38	7.47	7.19	7.82	7.75
14	8.64	7.04	9.42	7.38	10.71	<6.88	11.85	8.08	7.27	7.14	8.02	7.58
15	8.78	7.32	10.48	6.89	10.83	6.97	11.89	8.32	<6.88	7.07	8.45	7.53
16	9.29	7.55	11.21	<6.88	10.88	6.94	11.91	8.67	7.08	7.29	9.08	7.31
17	9.51	7.67	11.60	<6.88	10.90	6.93	11.86	8.92	<6.88	7.42	8.74	7.24
18	9.74	7.85	11.61	<6.88	10.94	7.01	11.68	8.82	<6.88	7.27	8.23	7.37
19	9.80	7.98	11.58	<6.88	10.84	7.17	11.53	8.70	6.97	7.11	7.84	7.56
20	9.76	7.84	11.47	<6.88	10.14	7.35	11.45	8.86	7.21	7.03	7.57	8.08
21	9.69	7.55	11.40	<6.88	9.32	<6.88	11.41	9.09	7.07	7.02	7.38	8.49
22	9.50	7.40	11.45	<6.88	8.69	<6.88	11.38	9.28	7.01	6.97	7.27	8.69
23	9.07	7.51	11.52	6.93	8.14	<6.88	11.33	9.46	7.10	6.94	7.15	8.39
24	8.63	7.69	11.53	6.89	7.79	7.17	11.29	9.55	7.05	6.92	7.10	8.07
25	8.14	7.55	11.57	<6.88	7.61	7.48	11.24	9.56	7.03	6.94	7.04	8.01
26	7.71	7.54	11.62	<6.88	7.26	7.58	11.20	9.52	7.14	6.99	<6.88	7.69
27	7.45	7.90	11.63	<6.88	<6.88	7.83	11.22	9.51	7.36	7.11	<6.88	7.44
28	7.10	7.69	11.65	7.11	<6.88	8.44	11.28	9.50	7.39	7.28	<6.88	7.48
29	6.98	7.63	11.69	7.11	---	9.13	11.21	9.24	7.21	7.22	<6.88	7.52
30	6.90	7.77	11.73	7.10	---	9.63	11.13	8.73	7.43	7.00	<6.88	7.38
31	7.04	---	11.79	7.24	---	10.06	---	8.24	---	<6.88	<6.88	---
MAX	9.80	7.98	11.79	11.92	10.94	10.06	11.91	11.10	7.89	7.42	9.08	9.51

< 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.--Records good. 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, 40.5°C, July 13, 2001; minimum, 4.0°C, Mar. 4, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 532 microsiemens/cm, June 29; minimum recorded, 116 microsiemens/cm, Aug. 17.
WATER TEMPERATURE: Maximum, 40.0°C, July 23; minimum, 4.0°C, Mar. 4.

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

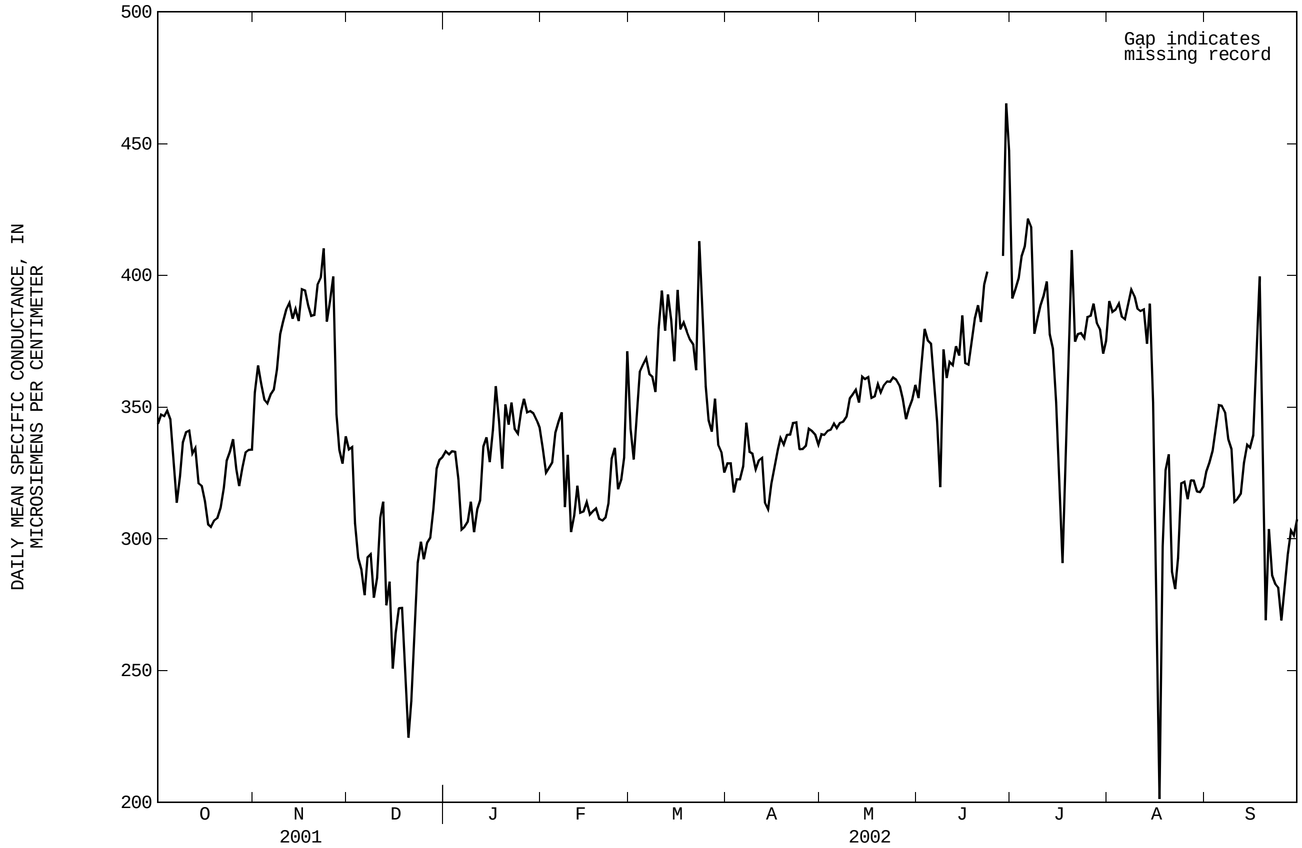
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	357	331	344	367	349	356	340	329	334	343	325	333
2	358	330	347	383	356	366	339	322	335	336	326	332
3	351	338	347	363	356	359	323	294	306	337	329	333
4	353	341	349	358	347	353	307	287	293	338	331	333
5	351	321	345	354	345	351	293	279	288	333	305	323
6	345	309	330	359	349	355	284	272	279	314	301	304
7	346	294	314	360	353	356	323	277	293	309	301	305
8	334	307	324	373	360	364	338	269	294	309	304	306
9	356	329	337	388	373	378	284	270	278	325	304	314
10	349	335	340	390	378	382	300	279	285	308	297	303
11	358	329	341	397	379	387	325	293	308	325	299	311
12	364	318	332	399	384	390	370	282	314	327	306	315
13	371	317	334	392	378	383	293	258	275	392	320	335
14	326	313	321	399	380	387	291	258	284	364	316	338
15	322	317	320	394	376	383	266	236	251	349	323	329
16	322	299	314	405	382	395	275	258	264	372	324	341
17	315	292	305	407	386	394	279	266	274	418	329	358
18	309	302	304	397	382	388	279	265	274	388	316	345
19	311	304	307	394	372	385	275	214	250	339	316	327
20	312	303	308	394	377	385	238	214	224	371	329	351
21	318	307	312	403	390	396	246	234	239	354	336	343
22	327	316	319	410	389	399	282	241	264	454	335	352
23	334	327	330	438	385	410	310	272	291	365	335	342
24	335	330	333	388	376	382	307	289	299	370	322	340
25	343	333	338	399	385	390	299	289	292	404	327	348
26	333	320	326	435	380	400	311	288	298	371	333	353
27	329	315	320	386	308	347	310	291	300	360	337	348
28	335	318	327	354	308	334	322	293	311	352	344	348
29	340	324	333	346	292	328	332	319	327	352	337	348
30	341	325	334	347	334	339	331	329	330	354	327	345
31	354	322	334	---	---	---	337	326	331	363	325	342
MONTH	371	292	328	438	292	374	370	214	290	454	297	334

08067118 Lake Charlotte near Anahuac, TX--Continued

SPECIFIC CONDUCTANCE FROM DCP, in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	349	320	334	376	328	342	335	321	329	346	335	340
2	341	313	325	342	323	330	333	318	329	344	335	339
3	333	321	327	356	337	346	332	309	318	346	336	341
4	336	321	329	377	350	363	328	313	323	351	336	341
5	353	329	340	378	355	366	336	313	323	347	341	344
6	349	339	344	402	336	369	336	320	328	346	337	342
7	373	313	348	404	344	362	349	334	344	351	337	344
8	329	303	312	378	343	362	406	318	333	350	341	344
9	383	303	332	386	339	356	342	327	332	349	343	346
10	311	297	303	391	364	380	336	322	326	357	347	353
11	315	303	309	414	382	394	335	323	330	393	349	355
12	327	310	320	423	351	379	335	319	331	365	350	356
13	315	308	310	423	362	393	330	302	314	364	342	352
14	316	306	310	409	361	383	316	302	311	366	354	362
15	317	308	314	379	354	367	326	312	321	365	358	361
16	312	308	309	413	376	395	330	321	327	366	359	361
17	316	308	311	399	364	380	341	330	334	366	343	353
18	326	305	312	393	366	382	342	333	338	361	346	354
19	312	305	308	391	367	379	339	331	336	363	354	359
20	311	304	307	381	367	376	346	335	339	361	348	355
21	312	302	308	389	344	374	342	337	340	372	354	358
22	322	303	313	411	337	364	348	341	344	371	353	360
23	346	316	330	445	378	413	355	331	344	365	351	360
24	362	315	334	422	346	381	341	330	334	365	357	361
25	368	313	319	396	333	358	341	327	334	365	353	360
26	352	303	322	363	329	345	346	327	335	363	354	358
27	346	313	331	372	329	341	348	338	342	361	341	353
28	388	329	371	361	346	353	345	337	341	349	342	345
29	---	---	---	354	326	336	349	323	340	354	344	349
30	---	---	---	346	322	333	341	326	336	357	349	353
31	---	---	---	328	322	325	---	---	---	361	355	358
MONTH	388	297	323	445	322	365	406	302	332	393	335	352

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	359	348	353	415	362	391	406	367	390	330	320	325
2	396	353	367	423	370	395	395	375	386	333	324	329
3	387	369	380	425	381	399	397	374	387	340	329	333
4	380	367	375	422	383	407	399	377	389	353	337	342
5	384	360	374	431	402	411	390	376	384	358	341	351
6	366	352	359	433	409	422	391	369	383	353	346	351
7	356	329	345	440	380	419	394	384	389	356	343	348
8	337	307	320	429	357	378	403	387	395	350	329	338
9	425	333	372	392	369	383	397	388	392	344	329	334
10	375	351	361	401	375	388	393	383	387	341	296	314
11	383	356	367	407	376	392	389	381	386	330	300	315
12	376	355	366	410	383	398	394	380	387	321	312	317
13	384	365	373	395	347	378	388	365	374	335	320	329
14	384	353	370	382	359	372	460	364	389	340	333	336
15	397	377	385	387	313	352	385	310	352	342	330	335
16	390	353	367	354	278	318	328	147	269	359	328	339
17	381	357	366	375	252	291	294	116	201	449	329	364
18	389	356	374	393	305	339	317	286	297	478	335	400
19	403	367	384	408	336	379	345	317	326	366	270	333
20	410	369	389	447	371	410	344	314	332	282	258	269
21	401	368	382	391	356	375	332	234	288	314	274	304
22	417	380	396	386	369	378	295	245	281	313	279	286
23	417	383	401	389	368	378	329	272	293	296	264	283
24	---	---	---	382	370	376	326	311	321	309	258	281
25	---	---	---	392	376	384	332	309	322	287	258	269
26	---	---	---	393	378	385	319	311	315	291	271	282
27	---	---	---	403	375	389	326	317	322	301	290	294
28	447	395	407	392	370	382	328	313	322	307	300	303
29	532	405	465	401	360	380	332	274	318	307	298	301
30	493	393	447	384	360	370	327	304	318	313	301	307
31	---	---	---	385	363	375	327	312	320	---	---	---
MONTH	---	---	---	447	252	380	460	116	342	478	258	320



WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.2	20.1	23.1	24.4	20.1	22.3	12.8	11.0	11.6	10.8	9.4	10.1
2	28.1	20.2	24.1	25.4	22.2	23.7	13.5	12.8	13.1	9.5	8.6	9.2
3	28.0	22.3	25.0	25.1	21.8	23.4	14.0	13.3	13.6	9.0	8.2	8.6
4	25.1	22.8	24.0	24.6	21.3	22.7	16.1	14.0	14.9	8.5	7.5	7.9
5	24.1	22.5	23.3	22.6	18.8	20.7	20.2	15.9	17.7	9.6	8.2	8.8
6	23.1	19.7	21.2	21.0	17.2	19.0	21.4	18.5	20.0	10.2	9.1	9.7
7	23.6	17.0	20.1	22.3	17.4	19.7	22.0	20.5	21.2	10.0	9.0	9.6
8	21.2	18.8	20.0	26.4	19.0	22.1	21.1	15.7	19.0	10.3	8.8	9.6
9	24.1	20.3	22.3	25.2	21.3	23.0	15.7	12.7	13.8	12.0	9.8	10.7
10	27.2	23.8	25.2	26.6	19.5	22.7	15.9	10.9	13.2	14.0	11.9	12.9
11	26.4	24.4	25.3	26.0	20.1	23.1	14.6	11.9	12.8	13.9	12.8	13.6
12	25.1	23.2	24.1	23.5	20.4	22.1	18.2	14.6	17.3	14.6	12.6	13.4
13	25.0	21.2	23.0	23.0	19.6	21.4	18.6	15.6	17.8	13.6	11.2	12.5
14	22.7	19.8	21.3	23.2	19.6	21.0	15.6	14.3	14.6	15.1	12.3	13.5
15	23.9	21.1	22.3	22.2	20.1	21.1	15.5	14.3	14.9	15.0	10.6	12.7
16	23.5	19.2	21.0	21.5	20.2	20.9	17.9	15.5	16.9	16.1	10.2	13.3
17	19.3	17.9	18.7	20.4	18.7	19.5	17.8	16.6	17.3	17.9	14.6	16.1
18	19.6	18.2	18.7	20.7	17.8	19.3	16.6	15.9	16.2	17.6	15.9	16.5
19	21.7	18.6	19.6	22.5	19.0	20.5	16.3	14.9	15.8	17.0	11.0	15.3
20	20.2	19.5	19.8	19.7	15.6	17.9	14.9	14.2	14.4	13.5	9.2	12.0
21	21.0	20.1	20.6	17.4	13.6	15.5	14.5	13.7	14.0	16.7	11.3	13.7
22	23.4	20.8	21.8	18.0	14.8	16.4	15.6	14.2	14.9	18.8	14.5	16.2
23	25.5	21.9	23.6	22.3	17.3	20.0	15.6	14.2	14.9	21.1	18.2	19.7
24	27.0	24.3	25.5	21.9	19.6	21.0	14.2	13.0	13.3	21.3	15.4	19.4
25	26.0	20.9	22.9	19.6	16.4	17.8	13.1	12.2	12.6	16.5	11.3	13.8
26	20.9	18.7	19.8	22.9	17.4	20.2	12.3	11.3	11.8	16.2	8.4	12.4
27	20.6	16.6	18.5	22.5	17.1	20.1	11.9	11.1	11.5	19.4	11.6	15.1
28	18.4	15.3	17.0	17.1	12.6	15.1	13.3	11.8	12.4	19.4	16.1	17.7
29	20.2	14.9	17.1	12.6	8.2	9.9	13.6	12.8	13.1	21.5	18.9	20.1
30	20.1	15.9	17.9	11.9	8.0	9.9	13.1	12.0	12.4	23.1	20.6	21.6
31	22.8	17.1	19.8	---	---	---	12.0	10.8	11.3	22.0	16.2	20.2
MONTH	28.1	14.9	21.5	26.6	8.0	19.7	22.0	10.8	14.8	23.1	7.5	13.7

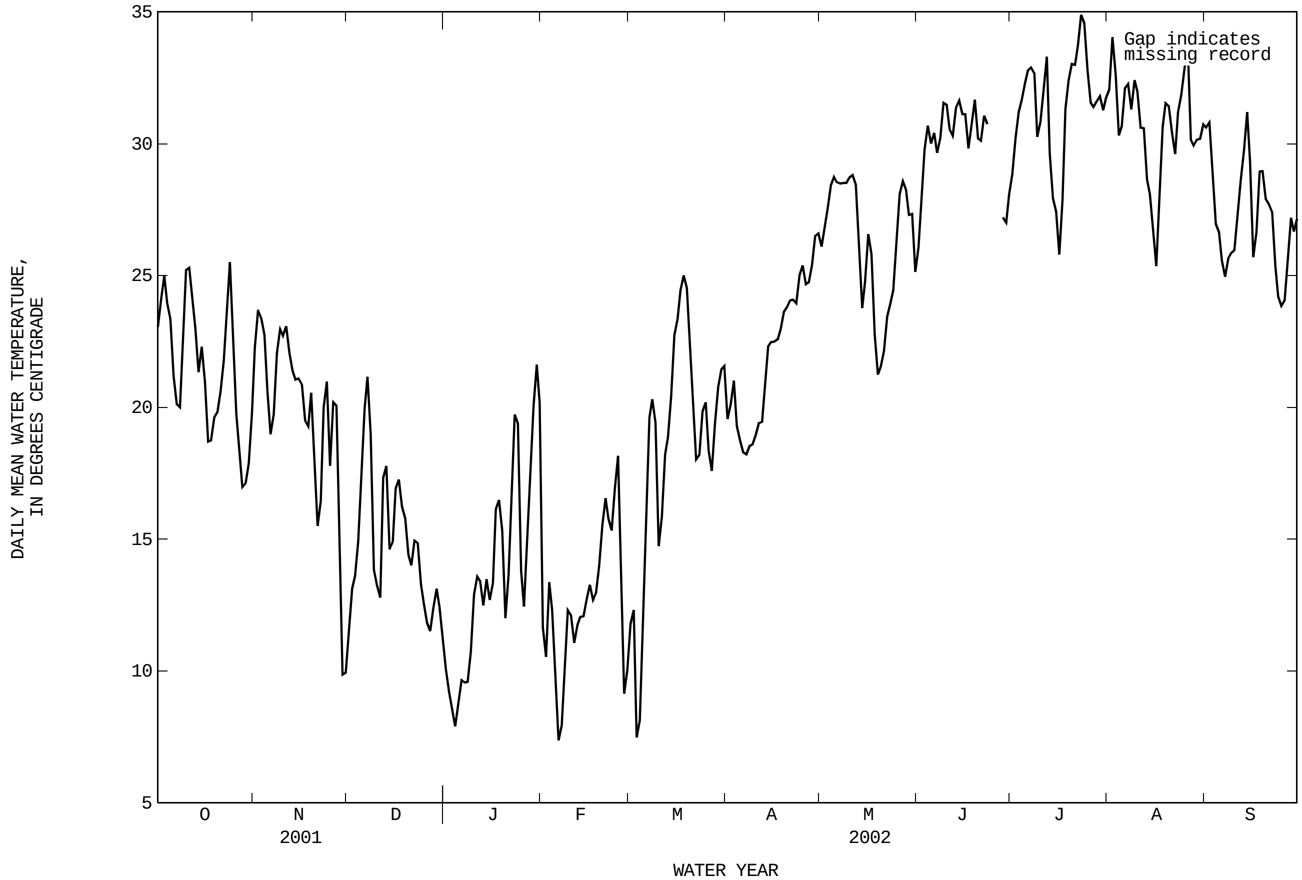
08067118 Lake Charlotte near Anahuac, TX--Continued

WATER TEMPERATURE FROM DCP, in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	16.2	8.7	11.7	13.0	10.7	11.8	21.0	18.8	19.6	27.1	25.0	26.1
2	14.5	6.5	10.5	13.3	8.2	12.3	21.9	19.0	20.1	27.7	25.9	26.8
3	15.1	11.6	13.4	9.0	5.8	7.5	21.6	20.4	21.0	28.6	26.6	27.5
4	13.6	11.3	12.3	12.3	4.0	8.1	20.4	18.7	19.3	29.1	27.8	28.4
5	11.3	7.9	9.5	14.5	8.0	11.4	19.2	18.4	18.7	29.6	28.1	28.7
6	7.9	6.6	7.4	19.2	12.4	15.5	18.9	17.8	18.3	29.5	27.6	28.5
7	10.6	5.2	7.9	24.5	16.0	19.6	18.9	17.6	18.2	29.6	27.5	28.5
8	12.7	8.9	10.5	21.5	19.0	20.3	19.1	17.9	18.5	29.6	27.6	28.5
9	14.1	10.3	12.3	21.0	14.8	19.4	19.2	18.1	18.6	29.6	27.6	28.5
10	13.8	10.9	12.1	19.1	10.7	14.7	19.2	18.8	18.9	30.4	27.7	28.7
11	12.5	10.1	11.1	17.4	14.1	15.9	21.5	18.7	19.4	30.4	27.4	28.8
12	12.6	11.0	11.7	20.9	16.1	18.2	19.8	19.2	19.4	30.0	27.0	28.4
13	12.3	11.8	12.1	22.9	14.6	18.9	23.4	19.4	20.8	28.8	24.0	26.4
14	12.5	11.7	12.1	23.0	17.6	20.4	23.3	21.2	22.3	25.5	21.9	23.8
15	14.8	12.1	12.7	24.9	20.8	22.7	23.3	21.3	22.5	26.5	23.0	24.8
16	14.5	12.6	13.3	24.8	21.9	23.4	23.1	22.1	22.5	28.3	25.0	26.6
17	13.2	12.2	12.7	26.4	22.8	24.4	23.8	21.9	22.6	27.5	24.2	25.8
18	13.3	12.8	12.9	27.4	23.3	25.0	25.0	21.9	23.0	24.2	21.6	22.8
19	15.0	13.2	14.0	26.1	23.6	24.5	24.9	22.4	23.6	22.4	19.8	21.2
20	16.9	14.5	15.5	23.9	19.9	22.6	24.6	22.8	23.8	22.4	20.6	21.5
21	18.4	15.2	16.6	24.1	17.6	20.3	24.8	23.3	24.1	23.4	21.4	22.1
22	16.9	14.5	15.8	24.1	12.6	18.0	24.5	22.9	24.1	24.3	22.8	23.4
23	17.7	13.5	15.3	21.8	13.7	18.2	25.7	22.8	23.9	24.6	23.4	23.9
24	19.4	14.7	16.9	22.6	17.5	19.8	25.8	23.8	25.0	25.6	23.5	24.4
25	19.8	16.8	18.2	20.9	19.4	20.2	25.9	24.9	25.4	28.2	24.8	26.3
26	17.9	8.1	12.4	20.5	16.1	18.4	25.4	23.6	24.7	29.5	26.9	28.1
27	13.5	5.3	9.1	19.4	15.7	17.6	25.6	24.0	24.7	29.7	27.6	28.6
28	13.2	6.7	10.0	20.8	18.4	19.4	26.6	24.3	25.4	28.8	27.6	28.2
29	---	---	---	21.8	19.9	20.8	28.0	25.4	26.5	28.1	26.4	27.3
30	---	---	---	22.6	20.4	21.4	27.6	25.8	26.6	29.1	26.3	27.3
31	---	---	---	21.9	21.0	21.6	---	---	---	26.4	23.9	25.1
MONTH	19.8	5.2	12.5	27.4	4.0	18.5	28.0	17.6	22.1	30.4	19.8	26.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.3	24.0	26.1	30.2	27.7	28.8	35.6	28.8	32.1	32.7	28.3	30.6
2	30.2	25.8	27.8	33.3	27.7	30.2	39.6	29.3	34.0	33.0	28.3	30.8
3	32.4	27.8	29.8	33.3	29.0	31.2	36.3	29.8	32.6	31.2	27.8	28.9
4	32.8	28.8	30.7	34.2	29.2	31.6	34.7	27.1	30.3	27.8	26.4	27.0
5	31.0	28.4	30.0	35.7	29.3	32.3	35.1	26.8	30.7	27.6	25.5	26.6
6	33.6	27.3	30.4	36.9	29.3	32.8	36.0	28.2	32.1	26.9	24.6	25.6
7	31.3	28.1	29.6	37.0	28.2	32.9	35.4	29.6	32.3	25.8	24.3	25.0
8	33.7	27.1	30.2	35.7	29.5	32.7	33.9	28.0	31.3	26.0	25.2	25.7
9	33.4	29.9	31.5	32.1	29.4	30.3	35.3	29.4	32.4	26.2	25.6	25.9
10	33.9	29.3	31.5	34.2	27.9	30.8	34.1	29.7	32.0	27.3	25.0	26.0
11	32.0	29.7	30.6	35.6	28.6	32.0	32.3	28.9	30.6	28.6	25.8	27.3
12	32.6	28.0	30.3	37.0	30.6	33.3	31.7	29.6	30.6	30.4	26.9	28.6
13	33.6	28.8	31.4	32.3	26.8	29.6	30.4	28.0	28.6	33.8	27.0	29.7
14	34.2	29.2	31.6	31.0	25.6	27.9	29.0	27.4	28.1	34.1	29.3	31.2
15	35.0	27.1	31.1	28.8	26.2	27.4	28.4	24.9	26.7	31.5	26.9	29.3
16	34.9	27.4	31.1	26.9	24.8	25.8	26.7	24.6	25.4	26.9	25.0	25.7
17	32.8	27.3	29.8	32.1	24.4	27.9	30.3	25.6	27.6	28.9	24.8	26.6
18	34.9	26.9	30.7	34.1	28.4	31.3	32.9	29.1	30.6	31.2	27.0	29.0
19	35.0	28.6	31.7	35.4	29.6	32.4	33.4	30.0	31.5	30.6	27.8	29.0
20	32.3	29.4	30.2	36.3	29.9	33.0	33.2	29.9	31.4	29.0	26.5	27.9
21	33.2	27.3	30.1	35.5	30.5	33.0	32.4	28.3	30.4	29.5	26.2	27.7
22	33.8	28.3	31.1	37.3	30.5	33.7	30.7	28.3	29.6	29.0	25.9	27.4
23	32.4	28.5	30.7	40.0	30.8	34.9	34.5	28.3	31.2	26.4	24.6	25.4
24	---	---	---	39.1	31.0	34.6	33.1	30.4	31.9	25.5	22.9	24.2
25	---	---	---	34.5	30.7	32.8	37.4	29.5	32.8	24.8	22.9	23.8
26	---	---	---	33.3	29.8	31.6	37.8	31.2	33.8	25.9	22.4	24.1
27	---	---	---	33.6	29.3	31.4	32.0	28.6	30.2	30.2	23.5	25.6
28	28.0	26.4	27.2	34.4	29.2	31.6	34.1	26.6	29.9	29.5	25.6	27.2
29	27.8	26.2	27.0	34.4	29.6	31.8	33.3	26.7	30.2	28.4	25.4	26.7
30	30.2	26.4	28.1	33.0	29.8	31.3	33.3	26.5	30.2	29.5	24.2	27.2
31	---	---	---	35.2	28.6	31.7	33.5	27.9	30.7	---	---	---
MONTH	---	---	---	40.0	24.4	31.4	39.6	24.6	30.7	34.1	22.4	27.2

08067118 Lake Charlotte near Anahuac, TX--Continued



08067252 Trinity River at Wallisville, TX

LOCATION.--Lat 29°48'44", long 94°43'52", 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^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--Oct. 1994 to current year.

GAGE.--Water-stage recorders. Datum of gage is NGVD of 1929. 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), 4.12 ft, Sept. 8; minimum elevation (upstream), -0.91 ft, Mar. 10. Maximum elevation (downstream), 3.85 ft, Sept. 7; minimum elevation (downstream), -1.52 ft, Jan. 25.

ELEVATION (UPSTREAM), in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	OCTOBER MAX	OCTOBER MIN	NOVEMBER MAX	NOVEMBER MIN	DECEMBER MAX	DECEMBER MIN	JANUARY MAX	JANUARY MIN	FEBRUARY MAX	FEBRUARY MIN	MARCH MAX	MARCH MIN
1	1.47	0.73	1.98	0.90	2.05	1.04	3.32	3.10	---	---	2.63	1.45
2	1.49	0.84	1.92	0.56	2.15	1.03	3.41	3.09	---	---	2.66	0.16
3	1.63	0.79	1.92	0.58	1.96	0.93	3.25	3.04	---	---	0.16	-0.70
4	1.70	0.78	1.82	0.28	1.93	0.88	3.16	2.95	---	---	1.19	-0.44
5	1.74	0.63	1.64	0.35	2.01	0.98	3.38	2.79	1.38	-0.07	1.12	0.09
6	1.67	-0.13	1.96	0.62	1.88	0.84	2.81	2.25	1.04	0.08	1.27	0.15
7	1.41	0.53	1.81	0.30	1.75	0.65	2.25	1.88	1.31	0.58	1.36	-0.04
8	1.82	0.84	1.71	0.40	1.56	-0.16	2.03	1.78	2.06	1.27	1.93	0.41
9	2.50	1.23	1.66	0.34	0.42	-0.19	2.02	1.61	2.31	1.61	1.87	-0.33
10	2.66	1.43	1.52	0.26	1.07	0.24	1.83	1.24	2.25	1.48	1.42	-0.91
11	3.04	1.71	1.34	0.41	2.17	0.24	1.51	0.55	1.94	1.54	1.78	0.67
12	2.53	1.59	1.42	0.59	2.41	1.46	0.79	0.02	2.18	1.85	1.65	-0.06
13	3.04	1.65	1.81	0.64	2.20	1.46	1.19	-0.12	2.26	1.94	1.00	0.21
14	2.00	1.37	2.05	0.84	2.51	1.94	1.33	-0.01	2.34	2.03	1.45	0.86
15	2.87	1.46	2.53	1.24	3.33	2.43	1.07	-0.06	2.42	2.18	1.55	0.99
16	2.55	1.48	2.62	1.44	3.52	2.90	1.34	0.36	2.30	2.01	1.37	0.68
17	2.81	1.82	2.21	2.07	3.59	2.77	1.17	0.20	2.35	2.12	1.42	0.69
18	2.73	1.80	2.33	2.21	3.09	2.74	1.06	-0.03	2.81	2.19	1.69	0.56
19	2.60	1.71	2.39	2.06	3.24	2.60	1.04	-0.58	2.88	2.41	2.31	0.63
20	2.39	1.65	2.06	1.59	2.72	2.50	1.15	-0.18	2.56	1.44	2.11	0.05
21	2.57	1.73	1.70	1.58	2.90	2.66	1.26	0.49	1.81	1.00	0.33	-0.78
22	2.47	1.46	1.77	1.60	3.18	2.83	1.42	0.49	1.23	0.29	1.31	-0.68
23	2.44	1.37	2.05	1.77	3.11	2.73	1.54	0.32	1.74	0.35	1.95	0.17
24	2.41	1.10	2.14	1.80	3.00	2.72	1.54	0.08	1.73	0.45	2.04	0.94
25	1.39	0.67	1.82	1.28	3.02	2.79	0.80	-0.39	1.77	0.62	1.86	0.83
26	1.76	0.66	2.18	1.74	3.15	2.74	1.40	0.40	1.11	-0.67	1.40	0.26
27	1.78	0.83	2.54	0.75	3.04	2.72	1.63	0.86	0.38	-0.72	2.03	0.99
28	1.57	0.78	1.08	0.33	3.32	2.85	1.85	0.37	1.45	0.38	2.25	1.66
29	1.43	0.83	1.16	0.52	3.32	2.88	1.54	0.37	---	---	2.40	1.88
30	1.62	0.64	1.96	0.84	3.22	2.92	1.72	0.78	---	---	2.86	1.66
31	1.94	1.13	---	---	3.28	3.02	1.71	0.02	---	---	2.56	1.63
MONTH	3.04	-0.13	2.62	0.26	3.59	-0.19	3.41	-0.58	---	---	2.86	-0.91

08067252 Trinity River at Wallisville, TX--Continued

ELEVATION (UPSTREAM), in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.36	1.47	3.37	2.68	2.10	0.81	1.94	0.86	1.20	0.46	1.76	0.59
2	2.71	1.80	3.06	2.49	2.12	0.96	1.84	0.92	1.11	0.13	1.88	0.66
3	2.47	1.77	2.75	2.17	2.17	1.35	1.72	1.03	1.04	0.04	2.09	0.69
4	2.41	1.74	2.50	1.93	2.00	1.44	1.56	0.63	1.46	0.03	2.17	1.05
5	2.74	1.88	2.56	1.92	1.97	1.23	1.36	0.24	1.63	0.14	2.13	2.01
6	2.96	1.97	2.53	2.14	1.79	1.01	1.00	-0.08	1.30	0.09	2.32	2.05
7	3.48	2.76	2.56	2.25	1.94	0.82	---	-0.11	1.24	-0.23	3.20	2.32
8	3.65	3.01	3.01	2.31	1.94	0.70	1.56	---	1.87	-0.05	4.12	3.20
9	3.47	2.96	2.85	1.39	2.14	0.97	2.15	0.60	1.72	0.28	4.09	2.54
10	3.36	2.88	2.03	1.26	2.32	0.82	1.77	0.51	2.36	0.61	3.01	1.97
11	3.40	3.13	2.65	1.42	2.54	1.01	1.83	0.31	2.30	1.30	2.73	1.17
12	3.38	3.10	2.92	1.89	2.21	0.86	1.92	0.36	2.22	1.53	2.18	0.65
13	3.28	2.96	2.03	0.65	2.10	0.65	1.56	0.58	2.33	2.13	1.99	0.70
14	3.38	3.06	2.31	0.36	1.49	0.49	1.50	0.37	2.31	2.10	2.28	1.11
15	3.63	3.14	2.60	1.41	1.78	-0.20	1.17	0.51	2.93	2.18	2.10	0.49
16	3.56	3.05	2.66	1.62	1.64	0.72	1.96	0.89	3.32	0.94	1.74	0.50
17	3.33	3.03	---	---	1.13	-0.15	1.69	0.70	2.03	0.64	2.18	0.54
18	3.17	2.67	---	---	1.51	0.41	1.42	0.59	1.90	0.64	2.07	0.88
19	3.17	2.63	2.00	0.80	---	---	1.42	0.45	1.83	0.62	2.44	1.25
20	3.20	2.61	2.33	1.32	---	---	1.39	0.40	1.74	0.51	2.05	1.57
21	3.24	2.71	2.49	1.61	---	---	1.34	0.34	1.61	0.31	2.30	1.52
22	3.09	2.42	2.58	2.03	1.82	0.38	1.40	0.33	1.58	0.41	2.07	1.23
23	2.89	2.20	2.74	2.03	1.80	0.59	1.26	0.26	1.38	0.36	2.15	1.33
24	2.98	2.55	2.49	1.89	1.84	0.37	1.42	0.23	1.31	0.46	2.45	1.43
25	2.86	2.40	2.40	1.75	2.02	0.33	1.52	0.36	1.17	0.51	2.47	1.16
26	2.83	2.41	2.39	1.58	2.07	0.53	1.48	0.58	1.51	0.43	1.89	0.29
27	3.64	2.51	2.65	1.58	2.50	0.84	1.79	0.59	1.42	0.20	1.99	0.78
28	3.27	2.71	2.80	1.61	1.71	0.67	1.66	0.93	1.01	0.08	2.29	1.07
29	2.95	2.40	2.38	1.52	2.60	0.56	1.62	0.91	0.97	0.23	2.38	0.73
30	3.50	2.41	2.11	1.02	2.17	1.17	1.41	0.75	1.34	0.43	1.94	0.62
31	---	---	2.06	0.68	---	---	1.22	0.68	1.54	0.51	---	---
MONTH	3.65	1.47	---	---	---	---	---	---	3.32	-0.23	4.12	0.29

ELEVATION (DOWNSTREAM), in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	1.33	0.60	1.85	0.76	1.91	0.87	2.98	2.75	---	---	2.53	1.38
2	1.36	0.70	1.79	0.42	2.01	0.88	2.99	2.77	1.01	---	2.58	0.09
3	1.50	0.67	1.80	0.45	1.83	0.76	2.90	2.67	---	---	0.09	-0.76
4	1.57	0.64	1.69	0.15	1.79	0.72	2.87	2.64	---	---	1.11	-0.49
5	1.61	0.50	1.52	0.22	1.88	0.82	3.07	2.51	1.30	-0.13	1.05	0.02
6	1.53	-0.26	1.84	0.50	1.74	0.69	2.52	1.97	0.97	0.00	1.18	0.07
7	1.29	0.39	1.69	0.18	1.61	0.50	2.00	1.53	1.13	0.44	1.30	-0.11
8	1.70	0.70	1.59	0.28	1.43	-0.28	1.76	1.40	1.88	1.04	1.85	0.33
9	2.37	1.08	1.55	0.23	0.31	-0.30	1.75	1.19	2.12	1.25	1.79	-0.37
10	2.53	1.30	1.40	0.15	0.97	0.14	1.58	1.04	2.02	1.17	1.36	-0.94
11	2.91	1.55	1.22	0.30	2.06	0.13	1.32	0.40	1.69	1.21	1.72	0.59
12	2.38	1.44	1.31	0.48	2.29	1.33	0.66	-0.10	1.90	1.50	1.58	-0.13
13	2.90	1.50	1.70	0.52	1.95	1.28	1.08	-0.25	2.00	1.57	0.93	0.13
14	1.81	1.16	1.94	0.71	2.24	1.39	1.21	-0.13	2.03	1.73	1.39	0.79
15	2.68	1.30	2.40	1.11	3.05	2.11	0.96	-0.17	2.16	1.87	1.47	0.91
16	2.35	1.27	2.50	0.73	3.26	2.62	1.24	0.25	2.08	1.75	1.29	0.61
17	2.62	1.65	1.81	-0.09	3.31	2.56	1.06	0.09	2.08	1.80	1.34	0.62
18	2.55	1.63	1.36	-0.45	2.80	2.50	0.96	-0.13	2.57	1.94	1.60	0.47
19	2.41	1.53	1.44	-0.55	2.93	2.31	0.94	-0.66	2.64	2.07	2.24	0.55
20	2.21	1.46	0.08	-1.17	2.47	2.23	1.04	-0.27	2.32	1.27	2.02	-0.01
21	2.40	1.56	0.98	-0.07	2.65	2.35	1.16	0.37	1.68	0.84	0.27	-0.83
22	2.33	1.30	1.61	0.61	2.93	2.57	1.30	0.37	1.11	0.17	1.25	-0.72
23	2.29	1.22	2.08	1.30	2.84	2.46	1.43	0.20	1.66	0.25	1.88	0.10
24	2.26	0.96	2.13	0.27	2.71	2.45	1.41	-0.39	1.65	0.35	1.95	0.85
25	1.26	0.54	1.67	0.40	2.77	2.54	0.30	-1.52	1.68	0.51	1.77	0.73
26	1.64	0.54	2.14	1.36	2.86	2.44	1.19	-0.39	1.00	-0.72	1.31	0.13
27	1.65	0.71	1.91	0.63	2.70	2.41	1.39	-0.11	0.32	-0.79	1.91	0.85
28	1.45	0.66	0.96	0.23	2.94	2.54	1.66	0.25	1.39	0.31	2.06	1.41
29	1.31	0.71	1.01	0.36	2.96	2.58	1.42	0.24	---	---	2.22	1.67
30	1.50	0.52	1.83	0.67	2.86	2.65	1.61	0.65	---	---	2.69	1.54
31	1.82	1.00	---	---	2.94	2.69	1.59	-0.09	---	---	2.37	1.36
MONTH	2.91	-0.26	2.50	-1.17	3.31	-0.30	3.07	-1.52	---	---	2.69	-0.94

08067252 Trinity River at Wallisville, TX--Continued

ELEVATION (DOWNSTREAM), in FT (NGVD), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.15	1.15	3.20	2.44	2.06	0.78	1.91	0.82	1.19	0.45	1.74	0.58
2	2.50	1.45	2.88	2.19	2.07	0.92	1.80	0.88	1.12	0.13	1.87	0.64
3	2.17	1.48	2.61	1.95	2.13	1.33	1.67	1.00	1.03	0.04	2.08	0.68
4	2.17	1.46	2.34	1.74	1.96	1.40	1.54	0.60	1.46	0.03	2.71	0.89
5	2.51	1.53	2.40	1.73	1.94	1.19	1.34	0.22	1.61	0.15	2.47	0.87
6	2.74	1.60	2.40	1.95	1.75	0.98	0.98	-0.09	1.30	0.09	3.24	1.17
7	3.24	2.52	2.44	2.13	1.91	0.78	---	-0.13	1.24	-0.22	3.85	2.05
8	3.40	2.72	2.91	2.19	1.92	0.67	1.53	---	1.85	-0.05	3.29	2.33
9	3.24	2.71	2.76	1.30	2.10	0.92	2.13	0.58	1.71	0.29	3.00	1.51
10	3.09	2.47	1.95	1.19	2.28	0.80	1.74	0.49	2.34	0.60	2.96	1.90
11	3.11	2.73	2.58	1.34	2.51	0.99	1.82	0.30	2.28	1.29	2.70	1.13
12	3.10	2.81	2.82	1.80	2.17	0.83	1.92	0.35	2.46	1.52	2.16	0.62
13	3.08	2.76	1.95	0.56	2.06	0.62	1.55	0.57	2.44	1.29	1.97	0.67
14	3.18	2.79	2.23	0.25	1.46	0.47	1.47	0.35	2.37	1.22	2.26	1.09
15	3.38	2.92	2.50	1.31	1.76	-0.20	1.13	0.48	2.90	1.44	2.07	0.48
16	3.43	2.83	2.56	1.51	1.61	0.70	1.93	0.86	2.73	1.14	1.72	0.48
17	3.20	2.82	---	---	1.11	-0.16	1.65	0.66	2.28	0.88	2.17	0.53
18	3.05	2.56	---	---	1.48	0.39	1.38	0.56	2.14	0.88	2.04	0.85
19	3.04	2.50	1.87	0.70	---	---	1.39	0.40	2.07	0.87	2.41	1.22
20	3.09	2.48	2.26	1.17	---	---	1.36	0.37	2.00	0.76	1.98	1.51
21	3.13	2.60	2.41	1.54	---	---	1.32	0.32	1.86	0.58	2.21	1.41
22	2.98	2.28	2.51	1.98	1.79	0.36	1.37	0.30	1.83	0.67	1.99	1.15
23	2.73	2.08	2.67	1.94	1.78	0.58	1.24	0.24	1.62	0.63	2.11	1.27
24	2.79	2.39	2.40	1.83	1.81	0.36	1.39	0.19	1.56	0.72	2.42	1.38
25	2.66	2.18	2.34	1.65	1.99	0.32	1.50	0.33	1.44	0.77	2.43	1.12
26	2.64	2.19	2.33	1.50	2.04	0.51	1.45	0.57	1.79	0.70	1.87	0.25
27	3.47	2.34	2.57	1.53	2.47	0.82	1.77	0.56	1.69	0.47	1.96	0.75
28	3.10	2.56	2.76	1.53	1.68	0.64	1.63	0.91	1.28	0.34	2.27	1.04
29	2.78	2.20	2.34	1.48	2.57	0.53	1.61	0.90	1.25	0.21	2.35	0.72
30	3.31	2.26	2.08	0.97	2.13	1.13	1.40	0.74	1.33	0.41	1.93	0.60
31	---	---	2.04	0.64	---	---	1.19	0.65	1.53	0.49	---	---
MONTH	3.47	1.15	---	---	---	---	---	---	2.90	-0.22	3.85	0.25

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. Missing record due to malfunctions of 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, 9.1°C, Jan. 5, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,390 microsiemens/cm, Aug. 11, 12; minimum, 122 microsiemens/cm, Sept. 22.
WATER TEMPERATURE: Maximum, 33.5°C, Aug. 5, 26; minimum, 9.0°C, Jan. 5.
SPECIFIC CONDUCTANCE: Maximum, 9,620 microsiemens/cm, Sept. 7; minimum, 164 microsiemens/cm, Sept. 21, 22.
WATER TEMPERATURE: Maximum, 32.6°C, Aug. 2; minimum, 9.1°C, Jan. 5.

SPECIFIC CONDUCTANCE (UPSTREAM), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	366	350	359	342	317	334	244	230	238	375	371	373
2	383	361	372	333	318	324	231	225	226	370	357	363
3	393	378	386	335	325	330	252	226	243	358	348	353
4	398	389	392	340	327	332	263	251	259	349	342	345
5	402	394	396	344	333	338	273	260	267	343	332	339
6	398	390	393	353	336	342	279	271	276	332	323	327
7	401	392	396	350	336	340	283	279	281	325	316	321
8	403	356	391	345	336	341	286	280	283	318	315	316
9	359	331	343	347	341	343	289	286	288	319	315	317
10	354	341	347	346	341	343	292	289	290	319	316	317
11	356	348	352	346	342	343	297	289	292	321	317	319
12	355	343	352	345	341	343	295	289	292	323	319	321
13	355	324	337	385	342	346	290	269	281	324	321	322
14	333	312	320	583	342	369	305	271	294	324	320	322
15	312	280	293	1370	344	588	325	305	315	326	322	324
16	317	277	298	1770	348	824	330	318	325	326	321	324
17	337	315	327	349	346	347	331	325	328	325	321	322
18	350	336	343	348	344	345	348	327	337	326	323	324
19	362	346	354	347	342	344	355	342	350	327	324	325
20	373	357	367	343	340	341	343	334	338	329	326	327
21	381	373	378	341	338	340	367	339	358	329	320	325
22	382	370	378	342	337	339	370	364	367	322	313	317
23	370	354	359	909	338	588	378	369	375	314	309	311
24	362	351	359	664	358	412	380	377	379	314	304	308
25	353	329	340	414	335	352	380	377	379	314	306	309
26	344	334	338	652	335	430	381	377	379	313	308	310
27	349	328	338	364	325	339	385	380	382	311	301	305
28	343	332	337	325	284	310	385	380	383	307	299	302
29	342	332	336	285	259	273	383	377	379	303	298	299
30	342	331	337	260	215	233	380	377	378	312	292	299
31	343	330	335	---	---	---	379	374	376	301	291	293
MONTH	403	277	353	1770	215	372	385	225	321	375	291	322

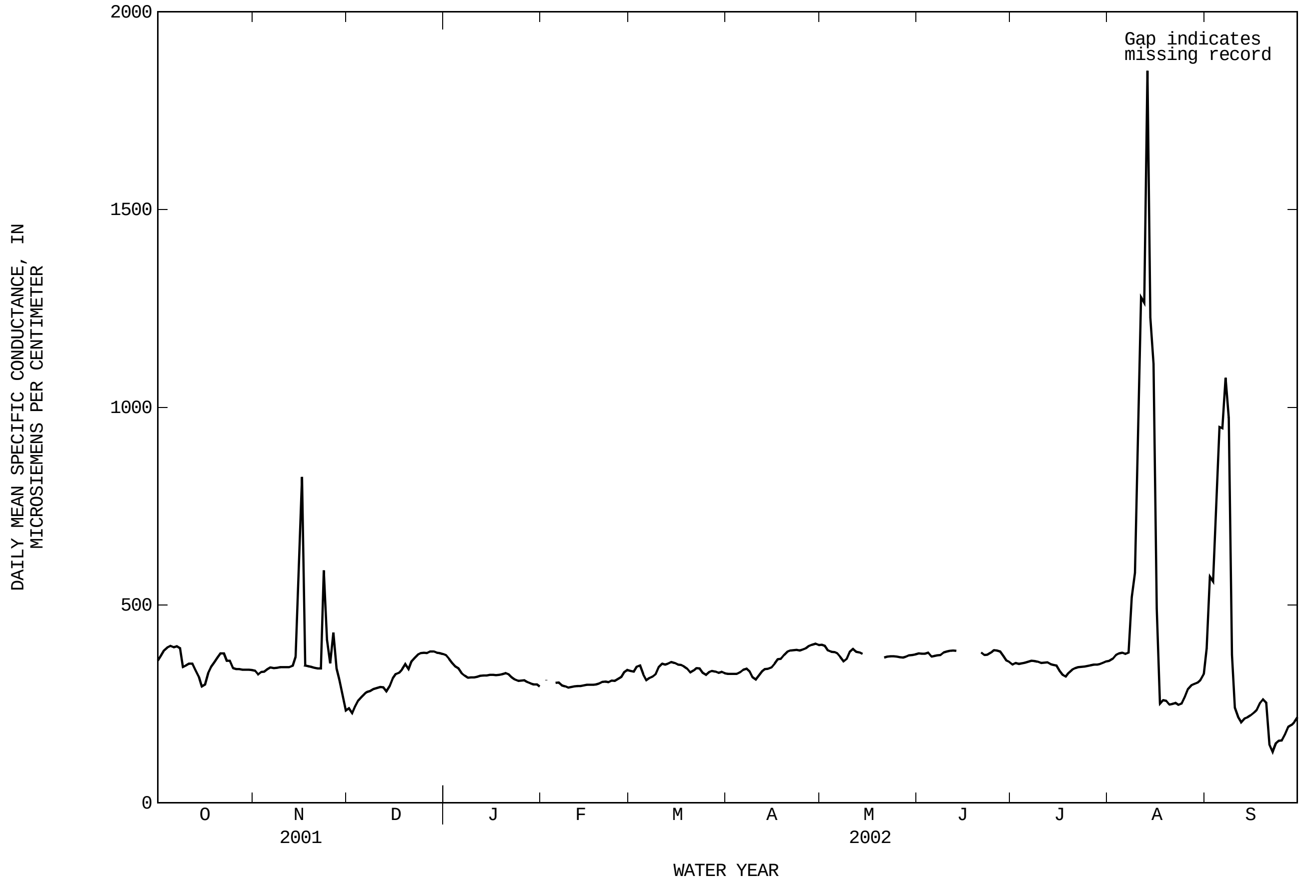
08067252 Trinity River at Wallisville, TX--Continued

SPECIFIC CONDUCTANCE (UPSTREAM), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	340	329	333	327	324	326	401	398	399
2	312	309	310	334	329	332	328	326	326	401	392	397
3	---	---	---	360	321	344	327	325	326	393	380	385
4	---	---	---	355	339	347	327	325	326	385	379	382
5	307	302	304	339	312	325	334	327	330	382	379	381
6	313	302	304	318	304	310	339	334	336	381	373	378
7	302	294	297	321	311	315	340	338	339	375	360	368
8	297	292	294	325	314	319	339	328	332	361	354	358
9	292	290	291	335	320	325	329	310	317	372	357	364
10	294	292	293	354	335	344	314	308	311	390	372	382
11	295	294	294	374	344	352	328	314	322	393	383	389
12	297	294	295	377	340	349	336	328	332	385	379	382
13	296	295	296	359	347	352	340	336	338	382	377	380
14	299	296	297	368	350	356	340	337	339	380	372	376
15	299	297	298	370	348	353	345	339	342	---	---	---
16	300	297	298	360	344	349	359	345	352	---	---	---
17	299	298	299	352	346	349	366	359	363	---	---	---
18	302	298	299	347	342	345	370	361	364	---	---	---
19	305	300	302	344	336	339	380	369	374	---	---	---
20	308	303	305	341	322	329	385	379	382	---	---	---
21	308	300	307	342	328	334	387	384	385	369	365	367
22	308	300	305	345	338	340	387	385	386	371	368	370
23	313	306	309	344	334	340	387	385	386	372	369	371
24	312	306	308	336	324	328	387	383	385	372	369	371
25	318	310	313	331	316	324	389	386	387	372	367	370
26	332	313	318	340	322	330	395	388	391	370	366	368
27	335	324	330	336	331	334	398	395	396	368	366	367
28	338	333	335	333	328	331	403	398	399	373	366	370
29	---	---	---	332	324	328	403	400	402	375	371	373
30	---	---	---	333	328	331	400	398	399	377	371	374
31	---	---	---	330	326	328	---	---	---	378	373	375
MONTH	---	---	---	377	304	336	403	308	356	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	381	375	377	357	344	350	365	356	359	595	322	390
2	381	372	377	359	349	354	368	360	364	1080	327	572
3	380	374	377	352	349	351	379	367	374	1150	338	560
4	382	376	379	354	351	352	383	373	377	1100	363	793
5	381	366	370	357	352	355	389	375	379	991	919	950
6	378	366	371	359	355	357	381	373	376	998	922	947
7	380	368	373	361	357	359	385	376	380	1160	998	1070
8	380	371	374	362	354	358	876	376	520	1080	720	974
9	385	375	380	359	355	357	996	393	581	720	241	374
10	388	381	383	356	351	354	2090	392	976	244	238	240
11	390	381	384	356	352	354	2390	532	1280	242	198	217
12	394	382	385	357	353	355	2390	769	1260	211	198	204
13	388	381	384	356	347	351	2160	1540	1850	226	208	212
14	---	---	---	350	346	348	1540	888	1230	223	211	216
15	---	---	---	350	341	347	1250	793	1110	229	210	221
16	---	---	---	341	327	333	798	262	491	232	223	227
17	---	---	---	333	317	323	269	224	250	243	232	235
18	---	---	---	324	313	319	274	239	259	261	243	252
19	---	---	---	335	323	329	265	246	258	269	257	262
20	---	---	---	340	334	336	252	244	249	287	173	253
21	383	376	380	343	339	340	253	243	250	173	125	148
22	376	371	374	344	341	343	259	242	252	144	122	129
23	377	372	375	345	342	344	255	241	247	154	144	150
24	382	376	379	347	343	345	260	246	251	162	153	157
25	398	381	386	348	345	346	274	251	267	163	150	157
26	394	381	385	349	346	348	297	270	288	189	158	173
27	406	378	382	351	347	349	301	291	297	196	186	191
28	378	361	372	352	348	350	306	292	300	203	189	196
29	368	356	359	352	349	351	310	299	303	209	201	204
30	359	353	356	361	351	354	318	306	310	220	209	216
31	---	---	---	361	354	357	354	318	325	---	---	---
MONTH	---	---	---	362	313	347	2390	224	517	1160	122	363

08067252 Trinity River at Wallisville, TX--Continued



WATER TEMPERATURE (UPSTREAM), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

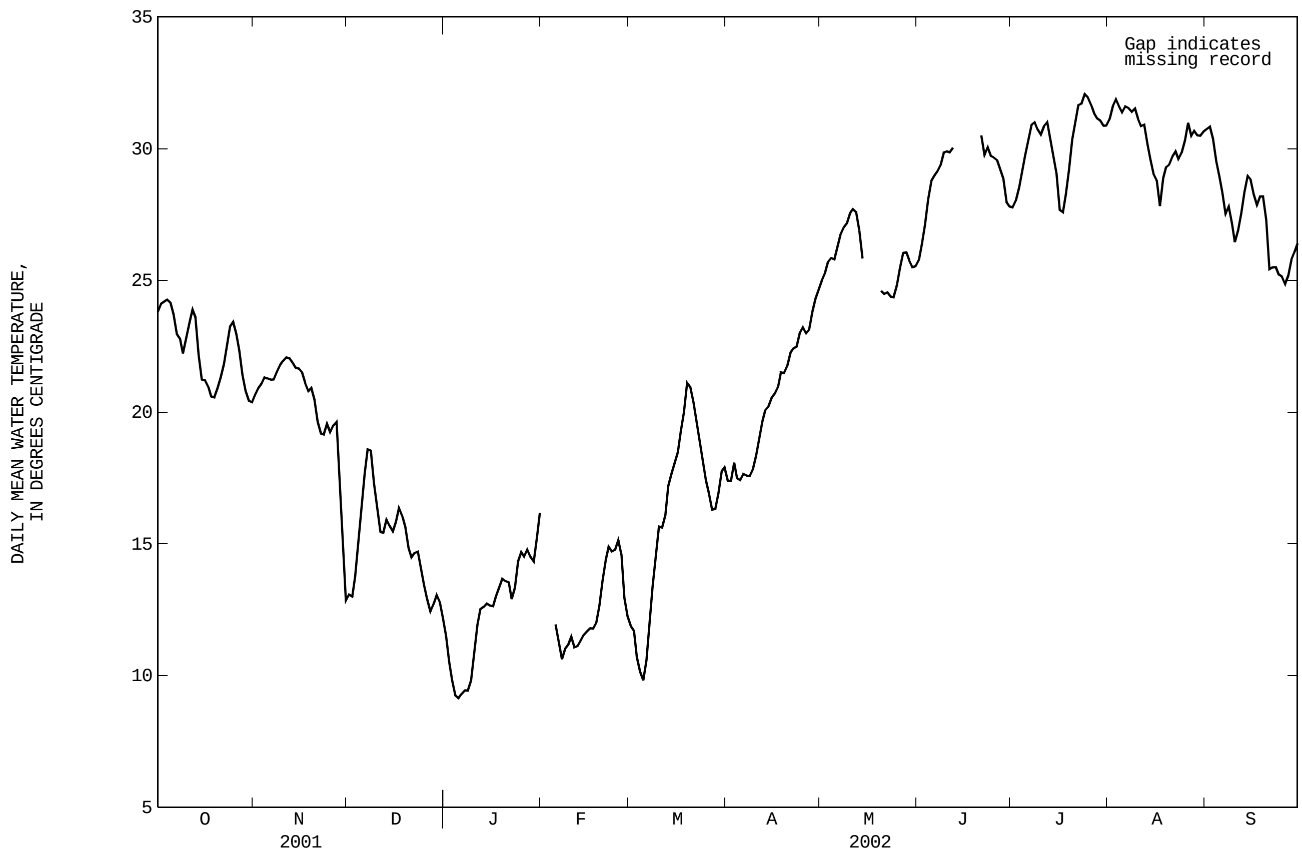
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.6	23.3	23.8	21.1	20.2	20.6	13.2	12.8	13.1	11.9	11.1	11.5
2	25.3	23.5	24.1	21.1	20.7	20.9	13.2	12.9	13.0	10.8	10.2	10.5
3	25.0	23.7	24.2	21.3	20.7	21.1	14.4	13.0	13.8	10.2	9.5	9.8
4	24.4	24.2	24.3	21.7	20.8	21.3	15.7	14.4	15.0	9.5	9.1	9.2
5	24.4	24.0	24.1	21.7	20.8	21.3	17.1	15.7	16.3	9.2	9.0	9.1
6	24.0	23.2	23.7	21.5	20.9	21.2	18.3	17.1	17.7	9.6	9.1	9.3
7	23.3	22.6	23.0	21.6	20.8	21.2	18.9	18.3	18.6	9.6	9.2	9.4
8	23.2	22.1	22.8	23.1	21.0	21.5	18.9	17.9	18.5	9.6	9.2	9.4
9	22.6	22.0	22.2	22.1	21.4	21.8	17.9	16.7	17.3	10.3	9.4	9.8
10	23.7	22.4	22.8	22.4	21.5	21.9	16.7	15.9	16.4	11.6	10.3	10.9
11	23.6	23.2	23.4	22.6	21.7	22.1	15.9	15.2	15.4	12.2	11.6	11.9
12	24.4	23.5	23.9	22.2	21.8	22.0	15.5	15.4	15.4	12.8	12.2	12.5
13	24.4	23.0	23.6	22.1	21.7	21.9	16.6	15.3	15.9	12.8	12.4	12.6
14	23.0	21.4	22.2	21.9	21.6	21.7	16.1	15.5	15.7	12.9	12.6	12.7
15	21.6	20.8	21.2	21.8	21.6	21.7	15.6	15.4	15.5	12.8	12.3	12.7
16	21.5	20.9	21.2	21.8	21.3	21.5	16.2	15.5	15.8	13.0	12.3	12.6
17	21.3	20.8	21.0	21.4	20.9	21.1	16.6	16.2	16.4	13.3	12.8	13.0
18	20.8	20.3	20.6	21.0	20.6	20.8	16.3	15.9	16.1	13.6	13.1	13.3
19	20.8	20.3	20.6	21.8	20.6	20.9	15.9	15.2	15.6	13.9	13.4	13.7
20	21.3	20.6	20.9	21.2	20.0	20.5	15.2	14.5	14.8	13.8	13.4	13.6
21	21.6	21.1	21.3	20.1	19.2	19.6	14.7	14.3	14.5	13.7	13.2	13.5
22	22.0	21.5	21.8	19.7	18.9	19.2	14.9	14.4	14.6	13.2	12.7	12.9
23	23.0	22.0	22.5	19.8	18.7	19.2	14.9	14.4	14.7	13.8	12.9	13.3
24	23.6	22.9	23.2	19.9	19.2	19.6	14.4	13.7	14.0	14.6	13.8	14.3
25	23.7	23.2	23.4	19.9	18.9	19.2	13.7	13.2	13.5	15.5	14.0	14.7
26	23.2	22.5	22.9	20.0	19.2	19.5	13.2	12.6	12.9	14.9	14.2	14.5
27	22.7	21.8	22.3	20.2	18.7	19.6	12.6	12.3	12.4	15.4	14.2	14.8
28	21.8	21.0	21.4	18.7	16.8	18.0	13.0	12.4	12.7	15.0	14.2	14.5
29	21.1	20.5	20.8	16.8	13.5	15.5	13.3	12.9	13.1	14.7	14.1	14.3
30	20.6	20.2	20.4	13.5	12.6	12.8	13.1	12.5	12.8	15.7	14.7	15.3
31	20.6	20.0	20.4	---	---	---	12.5	11.9	12.2	16.5	15.7	16.2
MONTH	25.3	20.0	22.4	23.1	12.6	20.3	18.9	11.9	15.0	16.5	9.0	12.4

08067252 Trinity River at Wallisville, TX--Continued

WATER TEMPERATURE (UPSTREAM), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	12.0	11.8	11.9	17.8	17.1	17.4	25.5	24.6	25.0
2	---	14.2	---	11.9	11.2	11.7	18.0	16.8	17.4	25.6	24.9	25.3
3	---	---	---	11.2	10.4	10.7	18.4	17.7	18.1	26.1	25.4	25.7
4	---	12.3	---	10.7	9.9	10.1	17.7	17.1	17.5	26.0	25.6	25.8
5	12.3	11.6	11.9	10.0	9.4	9.8	17.8	17.1	17.4	26.3	25.4	25.8
6	11.6	11.0	11.3	11.3	10.0	10.6	18.0	17.4	17.6	26.6	25.9	26.2
7	11.0	10.3	10.6	12.9	11.1	11.9	17.8	17.4	17.6	27.2	26.4	26.7
8	11.3	10.8	11.0	14.3	12.7	13.4	17.7	17.4	17.6	27.3	26.7	27.0
9	11.5	10.8	11.1	15.0	13.7	14.4	18.2	17.5	17.8	27.5	26.8	27.1
10	11.7	11.2	11.5	16.5	15.0	15.7	18.7	18.0	18.3	27.9	27.2	27.5
11	11.3	10.9	11.1	15.9	15.4	15.6	19.5	18.6	19.0	28.0	27.5	27.7
12	11.4	10.9	11.1	16.8	15.3	16.1	20.1	19.3	19.6	27.8	27.4	27.6
13	11.6	11.0	11.3	17.9	16.5	17.2	20.4	19.8	20.1	27.6	26.4	26.9
14	11.8	11.3	11.5	17.9	17.4	17.6	20.6	19.9	20.2	26.4	25.4	25.8
15	11.9	11.4	11.7	18.8	17.7	18.1	20.7	20.4	20.5	---	---	---
16	12.0	11.6	11.8	19.2	18.1	18.5	20.8	20.6	20.7	---	---	---
17	12.1	11.5	11.8	20.2	18.7	19.3	21.4	20.6	20.9	---	---	---
18	12.2	11.8	12.0	20.8	19.4	20.0	21.9	21.2	21.5	---	---	---
19	13.2	12.2	12.7	21.8	20.6	21.1	21.8	21.2	21.5	---	---	---
20	14.2	13.2	13.6	21.4	20.4	21.0	22.1	21.4	21.8	24.9	24.1	24.6
21	15.0	14.0	14.4	21.0	19.8	20.4	22.6	21.9	22.2	24.8	24.1	24.5
22	15.2	14.7	14.9	20.4	19.1	19.7	22.7	22.1	22.4	24.8	24.3	24.5
23	15.1	14.4	14.7	19.2	18.7	18.9	22.9	22.1	22.5	24.6	24.1	24.4
24	15.1	14.3	14.8	18.7	17.5	18.1	23.5	22.6	23.0	24.6	24.1	24.4
25	15.5	14.7	15.1	17.5	17.2	17.4	23.5	23.0	23.2	25.4	24.4	24.8
26	15.4	13.6	14.6	17.3	16.6	16.9	23.3	22.8	23.0	26.0	25.0	25.5
27	13.6	12.6	12.9	16.6	16.0	16.3	23.6	22.6	23.1	26.4	25.7	26.0
28	12.6	12.0	12.2	16.7	16.0	16.3	24.3	23.2	23.8	26.3	25.9	26.1
29	---	---	---	17.4	16.4	16.9	24.7	24.0	24.3	26.0	25.6	25.8
30	---	---	---	18.1	17.4	17.7	25.0	24.4	24.6	25.8	25.2	25.5
31	---	---	---	18.0	17.8	17.9	---	---	---	25.8	25.3	25.5
MONTH	---	---	---	21.8	9.4	16.2	25.0	16.8	20.5	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.3	25.4	25.8	28.1	27.5	27.8	32.2	30.5	31.1	31.5	30.3	30.7
2	26.9	25.9	26.4	28.7	27.7	28.0	32.6	30.9	31.6	32.1	30.4	30.8
3	27.9	26.6	27.1	29.5	28.1	28.5	32.7	31.3	31.9	31.1	29.9	30.4
4	28.6	27.4	28.1	30.0	28.6	29.1	32.9	31.2	31.6	30.0	29.1	29.5
5	29.2	28.4	28.8	30.2	29.3	29.8	33.5	30.6	31.4	29.2	28.6	28.9
6	29.3	28.7	29.0	30.8	30.0	30.3	32.6	30.9	31.6	29.0	27.7	28.3
7	29.5	29.0	29.1	32.0	30.3	30.9	32.5	31.1	31.5	27.7	27.3	27.5
8	30.2	29.0	29.4	32.2	30.4	31.0	31.9	30.7	31.4	28.3	27.4	27.8
9	30.5	29.3	29.8	31.4	30.5	30.7	31.8	31.2	31.5	28.2	26.1	27.2
10	30.6	29.6	29.9	31.3	30.2	30.5	31.8	30.2	31.2	26.9	26.1	26.4
11	30.1	29.6	29.9	32.3	30.4	30.9	31.4	30.3	30.9	27.3	26.5	26.9
12	30.6	29.7	30.0	32.1	30.5	31.0	31.2	30.3	30.9	27.9	27.3	27.5
13	30.4	---	---	30.8	30.0	30.4	30.8	29.9	30.2	29.3	27.9	28.4
14	---	---	---	30.3	29.5	29.8	29.9	29.5	29.6	30.7	28.3	29.0
15	---	---	---	29.9	28.0	29.1	29.5	28.6	29.1	29.0	28.6	28.8
16	---	---	---	28.0	27.4	27.7	29.4	27.8	28.8	28.6	27.9	28.3
17	---	---	---	28.6	27.0	27.6	28.3	27.5	27.8	28.5	27.6	27.9
18	---	---	---	29.1	27.7	28.3	30.0	28.2	28.9	29.2	27.8	28.2
19	---	---	---	29.9	28.5	29.2	30.7	29.0	29.3	28.6	27.9	28.2
20	---	---	---	30.8	29.8	30.4	30.6	29.0	29.4	28.1	25.6	27.3
21	31.6	29.9	30.5	31.6	30.5	31.0	30.5	29.5	29.7	26.0	24.9	25.4
22	30.8	29.4	29.7	32.7	31.2	31.6	30.5	29.7	29.9	25.8	25.2	25.5
23	30.8	29.5	30.0	32.1	31.4	31.7	30.8	29.4	29.6	25.6	25.3	25.5
24	29.9	29.5	29.7	33.2	31.6	32.1	30.8	29.5	29.9	25.5	25.0	25.2
25	29.9	29.4	29.7	32.7	31.8	31.9	31.8	29.9	30.3	25.3	25.0	25.2
26	29.8	29.4	29.6	32.1	31.4	31.7	33.5	30.3	31.0	25.1	24.7	24.9
27	29.9	29.1	29.2	31.7	31.0	31.4	31.2	30.2	30.5	25.9	24.6	25.2
28	29.2	28.2	28.8	31.8	30.8	31.1	32.7	29.9	30.7	26.4	25.4	25.8
29	28.2	27.8	28.0	31.8	30.7	31.1	31.9	30.0	30.5	26.5	25.7	26.1
30	28.2	27.6	27.8	31.2	30.6	30.9	31.6	30.0	30.5	28.0	26.0	26.4
31	---	---	---	31.8	30.5	30.9	31.6	30.2	30.6	---	---	---
MONTH	---	---	---	33.2	27.0	30.2	33.5	27.5	30.4	32.1	24.6	27.4



SPECIFIC CONDUCTANCE (DOWNSTEAM), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	317	306	312	327	322	325	234	221	229	397	392	394
2	327	317	322	329	321	325	221	215	217	390	377	384
3	336	327	331	330	325	328	241	216	232	378	373	376
4	340	331	335	335	328	331	250	239	247	373	369	371
5	342	336	340	340	333	336	261	248	255	369	359	364
6	342	338	340	354	337	342	269	260	265	359	350	355
7	343	339	341	354	338	343	272	267	270	350	342	346
8	348	315	340	344	337	340	273	268	270	342	339	340
9	315	299	305	343	339	341	277	272	275	344	339	341
10	314	305	309	342	338	340	280	276	278	346	342	344
11	316	309	313	340	337	338	280	275	277	346	342	344
12	312	306	308	339	336	337	279	271	274	344	342	343
13	311	258	280	400	335	343	272	181	248	345	343	344
14	279	266	274	592	335	369	227	176	204	346	345	345
15	292	265	277	1360	335	631	241	215	227	347	336	340
16	320	278	298	3760	343	1650	266	236	253	339	335	337
17	342	319	330	4010	1880	3240	271	266	269	337	334	335
18	361	342	350	3010	2360	2690	273	265	271	337	333	335
19	403	361	380	2750	337	1610	265	255	259	338	328	334
20	388	382	384	339	332	335	260	254	257	331	327	330
21	393	388	390	334	331	332	299	260	285	334	322	326
22	395	381	392	547	331	386	321	299	309	325	312	317
23	381	376	378	1780	522	878	340	321	330	317	309	312
24	377	364	374	2600	408	972	354	340	347	314	307	310
25	364	345	358	408	327	344	377	354	365	314	308	310
26	348	341	343	1280	328	742	392	373	384	317	312	313
27	346	339	343	1680	318	747	401	392	397	322	314	315
28	342	337	340	318	277	303	400	395	398	324	297	304
29	340	329	335	279	250	265	399	395	397	299	295	297
30	337	329	331	250	208	224	399	397	398	301	291	296
31	331	326	328	---	---	---	400	397	397	299	291	293
MONTH	403	258	335	4010	208	670	401	176	293	397	291	335

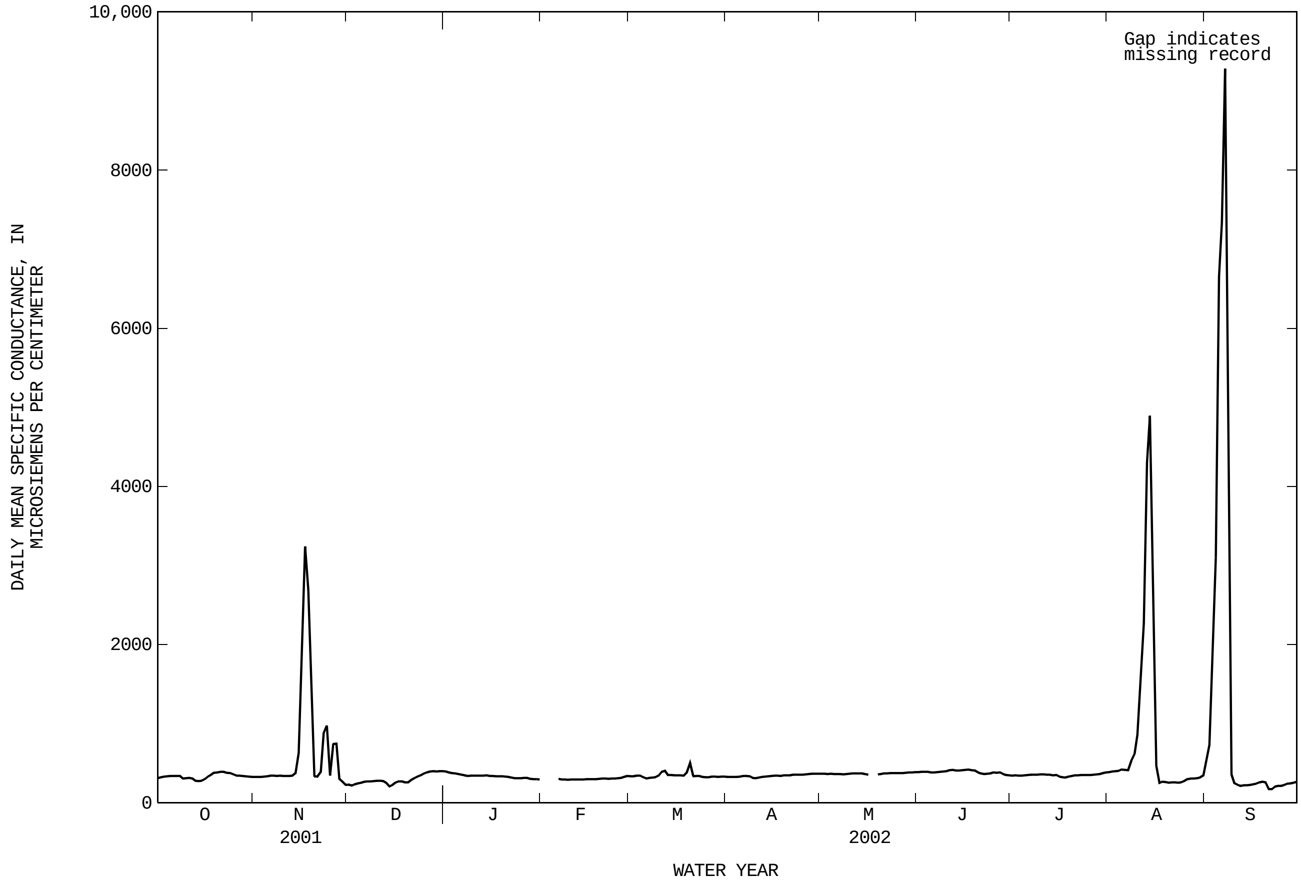
08067252 Trinity River at Wallisville, TX--Continued

SPECIFIC CONDUCTANCE (DOWNSTREAM), in US/CM @ 25C, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	339	329	334	329	325	326	370	368	369
2	---	---	---	336	329	333	330	327	328	370	365	367
3	---	---	---	354	333	342	329	327	327	366	363	364
4	---	---	---	350	331	341	329	327	328	368	365	366
5	---	---	---	332	307	321	336	328	332	366	362	364
6	304	299	301	310	302	305	342	336	339	367	360	362
7	299	292	294	316	308	312	342	339	341	369	360	362
8	296	292	294	321	313	317	340	329	333	362	358	360
9	292	290	291	331	319	324	329	308	316	378	360	362
10	293	291	292	366	331	342	312	307	309	370	363	366
11	295	293	294	827	340	389	322	312	318	372	366	369
12	296	294	295	827	340	402	328	322	325	373	367	370
13	296	295	295	352	347	349	331	328	330	373	371	372
14	297	295	296	352	348	350	335	331	333	376	369	372
15	299	297	298	352	346	349	339	335	337	369	360	364
16	299	298	298	351	344	347	344	339	342	360	354	356
17	298	297	298	351	346	348	345	340	343	---	---	---
18	301	297	299	348	342	344	342	336	338	---	---	---
19	304	300	301	4470	335	382	348	342	345	361	355	358
20	308	304	306	5360	324	501	352	346	348	368	356	363
21	309	299	307	339	328	334	351	346	348	375	368	372
22	305	298	302	341	338	339	367	349	353	375	370	372
23	308	302	305	343	330	338	371	351	355	375	372	374
24	306	303	305	330	319	325	359	350	353	377	373	375
25	314	306	310	323	319	320	357	354	356	377	372	375
26	319	311	314	328	319	323	360	355	357	375	372	373
27	336	319	327	330	328	329	366	360	362	376	372	375
28	340	333	337	332	327	330	367	365	366	402	375	379
29	---	---	---	331	323	328	369	367	368	386	379	382
30	---	---	---	332	327	331	369	367	368	386	381	384
31	---	---	---	330	327	328	---	---	---	390	384	386
MONTH	---	---	---	5360	302	344	371	307	341	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	392	385	387	351	333	341	393	385	387	1010	325	522
2	398	385	390	354	339	346	399	391	394	1640	331	730
3	409	387	391	345	340	343	401	398	400	3730	335	1700
4	396	389	392	346	342	344	407	396	402	7630	868	3100
5	394	373	384	349	343	347	452	403	418	7790	5830	6650
6	389	376	384	351	347	349	420	410	415	8540	6580	7340
7	389	384	386	354	351	353	430	367	413	9620	8540	9280
8	394	387	391	355	352	354	750	419	530	9590	666	5660
9	402	391	396	361	353	355	885	449	612	666	243	356
10	403	389	398	361	351	357	1770	492	860	253	242	247
11	415	402	411	362	353	359	2560	1050	1670	250	203	223
12	419	407	416	360	352	355	2910	1680	2270	220	204	212
13	411	403	407	363	346	353	5160	2910	4300	234	216	220
14	408	404	406	355	345	348	5250	4160	4890	230	217	223
15	421	407	412	358	340	349	5660	783	3430	237	211	227
16	422	412	416	341	326	332	787	264	468	239	228	233
17	424	414	419	333	315	322	265	221	250	251	237	242
18	416	406	411	326	313	319	282	247	267	269	251	259
19	408	403	407	339	325	332	268	246	262	273	262	267
20	404	375	385	343	338	340	260	245	254	292	181	256
21	376	363	372	347	341	345	260	245	256	181	164	171
22	367	362	364	350	346	347	268	244	259	193	164	174
23	368	363	366	352	348	350	264	243	253	210	193	203
24	374	368	371	351	348	349	269	251	258	218	207	212
25	422	371	382	354	348	351	281	258	275	218	205	212
26	402	369	378	354	350	352	305	274	297	238	211	224
27	489	368	382	359	350	354	309	298	304	248	238	242
28	370	347	361	360	355	357	313	297	305	253	240	247
29	382	347	353	371	357	362	317	303	309	260	250	253
30	351	342	347	380	370	376	325	312	316	273	260	266
31	---	---	---	385	379	382	436	319	344	---	---	---
MONTH	489	342	389	385	313	349	5660	221	841	9620	164	1340

08067252 Trinity River at Wallisville, TX--Continued



WATER TEMPERATURE (DOWNSTREAM), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.4	23.4	23.8	21.2	20.3	20.7	13.4	12.9	13.2	12.0	11.3	11.6
2	24.8	23.6	24.1	21.2	20.8	21.0	13.3	13.0	13.1	10.9	10.3	10.6
3	24.7	23.8	24.2	21.4	20.8	21.1	14.5	13.1	13.9	10.3	9.6	9.9
4	24.5	24.2	24.3	21.8	20.9	21.4	15.8	14.5	15.1	9.6	9.2	9.4
5	24.4	24.1	24.2	21.7	20.9	21.3	17.2	15.8	16.4	9.4	9.1	9.2
6	24.1	23.2	23.8	21.5	21.0	21.3	18.4	17.2	17.8	9.7	9.2	9.4
7	23.4	22.7	23.1	21.6	20.9	21.3	19.0	18.4	18.7	9.8	9.4	9.6
8	23.3	22.2	22.9	22.0	21.1	21.5	19.0	18.0	18.6	9.8	9.3	9.6
9	22.6	22.1	22.3	22.3	21.4	21.9	18.0	16.8	17.4	10.4	9.6	9.9
10	23.5	22.5	22.8	22.4	21.5	22.0	16.8	16.0	16.5	11.6	10.4	11.0
11	23.6	23.2	23.4	22.6	21.8	22.1	16.0	15.3	15.5	12.3	11.6	12.0
12	24.5	23.5	23.9	22.3	21.9	22.1	15.6	15.4	15.5	12.9	12.3	12.6
13	24.5	23.1	23.7	22.1	21.8	21.9	16.6	15.4	16.0	12.9	12.5	12.7
14	23.1	21.5	22.2	21.9	21.6	21.8	16.2	15.6	15.8	13.0	12.7	12.8
15	21.7	20.9	21.3	21.9	21.6	21.7	15.7	15.5	15.6	12.9	12.5	12.8
16	21.5	21.0	21.3	21.8	21.4	21.6	16.3	15.5	15.9	13.1	12.4	12.8
17	21.3	20.8	21.0	21.6	21.2	21.4	16.7	16.3	16.4	13.4	12.9	13.1
18	20.9	20.4	20.7	21.6	21.0	21.3	16.4	16.0	16.2	13.7	13.2	13.4
19	20.9	20.3	20.6	21.5	20.6	21.2	16.0	15.3	15.7	14.0	13.5	13.8
20	21.3	20.7	21.0	21.2	20.1	20.5	15.3	14.6	14.9	14.0	13.5	13.7
21	21.7	21.1	21.4	20.1	19.3	19.7	14.8	14.4	14.6	13.8	13.3	13.6
22	22.1	21.5	21.9	19.5	19.0	19.2	14.9	14.5	14.7	13.3	12.8	13.0
23	23.0	22.1	22.6	19.5	18.4	19.2	14.9	14.5	14.8	13.9	13.0	13.4
24	23.7	23.0	23.3	19.9	19.2	19.5	14.5	13.8	14.1	14.8	13.9	14.4
25	23.7	23.2	23.5	19.7	19.0	19.3	13.8	13.3	13.6	14.5	14.2	14.3
26	23.3	22.6	23.0	20.0	19.2	19.7	13.3	12.7	13.0	14.5	14.0	14.1
27	22.8	21.9	22.4	20.2	18.8	19.7	12.7	12.4	12.5	14.7	14.2	14.4
28	21.9	21.1	21.5	18.8	16.9	18.1	13.1	12.5	12.8	14.8	14.3	14.5
29	21.2	20.6	20.9	16.9	13.6	15.6	13.4	13.0	13.2	14.8	14.2	14.4
30	20.7	20.3	20.5	13.6	12.8	12.9	13.2	12.6	12.9	15.8	14.8	15.3
31	20.7	20.1	20.4	---	---	---	12.6	12.0	12.3	16.6	15.8	16.2
MONTH	24.8	20.1	22.5	22.6	12.8	20.4	19.0	12.0	15.1	16.6	9.1	12.5

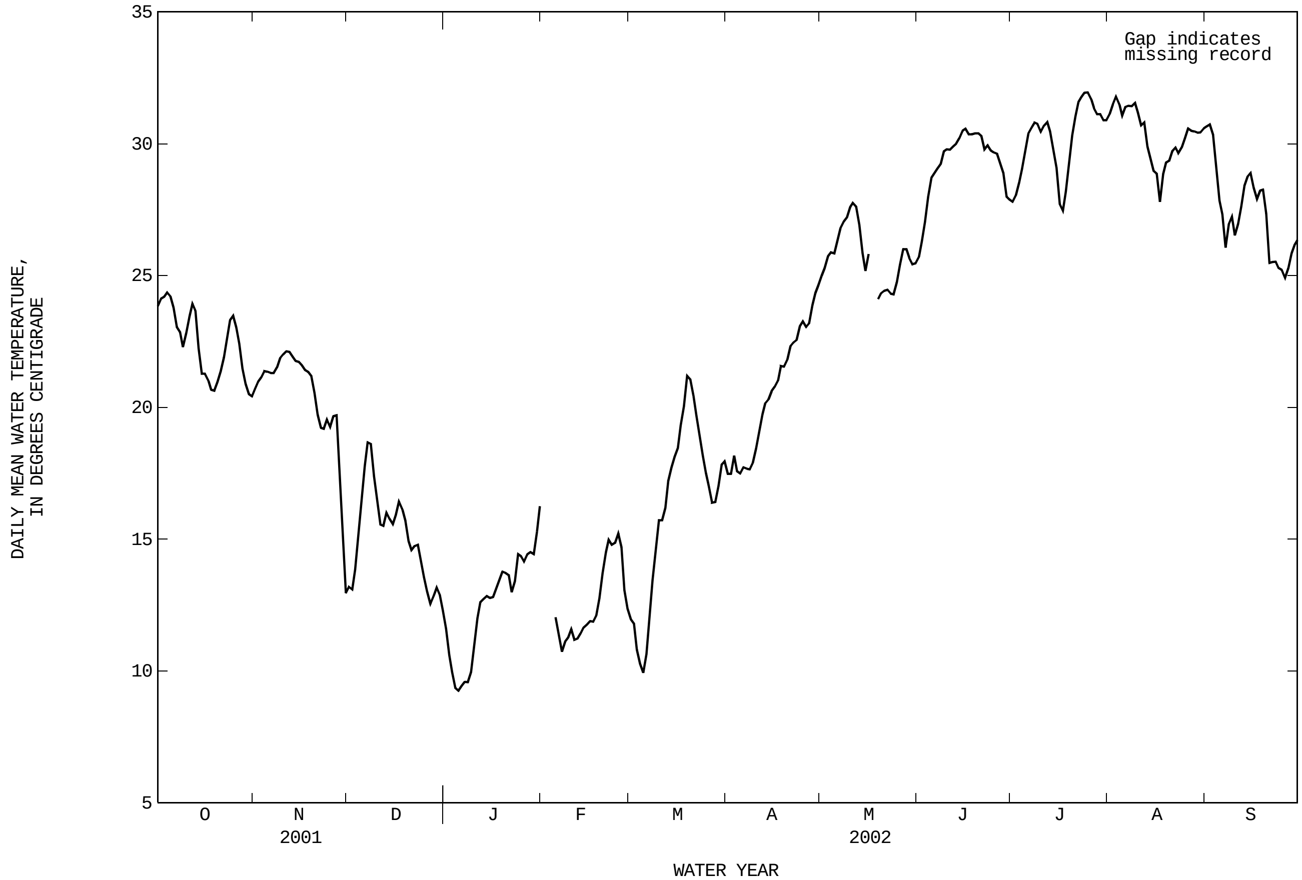
08067252 Trinity River at Wallisville, TX--Continued

WATER TEMPERATURE (DOWNSTREAM), in (DEGREES C), WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	12.1	11.9	12.0	17.8	17.2	17.5	25.5	24.6	25.0
2	---	14.3	---	12.0	11.3	11.8	18.1	16.9	17.5	25.7	24.9	25.3
3	---	---	---	11.3	10.6	10.8	18.5	17.8	18.2	26.1	25.4	25.7
4	---	12.4	---	10.8	10.0	10.3	17.8	17.2	17.6	26.0	25.6	25.9
5	12.4	11.7	12.0	10.2	9.6	9.9	17.9	17.1	17.5	26.3	25.4	25.8
6	11.7	11.1	11.4	11.4	10.1	10.6	18.0	17.5	17.7	26.7	25.9	26.3
7	11.1	10.4	10.7	13.2	11.2	12.1	17.8	17.5	17.7	27.2	26.5	26.8
8	11.4	10.9	11.1	14.3	12.8	13.4	17.8	17.5	17.6	27.3	26.8	27.0
9	11.6	10.9	11.2	15.0	13.8	14.5	18.2	17.6	17.9	27.6	26.8	27.2
10	11.8	11.3	11.6	16.7	15.0	15.7	18.8	18.1	18.4	27.9	27.3	27.6
11	11.4	11.0	11.2	16.2	15.4	15.7	19.6	18.7	19.1	28.1	27.6	27.8
12	11.5	11.0	11.2	16.9	15.4	16.2	20.2	19.4	19.7	27.8	27.4	27.6
13	11.7	11.1	11.4	17.9	16.6	17.2	20.5	19.9	20.1	27.6	26.4	26.9
14	11.9	11.4	11.6	18.0	17.5	17.7	20.6	20.0	20.3	26.4	25.4	25.9
15	12.0	11.5	11.8	18.6	17.7	18.1	20.8	20.4	20.6	25.4	24.9	25.2
16	12.1	11.7	11.9	18.8	18.2	18.4	20.9	20.7	20.8	26.3	25.3	25.8
17	12.2	11.6	11.9	19.9	18.7	19.3	21.4	20.7	21.0	---	---	---
18	12.3	11.9	12.1	20.8	19.4	20.0	22.0	21.2	21.6	---	---	---
19	13.3	12.3	12.8	22.2	20.6	21.2	21.9	21.3	21.5	24.4	23.8	24.1
20	14.2	13.3	13.7	22.2	20.5	21.1	22.2	21.4	21.8	24.8	23.9	24.3
21	15.0	14.1	14.5	20.9	19.9	20.4	22.6	21.9	22.3	24.8	24.0	24.4
22	15.2	14.8	15.0	20.1	19.2	19.7	22.8	22.2	22.5	24.8	24.2	24.5
23	15.2	14.5	14.8	19.2	18.8	19.0	22.9	22.2	22.6	24.5	24.1	24.3
24	15.1	14.4	14.8	18.8	17.6	18.2	23.5	22.7	23.1	24.5	24.0	24.3
25	15.5	14.8	15.2	17.6	17.3	17.5	23.5	23.1	23.3	25.3	24.3	24.7
26	15.4	13.7	14.7	17.4	16.7	17.0	23.4	22.8	23.1	26.0	24.9	25.4
27	13.7	12.7	13.1	16.7	16.1	16.4	23.6	22.7	23.2	26.4	25.7	26.0
28	12.7	12.1	12.4	16.7	16.0	16.4	24.4	23.3	23.8	26.2	25.8	26.0
29	---	---	---	17.5	16.5	17.0	24.7	24.1	24.4	25.9	25.5	25.7
30	---	---	---	18.2	17.5	17.8	25.0	24.4	24.7	25.8	25.1	25.4
31	---	---	---	18.1	17.8	18.0	---	---	---	25.8	25.2	25.5
MONTH	---	---	---	22.2	9.6	16.2	25.0	16.9	20.6	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.1	25.3	25.7	28.1	27.6	27.8	32.1	30.5	31.1	31.0	30.4	30.7
2	26.8	25.8	26.3	28.6	27.7	28.0	32.6	31.0	31.5	31.2	30.4	30.7
3	27.8	26.5	27.0	29.2	28.2	28.5	32.4	31.4	31.8	31.2	29.6	30.3
4	28.6	27.3	28.0	29.6	28.6	29.0	32.1	31.2	31.5	29.8	27.6	29.2
5	29.0	28.3	28.7	30.2	29.3	29.7	31.9	30.5	31.1	28.0	27.6	27.8
6	29.1	28.6	28.9	30.8	30.0	30.4	32.1	30.9	31.4	27.7	26.4	27.3
7	29.4	28.9	29.1	31.0	30.3	30.6	32.1	31.2	31.4	26.4	25.9	26.1
8	29.7	28.9	29.2	31.2	30.5	30.8	31.9	30.5	31.4	28.3	25.9	26.9
9	30.1	29.2	29.7	31.0	30.5	30.8	31.9	31.1	31.6	28.3	26.1	27.2
10	30.5	29.4	29.8	30.9	30.2	30.5	31.9	30.1	31.2	26.9	26.1	26.5
11	30.1	29.5	29.8	31.2	30.4	30.7	31.3	29.9	30.7	27.4	26.6	26.9
12	30.5	29.6	29.9	31.7	30.5	30.8	31.6	30.1	30.8	28.0	27.4	27.6
13	31.1	29.5	30.0	30.8	30.0	30.5	30.4	29.5	29.9	28.9	27.9	28.4
14	31.1	29.8	30.2	30.1	29.6	29.8	29.7	29.4	29.5	29.4	28.3	28.8
15	31.1	30.2	30.5	29.9	28.1	29.1	29.4	28.6	29.0	29.1	28.7	28.9
16	31.2	30.1	30.6	28.1	27.4	27.7	29.4	27.8	28.9	28.7	28.0	28.3
17	30.9	30.2	30.4	27.9	27.1	27.5	28.3	27.6	27.8	28.5	27.6	27.9
18	31.3	30.0	30.4	28.7	27.7	28.2	29.5	28.3	28.8	28.9	27.8	28.2
19	31.3	30.1	30.4	29.9	28.6	29.2	30.0	29.1	29.3	28.6	28.0	28.3
20	30.7	30.2	30.4	30.7	29.9	30.3	30.1	29.1	29.4	28.2	25.6	27.3
21	30.9	29.9	30.3	31.5	30.6	31.0	30.3	29.5	29.7	26.0	25.0	25.5
22	30.6	29.4	29.8	32.1	31.2	31.6	30.2	29.6	29.9	25.8	25.3	25.5
23	30.4	29.4	29.9	32.1	31.4	31.8	30.7	29.4	29.6	25.6	25.3	25.5
24	30.0	29.5	29.7	32.4	31.6	31.9	30.7	29.6	29.8	25.5	25.1	25.3
25	29.9	29.4	29.7	32.2	31.8	32.0	30.8	30.0	30.2	25.3	25.1	25.2
26	29.9	29.4	29.6	31.9	31.5	31.7	31.0	30.3	30.6	25.1	24.8	24.9
27	29.9	29.1	29.2	31.6	31.1	31.4	31.0	30.2	30.5	25.9	24.7	25.3
28	29.2	28.3	28.9	31.5	30.9	31.1	31.3	30.0	30.5	26.4	25.4	25.8
29	28.3	27.8	28.0	31.6	30.8	31.1	31.3	30.0	30.4	26.5	25.8	26.1
30	28.2	27.6	27.9	31.1	30.6	30.9	31.0	30.0	30.4	27.1	26.1	26.3
31	---	---	---	31.7	30.5	30.9	31.0	30.2	30.6	---	---	---
MONTH	31.3	25.3	29.3	32.4	27.1	30.2	32.6	27.6	30.3	31.2	24.7	27.3

08067252 Trinity River at Wallisville, TX--Continued



THIS PAGE IS INTENTIONALLY LEFT BLANK.

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 2002

Station name and number	Location	Period of record	Water Year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
Trinity River Basin								
Big Fossil Creek Haltom City, TX 08048800	Lat 32º48’26”, long 97º14’54”, 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^2.	1960-73✞ 1974-84ϕ 1985-2002	04-15-02	12.13	--a/	09-07-62	26.90b/	27,000

✞ Operated as a continuous-record station.

ϕ Operated as an unpublished stage-only station.

a/ Gage Height only, discharge measurement not available.

b/ Peak of record prior to channel rectification and widening in 1964-66. Maximum stage since rectification: 13.76 ft on 05-03-90.

THIS PAGE IS INTENTIONALLY LEFT BLANK.

INDEX

CALENDAR FOR WATER YEAR 2002

2001

OCTOBER

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

NOVEMBER

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

DECEMBER

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

2002

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

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

SEPTEMBER

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

CONVERSION FACTORS

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
Area		
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
Volume		
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
Flow		
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
Mass		
ton (short)	9.072×10^{-1}	megagram or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

$$°F = (1.8 \times °C) + 32$$