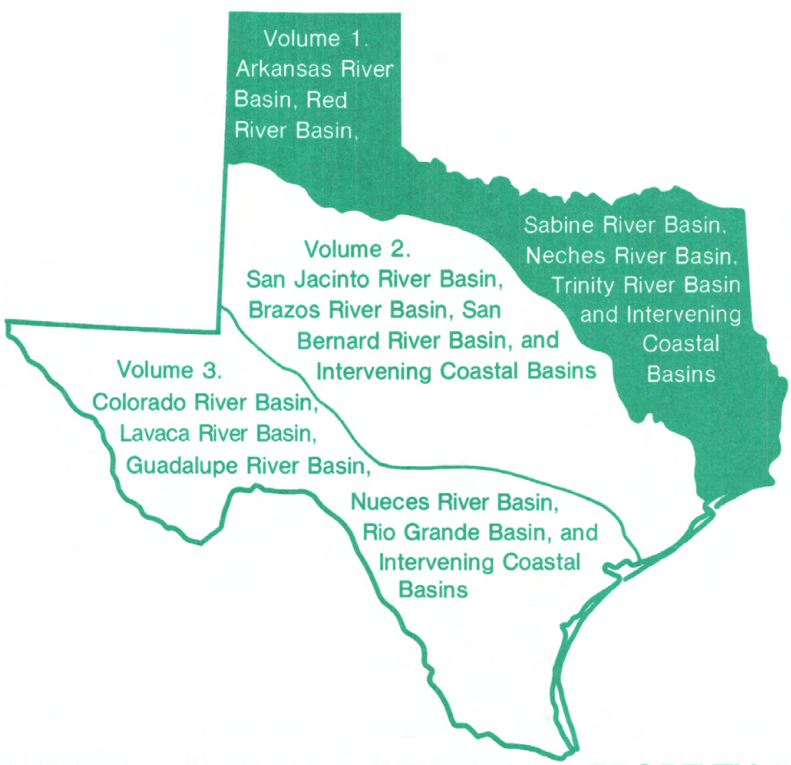
Water Resources Data Texas Water Year 1995

Volume 1. Arkansas River Basin, Red River Basin, Sabine River Basin, Neches River Basin, Trinity River Basin, and Intervening Coastal Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-95-1
Prepared in cooperation with the State of Texas
and with other agencies

CALENDAR FOR WATER YEAR 1995

1994

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1995

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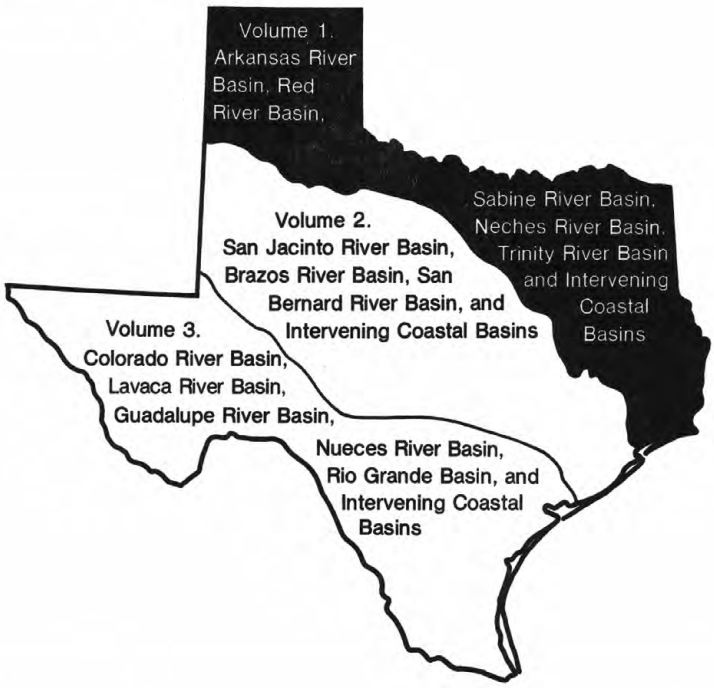
Water Resources Data
Texas
Water Year 1995

Volume 1. Arkansas River Basin, Red River Basin, Sabine River Basin, Neches River Basin, Trinity River Basin, and Intervening Coastal Basins

by S.C. Gandara, W.J. Gibbons, F.L. Andrews, J.C. Fisher, B.A. Hinds, and R.E. Jones



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT TX-95-1
Prepared in cooperation with the State of Texas
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

GEOLOGICAL SURVEY

Gordon P. Eaton, Director

For additional information write to:
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Austin, Texas 78754-3898

1996

PREFACE

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

Volume 1. Arkansas River Basin, Red River Basin, Sabine River Basin, Neches River Basin, Trinity River Basin, and Intervening Coastal Basins

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

Volume 3. Colorado River Basin, Lavaca River Basin, Guadalupe River Basin, Nueces River Basin, Rio Grande Basin, and Intervening Coastal Basins

Volume 4. Ground-Water Data

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

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REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

1. AGENCY USE ONLY *(Leave blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	February 1996	Annual--Oct. 1, 1994 to Sept. 30, 1995

4. TITLE AND SUBTITLE
Water Resources Data--Texas, Water Year 1995, Volume 1
Arkansas River, Red River, Sabine River, Neches River,
Trinity River Basins and Intervening Coastal Basins

5. FUNDING NUMBERS

6. AUTHOR(S)
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7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Texas District
8011 Cameron Road, Bldg. 1
Austin, TX 78754-3898

8. PERFORMING ORGANIZATION REPORT NUMBER
USGS-WDR-TX-95-1

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Geological Survey, Water Resources Division
Texas District
8011 Cameron Road, Bldg. 1
Austin, TX 78754-3898

10. SPONSORING / MONITORING AGENCY REPORT NUMBER
USGS-WDR-TX-95-1

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 1995 water year for Texas are presented in four volumes, and consist of records of stage, discharge, and water quality of streams and canals; stage, contents, and water-quality of lakes and reservoirs; and water levels and water quality of ground-water wells. Volume 1 contains records for water discharge at 112 gaging stations; stage only at 5 gaging stations; stage and contents at 34 lakes and reservoirs; water quality at 67 gaging stations; and data for 7 partial-record and 14 flood-hydrograph partial-record stations. Also included are lists of discontinued surface-water discharge or stage-only stations and discontinued surface-water-quality stations; crest-stage and flood-hydrograph partial-record stations, reconnaissance partial-record stations, and low-flow partial-record stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. Records for a few pertinent stations in the bordering States also are included. 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.

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
559

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	

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

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

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

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 crest-stage partial-record stations. Discontinued project stations with less than 3 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the title page of this report.

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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Punta De Agua Creek near Channing (d)	07227448	3,568	1968-73
Canadian River at Tascosa (d)	07227470	18,536	1969-77
Dixon Creek near Borger (d)	07227920	134	1974-89
Palo Duro Creek near Spearman (d)	07233500	960	1945-79
Tierra Blanca Creek above Buffalo Lake near Umbarger (d)	07295500	1,968	1942-54, 1967-73
Tierra Blanca Creek below Buffalo Lake near Umbarger (d)	07296100	2,075 lml	1967-73
Prairie Dog Town Fork Red River near Canyon (d)	07297500	3,369	1924-26, 1938-49
North Tule Draw at Reservoir near Tulia (d)	07298000	189	1939-40, 1941-73
Tule Creek near Silverton (d)	07298200	1,150	1964-86
Prairie Dog Town Fork Red River near Brice (d)	07298500	6,082	1949-51, 1961-63
Mulberry Creek near Brice (d)	07299000	N/A	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
Jonah Creek at Weir near Estelline (d)	07299512	65.50	1974-82
Jonah Creek below Weir near Estelline (d)	07299514	66.60	1974-76
Salt Creek near Estelline (d)	07299530	142	1974-79
Red River near Quanah (d)	07299570	8,321	1959-82
Salt Fork Red River near Clarendon (d)	07299850	457	1960-64
McClellan Creek near McLean (d)	07301200*	759	1967-80
Quitaque Creek near Quitaque (d)	07307500	293	1946-59
North Pease River near Childress (d)	07307600	1,434	1973-79
Middle Pease River near Padacah (d)	07307750	1,086	1973-79
Middle Pease River below Paducah (d)	07307760	N/A	1980-82
Pease River near Crowell (d)	07308000	3,037	1924-47
North Wichita River near Paducah (d)	07311600	540	1961-82
North Wichita River near Crowell (d)	07311622	591	1969-76
Middle Wichita River near Truscott (d)	07311648	161	1971-76
South Wichita River near Guthrie (d)	07311780	239	1971-76
South Wichita River at Ross Ranch near Benjamin (d)	07311790	499	1971-79
Wichita River near Seymour (d)	07311900	1,874	1959-79
Little Wichita River near Ringgold (d)	07315400	1,350	1959-65
Mineral Creek near Sadler (d)	07316200	26	1967-76
Bois D'Arc Creek near Randolph (d)	07332600	72	1962-85
Sanders Creek near Chicota (d)	07335400	175	1968-86
Little Pine Creek near Kanawha (d)	07336750	75.40	1968-80
Pecan Bayou near Clarksville (d)	07336800	100	1962-77
South Sulphur River near Commerce (d)	07342470	189	1979-91
Cuthand Creek near Bogata (d)	07343300	69	1956-74
Sulphur River near Darden (d)	07344000	2,774	1924-56
Big Cypress Creek near Winnsboro (d)	07344482	27.2	1974-92
Lake Cypress Springs near Mt. Vernon (d)	07344484	75.0	1974-91
Boggy Creek near Daingerfield (d)	07345000	72	1943-77
Big Cypress Creek near Karnack (e)	07346085	N/A	1980-85
Frazier Creek near Linden (d)	07346140	48.0	1965-91

Station name	Station number	Drainage area (mi2)	Period of record (water years)
Sabine River near Emory (d)	08017500	888	1953-73
Grand Saline Creek near Grand Saline (d)	08018200	91.4	1968-73
Burke Creek near Yantis (d)	08018730	33.10	1979-89
Lake Winnsboro near Winnsboro (d)	08019300	27.1	1962-
Prairie Creek near Gladewater (d)	08020200	48.90	1968-77
Sabine River near Longview (d)	08020500	2,947	1904-06
Rabbit Creek at Kilgore (d)	08020700	75.80	1964-77
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	08021000	120	1940-48
Lake Cherokee near Longview (e)	08021500	158	1951-83
Murval Lake near Gary (d)	08022200	115	1958-78
Murval 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	1952-82
Sabine River near Milam (d)	08024400	6,508	1939-66
Palo Gaucho Bayou near Hemphill (d)	08024500	123	1952-65
Mill Creek near Burkeville (d)	08025307	18	1974-79
Cypress Creek near Buna (d)	08030000	69.20	1952-83
Cow Bayou near Mauriceville (d)	08031000	83.30	1952-86
Kickapoo Creek near Brownsboro (d)	08031200	232	1962-89
Lake Palestine near Franklin (e)	08031400	839	1962-94
Neches River near Reese (d)	08031500	851	1924-27
Neches River near Alto (d)	08032500	1,945	1944-78
Piney Creek near Groveton (d)	08033300	79	1962-89
Striker Creek near Summerfield (d)	08033700	146	1941-49
East Fork Angelina River near Cushing (d)	08033900	158	1964-89
Mud Creek near Jacksonville (d)	08034500	376	1939-79
Mud Creek at Ponta (d)	08035000	475	1924-27
Angelina River near Lufkin (d)	08037000	1,600	1923-34, 1940-79
Bayou Lanana at Nacogdoches (d)	08037050	31.3	1964-86, 1988-93
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	1924-26
Angelina River at Horger (d)	08039500	3,486	1928-51, 1966-73
North Creek near Jacksboro (d)	08042700	21.60	1956-80
West Fork Trinity River at Bridgeport (d)	08043100	1,113	1985-89
West Fork Trinity River at Bridgeport (d)	08043500	1,147	1910-30
West Fork Trinity River at Lake Worth, Fort Worth (d)	08045500	2,069	1917-18
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	1960-73
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
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

Station name	Station number	Drainage area (mi2)	Period of record (water years)
Mountain Creek near Duncanville (e)	08049900	225	1970-90
Mountain Creek near Grand Prairie (d)	08050000	273	1925-33
Elm Fork Trinity SWS 6-O near Muenster (e)	08050200	0.77	1957-71
Elm Fork Trinity River near Muenster (d)	08050300	46	1957-73
Elm Fork Trinity River near Sanger (d)	08050500	381	1949-84
Isle Du Bois Creek near Pilot Point (d)	08051000	266	1949-84
Elm Fork Trinity River near Pilot Point (d)	08051130	692	1986-92
Elm Fork Trinity River near Denton (d)	08052000	1,084	1924-26
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
Denton Creek near Roanoke (d)	08054000	621	1924-27, 1939-55
Denton Creek near Grapevine (d)	08055000	705	1947-91
Bachman Branch at Dallas (d)	08055700	10	1964-79
Turtle Creek at Dallas (d)	08056500	7.98	1948-91
White Rock Creek at Keller Springs Road, Dallas (d)	08057100	29.40	1962-79
White Rock Creek at White Rock Lake, Dallas (d)	08057300	100	1963-79
White Rock Creek at Scyene Road, Dallas (d)	08057400	122	1963-79
Tenmile Creek at State Highway 342 at Lancaster (d)	08057450	52.80	1970-79
Honey Creek SWS #11 near McKinney	08057500	2.14	1953-73
Honey Creek SWS #12 near McKinney	08058000	1.26	1953-77
Honey Creek near McKinney (d)	08058500	39	1951-73
East Fork Trinity River near McKinney (d)	08059000	190	1950-75
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
Lake Ray Hubbard near Forney (e)	08061550	1,071	1968-93
Duck Creek near Garland (d)	08061700	31.6	1958-92
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
Kings Creek near Kaufman (d)	08062900	233	1963-87
Lacey Fork near Mabank (d)	08062980	118	1982-84
Cedar Creek near Mabank (d)	08063000	733	1939-66
South Twin Creek near Eustace (d)	08063003	27.40	1983-84
Cedar Creek at Trinidad (d)	08063020	1,011	1965-71
Pin Oak Creek near Hubbard (d)	08063200	17.60	1956-72
Richland Creek near Richland (d)	08063500	734	1939-88
Chambers Creek near Corsicana (d)	08064500	963	1939-84
Richland Creek near Fairfield (d)	08064600	1,957	1972-83
Catfish Creek near Tennessee Colony (d)	08064800	207	1962-89
Trinity River near Midway (d)	08065500	14,450	1939-70
Caney Creek near Madisonville (d)	08065700	112	1963-76
White Rock Creek near Trinity (d)	08066100	222	1965-71, 1974-85
Livingston Reservoir outflow weir near Goodrich (d)	08066191	16,583	1969-94
Big Creek near Shepherd	08066400	38.80	1966-89
Sulphur Barge Canal near Wallisville (e)	08067113	N/A	1976-82
Lost River near Wallisville (e)	08067250	N/A	1976-82
Old River (cutoff channel) near Wallisville (e)	08067255	N/A	1976-82
Anahuac Channel at Anahuac (e)	08067301	N/A	1976-82

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 1994 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	18,536	SC, T	1948-53, 1968-77
Canadian River near Canadian	07228000	22,866	SC, T	1974-81
Prairie Dog Town Fork Red River near Wayside	07297910	4,221	SC, T	1968-81
Tule Creek near Silverton	07298200	1,150	SC, T	1967-69
Prairie Dog Town Fork Red River near Brice	07298500	6,082	T S	1950-51, 1949-51
Mulberry Creek near Brice	07299000	N/A	T, S	1949-51
Prairie Dog Town Fork Red River near Lakeview	07299200	6,792	SC, T S	1968-80, 1979-80
Little Red River near Turkey	07299300	139	SC, T S	1968-81, 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
Salt Fork Red River near Hedley	07299930	744	SC, T	1956-61
Salt Fork Red River near Wellington	07300000	1,222	SC, T	1952-91
North Pease River near Childress	07307600	1,434	SC, T	1973-79
Middle Pease River near Paducah	07307750	1,086	SC T	1973-79, 1973-77
Middle Pease River near Paducah	07307760	N/A	SC T	1979-82, 1979-80
Pease River near Childress	07307800	2,754	SC, T	1968-82
Pease River near Crowell	07308000	3,037	SC	1942-43
Red River near Burkburnett	07308500	2,057	SC, T	1968-81
North Fork Wichita River near Paducah	07311600	540	SC, T	1967-76
North Wichita River near Crowell	07311622	591	SC T	1970-76, 1973-74
Middle Fork Wichita River near Truscott	07311648	161	SC	1970-76
Truscott Brine Lake near Truscott	07311669	N/A	SC, T	1984-89
North Wichita River near Truscott	07311700	937	SC, T	1965-89, 1990-92
South Fork Wichita River near Guthrie	07311780	239	SC T	1970-76, 1973-74
South Wichita River below Low-Flow Dam near Guthrie	07311783	N/A	SC, T	1986-89
South Fork Wichita River at Ross Ranch near Benjamin	07311790	499	SC	1970-79
Wichita River near Seymour	07311900	1,874	SC, T	1968-79
Beaver Creek near Electra	07312200	652	SC, T	1968-70
Wichita River at Wichita Falls	07312500	3,140	SC, T	1981-89
Wichita River near Charlie	07312700	3,439	SC, T	1967-81
Little Wichita River near Archer City	07314500	481	SC T	1953-55, 1953-54
Little Wichita River above Henrietta	07314900	1,037	SC, T	1952-56, 1959-66
Little Wichita River near Henrietta	07315000	1,037	SC T	1953-66, 1952-56, 1959-66
East Fork Little Wichita River near Henrietta	07315200	178	T	1953-54
Little Wichita River near Ringgold	07315400	1,350	SC	1959-62

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Red River near Gainesville	07316000	N/A	SC	1944-46, 1952-64, 1966-89,
			T	1952-63, 1966-89
Red River at Denison Dam near Denison	07331600	3,972	SC	1944-89,
			T	1945-89
Little Pine Creek near Kanawha	07336750	75.40	T	1979-80
Red River near De Kalb	07336820	47,348	SC, T	1968-91
South Sulphur River near Cooper	07342500	527	SC, T	1958-66, 1967-89
Sulphur River near Talco	07343200	1,365	SC, T	1966-91
White Oak Creek near Talco	07343500	494	SC, T	1967-89
Sulphur River near Darden	07344000	2,774	SC, T	1947-50
Big Cypress Creek near Pittsburg	07344500	366	SC, T	1968-89
Little Cypress Creek near Jefferson	07346070	675	SC, T	1967-91
Sabine River near Emory	08017500	888	SC, T	1952-54
Grand Saline Creek near Grand Saline	08018200	91.40	SC, T	1968-73
Sabine River near Mineola	08018500	1,357	SC, T	1967-91
Lake Fork Creek near Quitman	08019000	585	SC, T	1967-89
Big Sandy Creek near Big Spring	08019500	231	SC, T, S	1984-86
Sabine River at Logansport	08022500	4,842	SC, T	1939-45
Sabine River below Toledo Bend near Burkeville	08026000	7,482	SC, T	1968-86,
			C	1969-75
Sabine River near Bon Weir	08028500	8,229	SC, T, C	1969-83
Cow Bayou near Mauriceville	08031000	83.30	SC, T	1952-55
Neches River near Neches	08032000	1,145	SC, T	1969-91
Neches River near Alto	08032500	1,945	SC, T	1959-69
Neches River near Diboll	08033000	2,724	SC, T	1969-81
Neches River near Rockland	08033500	3,636	SC	1941-42, 1945-47
Angelina River near Lufkin	08037000	1,600	SC, T	1954-79
Angelina River below Sam Rayburn Dam near Jasper	08039400	3,449	SC, T	1964-79
Village Creek near Kountze	08041500	860	SC, T	1967-70
Pine Island Bayou near Sour Lake	08041700	336	SC, T	1968-89
Big Sandy Creek near Bridgeport	08044000	333	SC, T	1969-77,
			S	1968-77
Clear Fork Trinity River at Fort Worth	08047500	518	SC	1948-52,
			T	1947-62
Village Creek at Everman	08048970	84.5	SC, pH, T, DO	1989-91
Elm Fork Trinity River SWS # 6-0 near Muenster	08050200	0.77	S	1956-66
Elm Fork Trinity River near Muenster	08050300	46	SC	1966-67,
			T	1957-67,
			S	1957-68
Clear Creek near Sanger	08051500	295	SC	1969-77,
			T, S	1968-77
Little Elm Creek near Celina	08052650	46.70	SC, T, S	1966-75
Little Elm Creek near Aubrey	08052700	75.50	SC, T, S	1966-75
Elm Fork Trinity River near Lewisville	08053000	1,673	SC	1981-86,
			T	1976-81
Trinity River at Westmoreland Road, Dallas	08056400	6,074	SC, pH, T, DO	1977
Duck Creek near Garland	08061700	31.6	SC, pH, T, DO	1988-89
Cedar Creek near Mabank	08063000	733	SC, T	1956-57
Pin Oak Creek near Hubbard	08063200	17.60	SC	1965-72,
			T	1957-72,
			S	1956-60, 1965-72

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Richland Creek near Richland	08063500	734	SC, T	1967-69, 1983-89
Chambers Creek near Corsicana	08064500	936	SC, T	1961-70
Richland Creek near Fairfield	08064600	1,957	SC, T	1956-66, 1972-83
Trinity River near Oakwood	08065000	12,833	SC, T S	1947-81, 1976-81
Bedias Creek near Madisonville	08065800	321	SC, T S	1984-87, 1984-86
Long King Creek at Livingston	08066200	141	SC, T	1963-72
Trinity River near Goodrich	08066250	16,844	SC, T	1969-73
Trinity River near Moss Bluff	08067100	N/A	SC	1946-65
Old River near Cove	08067200	N/A	SC T	1946-65, 1965
Trinity River at Anahuac	08067300	N/A	SC	1946-65

WATER RESOURCES DATA—TEXAS, 1995

VOLUME 1

ARKANSAS RIVER BASIN, RED RIVER BASIN, SABINE RIVER BASIN, NECHES RIVER BASIN, TRINITY RIVER BASIN, AND INTERVENING COASTAL BASINS

INTRODUCTION

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

This report series includes records of stage, discharge, and water quality of streams and canals; stage, contents, and water quality of lakes and reservoirs, and water levels and water quality of ground water wells. Volume 1 contains records for water discharge at 112 gaging stations; stage only at 5 gaging stations; stage and contents at 34 lakes and reservoirs; and water quality at 67 gaging stations. Also included are data for 7 partial-record and 14 flood-hydrograph partial-record 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. Groundwater 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-95-1." For archiving and general distribution, the reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or may be purchased on microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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

COOPERATION

Federal agencies that assisted the U.S. Geological Survey in the collection of data in this report in the form of funds or services in 1995 are:

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

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

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

HYDROLOGIC CONDITIONS

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

Streamflow across the State during water year 1995 generally was normal (discharges between the 25 percentile and 75 percentile of record), except for central and east Texas, where streamflow was above normal (discharges within the upper 25 percentile of record) most of the year.

Conservation storage in 77 selected reservoirs throughout the State, with a combined conservation capacity of 34,718,000 acre-feet, decreased from 83 percent at the end of September 1994 to 82 percent at the end of September 1995. Records from these reservoirs indicate that storage increased in 43, decreased in 28, and remained the same in 6.

The area for which water resources data are presented in volume 1 includes the Texas Panhandle and extends across northern and eastern Texas to southeastern Texas. Normal annual precipitation ranges from about 17 inches in the western part of the Texas Panhandle to more than 50 inches in the extreme southeastern part of the State. Average annual runoff ranges from less than 1 inch in parts of the Panhandle to as much as 15 inches in southeastern Texas. The area described in volume 1 and the location of selected streamflow and water-quality stations in the area are shown in figure 1.

Streamflow

Streamflow was above normal during water year 1995 in the area covered in volume 1. Streamflow for water year 1995 and for the period of record at six selected stations (fig. 1) for which data are included in volume 1 are presented in table 1.

At the four long-term hydrologic index stations in the State, streamflow during water year 1995 ranged from above normal to below normal. Monthly mean discharges for water year 1995 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 May, June, and July, and above normal for the remaining 9 months. The station North Bosque River near Clifton had above normal streamflow for water year 1995. The station North Concho River near Carlsbad had below normal streamflow, including 5 months of no flow, for the remaining 11 months. Streamflow for the station Guadalupe River near Spring Branch was normal for water year 1995.

Conservation storage in 36 selected reservoirs in this area of the State, with a total combined conservation capacity of 21,624,000 acre-feet, increased from 88 percent of capacity at the end of September 1994 to 89 percent of capacity at the end of September 1995. Records from these reservoirs indicate that storage increased in 19, decreased in 14, and remained the same in 3 during the water year.

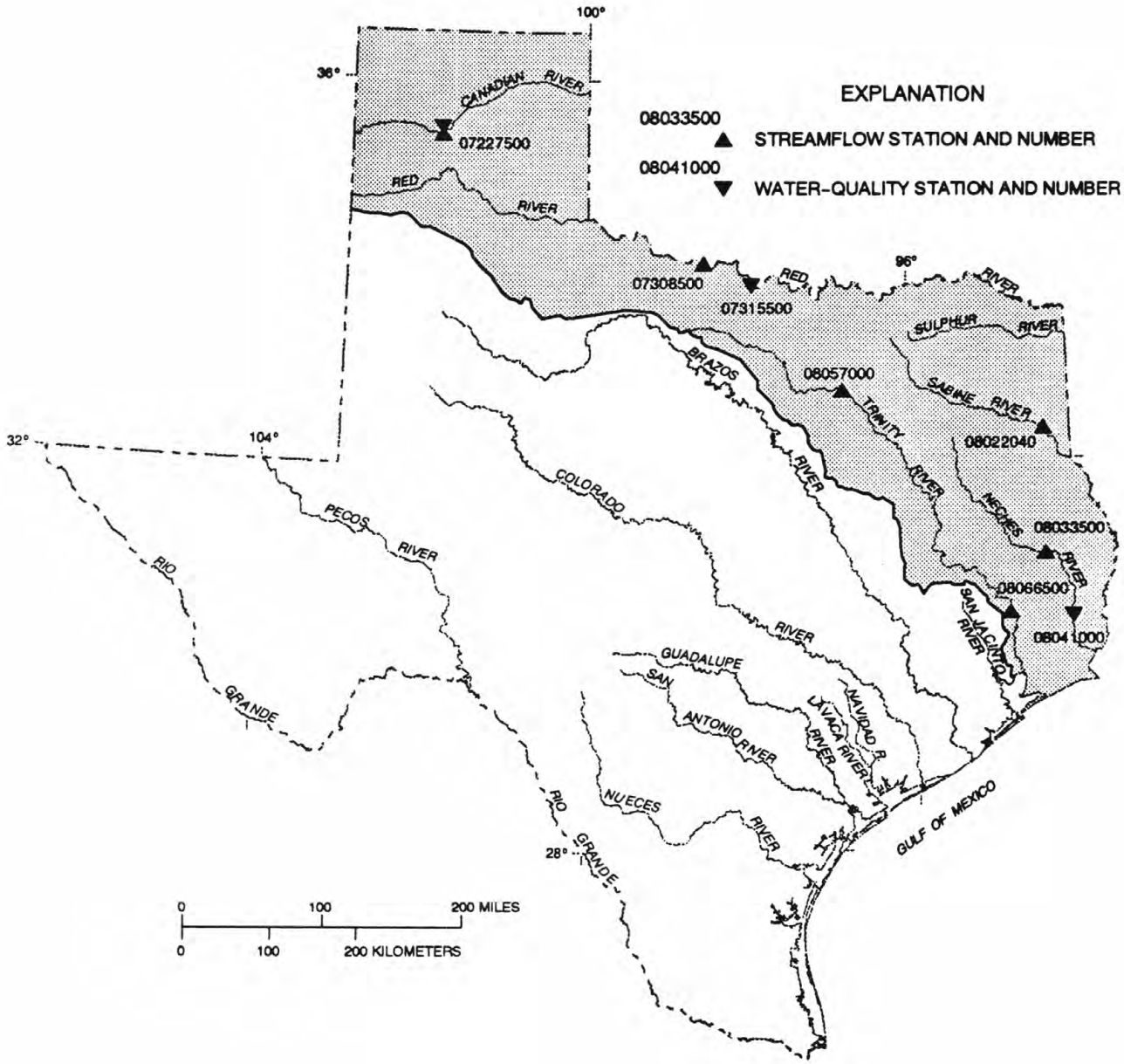

Figure 1. Area of Texas covered by volume 1 (shaded) and location of selected streamflow and water-quality stations in volume 1.

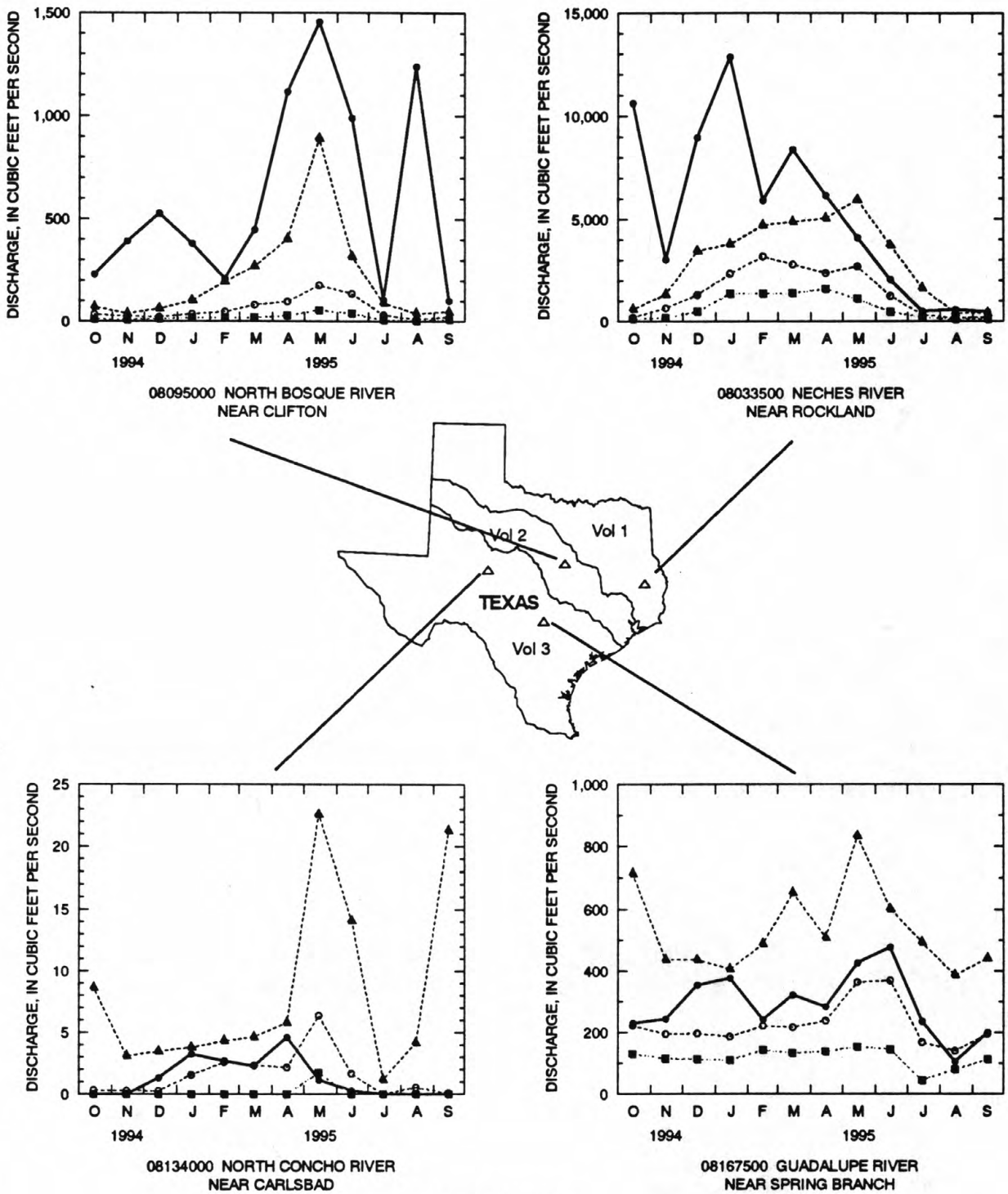

Figure 2. Monthly mean discharges at four long-term hydrologic index stations during 1995 water year and median of the monthly mean discharges for 1961–90 water years.

Water Quality

Dissolved-solids concentrations in most streams in the State are inversely related to streamflow. 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.

Records of discharge-weighted-average concentrations of dissolved solids for water year 1995 are compared with those for water years 1991–95 for selected long-term daily or continuous-record water-quality stations (fig. 1) in the Arkansas, Red, and Neches River Basins. Results are shown in table 2.

Table 1. Streamflow at six selected stations

Station no. and name	Discharge during 1995 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
Arkansas River Basin						
07227500 Canadian River near Amarillo, Tex.	57,200	3.0	240	135,000	0	287 (1939-95)
Red River Basin						
07308500 Red River near Burkburnett, Tex.	174,000	20	3,869	174,000	0	1,188 (1961-95)
Sabine River Basin						
08022040 Sabine River near Beckville, Tex.	18,300	96	4,697	49,400	2.4	2,555 (1961-95)
Neches River Basin						
08033500 Neches River near Rockland, Tex.1/	42,300	202	5,328	42,300	18	2,363 (1962-95)
Trinity River Basin						
08057000 Trinity River at Dallas, Tex.	30,500	383	4,018	111,000	10	1,809 (1934-95)
08066500 Trinity River at Romayor, Tex.	122,000	1,040	17,530	122,000	292	8,802 (1969-95)

1/ Hydrologic index station.

Table 2. Comparison of records of discharge-weighted-average concentrations of dissolved solids for the 1995 and 1991-95 water years

Station no. and name	Mean discharge (cubic feet per second)		Discharge-weighted-average concentration of dissolved solids (milligrams per liter)	
	1995	1991-95	1995	1991-95
Arkansas River Basin				
07227500 Canadian River near Amarillo, Tex.	240	180	805	927
Red River Basin				
07315500 Red River near Terral, Okla.	6,517	4,325	962	1,200
Neches River Basin				
08041000 Neches River at Evadale, Tex.	13,480	9,746	72	79

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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 for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 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.

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 1995 water year that began October 1, 1994, and ended September 30, 1995. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, and water-quality data for surface water. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order Numbering

Since October 1, 1950, the order of listing hydrologic-station records in U.S. Geological Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream sta-

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

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

Data Collection and Computation

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

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

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

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

At some stream-gaging stations, the stage-discharge relation is affected by the backwater from reservoirs, trib-

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

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

For some gaging stations, there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

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

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

Station Manuscript

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

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

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

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

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

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

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

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

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

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

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

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

Data table of daily mean values

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

Statistics of monthly mean data

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

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a desig-

nated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. However, data for partial water years, if any, will only be used in the statistical calculations, if appropriate. For example, all of the calculations for the statistical characteristics designated ANNUAL (See line headings below.), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period of record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the column heading. When this occurs, it should be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data is omitted if there is extensive regulation or diversion of flow in the drainage basin.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-

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

Identifying Estimated Daily Discharge

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

Accuracy of the Records

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

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^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.

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

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

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

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

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the Texas District Office.

Sediment

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

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided-day method (time-discharge-weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided-day method. For periods when no samples were collected, daily discharges of suspended sediment

were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

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

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the U.S. Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the U.S. Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Historical and current (1995) 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 to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge mea-

surements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remarks Codes

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

PRINTED OUTPUT	REMARK
e or E	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (Organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
&	Biological organism estimated as dominant.

DISSOLVED TRACE-ELEMENT CONCENTRATIONS

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (mg/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 mg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from a 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. Full implementation of the protocols will take place in the near future.

ACCESS TO WATSTORE DATA

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

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

General inquiries about WATSTORE may be directed to:

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

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

DEFINITION OF TERMS

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

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

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

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

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The

growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rodsha-ped bacteria which ferment lactose with gas formation within 24 hours at 35 °C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at +35 °C or -1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters or liters.

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

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

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

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage.

This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

Cubic-foot-per-second day [$(ft^3/s)/d$] 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, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile [$(ft^3/s)/mi^2$] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

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

> Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.
>
> Instantaneous discharge is the discharge at a particular instant of time.

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

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

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

$$\overline{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log 2 \frac{n_i}{n}$$

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

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

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

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

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

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate (CaCO3).

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

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic fea-

ture as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

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

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

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

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

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

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

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

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The

term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

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

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

Surface area of a lake is that area outlined on the latest U.S. Geological Survey topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

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

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

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

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

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

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

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

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

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

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

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

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

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless

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

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

Total recoverable is the amount of a given constituent that is in solution after a representative water- suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. 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, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

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

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

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

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

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

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

1-D1. ***Water temperature-influential factors, field measurement, and data presentation***, by H.H. Stevens, Jr., J.F. Ficke, and G.F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 p.

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

2-D1. ***Application of surface geophysics to ground-water investigations***, by A.A.R. Zohdy, G.P. Eaton, and D.R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 p.

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

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

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

2-F1. ***Application of drilling, coring, and sampling techniques to test holes and wells***, by Eugene Shuter and Warren E. Teasdale: USGS--TWRI Book 2, Chapter F1. 1989. 97 p.

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

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

3-A3. ***Measurement of peak discharge at culverts by indirect methods***, by G.L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 p.

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

3-A5. ***Measurement of peak discharge at dams by indirect methods***, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 p.

3-A6. ***General procedure for gaging streams***, by R.W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 p.

3-A7. ***Stage measurements at gaging stations***, by T.J. Buchanan and W.P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 p.

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

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

3-A10. ***Discharge ratings at gaging stations***, by E.J. Ken-nedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 p.

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

3-A12. ***Fluorometric procedures for dye tracing***, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A12, 1986. 41 p.

3-A13. ***Computations of continuous records of streamflow***, by E.J. Kennedy: USGS-- TWRI Book 3, Chapter A13, 1983. 53 p.

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

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

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

3-A17. ***Acoustic velocity meter systems***, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 p.

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

3-A19. ***Levels of streamflow gaging stations***, by E.J. Ken-nedy: USGS--TWRI Book 3, Chapter A19. 1990. 27 p.

3-A20. ***Simulation of soluble waste transport and buildup in surface waters using tracers***, by F.A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.

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

3-B2. ***Introduction to ground-water hydraulics, a programmed text for self instruction***, by G.D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 p.

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

3-B4. ***Regression modeling of ground-water flow***, by Richard L. Cooley and Richard L. Naff: USGS--TWRI Book 3, Chapter B4. 1990. 232 p.

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

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

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

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

3-C1. ***Fluvial sediment concepts***, by H.P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 p.

3-C2. ***Field methods for measurement of fluvial sediment***, by H.P. Guy and V.W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 p.

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

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

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4-B1. ***Low-flow investigations***, by H.C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 p.

4-B2. ***Storage analyses for water supply***, by H.C. Riggs and C.H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 p.

4-B3. ***Regional analyses of streamflow characteristics***, by H.C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 p.

4-D1. ***Computation of rate and volume of stream depletion by wells***, by C.T. Jenkins: USGS--TWRI Book 4,Chapter D1. 1970. 17 p.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

7-C3. ***A model for simulation of flow in singular and interconnected channels***, by R.W. Schaffrannek, R.A. Baltzer, and D.E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1983. 110 p.

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

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

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

07227000 CANADIAN RIVER AT LOGAN, NM

LOCATION.--Lat 35°21'25", long 103°25'03", in NEqNEq sec.15, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080006, on left bank 1,110 ft upstream from bridge on U.S. Highway 54, 0.7 mi south of Logan, 1.4 mi upstream from Chicago, Rock Island & Pacific Railroad Co. bridge, 2.0 mi downstream from Ute Dam, 4.3 mi upstream from Revuelto Creek, and at mile 672.0.

DRAINAGE AREA.--11,141 mi², of which 1,110 mi²is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1904 to November 1905 (gage heights and discharge measurements only), December 1908 to September 1909, February 1910, April to July 1910, August 1910 to September 1911 (gage heights and discharge measurements only), October 1911 to May 1914, January to May 1924, September 1924 to July 1925, January 1927 to April 1934, August 1934 to current year. Monthly discharge only for some periods, published in WSP 1311. Records for December 1909, January 1910, and May to July 1934, published in WSP 267, 287, and 762 are unreliable and should not be used. Published as "South Canadian River" June to September 1904.

REVISED RECORDS.--WSP 1087: 1935-36. WSP 1117: Drainage area. WSP 1281: 1912, 1932(M), 1934, 1945-47, 1949-50. WSP 1311: 1931(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 3,667.1 ft above sea level. Prior to Jan. 1, 1987 same site at datum 1.0 ft higher. See WSP 1311 or 1731 for history of changes prior to Oct. 1, 1934.

REMARKS.--Records poor. Flow regulated by Conchas Lake, 45 mi upstream (station 07223500) and Ute Reservoir, 2 mi upstream (station 07226800). Diversions for irrigation of about 90,000 acres upstream from station. Several observations of water temperature were made during the year. No flow at times prior to completion of Ute Dam.

AVERAGE DISCHARGE.--15 years (water years 1909, 1912-13, 1927-38), 392 ft³/s, 284,000 acre-ft/yr, prior to completion of Conchas dam. 24 years (water years 1939-62), 257 ft³/s, 186,200 acre-ft/yr, prior to completion of Ute Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 278,000 ft³/s, Sept. 30, 1904, gage height, about 36.5 ft, site and datum used in 1909, from rating curve extended above 14,000 ft³/s, from Ninth Biennial Report of New Mexico State Engineer.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.7	3.4	3.3	e3.2	3.5	3.2	3.0	3.0	305	213	332
2	4.1	3.6	3.4	3.3	e3.2	3.4	3.2	3.0	2.9	305	229	333
3	3.9	3.6	3.4	3.3	e3.2	3.4	3.4	3.1	2.9	304	240	334
4	5.6	4.3	3.7	3.4	e3.2	3.2	3.3	3.1	3.0	304	276	334
5	6.0	8.7	8.7	e3.5	e3.2	3.2	3.2	4.0	2.9	303	304	335
6	3.8	8.8	9.1	e3.4	3.2	3.2	3.4	3.3	2.8	304	304	335
7	3.8	8.7	8.9	e3.4	3.2	3.2	3.0	3.1	2.8	303	304	337
8	3.8	8.6	8.9	e3.4	3.2	3.1	3.1	2.9	2.8	303	305	339
9	3.8	8.6	8.8	e3.4	3.2	3.1	3.1	3.1	89	303	306	340
10	3.7	8.6	8.8	e3.4	3.2	3.1	3.1	3.0	298	302	306	344
11	3.7	8.7	4.8	e3.3	3.2	3.1	3.1	3.1	305	302	306	347
12	3.7	9.1	3.6	e3.3	3.3	3.1	3.1	3.1	309	302	306	363
13	3.7	8.5	3.3	e3.3	3.3	3.1	3.0	3.8	311	302	308	364
14	3.8	8.5	3.3	e3.3	3.2	3.1	3.0	3.5	311	302	310	366
15	4.9	8.6	3.3	e3.3	3.2	3.1	3.1	3.4	312	302	310	366
16	3.9	8.6	3.3	e3.3	3.1	3.3	3.1	3.2	312	303	311	368
17	3.7	7.9	3.4	e3.3	3.1	3.2	3.1	3.0	312	302	295	370
18	3.7	3.8	3.3	e3.3	3.1	3.2	3.0	3.0	312	305	315	371
19	3.8	3.7	3.3	e3.3	3.1	3.1	3.2	3.0	311	305	316	374
20	3.7	3.5	3.3	e3.3	3.1	3.2	3.3	2.9	254	303	316	375
21	3.8	3.6	3.3	e3.3	3.2	3.3	3.0	3.0	306	303	318	376
22	3.8	3.6	3.3	e3.3	3.2	3.1	3.1	2.9	307	303	319	370
23	3.8	3.6	3.3	e3.3	3.2	3.1	3.1	2.7	308	304	320	368
24	3.7	3.6	3.3	e3.3	3.2	3.2	3.1	2.9	310	304	321	370
25	3.8	3.6	3.3	e3.3	3.2	3.2	3.0	3.1	310	304	322	372
26	3.7	3.6	3.3	e3.3	3.2	3.2	3.0	3.3	309	297	323	372
27	3.7	3.5	3.4	e3.3	3.3	3.2	3.1	3.1	308	239	324	372
28	3.8	3.4	3.4	e3.3	3.3	3.3	3.1	3.1	308	213	326	374
29	3.8	3.4	3.4	e3.3	---	3.4	3.1	5.8	307	213	327	375
30	3.8	3.4	3.4	e3.3	---	3.7	3.0	5.4	306	212	329	376
31	3.7	---	3.5	e3.3	---	3.6	---	3.1	---	213	332	---
TOTAL	122.6	173.4	138.9	103.1	89.5	100.2	93.6	102.0	6538.1	8969	9441	10752
MEAN	3.95	5.78	4.48	3.33	3.20	3.23	3.12	3.29	218	289	305	358
MAX	6.0	9.1	9.1	3.5	3.3	3.7	3.4	5.8	312	305	332	376
MIN	3.7	3.4	3.3	3.3	3.1	3.1	3.0	2.7	2.8	212	213	332
AC-FT	243	344	276	204	178	199	186	202	12970	17790	18730	21330

07227000 CANADIAN RIVER AT LOGAN, NM--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995#, BY WATER YEAR (WY)

MEAN	32.0	27.1	7.04	7.69	9.64	3.15	17.4	36.8	59.9	84.0	94.4	104
MAX	325	287	84.1	62.7	174	11.4	239	767	575	608	720	838
(WY)	1966	1983	1983	1992	1980	1983	1987	1987	1969	1982	1981	1969
MIN	1.30	1.19	1.24	.86	1.13	.63	.26	.64	.62	.65	1.19	1.36
(WY)	1964	1984	1984	1963	1987	1963	1963	1963	1963	1963	1963	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1963 - 1995#	
ANNUAL TOTAL	47165.2		36623.4			
ANNUAL MEAN	129		100		40.4	
HIGHEST ANNUAL MEAN					145	1969
LOWEST ANNUAL MEAN					1.62	1964
HIGHEST DAILY MEAN	493	Jun 14	376	Sep 21	6860	Jun 18 1969
LOWEST DAILY MEAN	3.3	Aug 13	2.7	May 23	.10	Jan 12 1963
ANNUAL SEVEN-DAY MINIMUM	3.3	Dec 18	2.9	Jun 2	.10	Apr 16 1963
INSTANTANEOUS PEAK FLOW					c219000	Sep 22 1941
INSTANTANEOUS PEAK STAGE					a29.30	Sep 22 1941
ANNUAL RUNOFF (AC-FT)	93550		72640		29250	
10 PERCENT EXCEEDS	352		322		27	
50 PERCENT EXCEEDS	5.7		3.6		2.6	
90 PERCENT EXCEEDS	3.6		3.1		1.6	

e Estimated
c From rating curve extended above 75,000 ft³/s.
a From floodmarks.

07227000 CANADIAN RIVER AT LOGAN, NM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-62, 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 1994												
17...	1000	8.6	4120	8.2	10.5	9.5	670	11.2	113	400	79	50
MAY 1995												
24...	1015	3.1	9430	8.0	14.5	15.0	670	7.6	89	630	130	73
JUL												
13...	1415	300	1230	8.3	34.0	22.0	670	8.9	117	290	52	40
AUG												
10...	1810	306	1200	8.0	35.0	22.0	664	8.0	106	300	56	40

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 1994											
17...	720	16	7.8	248	380	940	0.80	6.8	2330	250	10
MAY 1995											
24...	1900	33	10	330	500	2800	1.1	11	5620	400	100
JUL											
13...	150	4	7.2	202	340	67	0.60	4.3	782	200	5
AUG											
10...	150	4	6.7	200	330	66	0.60	5.2	775	160	<3

07227100 REVUELTO CREEK NEAR LOGAN, NM

LOCATION.--Lat 35°20'29", long 103°23'37", in SWqNWq sec.24, T.13 N., R.33 E., Quay County, Hydrologic Unit 11080008, on right bank 0.3 mi upstream from bridge on State Highway 469, 1.9 mi southeast of Logan, and at mile 2.3.

DRAINAGE AREA.--786 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1959 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,660 ft above sea level. Prior to Jan. 16, 1981, at site 320 ft upstream at datum 0.56 ft higher.

REMARKS.--Records poor. Low flows supplemented by surface and ground-water return from irrigation in vicinity of Tucumcari. Several observations of water temperature were made during the year. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD (1941-47).--Maximum discharge determined, about 13,400 ft³/s, Sept. 18, 1946, gage height, 9.04 ft, at site 180 ft downstream at different datum, from unpublished records collected by U.S. Bureau of Reclamation. A peak of 26,100 ft³/s, date unknown, gage height, 12.9 ft at former site and datum, was measured by slope-area method in May 1957.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e17	9.4	.51	1.8	4.9	7.6	16	20	e15	65	402	11
2	e25	6.3	1.5	1.2	2.1	11	.45	14	e10	91	257	13
3	e30	9.2	.41	.68	2.5	2.5	6.1	6.7	e7.0	73	152	14
4	82	27	.27	.67	1.1	2.2	42	4.4	e10	19	29	15
5	120	17	.26	.90	1.5	1.2	91	31	e12	2.4	47	11
6	51	15	2.9	2.1	2.0	2.6	75	29	e15	4.6	203	14
7	26	11	3.7	5.4	5.5	2.8	46	24	e10	4.7	123	33
8	29	6.2	3.0	2.8	3.0	3.7	18	23	4.4	2.2	44	108
9	14	5.5	4.7	3.5	1.1	1.7	31	40	2.5	2.3	110	381
10	11	11	3.2	1.8	.75	1.1	40	37	3.3	2.7	704	1010
11	5.9	11	2.2	1.7	.67	.78	20	32	3.0	2.5	280	673
12	5.8	13	2.1	1.5	2.0	.46	23	25	1.3	1.0	287	479
13	6.2	13	1.6	1.5	1.7	.28	12	24	.57	.90	133	203
14	8.3	7.8	1.8	.70	1.2	.10	14	15	.37	1.1	105	101
15	203	2.2	1.2	.84	.52	.09	20	13	.16	1.2	744	61
16	141	2.0	1.1	1.3	.30	.09	12	14	.02	39	111	50
17	92	1.5	1.5	.60	.24	.05	15	9.1	.02	143	37	51
18	61	1.0	2.5	.89	.21	.04	19	6.5	.18	400	30	227
19	49	1.0	1.7	1.0	.79	.12	79	5.9	1.0	320	32	152
20	36	1.4	1.5	1.1	.77	.22	97	8.0	1.4	121	15	171
21	42	1.8	1.2	1.6	1.3	.15	104	9.5	6.3	9.2	7.8	104
22	41	1.1	1.9	.82	1.5	.06	102	11	161	15	17	60
23	31	1.1	1.9	.72	.96	.07	129	3.8	78	2.3	22	57
24	24	1.3	1.8	4.8	.92	.08	113	12	46	45	31	57
25	25	.81	1.5	4.3	1.3	.12	88	5.8	57	15	8.0	53
26	43	.92	.58	7.3	1.2	.04	36	160	85	2.8	6.7	52
27	14	1.1	.66	3.1	1.7	.05	13	253	135	1.6	9.1	35
28	10	.84	3.0	3.5	1.8	.21	13	180	137	.84	9.9	35
29	7.2	.47	1.2	2.4	---	.33	7.6	e60	89	.98	22	33
30	7.0	.33	2.1	5.2	---	1.2	19	e40	22	.52	13	31
31	8.7	---	2.2	6.6	---	20	---	e25	---	80	15	---
TOTAL	1266.1	181.27	55.69	72.32	43.53	60.94	1301.15	1141.7	913.52	1469.84	4006.5	4295
MEAN	40.8	6.04	1.80	2.33	1.55	1.97	43.4	36.8	30.5	47.4	129	143
MAX	203	27	4.7	7.3	5.5	20	129	253	161	400	744	1010
MIN	5.8	.33	.26	.60	.21	.04	.45	3.8	.02	.52	6.7	11
AC-FT	2510	360	110	143	86	121	2580	2260	1810	2920	7950	8520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1995, BY WATER YEAR (WY)

MEAN	35.1	9.09	9.91	5.62	7.54	6.41	24.2	46.9	69.5	117	124	74.4
MAX	320	34.1	129	27.9	42.5	52.1	346	203	492	1203	575	515
(WY)	1961	1962	1960	1990	1983	1985	1970	1991	1960	1960	1981	1969
MIN	.000	.056	.001	.000	.000	.003	.32	.085	.89	.42	.93	1.72
(WY)	1965	1978	1976	1965	1965	1980	1981	1976	1990	1983	1978	1978

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1959 - 1995	
ANNUAL TOTAL	10248.63		14807.56			
ANNUAL MEAN	28.1		40.6		43.9	
HIGHEST ANNUAL MEAN					204	1960
LOWEST ANNUAL MEAN					4.72	1964
HIGHEST DAILY MEAN	932	May 10	1010	Sep 10	13800	Jul 9 1960
LOWEST DAILY MEAN	.04	Feb 20	.02	Jun 16	.00	Oct 20 1959
ANNUAL SEVEN-DAY MINIMUM	.54	Nov 29	.08	Mar 21	.00	Oct 20 1959
INSTANTANEOUS PEAK FLOW			4690	Sep 10	a26700	Jul 9 1960
INSTANTANEOUS PEAK STAGE			6.79	Sep 10	14.30	Jul 9 1960
ANNUAL RUNOFF (AC-FT)	20330		29370		31830	
10 PERCENT EXCEEDS	57		106		60	
50 PERCENT EXCEEDS	8.0		7.3		5.1	
90 PERCENT EXCEEDS	1.3		.58		.00	

e Estimated
a From slope-area measurement of peak flow.

07227100 REVUELTO CREEK NEAR LOGAN, NM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1959 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 1994												
16...	1603	6.0	1860	8.7	16.0	11.5	663	9.2	98	360	68	45
MAY 1995												
24...	0845	8.0	1660	8.4	11.5	11.5	670	9.5	100	410	75	55
JUL												
13...	1545	1.0	1250	8.4	34.0	32.5	668	6.5	103	340	70	40
AUG												
09...	1620	10	1150	8.3	38.0	33.0	662	7.8	127	270	53	33

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 1994											
16...	280	6	4.4	226	450	170	0.60	9.2	1160	280	4
MAY 1995											
24...	220	5	6.1	228	510	92	0.70	6.5	1100	250	<3
JUL											
13...	130	3	7.8	185	380	49	0.60	9.6	798	180	5
AUG											
09...	140	4	5.6	166	350	43	0.60	12	737	200	<3

07227140 CANADIAN RIVER ABOVE NEW MEXICO-TEXAS STATE LINE, NM

WATER-QUALITY RECORDS

LOCATION.--Lat 35°23'35", long 103°02'30", in SWq sec.32, T.14 N., R.37 E., Quay County, Hydrologic Unit 11080006, 0.1 mi upstream from New Mexico-Texas State line, 5.5 mi downstream from Rana Canyon, and 14.7 mi north of Glenrio.

PERIOD OF RECORD.--Water years 1969-73, 1975-86, 1992 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE AIR (DEG C)	TEMPER-ATURE WATER (DEG C)	BARO-METRIC PRES-SURE (MM OF HG)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 1994												
16...	1202	20	5980	8.5	12.0	7.0	670	11.8	113	480	100	55
MAY 1995												
23...	1515	e5.0	7240	8.3	21.0	24.5	668	7.7	108	590	110	77
JUL												
13...	1015	e310	1390	8.3	30.0	23.5	674	10.0	134	300	54	40
AUG												
10...	1430	e315	878	8.3	36.0	26.0	670	6.6	93	88	19	9.9

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 1994											
16...	1000	20	8.0	246	440	1500	0.60	9.5	3260	330	<10
MAY 1995											
23...	1400	25	9.8	231	480	2000	0.70	8.3	4220	380	20
JUL											
13...	170	4	7.4	186	340	100	0.60	4.7	828	200	<3
AUG											
10...	140	6	3.5	159	170	71	0.40	7.0	516	190	<3

estimated.

07227500 CANADIAN RIVER NEAR AMARILLO, TX

LOCATION.--Lat 35°28'13", long 101°52'45", Potter County, Hydrologic Unit 11090105, on left bank at downstream side of southbound lane of bridge on U.S. Highways 87 and 287, 1,500 ft downstream from Pitcher Creek, 1.4 mi downstream from East Amarillo Creek, 1.7 mi downstream from Panhandle and Santa Fe Railway Co. bridge, 19 mi north of Amarillo, and 537.7 mi upstream from mouth.

DRAINAGE AREA.--19,445 mi², of which 4,069 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1924 to December 1925 (period no longer used in computation of average annual discharge), January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,989.16 ft above sea level. Jan. 16, 1924, to Dec. 31, 1925, and Apr. 3 to June 1, 1938, nonrecording gage at site of old bridge 20 ft upstream at same datum. June 2 to Dec. 5, 1938, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There is some regulation by Conchas and Ute Reservoirs in New Mexico, total capacity 439,000 acre-feet. Conchas and Bell Ranch Canals divert water from Conchas Reservoir upstream for irrigation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1914 reached a stage of 24 ft; a higher stage probably occurred during a flood in October 1904, but stage is unknown; information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 14,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 5	0645	57,200	11.95	June 3	0900	14,400	7.11

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	37	26	27	30	20	22	32	776	341	285	633
2	3.2	35	24	28	30	19	20	32	653	843	362	607
3	3.0	34	24	27	30	20	20	29	4290	517	578	573
4	4.6	34	23	26	28	20	21	30	1640	327	424	550
5	15800	33	23	26	27	22	22	39	291	286	377	525
6	392	34	24	30	26	23	23	44	194	260	398	513
7	248	30	25	33	25	22	24	228	122	248	352	538
8	195	29	27	34	25	22	24	449	76	245	418	612
9	170	28	28	31	24	22	24	e190	48	249	427	519
10	139	26	27	30	24	19	23	e130	31	264	433	527
11	113	25	27	29	24	21	22	e100	22	266	611	1070
12	91	26	25	27	20	21	22	70	18	265	543	601
13	92	26	31	27	21	e20	23	67	17	268	392	695
14	75	26	28	27	23	19	23	53	50	276	526	605
15	54	25	27	27	23	19	21	45	84	277	1760	539
16	52	26	27	27	24	19	21	37	99	307	1350	462
17	66	27	27	27	24	19	21	39	97	447	1060	457
18	63	27	27	26	23	19	22	55	95	930	847	829
19	62	27	26	25	22	18	22	54	102	718	805	1810
20	69	71	25	25	21	17	22	47	123	514	764	424
21	67	53	25	25	20	17	22	32	241	481	740	443
22	62	35	24	28	19	16	22	20	370	483	756	431
23	54	32	24	29	19	16	24	20	182	456	783	416
24	49	31	25	28	19	16	26	21	251	369	701	370
25	49	32	25	29	19	14	31	57	214	351	673	395
26	46	32	25	28	19	14	30	173	278	350	660	436
27	45	30	25	29	19	15	30	86	498	340	651	393
28	44	28	25	30	19	15	30	65	348	333	653	371
29	40	27	25	30	---	17	31	73	350	319	640	342
30	39	26	25	30	---	19	31	401	301	307	618	312
31	39	---	25	30	---	22	---	1050	---	281	620	---
TOTAL	18229.3	952	794	875	647	582	719	3768	11861	11918	20207	16998
MEAN	588	31.7	25.6	28.2	23.1	18.8	24.0	122	395	384	652	567
MAX	15800	71	31	34	30	23	31	1050	4290	930	1760	1810
MIN	3.0	25	23	25	19	14	20	20	17	245	285	312
AC-FT	36160	1890	1570	1740	1280	1150	1430	7470	23530	23640	40080	33720

07227500 CANADIAN RIVER NEAR AMARILLO, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	323	79.9	51.7	57.6	46.1	42.8	183	452	526	586	534	548
MAX	5663	812	458	519	259	403	5988	6804	5288	4880	3007	8016
(WY)	1942	1942	1942	1943	1980	1961	1942	1941	1941	1941	1981	1941
MIN	.57	1.52	1.25	4.75	3.00	1.86	1.51	4.60	.95	.31	.11	.034
(WY)	1981	1978	1984	1978	1939	1940	1978	1945	1990	1983	1983	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1939 - 1995	
ANNUAL TOTAL	89044.1		87550.3			
ANNUAL MEAN	244		240		287	
HIGHEST ANNUAL MEAN					2351	1941
LOWEST ANNUAL MEAN					37.7	1984
HIGHEST DAILY MEAN	15800	Oct 5	15800	Oct 5	79600	Sep 23 1941
LOWEST DAILY MEAN	2.4	Aug 20	3.0	Oct 3	.00	Aug 7 1940
ANNUAL SEVEN-DAY MINIMUM	5.1	Apr 4	15	Mar 22	.00	Sep 3 1983
INSTANTANEOUS PEAK FLOW			57200	Oct 5	135000	Jul 25 1941
INSTANTANEOUS PEAK STAGE			11.95	Oct 5	15.70	Jul 25 1941
INSTANTANEOUS LOW FLOW					.00	Oct 1 1977
ANNUAL RUNOFF (AC-FT)	176600		173700		208000	
10 PERCENT EXCEEDS	527		587		479	
50 PERCENT EXCEEDS	44		32		25	
90 PERCENT EXCEEDS	12		20		4.0	

e Estimated

07227500 CANADIAN RIVER NEAR AMARILLO, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: July 1948 to October 1949, February 1950 to current year. Chemical and biochemical analyses: March 1968 to current year. Pesticide analyses: March 1968 to June 1981.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1950 to current year.
WATER TEMPERATURE: August 1949 to current year.
SUSPENDED SEDIMENT DISCHARGE: August 1949 to September 1952.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 9,180 microsiemens June 8, 1990; minimum daily, 346 microsiemens Oct. 29, 1964.
WATER TEMPERATURE (1949-76, 1988 to current year): Maximum daily, 39.0°C July 7, 1973; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 6,270 microsiemens Apr. 15; minimum daily, 487 microsiemens June 4.
WATER TEMPERATURE; Maximum daily, 33.0°C July 25; minimum daily, 0.0°C January 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLVED, AS CACO3 (MG/L)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)
NOV 15...	1400	27	4440	8.4	11.0	10.9	110	530	340	130	51	660
JAN 24...	1500	26	4290	8.3	5.5	13.5	120	560	360	130	56	750
APR 03...	1430	22	4580	8.2	19.0	9.1	110	600	410	130	66	720
MAY 16...	1400	40	4380	8.3	23.5	7.8	105	560	370	120	64	670
JUL 11...	1530	262	1840	8.4	31.0	6.4	96	300	120	56	38	230
AUG 15...	1130	2480	666	8.8	23.0	7.2	94	52	0	12	5.3	98

DATE	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	CARBONATE WATER DIS IT FIELD MG/L AS CO3	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
NOV 15...	12	6.7	6	231	199	580	1000	0.60	13	2560	--
JAN 24...	14	5.2	0	244	200	540	1000	<0.10	12	2610	0.050
APR 03...	13	6.4	0	222	182	590	1100	0.60	13	2740	--
MAY 16...	12	8.3	7	227	198	530	1000	0.80	13	2520	0.050
JUL 11...	6	7.1	7	198	174	380	170	0.70	6.7	993	--
AUG 15...	6	2.4	10	99	97	92	47	0.30	6.2	324	0.340

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC DISSOLVED (UG/L AS AS)
NOV 15...	--	<0.010	--	<0.050	<0.015	--	<0.20	<0.010	<0.010	--	--
JAN 24...	--	<0.010	0.050	0.050	0.020	--	<0.20	<0.010	<0.010	--	1
APR 03...	--	0.010	--	<0.050	0.020	--	<0.20	0.030	<0.010	--	--
MAY 16...	--	<0.010	0.050	0.050	<0.015	--	0.30	0.020	<0.010	--	--
JUL 11...	--	<0.010	--	<0.050	<0.015	--	0.30	0.020	<0.010	--	2
AUG 15...	0.340	0.010	0.350	0.350	0.020	0.28	0.30	<0.010	0.020	0.06	--

07227500 CANADIAN RIVER NEAR AMARILLO, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 15...	--	--	--	--	--	--	--	--	--	--	--
JAN 24...	<100	<1.0	<1	<1	10	<1	40	<0.1	<1	<1.0	<10
APR 03...	--	--	--	--	--	--	--	--	--	--	--
MAY 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 11...	180	<1.0	<1	1	<3	<1	<1	<0.1	<1	<1.0	<3
AUG 15...	--	--	--	--	--	--	--	--	--	--	--

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	18229.3	815	467	23000	150	7360	110	5230	100
NOV.	1994	952	4000	2320	5960	880	2260	500	1290	520
DEC.	1994	794	4250	2470	5290	950	2040	530	1140	560
JAN.	1995	875	4110	2380	5630	910	2140	520	1220	540
FEB.	1995	647	4540	2640	4610	1000	1800	570	988	600
MAR.	1995	582	5100	2970	4670	1200	1890	630	991	680
APR.	1995	719	5330	3110	6040	1300	2480	660	1270	710
MAY	1995	3768	2430	1400	14300	500	5070	310	3160	310
JUNE	1995	11861	1010	581	18600	180	5870	130	4250	130
JULY	1995	11918	1320	754	24300	240	7720	170	5540	160
AUG.	1995	20207	1400	805	43900	260	14000	180	10000	170
SEPT	1995	16998	1300	743	34100	240	10800	170	7780	160
TOTAL		87550.3	**	**	190000	**	63500	**	42900	**
WTD.AVG.		240	1400	805	**	270	**	180	**	180

07227500 CANADIAN RIVER NEAR AMARILLO, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2360	3580	4110	4050	4290	e4780	4490	5610	1380	1510	1700	e1580
2	2740	3570	4100	4150	4450	e4780	4350	6150	1370	540	1690	1610
3	3020	3680	e4180	e4200	4440	4770	4360	6000	647	1140	1650	e1590
4	e2900	3790	e4250	e4220	4460	4750	4590	6070	487	1280	1610	e1620
5	562	e3650	4360	e4240	4430	4830	4560	4360	851	1150	1550	1610
6	746	e3870	4350	e4150	4470	4330	4770	4850	910	1310	1370	1610
7	1300	4040	4270	e4120	4500	4330	4820	2720	1300	1430	1520	1560
8	2220	4120	3850	e4150	4350	4460	5150	1930	1590	1470	1530	e1520
9	2350	4130	3160	e4180	4270	4510	5280	1360	2000	1610	1500	1490
10	3090	4180	4020	e4190	4250	4870	5800	1710	2380	1640	1530	1560
11	3160	4290	3900	e4210	4540	4980	5930	1790	2780	1650	1570	1410
12	2950	4200	4250	e4220	e4650	5220	6000	2340	2940	1660	1570	1130
13	2830	e4180	3340	e4180	4740	5500	5620	3410	3350	1670	1340	1130
14	2820	4120	4030	e4150	4650	5460	5590	3780	4410	1680	1200	1190
15	2980	4120	4220	4060	4500	5160	6270	4270	2550	1660	985	e1080
16	3070	4260	4530	4230	4330	5240	5930	4470	1990	1620	1170	1180
17	2910	4380	4550	4210	4180	5260	5620	4530	1840	1210	1330	1280
18	2890	4460	e4610	4220	4560	5000	5500	3500	1800	1170	1170	683
19	3160	4480	e4680	4210	4580	5040	5500	3720	1780	1080	1200	564
20	3330	e3450	4730	4090	4630	5200	5470	3950	1700	1320	1340	1140
21	3520	e3680	4700	4190	4740	5400	5570	4270	1680	1130	1420	1390
22	3930	3640	4480	e4100	4710	5540	5540	4590	1590	1200	1500	1400
23	3690	3920	4460	4020	4740	5690	5150	4450	1090	1230	1440	1400
24	3130	4210	4410	3940	4940	5840	5050	4330	1050	1300	1500	1430
25	3150	4220	e4400	3880	4810	5930	5040	3990	1560	1430	1520	1460
26	3260	4130	e4400	4020	4830	5990	5230	e3350	1520	1500	1550	1500
27	3250	4340	4390	3920	4840	5880	5600	2720	1020	1540	1550	1510
28	3200	4400	4320	3920	4790	5670	e5610	2670	1240	1450	1550	1520
29	3490	4410	4280	3900	---	5480	5620	3190	1450	1580	1560	1570
30	3490	4300	4300	4000	---	5230	5630	1870	1380	1610	1570	1600
31	3520	---	4400	4030	---	4790	---	1510	---	1660	1540	---
MEAN	2870	4060	4260	4110	4560	5160	5320	3660	1720	1400	1460	1380
MAX	3930	4480	4730	4240	4940	5990	6270	6150	4410	1680	1700	1620
MIN	562	3450	3160	3880	4180	4330	4350	1360	487	540	985	564

WTR YR 1995 MEAN 3320 MAX 6270 MIN 487

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15.0	8.0	4.0	2.0	7.0	---	7.0	11.0	28.0	25.0	22.0	---
2	16.0	10.0	5.0	.0	6.0	---	9.0	10.0	24.0	25.0	24.0	27.0
3	15.0	10.0	---	---	10.0	12.0	9.0	11.0	18.0	26.0	29.0	---
4	18.0	10.0	---	---	5.0	14.0	23.0	10.0	19.0	25.0	29.0	---
5	15.0	---	6.0	---	5.0	14.0	10.0	15.0	25.0	29.0	32.0	30.0
6	16.0	---	9.0	---	6.0	8.0	---	24.0	27.0	30.0	27.0	29.0
7	14.0	10.0	6.0	---	6.0	2.0	---	20.0	21.0	30.0	25.0	24.0
8	12.0	12.0	5.0	---	4.0	2.0	22.0	12.0	28.0	25.0	29.0	---
9	11.0	7.0	4.0	---	5.0	5.0	11.0	13.0	30.0	28.0	30.0	19.0
10	11.0	5.0	2.0	---	5.0	4.0	12.0	14.0	20.0	32.0	29.0	17.0
11	18.0	8.0	1.0	---	4.0	7.0	3.0	15.0	26.0	30.0	26.0	25.0
12	11.0	10.0	6.0	---	---	11.0	5.0	16.0	20.0	31.0	27.0	25.0
13	11.0	---	10.0	---	1.0	14.0	18.0	23.0	30.0	30.0	27.0	25.0
14	12.0	6.0	4.0	---	4.0	7.0	22.0	18.0	30.0	29.0	25.0	23.0
15	12.0	7.0	5.0	11.0	8.0	10.0	14.0	---	26.0	25.0	27.0	---
16	15.0	10.0	3.0	7.0	8.0	9.0	15.0	24.0	24.0	30.0	27.0	27.0
17	16.0	8.0	2.0	8.0	4.0	14.0	10.0	21.0	24.0	26.0	29.0	24.0
18	11.0	3.0	---	5.0	4.0	10.0	7.0	21.0	24.0	24.0	28.0	25.0
19	10.0	8.0	---	9.0	5.0	12.0	8.0	14.0	28.0	29.0	26.0	19.0
20	11.0	---	9.0	4.0	8.0	9.0	5.0	15.0	25.0	31.0	28.0	22.0
21	11.0	3.0	3.0	4.0	8.0	10.0	17.0	21.0	25.0	30.0	29.0	11.0
22	10.0	5.0	8.0	---	11.0	10.0	6.0	27.0	27.0	31.0	30.0	15.0
23	12.0	3.0	5.0	3.0	10.0	8.0	15.0	17.0	28.0	25.0	29.0	19.0
24	12.0	5.0	5.0	6.0	14.0	11.0	8.0	15.0	25.0	30.0	29.0	16.0
25	9.0	6.0	---	4.0	13.0	13.0	24.0	15.0	29.0	33.0	26.0	20.0
26	8.0	5.0	---	9.0	10.0	8.0	9.0	---	28.0	30.0	30.0	19.0
27	8.0	5.0	10.0	5.0	10.0	5.0	6.0	27.0	28.0	32.0	28.0	24.0
28	10.0	4.0	7.0	7.0	4.0	6.0	---	24.0	31.0	24.0	28.0	23.0
29	10.0	1.0	8.0	5.0	---	5.0	15.0	19.0	22.0	32.0	29.0	24.0
30	10.0	2.0	7.0	4.0	---	6.0	22.0	20.0	25.0	30.0	29.0	22.0
31	9.0	---	3.0	4.0	---	7.0	---	24.0	---	27.0	30.0	---
MEAN	12.0	6.5	5.5	5.5	7.0	8.5	12.5	18.0	25.5	28.5	28.0	22.0
MAX	18.0	12.0	10.0	11.0	14.0	14.0	24.0	27.0	31.0	33.0	32.0	30.0
MIN	8.0	1.0	1.0	.0	1.0	2.0	3.0	10.0	18.0	24.0	22.0	11.0

WTR YR 1995 MEAN 15.5 MAX 33.0 MIN .0

07228000 CANADIAN RIVER NEAR CANADIAN, TX

LOCATION.--Lat 35°56'06", long 100°22'13", Hemphill County, Hydrologic Unit 11090106, on left abutment at downstream side of upstream bridge on U.S. Highways 60 and 83, 600 ft downstream from Panhandle and Santa Fe Railway Co. bridge, 1.2 mi downstream from Red Deer Creek, 1.6 mi northeast of Canadian, and 433.9 mi upstream from mouth.

DRAINAGE AREA.--22,866 mi², of which 4,688 mi² probably is noncontributing.

PERIOD OF RECORD.--July 1924 to August 1925 (gage heights only), January 1938 to current year. Prior to April 1938, monthly discharges only, published in WSP 1311.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,301.50 ft above sea level. July 1, 1924, to Aug. 31, 1925, and Apr. 21 to Dec. 15, 1938, nonrecording gage; Dec. 16, 1938, to Sept. 30, 1953, water- stage recorder and nonrecording gages; all at site 300 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Extreme low flow is maintained by springs that enter river about 600 ft upstream from the gage. There is some regulation and diversions from Lake Meredith (07227900) 75 mi upstream. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--26 years (water years 1939-64) prior to completion of Lake Meredith, 549 ft³/s (397,800 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1939-64).--Maximum discharge, 122,000 ft³/s Sept. 23, 1941 (gage height, 9.8 ft), from graph based on gage readings, and from rating curves for two channels extended above 8,000 and 54,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 20.0 ft Oct. 2, 1904. Floods of May 2, 1914, and Oct. 5, 1923, reached stages of 12 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.96	30	36	72	62	64	95	63	435	49	39	27
2	.94	30	37	68	60	69	84	55	260	54	44	26
3	1.2	27	38	67	59	78	85	57	326	56	45	25
4	1.8	28	40	65	58	85	81	51	378	49	41	24
5	17	30	41	62	56	89	74	53	461	48	39	24
6	28	30	47	67	56	84	71	96	277	47	37	23
7	25	29	59	67	56	86	65	109	237	43	34	22
8	22	28	55	68	57	84	57	108	263	40	32	23
9	21	29	55	66	59	77	53	92	853	39	31	24
10	20	28	52	64	59	67	53	100	3310	39	31	28
11	18	29	51	60	57	66	53	139	1600	39	30	34
12	18	29	50	59	58	64	51	186	205	38	29	42
13	17	31	50	56	61	60	49	175	151	36	28	36
14	18	29	50	55	66	63	47	121	99	35	28	34
15	19	28	49	55	67	66	43	97	75	41	42	33
16	19	29	49	55	63	65	43	80	65	45	44	38
17	19	30	47	53	62	61	45	113	59	43	39	37
18	18	29	47	53	59	56	55	94	57	63	36	36
19	17	53	48	54	59	55	53	71	53	62	36	52
20	17	63	48	53	58	52	83	62	48	76	35	49
21	18	49	47	53	58	51	80	97	46	64	35	69
22	18	43	46	59	58	48	81	93	45	58	34	65
23	18	40	46	66	56	47	110	72	43	54	32	57
24	17	39	48	67	55	48	104	112	73	49	32	52
25	17	37	49	66	55	82	93	152	90	45	31	54
26	19	37	49	69	59	104	79	214	62	43	30	52
27	18	38	48	71	61	80	71	277	55	40	29	50
28	18	37	48	67	61	68	65	233	54	39	29	50
29	20	36	48	63	---	79	62	191	52	38	28	51
30	20	37	48	62	---	87	58	177	51	36	27	49
31	30	---	62	63	---	102	---	489	---	36	27	---
TOTAL	530.90	1032	1488	1925	1655	2187	2043	4029	9783	1444	1054	1186
MEAN	17.1	34.4	48.0	62.1	59.1	70.5	68.1	130	326	46.6	34.0	39.5
MAX	30	63	62	72	67	104	110	489	3310	76	45	69
MIN	.94	27	36	53	55	47	43	51	43	35	27	22
AC-FT	1050	2050	2950	3820	3280	4340	4050	7990	19400	2860	2090	2350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995#, BY WATER YEAR (WY)

MEAN	47.1	65.3	67.7	77.5	85.8	116	90.8	168	193	35.9	26.5	38.3
MAX	426	848	490	292	146	473	555	1022	1054	167	89.6	266
(WY)	1969	1972	1972	1972	1972	1973	1973	1977	1965	1967	1965	1970
MIN	.35	4.97	22.4	31.0	37.0	23.0	3.90	1.39	.34	.019	.019	.000
(WY)	1976	1967	1967	1977	1981	1967	1968	1966	1966	1970	1980	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1965 - 1995#	
ANNUAL TOTAL	14567.20		28356.90			
ANNUAL MEAN	39.9		77.7		84.2	
HIGHEST ANNUAL MEAN					190	1972
LOWEST ANNUAL MEAN					35.4	1981
HIGHEST DAILY MEAN	366	Jun 10	3310	Jun 10	12700	Oct 9 1968
LOWEST DAILY MEAN	.05	Aug 29	.94	Oct 2	.00	Oct 11 1964
ANNUAL SEVEN-DAY MINIMUM	.12	Aug 24	11	Oct 1	.00	Oct 11 1964
INSTANTANEOUS PEAK FLOW			4060	Jun 10	38900	Oct 9 1968
INSTANTANEOUS PEAK STAGE			7.20	Jun 10	9.83	Apr 15 1973
INSTANTANEOUS LOW FLOW					.00	Oct 11 1965
ANNUAL RUNOFF (AC-FT)	28890		56250		60990	
10 PERCENT EXCEEDS	72		96		139	
50 PERCENT EXCEEDS	39		52		38	
90 PERCENT EXCEEDS	4.0		26		.68	

Period of regulated streamflow.

07235000 WOLF CREEK AT LIPSCOMB, TX

LOCATION.--Lat 36°14'19", long 100°16'31", Lipscomb County, Hydrologic Unit 11100203, on right bank at downstream side of State Highway 305, 0.3 mi north of Lipscomb, 0.6 mi downstream from Sand Creek, 2 mi upstream from Plum Creek, and 61.2 mi upstream from mouth.

DRAINAGE AREA.--697 mi², of which 222 mi² probably is noncontributing.

PERIOD OF RECORD.--October 1937 to September 1942, October 1961 to current year. Prior to 1941, monthly discharges only, published in WSP 1311.
Water-quality records.--Chemical and biochemical analyses: May 1980.

REVISED RECORDS.--WSP 1311: 1938-39, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,371.29 ft above sea level. Prior to Feb. 25, 1938, nonrecording gage, Feb. 25, 1938, to Sept. 30, 1942, water-stage recorder at present site at datum 5.77 ft higher.

REMARKS.--No estimated daily discharges. Records fair. There are small diversions upstream from station for irrigation and recreation.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1938-42), 39.7 ft³/s, 28,760 acre-feet/yr.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1938-42).--Maximum discharge, 20,000 ft³/s Oct. 21, 1941 (Gage-height, 11.57 ft, present datum), from rating curve extended above 14,000 ft³/s on basis of velocity-area studies; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1890, 15.5 ft June 23, 1957, present site and datum, from flood-marks. A flood in May 1955 reached a stage of 12.1 ft, present site and datum, from information by State Department of Highways and Public Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.48	.43	.51	.70	1.2	1.5	2.0	1.7	3.1	4.5	2.9	.34
2	.51	.41	.55	.78	1.2	1.6	2.0	1.7	2.9	4.5	3.2	.32
3	.51	.39	.55	.84	1.2	1.6	1.9	1.7	4.6	4.4	3.2	.30
4	.52	.47	.54	.86	1.1	1.7	1.8	1.7	5.3	4.0	2.8	.29
5	.64	.44	.54	.88	1.1	1.7	1.9	1.9	9.8	3.7	2.5	.30
6	.56	.44	.81	.97	1.2	1.8	1.9	2.3	14	3.5	2.2	.29
7	.52	.45	.68	.96	1.1	1.8	1.8	2.3	19	3.3	1.9	.30
8	.50	.49	.61	1.0	1.1	1.8	1.7	2.2	17	3.1	1.6	.33
9	.51	.47	.60	.99	1.1	1.8	1.6	2.0	249	2.8	1.5	.36
10	.54	.45	.59	.97	1.2	1.7	1.7	1.8	134	2.6	1.3	.40
11	.53	.53	.55	1.0	1.2	1.7	1.6	1.8	60	2.4	1.2	.43
12	.47	.50	.56	1.0	1.2	1.7	1.6	1.7	37	2.2	1.0	.98
13	.46	.52	.58	1.0	1.2	1.7	1.6	1.7	27	2.1	.93	.52
14	.49	.53	.59	.99	1.3	1.9	1.6	1.6	20	2.1	.88	.40
15	.51	.47	.58	1.0	1.4	2.1	1.6	1.5	15	2.3	.96	.45
16	.48	.49	.60	1.0	1.3	2.0	1.6	1.6	12	2.4	.85	.56
17	.43	.51	.58	.95	1.3	1.9	1.7	1.7	10	2.2	.72	.45
18	.38	.51	.58	1.0	1.3	1.9	1.8	1.5	8.8	2.4	.63	.46
19	.38	.78	.58	.98	1.4	1.9	1.7	1.4	7.8	3.3	.58	.80
20	.42	.65	.58	.97	1.4	1.8	2.0	1.2	7.4	3.3	.58	.69
21	.41	.57	.59	1.0	1.4	1.7	1.8	1.2	7.0	2.8	.52	1.0
22	.39	.54	.59	1.2	1.4	1.6	1.8	1.2	6.5	7.0	.52	1.1
23	.39	.49	.60	1.1	1.4	1.5	2.4	1.2	6.5	14	.51	1.0
24	.38	.52	.61	1.1	1.4	1.6	2.1	1.3	7.8	11	.48	1.1
25	.39	.53	.60	1.2	1.5	3.1	2.0	1.6	7.7	8.6	.46	1.1
26	.39	.53	.60	1.2	1.5	3.2	1.9	2.9	6.3	6.9	.46	1.0
27	.39	.50	.60	1.2	1.5	2.5	1.8	4.9	5.6	5.7	.42	1.0
28	.41	.50	.60	1.2	1.5	2.2	1.8	3.4	5.0	4.8	.39	.80
29	.42	.50	.61	1.1	---	2.1	1.8	2.8	4.9	4.2	.37	.94
30	.45	.50	.63	1.2	---	2.1	1.8	3.1	4.7	3.5	.34	.92
31	.69	---	.74	1.2	---	2.1	---	3.4	---	3.1	.39	---
TOTAL	14.55	15.11	18.53	31.54	36.1	59.3	54.3	62.0	725.7	132.7	36.29	18.93
MEAN	.47	.50	.60	1.02	1.29	1.91	1.81	2.00	24.2	4.28	1.17	.63
MAX	.69	.78	.81	1.2	1.5	3.2	2.4	4.9	249	14	3.2	1.1
MIN	.38	.39	.51	.70	1.1	1.5	1.6	1.2	2.9	2.1	.34	.29
AC-FT	29	30	37	63	72	118	108	123	1440	263	72	38
CFSM	.00	.00	.00	.00	.00	.00	.00	.00	.05	.01	.00	.00
IN.	.00	.00	.00	.00	.00	.00	.00	.00	.06	.01	.00	.00

07235000 WOLF CREEK AT LIPSCOMB, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995, BY WATER YEAR (WY)

MEAN	6.78	5.77	3.46	3.66	4.49	7.16	8.51	18.7	18.6	8.00	8.50	6.19
MAX	167	112	12.3	11.8	10.9	53.0	69.1	124	206	82.7	77.6	61.8
(WY)	1969	1972	1972	1969	1963	1974	1980	1979	1965	1967	1965	1963
MIN	.10	.50	.60	.55	.60	1.10	.94	.65	.74	.30	.000	.21
(WY)	1965	1995	1995	1986	1986	1986	1986	1986	1966	1974	1964	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995	
ANNUAL TOTAL	732.10		1205.05			
ANNUAL MEAN	2.01		3.30		8.33	
HIGHEST ANNUAL MEAN					30.5	1965
LOWEST ANNUAL MEAN					1.44	1986
HIGHEST DAILY MEAN	7.7	May 26	249	Jun 9	2860	May 31 1963
LOWEST DAILY MEAN	.20	Aug 13	.29	Sep 4	.00	May 24 1964
ANNUAL SEVEN-DAY MINIMUM	.24	Aug 9	.30	Sep 2	.00	Jul 22 1964
INSTANTANEOUS PEAK FLOW			880	Jun 9	8790	May 31 1963
INSTANTANEOUS PEAK STAGE			8.27	Jun 9	10.62	May 10 1979
INSTANTANEOUS LOW FLOW					.00	Jul 22 1964
ANNUAL RUNOFF (AC-FT)	1450		2390		6040	
ANNUAL RUNOFF (CFSM)	.004		.007		.018	
ANNUAL RUNOFF (INCHES)	.06		.09		.24	
10 PERCENT EXCEEDS	4.5		4.5		10	
50 PERCENT EXCEEDS	.69		1.2		2.5	
90 PERCENT EXCEEDS	.33		.45		.49	

07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TX
(National stream-quality accounting network)

LOCATION.--Lat 34°50'15", long 101°24'49", Armstrong County, Hydrologic Unit 11120103, on left bank at downstream side of bridge on Farm Road 284, 13 mi northeast of Wayside, 26 mi south of Claude, and at mile 1,145.

DRAINAGE AREA.--4,211 mi², of which 3,281 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,463.74 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. There are several small diversions upstream from station. Sewage effluent is released into river above station by the city of Amarillo.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	0200	6,050	9.82				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.19	6.5	13	13	9.4	4.9	1.3	7.4	5.4	3.6	6.3
2	.47	.20	7.1	12	10	9.4	5.1	1.3	15	100	3.4	5.2
3	.49	.25	7.1	12	8.6	10	11	1.2	962	25	1.9	3.9
4	.49	.77	6.6	12	8.3	11	13	1.2	60	17	1.2	2.8
5	205	.81	6.5	12	8.9	11	5.2	1.3	61	13	.96	2.3
6	3.5	.84	6.7	15	10	10	4.1	1.8	37	13	1.2	2.1
7	1.0	.98	6.3	15	11	11	3.9	1.4	28	12	.73	4.4
8	.56	1.1	6.5	14	12	11	3.8	1.1	23	11	.61	3.0
9	.38	1.2	6.7	14	12	11	3.4	.98	21	11	.51	2.6
10	.32	1.3	6.2	14	12	11	2.7	.87	20	9.9	.52	3.4
11	.28	1.3	6.9	14	12	12	2.7	.87	17	8.4	.48	3.9
12	.26	1.8	8.1	14	12	12	2.6	.75	15	7.2	.42	11
13	.28	2.3	9.4	15	12	11	2.4	.56	11	5.5	.41	23
14	.35	1.9	9.0	15	13	12	2.3	.49	8.7	4.0	9.7	10
15	.51	1.9	8.5	15	13	12	2.1	.52	7.4	20	180	19
16	.30	2.1	8.9	14	13	11	2.1	.62	6.2	19	28	20
17	.27	2.3	8.4	16	13	10	2.0	61	5.2	18	21	16
18	.24	2.4	8.4	15	13	8.9	1.9	4.1	4.7	434	16	34
19	.25	10	9.4	15	13	8.3	2.2	2.8	4.2	50	15	50
20	.24	3.3	8.9	15	12	7.8	1.9	2.8	3.6	3.5	15	5.5
21	.21	2.8	8.9	14	11	7.8	1.7	2.7	24	2.1	18	188
22	.19	2.9	9.8	14	11	7.8	2.0	2.6	63	4.8	22	37
23	.26	3.1	9.8	13	11	6.4	1.7	2.5	31	1.8	28	22
24	.26	4.4	9.4	14	10	5.9	1.7	2.8	104	1.4	25	15
25	.21	4.8	11	14	10	4.6	1.5	125	14	1.3	19	15
26	.12	5.5	11	13	9.4	3.3	1.3	394	8.4	1.1	15	13
27	.21	4.6	8.7	13	8.9	3.2	1.5	58	38	.87	13	9.7
28	.19	4.5	8.5	11	9.4	3.4	1.5	23	9.0	.78	11	7.3
29	.17	4.4	11	12	---	4.1	1.5	79	6.5	.72	9.0	8.2
30	.17	4.9	13	12	---	5.0	1.4	139	5.9	.63	7.0	5.6
31	.16	---	13	12	---	5.2	---	106	---	1.3	6.5	---
TOTAL	217.81	78.84	266.2	423	312.5	266.5	95.1	1021.56	1621.2	803.70	474.14	549.2
MEAN	7.03	2.63	8.59	13.6	11.2	8.60	3.17	33.0	54.0	25.9	15.3	18.3
MAX	205	10	13	16	13	12	13	394	962	434	180	188
MIN	.12	.19	6.2	11	8.3	3.2	1.3	.49	3.6	.63	.41	2.1
AC-FT	432	156	528	839	620	529	189	2030	3220	1590	940	1090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	24.4	7.33	4.25	4.16	3.55	6.53	10.3	51.2	56.8	22.4	85.6	24.4
MAX	147	51.9	20.3	24.7	17.4	26.1	97.5	472	304	77.7	1410	110
(WY)	1986	1972	1988	1988	1990	1992	1977	1978	1984	1975	1968	1969
MIN	.000	.066	.099	.30	.16	.34	.17	.13	1.44	.000	.39	.000
(WY)	1976	1971	1971	1971	1976	1971	1978	1984	1970	1974	1983	1975

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	2238.81		6129.75			
ANNUAL MEAN	6.13		16.8		25.3	
HIGHEST ANNUAL MEAN					137	1968
LOWEST ANNUAL MEAN					1.90	1983
HIGHEST DAILY MEAN	363	Jun 10	962	Jun 3	22700	Aug 29 1968
LOWEST DAILY MEAN	.00	Jun 21	.12	Oct 26	.00	Jul 30 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 21	.17	Oct 26	.00	Jul 30 1968
INSTANTANEOUS PEAK FLOW			6050	Jun 3	58000	Aug 28 1968
INSTANTANEOUS PEAK STAGE			9.82	Jun 3	13.00	Aug 28 1968
ANNUAL RUNOFF (AC-FT)	4440		12160		18300	
10 PERCENT EXCEEDS	8.7		21		22	
50 PERCENT EXCEEDS	1.1		7.4		1.8	
90 PERCENT EXCEEDS	.05		.52		.06	

07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TX--Continued
(National stream-quality accounting network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1967 to August 1995 (dicontinued). Chemical and biochemical analyses: October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1968 to September 1981.
WATER TEMPERATURE: October 1968 to September 1981.

INSTRUMENTATION.--Specific conductance was recorded continuously at this station from April 1968 to September 1976.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 51,100 microsiemens July 30, 1978; minimum daily, 417 microsiemens July 10, 1975.
WATER TEMPERATURE: Maximum daily, 38.0°C Oct. 14, 1968, June 13, 1975; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC												
05...	1415	6.9	3950	8.5	9.5	13	14.0	134	0.4	310	K75	820
APR												
12...	1125	2.5	6320	8.4	14.0	2.9	12.0	127	0.8	42	22	1300
MAY												
26...	1125	4.9	1130	8.3	16.5	8600	11.5	128	2.1	K6800	K12000	110
AUG												
14...	1135	0.40	27200	8.2	30.0	61	9.5	149	2.7	450	1300	2000
22...	0915	21	5440	8.3	22.5	34	8.4	106	0.7	470	210	990

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)
DEC											
05...	630	230	59	600	9	17	7	219	192	190	830
APR											
12...	1200	380	85	990	12	18	8	175	156	150	1400
MAY											
26...	0	30	7.6	190	8	4.7	5	128	113	110	200
AUG											
14...	1900	570	150	5400	52	92	0	184	151	150	2500
22...	810	270	74	850	12	16	0	214	176	170	1100

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)
DEC											
05...	780	2.0	22	2820	2700	7.68	7.68	0.220	7.90	7.90	0.130
APR											
12...	1300	1.6	21	4530	4300	0.720	0.720	0.020	0.740	0.740	0.040
MAY											
26...	140	0.90	9.0	672	663	2.37	2.37	0.030	2.40	2.40	0.080
AUG											
14...	8400	1.0	26	--	17200	--	--	<0.010	--	<0.050	0.150
22...	1100	1.8	23	3660	3550	0.230	0.230	0.010	0.240	0.240	0.040

DATE	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
DEC											
05...	8.6	0.57	0.70	2.20	2.00	2.00	6.1	--	--	--	<10
APR											
12...	1.0	0.26	0.30	0.310	0.290	0.290	0.89	9	0.06	97	<10
MAY											
26...	3.3	0.82	0.90	0.960	0.260	0.270	0.83	13100	173	99	40
AUG											
14...	--	--	<0.20	0.010	<0.010	<0.010	--	214	0.23	100	--
22...	0.64	0.36	0.40	0.090	0.040	0.030	0.09	102	5.8	89	20

07297910 PRAIRIE DOG TOWN FORK RED RIVER NEAR WAYSIDE, TX--Continued
(National stream-quality accounting network)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)
DEC											
05...	100	<1	<10	110	40	31	<1	1	<1.0	4700	23
APR											
12...	<100	<1	<10	130	120	7	<1	1	<1.0	7000	13
MAY											
26...	89	<3	15	29	4	<10	<1	2	<1.0	840	26
AUG											
14...	--	--	--	--	--	--	--	--	--	--	--
22...	100	<1	10	160	60	18	1	<1	<1.0	6200	18

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TX

LOCATION.--Lat 34°34'09", long 100°11'37", Childress County, Hydrologic Unit 11120105, on left bank at downstream side of bridge on U.S. Highways 62 and 83, 3.1 mi downstream from Salt Creek, 10.0 mi north of Childress, and at mile 1,061.

DRAINAGE AREA.--7,725 mi², of which 4,767 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1964 to March 1965 (gage heights only), April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,628.4 ft above sea level (from Texas State Department of Highways and Public Transportation bench mark).

REMARKS.--Records poor. Many small diversions upstream from station. Flow is affected at times by discharge from the flood-detention pools of 23 floodwater-retarding structures with a combined detention capacity of 20,010 acre-ft. These structures control runoff from 95.2 mi² in the drainage basin above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1899, 16.9 ft in May or June 1957, from information by local residents and State Department of Highways and Public Transportation.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 27	1630	11,300	9.81	June 04	0300	43,100	11.60

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.2	1.5	6.8	9.8	9.9	9.1	5.3	2.2	1400	61	311	9.8
2	e3.2	1.3	7.3	8.1	9.4	16	4.8	2.4	496	320	1610	9.5
3	e3.2	1.3	7.7	9.8	7.8	14	17	3.3	3860	484	3570	9.5
4	10	2.4	8.2	11	6.9	13	12	2.3	26100	193	1130	9.5
5	7.9	9.0	7.8	11	6.9	13	7.1	25	2910	e82	e151	9.7
6	4.4	2.9	9.2	20	8.1	14	5.4	181	249	e56	e63	9.4
7	32	1.5	12	13	8.0	42	8.4	151	201	e48	e60	8.5
8	24	1.4	9.1	8.9	7.4	11	6.1	58	194	e32	e60	9.3
9	5.0	2.2	8.1	8.2	7.3	7.4	3.9	17	201	e13	e56	42
10	3.7	1.6	7.3	7.8	8.1	6.3	4.0	6.3	189	e11	e56	31
11	3.5	1.3	6.8	7.3	7.4	6.3	4.0	5.0	180	e11	e51	60
12	3.2	1.9	7.1	6.0	7.3	23	4.3	5.1	140	e9.1	e41	61
13	3.2	4.6	7.5	5.6	9.1	45	4.4	4.4	97	e8.3	e34	311
14	3.2	5.7	7.5	5.6	13	12	4.4	4.0	81	e7.5	e28	255
15	6.4	2.3	8.5	5.9	13	11	4.0	44	74	e7.2	25	435
16	14	1.9	9.2	6.4	8.3	8.4	4.8	99	75	e6.7	379	1010
17	762	1.8	8.0	6.1	6.8	5.7	122	32	75	e6.7	207	842
18	8.3	1.4	7.0	5.3	6.9	5.0	19	3.4	75	68	107	905
19	2.9	10	7.1	5.1	7.3	3.3	6.7	3.5	75	247	70	721
20	32	43	6.8	5.1	7.6	2.7	13	3.7	74	195	47	441
21	359	11	6.1	5.4	8.0	3.2	4.4	4.1	73	62	36	180
22	8.1	8.2	6.1	35	7.8	3.1	17	3.6	74	86	25	477
23	3.9	7.9	6.7	49	7.2	2.9	26	3.7	75	60	15	155
24	2.9	8.3	7.6	14	6.9	3.4	5.4	5.0	463	63	13	44
25	3.9	10	7.7	11	7.4	4.2	2.9	229	469	64	12	67
26	2.9	11	7.5	21	9.1	3.7	1.8	400	168	64	12	64
27	2.0	11	7.8	32	8.1	3.3	1.9	1240	341	63	11	55
28	1.9	7.8	24	10	7.7	3.5	2.0	151	315	64	11	33
29	2.0	6.6	39	9.3	---	4.5	2.2	266	111	65	11	184
30	2.1	6.6	17	9.0	---	4.8	2.2	349	65	63	10	76
31	1.9	---	14	9.2	---	5.4	---	558	---	63	9.8	---
TOTAL	1325.9	187.4	302.5	370.9	228.7	310.2	326.4	3862.0	38900	2583.5	8221.8	6524.2
MEAN	42.8	6.25	9.76	12.0	8.17	10.0	10.9	125	1297	83.3	265	217
MAX	762	43	39	49	13	45	122	1240	26100	484	3570	1010
MIN	1.9	1.3	6.1	5.1	6.8	2.7	1.8	2.2	65	6.7	9.8	8.5
AC-FT	2630	372	600	736	454	615	647	7660	77160	5120	16310	12940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

MEAN	107	45.0	33.0	35.5	27.6	41.3	91.4	251	333	101	156	149
MAX	1279	377	265	296	162	243	594	1835	1297	367	1086	470
(WY)	1987	1987	1993	1993	1987	1973	1973	1978	1995	1972	1968	1966
MIN	3.14	1.85	2.27	2.05	2.00	1.72	2.95	1.18	3.46	.66	1.56	3.39
(WY)	1985	1978	1983	1971	1974	1966	1978	1988	1994	1974	1980	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995	
ANNUAL TOTAL	9545.81		63143.5			
ANNUAL MEAN	26.2		173		114	
HIGHEST ANNUAL MEAN					286	1987
LOWEST ANNUAL MEAN					27.6	1994
HIGHEST DAILY MEAN	2670	May 26	26100	Jun 4	34200	May 28 1978
LOWEST DAILY MEAN	.04	Jul 28	1.3	Nov 2	.00	Aug 5 1970
ANNUAL SEVEN-DAY MINIMUM	.28	Jul 23	1.7	Oct 28	.00	Jun 7 1988
INSTANTANEOUS PEAK FLOW			43100	Jun 4	86400	May 28 1978
INSTANTANEOUS PEAK STAGE			11.60	Jun 4	13.94	May 21 1977
ANNUAL RUNOFF (AC-FT)	18930		125200		82900	
10 PERCENT EXCEEDS	33		203		168	
50 PERCENT EXCEEDS	5.2		9.3		7.3	
90 PERCENT EXCEEDS	1.4		3.2		1.0	

e Estimated

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1994 to September 1995.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1994 to September 1995.
TEMPERATURE: October 1994 to September 1995.

INSTRUMENTATION.--From October 1994 to September 1995, specific conductance and temperature were continuously recorded at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 81,300 microsiemens May 25, 1995; minimum, 3,230 microsiemens Sept. 29, 1995.
TEMPERATURE: Maximum, 37.0'C July 15,16, 1995; minimum, 0.0'C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 81,300 microsiemens May 25; minimum, 3,230 microsiemens Sept. 29.
TEMPERATURE: Maximum, 37.0'C July 15,16; minimum, 0.0'C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 09...	1215	7.9	72400	8.2	7.0	4900	4700	1400	330
FEB 01...	1010	11	60100	7.7	5.0	4900	4700	1400	330
MAR 24...	0945	3.6	77100	7.8	15.0	5200	5100	1500	360
MAY 10...	1020	7.0	50700	8.2	14.5	4400	4300	1300	280
JUN 26...	1135	169	15900	7.8	24.5	1800	1800	570	100
AUG 14...	1240	28	49300	7.9	31.5	4200	4100	1200	290

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 09...	17000	110	44	110	3900	27000	1.0	9.6	49700
FEB 01...	16000	100	41	110	3700	24000	0.70	9.6	45500
MAR 24...	19000	110	48	98	4200	28000	0.70	9.7	53200
MAY 10...	12000	79	33	100	3400	17000	0.70	9.1	34100
JUN 26...	3000	30	20	76	1500	4600	0.70	11	9850
AUG 14...	11000	74	37	100	3400	19000	0.60	11	35000

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e68000	---	---	e70400	---	---	e64500	68100	66000	67200
2	---	---	e67200	---	---	e70500	---	---	e66000	66900	65000	66200
3	---	---	e66800	---	---	e70800	---	---	e66600	67800	66200	67000
4	---	---	e66000	---	---	e70600	---	---	e67000	68900	66400	67500
5	---	---	e66500	---	---	e55000	---	---	e68000	68000	64600	66900
6	---	---	e66900	---	---	e66100	---	---	e68500	67100	63100	65400
7	---	---	e59500	---	---	e67000	---	---	e68800	67500	64900	66300
8	---	---	e61000	---	---	e67800	---	---	e69000	67900	60900	64200
9	---	---	e62000	---	---	68400	---	---	69100	64300	61900	63400
10	---	---	e62500	---	---	e68000	---	---	e69300	64600	62600	63700
11	---	---	e63000	---	---	e68100	---	---	e69500	66800	64000	65300
12	---	---	e63800	---	---	e68600	---	---	e69400	67000	65100	66300
13	---	---	e64000	---	---	e60400	---	---	e69300	68400	66300	67400
14	---	---	64400	---	---	e58200	---	---	69200	68900	66400	67700
15	---	---	e64000	---	---	e65800	68900	66800	67700	68700	66400	67800
16	---	---	e59200	---	---	66400	70500	66500	68600	69700	67900	68500
17	---	---	e35000	---	---	e66600	69700	65600	67900	72100	66600	69800
18	---	---	e50000	---	---	e67000	70100	66800	68600	72200	70600	71700
19	---	---	e52800	---	---	e64000	70500	66900	69000	72900	70000	71700
20	---	---	56800	---	---	e52000	71100	68000	69800	73200	70000	71900
21	---	---	e45000	---	---	e63200	71500	67800	69800	72400	70800	71800
22	---	---	e51500	---	---	e63300	70500	67900	69500	72200	61500	67400
23	---	---	e53000	---	---	e60000	69900	67400	68900	64100	57100	60100
24	---	---	e56600	---	---	e60500	68600	62100	66000	60100	55700	58900
25	---	---	e54000	---	---	e61500	68700	60800	65800	60500	58200	59300
26	---	---	59300	---	---	e62000	70300	65900	68300	61300	57500	59200
27	---	---	e60000	---	---	e62800	69700	65800	67600	62700	54800	59400
28	---	---	e65500	---	---	e63000	67400	61600	64700	62900	58300	61100
29	---	---	e68000	---	---	e63200	64800	60600	63700	65500	58000	61700
30	---	---	e70000	---	---	e63600	65400	63600	64300	66500	63200	64900
31	---	---	e70200	---	---	---	66800	64500	65500	67500	63100	65300
MONTH	---	---	60400	---	---	64500	71500	60600	67700	73200	54800	65600

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	63800	46800	55200	65900	63000	64500	59600	56300	58100	31300	30300	e73500
2	63700	49900	56200	63200	61400	62500	59000	53600	56800	33400	30800	e73700
3	66400	62100	63900	61400	59500	60400	62800	49000	55200	76900	71000	73900
4	67200	64200	65700	60600	57000	58800	68700	62700	64800	76100	72600	74000
5	66900	63300	65100	57200	53100	54500	68300	63400	65900	74900	38300	63600
6	67400	62300	65200	64500	53600	62200	66900	60800	64200	---	---	e50000
7	67400	64900	66000	63000	54200	58500	68700	55000	61400	---	---	e38000
8	69200	65000	67500	61200	57200	58600	67800	47300	58100	---	---	e44000
9	69800	64900	67200	60300	48800	55300	69400	61600	65500	---	---	e48000
10	69200	65800	67400	69500	54400	61400	74500	66200	69900	---	---	50200
11	70400	69200	69900	73200	66200	69300	74700	68200	71300	---	---	62000
12	71200	70000	70400	73100	22200	60000	71700	64300	68000	70600	63500	66300
13	70000	67300	68200	43000	36500	40000	70500	60100	66100	73700	67500	70400
14	67400	65000	66200	---	---	e48000	70500	57500	63600	74300	69700	72200
15	66000	64200	65300	---	---	e56000	63900	59700	61900	74200	71400	73200
16	66000	64100	64800	---	---	e60000	60500	36400	50000	---	---	e48600
17	67400	63500	65800	---	---	e63500	36900	24000	32900	---	---	e54000
18	67400	64000	66100	---	---	e66000	39800	29000	35200	---	---	e74500
19	68400	65100	67000	---	---	e68200	29200	26900	28000	---	---	e75000
20	68900	65500	67500	---	---	e70000	32000	29000	29900	---	---	e75200
21	70700	66600	68700	---	---	e71800	62600	54700	56600	---	---	e75400
22	72600	67700	70200	---	---	e73500	64500	58800	61600	---	---	e75600
23	74700	69700	72100	---	---	e74100	---	---	e63000	---	---	e75800
24	74700	72100	73500	---	---	75000	---	---	e68000	77800	75400	76100
25	74500	66800	70500	74500	60500	67000	---	---	e70000	81300	17600	37400
26	70400	63400	68000	77600	60900	70100	---	---	e70800	25000	18000	21800
27	70100	60700	64300	77600	63300	70800	---	---	e71600	---	---	e20000
28	65400	61200	63400	73500	66200	69700	---	---	e72400	---	---	e19500
29	---	---	---	67300	64500	65800	---	---	e72900	---	---	e18600
30	---	---	---	65200	61900	63400	---	---	e73200	---	---	18000
31	---	---	---	61900	58700	60100	---	---	---	---	---	e25000
MONTH	74700	46800	66500	77600	22200	63200	74700	24000	60200	81300	17600	55600

e Estimated

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	e40000	54800	47400	51300	61000	20100	31300	57100	53200	55000
2	---	---	e42000	57600	33300	41200	21000	8190	13600	56600	53000	54900
3	---	---	e44000	36900	31300	33900	10900	8170	9050	57300	53600	55300
4	---	---	e36000	36900	23900	33100	13200	9890	11100	57300	53400	55300
5	---	---	10000	32200	25100	25600	17100	13200	14600	56100	52200	54300
6	---	---	e13000	25900	24800	25500	21800	17100	19500	55800	52800	54400
7	---	---	e17000	26300	25900	26200	25700	21800	23500	58200	54500	56500
8	---	---	e22000	---	---	e30700	29600	25700	28000	58000	55900	56900
9	---	---	26000	---	---	e35200	36300	29600	33100	56700	30100	38800
10	---	---	e28500	---	---	e39700	40200	36300	38400	37100	34500	36100
11	---	---	e30800	---	---	e44200	42400	33800	37800	37000	31400	35000
12	---	---	e32500	---	---	e49000	52500	42400	48000	33100	16600	25200
13	---	---	e35000	56300	52900	54600	55800	51400	53400	---	---	e23000
14	---	---	38000	58600	54900	56400	62500	47800	54700	---	---	e20000
15	---	---	e45000	57000	53000	54600	60500	46000	54200	20800	15300	18800
16	---	---	e45500	54000	52500	53100	46000	13700	23000	20800	12700	15100
17	---	---	e46000	---	---	e53000	19100	14900	17100	14700	7330	11900
18	---	---	e46200	---	---	e38000	27300	19100	23200	11200	7390	10100
19	---	---	e47000	---	---	e36000	36400	27300	32900	13200	9330	12000
20	---	---	e48000	---	---	e44000	43600	36400	40800	13400	10400	11800
21	---	---	e48200	---	---	e40000	49800	43600	46900	23300	13400	18200
22	---	---	e49000	---	---	e36000	55000	49800	51800	23400	12700	16500
23	---	---	e48000	---	---	e37500	55900	53900	54700	21000	15700	18000
24	---	---	e47500	---	---	e39200	57700	54700	55800	22200	16100	20100
25	---	---	e47000	---	---	e40800	58500	55600	56800	21500	6100	13900
26	23800	15500	16900	47200	39900	42500	58300	55400	56800	20600	6140	6510
27	40700	23800	36900	55400	47200	49800	58100	55200	56300	6340	6240	6290
28	34900	31500	32700	58000	51700	55200	58100	54100	55900	6450	5350	6240
29	40800	31900	37600	61500	55100	58200	57600	53900	55800	18300	3230	15000
30	47400	40800	44000	62200	58600	60000	58300	54600	56200	17500	13100	15700
31	---	---	---	62900	52000	57700	58300	54400	56100	---	---	---
MONTH	47400	15500	36700	62900	23900	43300	62500	8170	39000	58200	3230	27900
YEAR	81300	3230	54200									

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	21.5	9.0	14.5	6.0	4.0	5.0	9.5	.0	3.5
2	---	---	---	20.0	12.0	15.0	7.0	5.0	6.0	7.0	.0	3.0
3	---	---	---	22.5	14.5	18.0	7.0	5.5	6.0	4.5	.0	2.0
4	27.5	17.5	21.5	21.0	12.5	16.0	6.5	4.5	5.5	3.0	.0	1.0
5	28.0	18.5	22.0	22.0	10.0	15.0	6.0	4.5	5.0	.5	.0	.0
6	27.0	17.5	20.5	22.5	10.0	15.5	5.0	4.5	4.5	9.0	.0	3.5
7	22.0	14.5	17.5	20.5	12.0	16.0	5.0	4.0	4.5	9.5	.0	3.5
8	20.5	12.0	15.5	22.5	16.0	19.0	4.0	3.0	3.5	16.0	2.5	7.5
9	19.0	11.5	15.0	19.0	12.5	15.0	4.5	1.5	3.0	15.0	4.0	8.5
10	20.0	12.5	16.0	18.5	8.5	13.0	5.0	.0	2.0	15.0	5.0	9.5
11	21.0	12.5	16.5	13.5	10.5	12.0	4.0	.0	1.5	15.5	5.0	10.0
12	21.0	13.0	16.5	14.0	10.5	12.5	7.0	.0	3.0	15.0	7.5	10.5
13	21.0	13.0	17.0	21.5	14.0	17.0	6.5	3.0	4.5	14.0	4.0	9.0
14	---	---	---	19.0	10.0	13.5	15.0	3.0	8.0	14.5	3.0	8.0
15	---	---	---	17.5	6.0	11.5	9.0	7.5	8.0	13.0	4.0	8.5
16	---	---	---	14.5	4.5	9.5	14.0	4.5	8.5	10.5	6.5	8.0
17	---	---	---	15.5	6.0	9.5	13.5	2.0	7.0	13.5	2.5	7.0
18	---	---	---	10.5	3.5	7.0	13.5	1.5	7.0	12.0	4.0	7.0
19	---	---	---	12.0	8.5	10.0	16.0	4.0	9.0	11.0	.0	5.5
20	---	---	---	12.0	6.5	9.0	13.5	4.0	8.0	14.5	.5	6.5
21	---	---	---	9.5	7.0	8.0	13.0	1.0	6.0	8.5	4.5	6.0
22	---	---	---	9.0	6.5	7.5	13.0	1.0	6.0	4.5	.5	3.0
23	---	---	---	6.5	5.0	6.0	11.5	2.0	6.0	12.5	.0	4.5
24	---	---	---	8.5	6.0	7.0	14.5	3.5	7.5	10.0	1.5	5.5
25	---	---	---	8.0	7.0	7.5	13.5	1.0	6.5	12.0	3.0	7.0
26	---	---	---	9.0	7.0	8.0	13.5	1.0	6.5	15.0	7.0	9.0
27	20.5	10.5	14.0	9.0	7.0	8.0	11.0	4.5	8.0	16.5	5.0	9.5
28	19.5	11.0	14.0	7.0	5.0	6.0	10.0	8.5	9.0	12.0	6.0	8.0
29	21.0	12.0	15.5	6.0	4.0	5.0	15.5	6.5	10.0	6.5	2.5	4.5
30	19.5	14.0	16.5	5.5	3.5	4.5	9.0	6.5	7.5	13.0	.0	5.5
31	20.0	10.5	15.0	---	---	---	9.5	2.0	7.0	13.0	.0	6.0
MONTH	28.0	10.5	17.0	22.5	3.5	11.0	16.0	.0	6.0	16.5	.0	6.0

07299540 PRAIRIE DOG TOWN FORK RED RIVER NEAR CHILDRESS, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	20.0	2.0	10.0	2.0	.0	.5	24.5	7.0	14.5	23.0	12.5	17.0
2	22.0	5.5	12.5	2.5	.0	.5	21.0	9.0	14.5	19.5	11.5	14.0
3	16.5	6.0	10.5	6.5	.0	2.5	17.5	12.5	14.5	---	---	---
4	18.5	1.5	9.5	11.0	2.0	5.5	23.5	12.0	17.0	---	---	---
5	20.0	4.5	11.0	10.0	6.5	7.5	26.5	10.5	17.5	---	---	---
6	21.0	3.5	11.0	14.0	2.0	8.5	24.0	13.5	17.5	---	---	---
7	16.0	4.5	9.0	10.5	.0	4.0	26.0	14.5	19.0	---	---	---
8	13.5	.0	5.5	15.0	.0	5.5	26.5	12.5	18.5	---	---	---
9	20.0	.5	9.0	17.0	.0	7.0	28.5	11.0	17.5	---	---	---
10	17.0	4.0	9.5	19.0	2.0	9.5	17.0	5.0	11.5	---	---	---
11	5.5	.0	2.5	23.0	6.0	13.5	21.5	2.0	10.5	---	---	---
12	1.0	.0	.0	23.5	12.0	16.0	27.0	5.0	15.0	30.5	15.5	21.5
13	2.0	.0	1.0	16.5	12.0	14.0	26.0	9.0	16.5	31.0	14.5	22.0
14	7.5	1.0	4.0	14.0	10.0	12.0	24.0	11.5	17.0	29.0	14.5	21.0
15	13.5	5.0	8.0	16.5	12.0	14.0	21.5	12.5	17.0	32.0	16.5	22.5
16	7.5	2.5	4.5	20.0	11.0	15.5	28.0	16.5	20.5	25.0	18.5	21.5
17	14.0	.0	6.0	20.5	11.0	15.5	18.5	13.5	16.0	26.0	15.0	21.5
18	14.0	3.5	8.5	20.0	12.0	16.0	26.5	9.0	16.5	22.5	9.5	16.0
19	18.0	4.5	10.5	18.5	13.0	16.0	18.0	10.5	13.5	26.0	12.5	19.0
20	21.0	4.5	12.5	18.0	12.0	15.0	---	---	---	25.0	15.5	20.0
21	21.0	6.0	13.0	19.5	12.0	15.5	---	---	---	29.5	16.0	22.0
22	22.5	9.0	14.0	18.0	14.5	16.5	11.0	7.5	8.5	29.0	18.0	23.0
23	20.0	9.0	13.5	17.0	12.0	15.0	18.0	5.5	11.0	23.5	16.5	20.5
24	19.5	6.0	12.5	25.0	13.5	17.5	23.0	8.5	14.5	17.5	13.5	16.0
25	18.0	8.5	13.0	25.0	15.5	19.0	23.5	10.5	16.0	15.5	13.0	14.5
26	22.5	12.5	16.5	21.5	9.0	14.0	19.0	11.0	14.5	24.0	15.5	18.5
27	15.5	10.0	12.5	22.0	6.0	13.0	24.0	8.5	14.5	---	---	---
28	10.5	2.0	5.5	11.5	7.5	9.0	23.5	12.0	16.5	---	---	---
29	---	---	---	10.5	6.5	8.5	26.5	14.5	19.5	---	---	---
30	---	---	---	11.5	6.5	8.5	20.0	14.5	16.5	---	---	---
31	---	---	---	21.5	6.5	12.5	---	---	---	24.0	16.0	19.0
MONTH	22.5	.0	9.0	25.0	.0	11.0	28.5	2.0	15.5	32.0	9.5	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.5	17.0	22.0	32.0	20.0	25.5	23.5	20.5	21.0	36.5	22.5	28.0
2	---	---	---	32.0	20.0	25.5	23.0	20.5	21.5	33.5	21.5	26.5
3	---	---	---	32.0	21.5	26.5	28.5	22.0	24.5	33.0	20.5	26.0
4	---	---	---	32.5	21.5	27.0	31.5	23.5	27.0	34.5	20.5	26.0
5	---	---	---	36.0	22.5	29.0	34.5	25.0	29.0	35.0	21.5	27.5
6	---	---	---	32.0	24.5	27.0	35.0	25.5	29.5	33.0	21.5	26.5
7	---	---	---	34.5	25.0	30.0	35.0	25.0	29.0	28.5	20.5	24.0
8	---	---	---	34.5	25.5	29.5	34.0	25.0	29.0	25.5	17.5	21.0
9	---	---	---	35.5	24.5	29.5	32.0	24.0	27.5	20.0	18.0	18.5
10	---	---	---	---	---	---	33.5	22.5	27.5	23.0	18.0	20.0
11	---	---	---	---	---	---	33.5	21.0	27.5	28.5	19.5	22.5
12	---	---	---	---	---	---	34.0	23.0	28.0	33.0	20.0	26.0
13	---	---	---	---	---	---	34.5	23.5	28.5	---	---	---
14	---	---	---	35.0	22.5	28.0	34.0	23.5	28.0	---	---	---
15	---	---	---	37.0	22.5	27.0	33.0	24.0	28.0	---	---	---
16	---	---	---	37.0	23.5	29.0	31.5	25.5	28.0	28.5	20.5	24.0
17	---	---	---	32.0	25.0	27.5	31.0	23.0	26.5	28.0	22.5	25.0
18	---	---	---	31.5	24.0	26.0	32.0	21.5	26.5	26.0	22.5	23.5
19	---	---	---	29.0	22.5	25.5	34.0	22.5	27.5	23.0	19.5	21.5
20	---	---	---	32.0	23.5	27.5	36.0	23.5	29.0	23.0	17.0	19.5
21	---	---	---	35.5	24.5	29.0	37.0	24.5	29.5	19.5	9.5	13.5
22	---	---	---	34.0	24.0	28.0	36.5	23.5	29.0	17.5	9.5	12.5
23	---	---	---	34.0	22.0	27.5	36.5	23.5	29.0	21.0	10.0	15.0
24	---	---	---	33.5	22.5	27.0	36.0	22.5	28.5	17.0	12.5	15.0
25	---	---	---	33.5	25.0	29.0	35.0	22.0	27.5	20.5	14.0	16.0
26	---	---	---	35.0	24.5	28.5	35.5	23.0	28.5	21.5	13.5	17.0
27	31.0	20.0	25.0	33.5	22.5	27.5	36.5	23.5	29.0	23.0	17.5	19.5
28	35.0	23.0	28.5	34.5	21.5	27.5	36.5	23.0	29.0	24.0	20.0	22.0
29	28.5	21.5	25.0	34.5	24.0	28.0	35.5	23.0	28.5	29.0	19.5	24.0
30	28.5	19.5	23.0	33.0	23.0	27.0	34.0	22.5	27.5	26.0	20.0	22.5
31	---	---	---	28.5	23.5	25.5	36.0	22.5	27.5	---	---	---
MONTH	35.0	17.0	25.0	37.0	20.0	27.5	37.0	20.5	27.5	36.5	9.5	21.5
YEAR	37.0	.0	15.5									

07299670 GROESBECK CREEK AT STATE HIGHWAY 6 NEAR QUANAH, TX

LOCATION.--Lat 34°21'16", long 99°44'24", Hardeman County, Hydrologic Unit 11130101, near left bank at downstream side of bridge on State Highway 6, 2 mi downstream from confluence of North and South Groesbeck Creeks, 4 mi north of Quanah, and 9 mi upstream from confluence with the Red River.

DRAINAGE AREA.--303 mi².

PERIOD OF RECORD.--November 1961 to current year. Prior to October 1974, published as "at State Highway 283".

GAGE.--Water-stage recorder. Datum of gage is 1,425.69 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. There are several diversions upstream from station for farm and ranch use and for a gypsum plant. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--The highest stage known occurred in June 1891; and the highest stage since 1891 occurred in September 1929, stages unknown. Other large floods are reported to have occurred in 1912, 1936, 1946, 1951, 1955, and 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	0235	11,500	22.18	Aug. 3	0400	10,600	21.80
July 19	1520	1,830	15.59				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e14	12	11	12	12	9.3	3.7	e11	17	31	24
2	11	e13	12	11	12	11	9.3	3.3	e10	20	6700	23
3	11	e12	12	11	11	12	9.7	3.4	e97	18	7320	22
4	11	e13	12	11	11	12	11	3.2	e3570	18	1660	22
5	11	e120	11	11	11	13	11	3.2	8150	17	277	23
6	11	e74	12	11	11	13	11	186	e2060	17	92	23
7	12	e38	12	11	11	13	11	e137	e375	17	53	23
8	13	e28	12	11	11	13	11	e30	e123	16	45	23
9	13	e27	12	11	11	12	11	e20	e78	20	43	24
10	13	e26	12	11	12	12	9.3	e17	e65	18	42	24
11	13	e24	11	12	12	12	9.7	e16	e58	17	41	26
12	12	e23	11	12	12	12	10	e16	e51	17	40	32
13	12	e22	11	11	12	14	11	e15	e43	16	37	271
14	12	e21	11	11	12	12	11	e14	34	15	32	61
15	12	e21	11	11	11	12	11	e14	30	15	32	43
16	14	21	11	11	12	11	11	e13	24	15	33	264
17	30	23	11	11	12	11	18	e13	22	14	32	235
18	e20	24	11	11	12	11	79	e13	21	192	30	246
19	e87	26	11	11	12	11	10	e12	20	685	30	195
20	e513	162	12	11	13	11	6.4	e12	20	77	31	158
21	e158	101	12	11	13	9.7	5.7	e12	19	20	32	103
22	e84	18	12	11	12	9.3	5.4	e11	19	13	29	121
23	e116	9.6	11	11	11	8.9	5.7	e11	18	11	29	74
24	e60	9.0	11	11	10	9.3	5.3	e10	21	10	28	53
25	e41	8.0	11	11	10	9.3	5.1	e10	19	9.8	27	51
26	e27	9.0	11	11	12	11	4.8	e144	19	9.5	27	63
27	e19	13	11	9.9	14	9.3	4.4	e139	19	9.1	26	50
28	e15	14	12	11	13	8.9	4.3	e27	18	8.9	26	44
29	e15	13	12	12	---	8.5	4.2	e20	18	8.8	25	42
30	e14	12	12	11	---	8.9	3.9	e15	17	9.0	24	46
31	e14	---	12	12	---	9.3	---	e13	---	9.1	24	---
TOTAL	1405	938.6	357	343.9	328	342.4	329.5	956.8	15049	1359.2	16898	2409
MEAN	45.3	31.3	11.5	11.1	11.7	11.0	11.0	30.9	502	43.8	545	80.3
MAX	513	162	12	12	14	14	79	186	8150	685	7320	271
MIN	11	8.0	11	9.9	10	8.5	3.9	3.2	10	8.8	24	22
AC-FT	2790	1860	708	682	651	679	654	1900	29850	2700	33520	4780
CFSM	.15	.10	.04	.04	.04	.04	.04	.10	1.66	.14	1.80	.27
IN.	.17	.12	.04	.04	.04	.04	.04	.12	1.85	.17	2.07	.30

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995, BY WATER YEAR (WY)

MEAN	33.9	9.12	8.51	7.38	7.73	9.24	13.6	27.2	57.5	14.4	25.0	46.8
MAX	393	31.3	43.0	24.3	26.3	37.1	97.1	163	502	116	545	286
(WY)	1984	1995	1992	1992	1992	1990	1976	1987	1995	1975	1995	1974
MIN	.68	1.33	1.48	1.33	1.35	1.18	1.12	1.74	1.54	.10	.000	.39
(WY)	1969	1969	1969	1971	1971	1971	1969	1967	1967	1964	1964	1968

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995	
ANNUAL TOTAL	8125.4		40716.4			
ANNUAL MEAN	22.3		112		21.2	
HIGHEST ANNUAL MEAN					112	1995
LOWEST ANNUAL MEAN					2.97	1964
HIGHEST DAILY MEAN	513	Oct 20	8150	Jun 5	9570	Oct 20 1983
LOWEST DAILY MEAN	8.0	Nov 25	3.2	May 4	.00	Jul 7 1964
ANNUAL SEVEN-DAY MINIMUM	9.4	Sep 8	3.6	Apr 29	.00	Jul 7 1964
INSTANTANEOUS PEAK FLOW			11500	Jun 5	18000	Oct 20 1983
INSTANTANEOUS PEAK STAGE			22.18	Jun 5	24.78	Oct 20 1983
ANNUAL RUNOFF (AC-FT)	16120		80760		15330	
ANNUAL RUNOFF (CFSM)	.073		.37		.070	
ANNUAL RUNOFF (INCHES)	1.00		5.00		.95	
10 PERCENT EXCEEDS	27		75		19	
50 PERCENT EXCEEDS	17		13		6.3	
90 PERCENT EXCEEDS	11		9.4		1.5	

e Estimated

07299840 GREENBELT LAKE NEAR CLARENDON, TX

LOCATION.--Lat 35°00'02", long 100°53'40", Donley County, Hydrologic Unit 11120201, on upstream side near right end of dam on Salt Fork Red River and 4.3 mi north of Clarendon.

DRAINAGE AREA.--457 mi², of which 191 mi² probably is noncontributing.

PERIOD OF RECORD.--August 1967 to current year. Prior to October 1973, published as Greenbelt Reservoir.

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

REMARKS.--The lake is formed by a rolled earthfill dam 5,800 ft long. Deliberate impoundment began Dec. 5, 1966, and the dam was completed in August 1967. The dam is the property of Greenbelt Municipal and Industrial Water Authority and was built to impound water for municipal and industrial uses by the cities of Childress, Clarendon, Crowell, Hedley, and Quanah. The spillway is an uncontrolled open cut through natural ground, 1,450 ft wide and located at the left end of dam, designed to discharge 184,000 ft³/s at an elevation of 2,684.0 ft. A morning-glory-type drop inlet with a 26-foot 8.5-inch-diameter opening at crest discharges into a 7- by 7-foot concrete conduit. The outlet works consists of a 36-inch pipe that is controlled by two 20-inch valves that control the discharge into a stilling basin and to a water treatment plant. The capacity table, dated April 1964, is based on Geological Survey topographic maps dated 1962. Gage-height telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	2,686.0	-
Design flood	2,683.0	105,600
Crest of spillway	2,674.0	81,760
Crest of morning-glory-type drop inlet	2,663.65	59,110
Lowest gated outlet (invert)	2,597.0	900

COOPERATION.--Records of diversion and capacity table provided by Greenbelt Municipal and Industrial Water Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 44,650 acre-ft June 26-28, 1975 (elevation, 2,655.71 ft); minimum, 2,950 acre-ft Aug. 29, 30, 1967 (elevation, 2,607.37 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 25,250 acre-ft June 9 at 1500 hours (elevation, 2,641.70 ft); minimum, 23,100 acre-ft Sept. 14 (elevation, 2,639.70 ft).

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

2,607.0	2,840	2,640.0	23,410	2,648.0	32,990
2,610.0	3,770	2,642.0	25,580	2,652.0	38,730
2,620.0	8,000	2,644.0	27,900	2,654.0	41,850
2,630.0	14,340	2,646.0	30,370	2,656.0	45,130

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24840	24190	24050	23960	24070	24050	23970	23720	24000	25030	24320	23580
2	24820	24170	24030	24000	24040	24050	23960	23660	23970	25060	24440	23520
3	24790	24120	24040	23960	24050	24050	24010	23720	24770	25040	24450	23460
4	24750	24090	24040	23960	24050	24060	24020	23690	25040	25000	24430	23450
5	24730	24120	24020	23940	24050	24110	24010	23720	25150	24970	24420	23400
6	24690	24090	24020	23980	24030	24020	24020	23750	25170	24940	24390	23360
7	24680	24150	24040	24030	24040	24060	24030	23760	25180	24910	24380	23310
8	24660	24110	24020	24040	24040	24050	23990	23780	25220	24880	24330	23290
9	24640	24170	24030	24040	24040	24040	23990	23740	25220	24820	24280	23250
10	e24630	24160	24020	24050	24030	24050	23870	23740	25190	24800	24260	23230
11	e24610	24140	24010	24030	24010	24000	23910	23710	25180	24740	24210	23200
12	e24590	24150	24000	24030	24010	24070	23910	23710	25170	24690	24200	23190
13	e24570	24150	24000	24030	24010	24040	23870	23690	25150	24660	24160	23160
14	e24500	24130	24000	24030	24010	24050	23860	23670	25130	24600	24200	23120
15	e24510	24120	24000	24030	24020	24060	23840	23620	25080	24580	24200	23210
16	e24490	24110	23980	24000	24020	24070	23840	23620	25040	24530	24160	23220
17	e24470	24080	23970	24020	24020	24060	23740	23580	25010	24560	24130	23210
18	e24450	24060	23970	23970	23990	24060	23780	23620	24990	24570	24080	23260
19	e24430	24140	23960	23970	24020	24030	23780	23600	24960	24560	24050	23350
20	24380	24130	23970	24020	24030	24040	23810	23580	24930	24550	24030	23340
21	24340	24120	23960	24020	24040	24040	23740	23590	24960	24580	24000	23340
22	24330	24110	23960	24020	24030	24000	23740	23560	24960	24600	23970	23350
23	24310	24110	23960	24040	24030	24020	23820	23510	25040	24600	23930	23340
24	24290	24120	23960	24030	24030	23970	23820	23520	24970	24570	23900	23330
25	24270	24120	23970	24040	24050	23980	23780	23600	25020	24550	23850	23340
26	24270	24120	23960	24050	24070	23980	23770	23770	25070	24500	23830	23330
27	24240	24110	23970	24050	24070	23970	23760	23830	25120	24450	23780	23330
28	24240	24070	23940	24020	24050	23980	23750	23860	25130	24420	23760	23330
29	24220	24060	23960	24050	---	23980	23750	23900	25100	24370	23700	23330
30	24190	24050	23970	24060	---	23980	23740	23960	25070	24320	23660	23320
31	24200	---	23980	24070	---	23970	---	23960	---	24300	23620	---
MAX	24840	24190	24050	24070	24070	24110	24030	23960	25220	25060	24450	23580
MIN	24190	24050	23940	23940	23990	23970	23740	23510	23970	24300	23620	23120
(+)	2640.74	2640.60	2640.53	2640.62	2640.60	2640.52	2640.31	2640.51	2641.54	2640.84	2640.20	2639.91
(@)	-680	-150	-70	+90	-20	-80	-230	+220	+1110	-770	-680	-300
(++)	363	307	304	302	279	312	334	338	372	482	457	383

CAL YR 1994 MAX 29270 MIN 23940 (@) -4690 (++) 4433
WTR YR 1995 MAX 25220 MIN 23120 (@) -1560 (++) 4233

e Estimated
(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.
(++) Diversions, in acre-feet, for municipal and industrial use by Greenbelt Municipal Water Authority

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TX

LOCATION.--Lat 34°57'27", long 100°13'14", Collingsworth County, Hydrologic Unit 11120202, near center of stream at downstream side of bridge on U.S. Highway 83, 4 mi downstream from Fort Worth and Denver (Burlington) Railway Co. bridge, 4.5 mi south of Lutie, and 7.2 mi north of Wellington.

DRAINAGE AREA.--1,222 mi², of which 209 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,941.41 ft above sea level.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. There are several small diversions upstream from gage for irrigation. There is some regulation for municipal use by Greenbelt Lake (station 07299840) 42 mi upstream.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--14 years (water years 1953-66) prior to completion of Greenbelt Lake, 72.6 ft³/s (52,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1953-66).--Maximum discharge, 146,000 ft³/s May 16, 1957 (gage height, 19.00 ft), from rating curve extended above 11,000 ft³/s on basis of slope-area measurement of 63,400 ft³/s; minimum, 0.1 ft³/s June 19, 1952.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	6.5	11	12	17	17	22	19	474	331	62	3.5
2	3.5	6.7	11	12	17	17	20	18	97	416	1300	3.6
3	3.4	6.8	11	13	15	18	24	18	15800	e376	1010	3.2
4	3.7	7.9	11	13	14	20	28	17	6830	e186	527	2.8
5	4.7	8.9	12	13	14	23	26	19	2120	e57	267	2.7
6	3.7	7.9	13	13	14	21	23	71	920	e23	106	2.5
7	4.2	8.0	13	13	14	27	19	56	e570	18	49	2.3
8	4.8	8.2	12	13	14	27	17	50	e288	14	34	2.2
9	4.4	7.9	12	12	14	23	16	31	e246	12	29	3.0
10	4.8	8.1	12	12	14	21	15	23	e217	11	26	3.0
11	4.8	8.7	12	12	14	20	15	19	e173	10	24	3.1
12	4.6	9.0	13	11	14	21	15	17	e142	10	21	2.7
13	4.4	10	12	12	17	21	14	15	e119	8.9	18	2.3
14	4.2	9.6	13	12	18	20	14	13	e100	8.8	14	1.8
15	5.1	9.4	12	12	18	20	14	13	e87	8.5	31	6.4
16	5.4	8.7	13	12	20	23	14	14	e81	8.2	41	11
17	6.2	8.8	13	12	18	21	33	16	e81	7.8	47	19
18	5.6	9.2	13	11	17	18	33	14	e81	140	26	155
19	5.6	23	12	11	17	18	21	13	e76	54	18	499
20	5.5	28	11	12	18	15	27	12	e70	22	15	275
21	5.5	16	9.9	12	17	15	23	14	e70	21	13	173
22	3.9	13	9.9	14	17	14	26	12	e65	16	11	173
23	3.5	12	9.9	14	17	14	42	12	e60	66	8.7	81
24	3.7	12	11	13	17	14	37	15	e60	52	8.1	48
25	3.8	12	12	13	15	29	33	25	e57	26	7.4	48
26	3.7	12	12	14	15	32	27	56	e55	17	6.6	47
27	4.0	11	12	15	17	22	21	575	e175	11	5.6	33
28	4.5	11	13	17	17	20	20	101	300	8.6	5.1	27
29	4.6	10	12	17	---	24	20	51	400	7.1	4.4	62
30	4.7	9.9	11	15	---	25	20	57	364	5.8	3.7	51
31	6.5	---	12	15	---	25	---	102	---	5.2	3.5	---
TOTAL	140.1	320.2	366.7	402	450	645	679	1488	30178	1957.9	3742.1	1747.1
MEAN	4.52	10.7	11.8	13.0	16.1	20.8	22.6	48.0	1006	63.2	121	58.2
MAX	6.5	28	13	17	20	32	42	575	15800	416	1300	499
MIN	3.1	6.5	9.9	11	14	14	14	12	55	5.2	3.5	1.8
AC-FT	278	635	727	797	893	1280	1350	2950	59860	3880	7420	3470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995#, BY WATER YEAR (WY)

MEAN	31.3	27.5	25.5	29.4	33.7	39.9	59.0	116	157	28.9	30.4	31.3
MAX	279	213	92.4	86.0	64.5	127	505	468	1006	155	301	113
(WY)	1987	1987	1992	1993	1988	1979	1977	1977	1995	1993	1968	1981
MIN	4.28	8.03	3.59	10.5	10.9	8.15	6.10	2.61	8.17	2.65	1.68	2.22
(WY)	1981	1981	1984	1971	1967	1972	1971	1971	1970	1970	1970	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995#	
ANNUAL TOTAL	7057.1		42116.1			
ANNUAL MEAN	19.3		115		50.8	
HIGHEST ANNUAL MEAN					115	1995
LOWEST ANNUAL MEAN					10.5	1971
HIGHEST DAILY MEAN	161	Apr 30	15800	Jun 3	15800	Jun 3 1995
LOWEST DAILY MEAN	1.6	Sep 5	1.8	Sep 14	.40	Jun 2 1985
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 30	2.6	Sep 8	.73	May 27 1985
INSTANTANEOUS PEAK FLOW			36200	Jun 3	62100	Apr 20 1977
INSTANTANEOUS PEAK STAGE			11.45	Jun 3	13.80	Apr 20 1977
ANNUAL RUNOFF (AC-FT)	14000		83540		36810	
10 PERCENT EXCEEDS	39		91		65	
50 PERCENT EXCEEDS	12		14		16	
90 PERCENT EXCEEDS	2.7		4.7		4.2	

e Estimated
Period of regulated streamflow.

07300000 SALT FORK RED RIVER NEAR WELLINGTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: February 1951 to October 1954, October 1967 to current year. Chemical and biochemical analyses: October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1952 to September 1954, October 1967 to September 1991.
WATER TEMPERATURE: June 1952 to September 1954, October 1967 to September 1991.

INSTRUMENTATION.--From September 1968 to September 1974, specific conductance was continuously recorded at this station.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,510 microsiemens Dec. 20, 1990; minimum daily, 330 microsiemens July 30, 1982.
WATER TEMPERATURE: Maximum daily, 40.0°C July 20, 1981; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
DEC												
05...	1740	12	3380	8.1	10.0	11.5	109	1.1	K66	210	1700	1600
FEB												
01...	1142	17	3510	8.0	10.0	13.1	124	0.6	160	79	1700	1600
APR												
12...	1525	15	3260	8.0	24.5	8.8	112	0.7	K19	K16	1600	1400
MAY												
26...	1505	43	2520	8.0	21.5	10.6	129	1.1	>1200	>2000	1200	1000
AUG												
14...	1525	14	3410	8.0	34.0	7.7	117	0.2	K14	92	1600	1500
22...	1350	12	3360	8.1	34.0	8.2	124	0.4	100	K24	1600	1500

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
DEC											
05...	550	91	200	2	3.9	160	1600	260	0.60	17	2830
FEB											
01...	550	89	220	2	3.7	160	1500	330	0.60	17	2820
APR											
12...	490	86	210	2	3.9	140	1500	290	0.60	18	2690
MAY											
26...	350	74	200	3	4.7	140	960	250	0.60	16	1940
AUG											
14...	490	99	230	2	4.9	120	1400	320	0.60	23	2650
22...	490	88	210	2	4.3	130	1500	310	0.60	22	2710

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
DEC											
05...	1.90	--	<0.010	1.90	1.90	0.080	--	<0.20	0.020	<0.010	--
FEB											
01...	1.79	1.79	0.010	1.80	1.80	0.070	--	<0.20	0.020	<0.010	--
APR											
12...	1.68	1.68	0.020	1.70	1.70	0.080	--	<0.20	<0.010	<0.010	--
MAY											
26...	0.540	0.540	0.010	0.550	0.550	0.050	0.15	0.20	<0.010	<0.010	--
AUG											
14...	1.08	1.08	0.020	1.10	1.10	0.080	--	<0.20	0.020	0.020	0.06
22...	1.38	1.38	0.020	1.40	1.40	0.100	0.10	0.20	<0.010	<0.010	--

07300500 SALT FORK RED RIVER AT MANGUM, OK

LOCATION.--Lat 34°51'30", long 99°30'30", in SW 1/4 SE 1/4 sec.34. T.5 N, R.22 W., Greer County, Hydrologic Unit 11120202, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mi south of Mangum, 13.0 mi downstream from Fish Creek, and at mile 35.5.

DRAINAGE AREA.--1,566 mi², of which 209 mi² probably is noncontributing.

PERIOD OF RECORD.--April 1905 to June 1906, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1241: 1938.

GAGE.--Water-stage recorder. Datum of gage is 1,490.87 ft above sea level (levels by U.S. Bureau of Reclamation). Apr. 11, 1905 to June 30, 1906, nonrecording gage at site 0.2 mi upstream at different datum. Oct. 1, 1937 to Nov. 8, 1938, nonrecording gage at present site and datum.

REMARKS.--Records fair.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage Height (ft)
June 4	1530	14,200	12.88	Aug. 3	0300	13,800	12.72
June 10	0915	6,520	9.51				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.7	17	26	28	21	43	24	196	e79	696	e40
2	.00	1.5	18	25	28	e22	43	22	679	e78	4100	e39
3	.00	1.3	19	26	26	26	45	22	1880	e76	6270	e38
4	.00	2.0	20	24	23	34	49	20	11000	e75	2090	e37
5	.00	3.6	22	24	22	38	48	21	3570	e74	e600	e36
6	.00	3.4	24	25	21	39	49	34	1150	e70	e450	e34
7	.00	3.4	24	25	21	46	43	145	678	e69	e370	e33
8	.00	3.3	25	29	21	48	37	313	526	e66	e250	e32
9	.00	3.1	25	28	20	50	31	112	856	e60	e190	e32
10	.00	3.1	25	28	21	45	28	66	2540	e58	e160	e31
11	.00	2.8	24	27	20	41	25	44	834	e55	e140	e45
12	.00	2.7	22	25	19	40	23	39	469	e50	e120	e60
13	.00	3.7	21	24	19	46	21	36	e240	e49	e110	864
14	.00	3.8	22	23	23	72	20	30	e190	e48	e100	661
15	.00	3.5	22	23	27	60	18	27	e170	e47	e90	875
16	.01	3.3	22	23	28	52	18	26	e150	e46	e83	1590
17	315	3.0	22	23	26	45	25	24	e140	e45	e78	1030
18	85	2.8	23	23	28	43	36	20	e130	e43	e75	1350
19	4.4	14	23	23	25	41	69	21	e117	e42	e72	1440
20	1.9	530	22	22	22	36	65	19	e109	e42	e69	600
21	2.9	71	22	23	22	32	49	20	e106	e41	e68	693
22	2.6	47	22	30	22	29	50	18	e100	e40	e64	559
23	1.1	29	22	32	21	27	56	17	e94	e45	59	366
24	.74	25	23	31	20	26	58	23	e90	530	e58	388
25	.45	23	24	31	21	28	68	49	e88	105	e54	544
26	.34	22	25	31	21	29	52	475	e86	e80	e52	e350
27	.34	20	25	33	21	32	40	936	e84	59	e50	e300
28	.39	18	25	30	21	53	32	994	e83	e52	e48	e245
29	.56	17	28	30	---	46	29	364	e82	e48	e46	e220
30	.85	17	28	29	---	42	25	280	e80	e47	e44	e180
31	1.8	---	27	28	---	41	---	254	---	e45	e42	---
TOTAL	418.38	885.0	713	824	637	1230	1195	4495	26517	2264	16698	12712
MEAN	13.5	29.5	23.0	26.6	22.7	39.7	39.8	145	884	73.0	539	424
MAX	315	530	28	33	28	72	69	994	11000	530	6270	1590
MIN	.00	1.3	17	22	19	21	18	17	80	40	42	31
AC-FT	830	1760	1410	1630	1260	2440	2370	8920	52600	4490	33120	25210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1995, BY WATER YEAR (WY)

MEAN	78.3	28.2	35.2	45.2	51.4	48.3	85.4	271	245	63.7	40.1	50.9
MAX	919	196	148	199	196	183	490	1389	1602	575	539	424
(WY)	1961	1987	1992	1960	1949	1969	1973	1957	1941	1953	1995	1995
MIN	.000	.000	.000	.000	.000	.12	.000	.000	.000	.000	.000	.000
(WY)	1941	1940	1940	1940	1953	1971	1955	1953	1952	1963	1943	1939

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1938 - 1995	
ANNUAL TOTAL	12496.82		68588.38			
ANNUAL MEAN	34.2		188		87.0	
HIGHEST ANNUAL MEAN					277	1941
LOWEST ANNUAL MEAN					12.3	1940
HIGHEST DAILY MEAN	530	Nov 20	11000	Jun 4	22600	May 28 1978
LOWEST DAILY MEAN	.00	Aug 10	.00	Oct 1	.00	Oct 2 1937
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 22	.00	Oct 1	.00	Aug 14 1938
INSTANTANEOUS PEAK FLOW			14200	Jun 4	72000	May 16 1957
INSTANTANEOUS PEAK STAGE			12.88	Jun 4	14.70	Jun 16 1938
ANNUAL RUNOFF (AC-FT)	24790		136000		63000	
10 PERCENT EXCEEDS	61		365		120	
50 PERCENT EXCEEDS	23		32		16	
90 PERCENT EXCEEDS	.00		3.1		.00	

e Estimated

07301200 McCLELLAN CREEK NEAR McLEAN, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 35°19'45", Long 100°36'32", Gray County, Hydrologic Unit 11120301, on left bank at downstream side of bridge on State Highway 273, 5.0 mi upstream from mouth.

DRAINAGE AREA.--759.0 mi², of which 299mi² probably is noncontributing.

PERIOD OF RECORD.--October 1967 to September 1980 (continuous record). October 1981 to September 1992 (annual maximum), October 1992 to current year (peaks above base discharge and annual maximum).

REVISED RECORDS.--WDR TX-75-1: 1968-70, 1972, 1973(M), 1974.

GAGE.--Water-stage recorder. Datum of gage is 2,545.99 ft above sea level.

REMARKS.--Water-discharge records fair. Flow is regulated by Lake McClellan,(capacity 5,000 acre-ft), 18 mi upstream. Flow is affected at times by discharge from flood-detention pool of a floodwater-retarding structure with detention capacity of 2,930 acre-ft. These structures control flow from 17.0 mi².

AVERAGE DISCHARGE.--13 years (water years 1967-80), 20.1 ft³/s, 14,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft³/s May 29, 1975 (gage height, 14.55 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1912, 21 ft in May 1957, from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	1600	862	8.48				

07301300 NORTH FORK RED RIVER NEAR SHAMROCK, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 35°15'51", Long 100°14'29", Wheeler County, Hydrologic Unit 11120302, on left bank at downstream side of bridge on U.S. Highway 83, 2.5 mi north of Shamrock.

DRAINAGE AREA.--1,082 mi^2, of which 379 mi^2 probably is noncontributing.

PERIOD OF RECORD.--October 1951 to September 1963 (miscellaneous measurements). October 1964 to September 1992 (annual maximum), October 1992 to current year (peaks above base discharge and annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 2,165.55 ft above sea level.

REMARKS.--Some regulation by Lake McClellan (capacity 5,000 acre-feet) 41 miles upstream. Flow is affected at times by discharge from flood-detention pools of eleven floodwater retarding structures with combined detention capacity of 18,290 acre-feet. These structures control runoff from 165 mi^2.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,600 ft^3/s June 3, 1995 (gage height, 8.49 ft).

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 26	2300	7,960	5.01	June 3	1300	25,600	8.49

07301410 SWEETWATER CREEK NEAR KELTON, TX

LOCATION.--Lat 35°28'23", long 100°07'14", Wheeler County, Hydrologic Unit 11120302, near center of stream at downstream side of bridge on Farm Road 592, 5 mi north of Kelton, 8 mi upstream from Texas-Oklahoma State line, and 8.5 mi northeast of Wheeler.

DRAINAGE AREA.--287 mi², of which 20 mi² probably is noncontributing.

PERIOD OF RECORD.--November 1961 to current year.
Water-quality records.--Chemical analyses: October 1969 to June 1985.

GAGE.--Water-stage recorder. Elevation of gage is 2,230 ft above sea level from topographic map.

REMARKS.--Records fair except those fore estimated daily discharge, which are poor. There are many small diversions upstream from station for ranch use. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1882, about 20 ft May 16, 1957.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 3	2100	1,040	13.93				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	1.0	2.0	4.8	6.9	6.8	12	9.4	52	11	150	3.7
2	.43	.90	2.2	4.9	6.7	7.1	11	8.8	40	12	83	3.5
3	.37	.76	2.4	5.0	6.5	7.6	13	9.0	385	12	110	3.2
4	.42	.79	2.5	4.8	6.3	8.1	14	8.6	753	10	52	3.1
5	.63	.90	2.7	5.0	6.2	8.6	14	8.2	385	9.5	39	3.0
6	.44	.91	3.4	5.1	6.6	8.6	15	13	136	8.8	30	3.0
7	.31	.77	4.2	5.4	6.5	e8.2	16	24	85	8.6	23	2.9
8	.36	.71	4.1	5.4	6.4	8.6	16	38	65	8.2	18	3.1
9	.37	.73	4.1	5.4	6.8	8.8	14	24	60	7.7	16	3.4
10	.36	.76	4.1	5.6	6.9	8.3	13	14	66	7.3	14	3.8
11	.37	.80	4.0	5.5	6.7	8.1	13	11	54	7.1	12	4.2
12	.41	.89	4.1	5.5	6.6	8.2	12	10	44	6.5	11	4.2
13	.38	1.0	4.2	5.3	6.7	8.2	12	9.4	39	6.1	10	3.8
14	.43	1.0	4.3	5.2	7.2	9.1	11	8.2	35	6.0	9.8	3.6
15	.68	1.0	4.5	5.3	7.3	12	11	7.5	31	5.9	9.4	3.7
16	.73	.99	4.3	5.3	7.0	11	11	7.4	28	6.1	9.3	5.0
17	.73	.97	4.1	5.2	6.8	10	11	13	24	6.9	8.5	4.5
18	.58	.96	3.9	5.2	6.8	10	12	12	23	16	8.0	4.6
19	.51	1.6	3.9	5.1	6.8	9.5	11	8.6	22	46	7.6	7.2
20	.67	7.0	3.9	5.2	6.9	8.8	12	7.4	21	13	e7.0	7.2
21	.73	3.7	3.9	5.2	7.0	8.4	13	7.9	e19	9.6	e6.5	8.1
22	.73	2.2	3.9	6.4	7.2	8.2	12	8.0	e18	17	6.2	9.0
23	.68	1.7	3.9	6.4	7.2	7.7	17	23	e17	18	5.7	7.5
24	.66	1.8	4.1	6.6	7.0	7.9	13	21	22	14	5.5	7.2
25	.63	2.0	4.1	7.1	6.9	9.4	12	22	e17	10	5.3	7.8
26	.59	2.1	4.0	7.4	7.2	12	11	37	e16	9.2	5.0	7.8
27	.56	2.1	4.1	7.9	7.0	10	10	133	15	8.1	4.7	7.2
28	.69	1.8	4.4	7.3	7.0	10	10	86	14	7.3	4.4	7.2
29	.69	1.9	4.6	6.9	---	12	10	48	12	6.8	4.0	8.4
30	.76	1.9	4.6	6.9	---	13	9.1	39	12	6.5	3.7	7.8
31	.88	---	5.0	6.8	---	12	---	50	---	6.6	3.7	---
TOTAL	17.22	45.64	119.5	179.1	191.1	286.2	371.1	726.4	2510	327.8	682.3	158.7
MEAN	.56	1.52	3.85	5.78	6.82	9.23	12.4	23.4	83.7	10.6	22.0	5.29
MAX	.88	7.0	5.0	7.9	7.3	13	17	133	753	46	150	9.0
MIN	.31	.71	2.0	4.8	6.2	6.8	9.1	7.4	12	5.9	3.7	2.9
AC-FT	34	91	237	355	379	568	736	1440	4980	650	1350	315

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995, BY WATER YEAR (WY)

MEAN	8.09	10.1	11.5	12.8	15.7	17.9	20.4	24.5	22.8	5.40	5.49	7.28
MAX	42.1	34.5	19.3	24.3	29.6	35.3	74.6	196	86.3	32.3	42.7	40.9
(WY)	1987	1975	1992	1987	1987	1988	1970	1977	1965	1967	1963	1988
MIN	.30	1.05	3.11	5.78	6.82	9.09	8.72	3.38	2.80	.44	.000	.027
(WY)	1985	1985	1984	1995	1995	1977	1971	1971	1966	1974	1964	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995	
ANNUAL TOTAL	2165.12		5615.06			
ANNUAL MEAN	5.93		15.4		13.3	
HIGHEST ANNUAL MEAN					26.8	1977
LOWEST ANNUAL MEAN					4.89	1984
HIGHEST DAILY MEAN	54	Apr 30	753	Jun 4	1820	May 21 1977
LOWEST DAILY MEAN	.08	Aug 28	.31	Oct 7	.00	Jul 29 1964
ANNUAL SEVEN-DAY MINIMUM	.10	Aug 24	.37	Oct 7	.00	Jul 29 1964
INSTANTANEOUS PEAK FLOW			1040	Jun 3	2890	May 20 1977
INSTANTANEOUS PEAK STAGE			13.93	Jun 3	15.73	May 20 1977
INSTANTANEOUS LOW FLOW					.00	Jul 29 1964
ANNUAL RUNOFF (AC-FT)	4290		11140		9620	
10 PERCENT EXCEEDS	12		22		21	
50 PERCENT EXCEEDS	3.9		7.1		10	
90 PERCENT EXCEEDS	.38		.80		.86	

e Estimated

07307750 MIDDLE PEASE RIVER NEAR PADUCAH, TX.

LOCATION.--Lat 34°12'31", long 100°18'03", Cottle County, Hydrologic Unit 11120104, on left bank at downstream side of bridge on U.S. Highway 62 and 83, 11.8 mi north of Paducah, and 13.4 mi upstream from mouth.

DRAINAGE AREA.--1,086 mi², of which 65 mi² probably is noncontributing.

PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: May 1973 to Septmber 1979.
WATER TEMPERATURE: May 1973 to September 1979.
SEDIMENT RECORDS: January 1992 to September 1992. October 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,910 microsiemens Feb. 12, 1975; minimum daily, 802 microsiemens June 10, 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUN						
05...	1310	970	1400	20.0	2280	5970
12...	1330	39	3600	30.0	700	73
AUG						
04...	0900	1340	1200	25.0	1650	5970

RED RIVER BASIN
07307800 PEASE RIVER NEAR CHILDRESS, TX

LOCATION.--Lat 34°13'39", long 100°04'24", Cottle County, Hydrologic Unit 11130105, near right bank at downstream side of bridge on Farm Road 104, 0.8 mi upstream from Catfish Creek, 4.4 mi downstream from confluence of North and Middle Forks, 17 mi southeast of Childress, and 71.0 mi upstream from mouth.

DRAINAGE AREA.--2,754 mi², of which 559 mi² probably is noncontributing.

PERIOD OF RECORD.--December 1959 to September 1962 (average discharge for 1961-62 water years excluded from average annual discharge computations), and October 1967 to current year.
Water-quality records.--Chemical analyses: July 1968 to September 1982

GAGE.--Water-stage recorder. Datum of gage is 1,492.98 ft above sea level. Prior to Dec. 21, 1959, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There are three small diversions for irrigation above station. Flow is affected at times by discharge from the flood-detention pools of six flood-water-retarding structures with a combined detention capacity of 1,360 acre-ft. These structures control runoff from 6.27 mi² in the Kent Creek drainage basin.

AVERAGE DISCHARGE.--2 years (water years 1961-62), 89.6 ft³/s (0.55 in/yr), 64,900 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1909, 22 ft June 1, 1957; flood in May 1935 reached a stage of 18 ft and was the second highest, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 2	2400	5,840	11.33	Aug. 2	1700	18,000	14.50a
June 5	0330	28,500	17.12a	Sept.16	0600	6,180	10.85

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.6	9.0	8.2	11	6.3	7.4	4.5	762	15	496	10
2	3.7	3.1	10	6.8	9.3	7.6	6.7	4.7	1000	34	9130	8.6
3	3.7	3.1	10	7.8	6.8	8.6	6.1	6.6	1310	42	6240	8.0
4	3.3	16	10	8.6	6.8	9.3	11	4.5	4790	69	2490	7.9
5	3.6	63	9.6	9.1	6.8	9.3	9.2	7.7	11200	30	e1320	7.3
6	3.5	22	8.6	11	7.5	9.4	7.6	380	2000	17	e882	6.8
7	22	16	8.6	9.5	8.0	12	6.8	269	1160	12	e515	6.7
8	6.7	14	8.6	8.6	7.0	9.8	6.5	229	738	11	e231	6.4
9	4.4	32	8.4	8.0	5.9	7.9	5.6	74	350	9.0	e157	11
10	3.8	19	7.8	8.0	6.4	6.6	5.3	21	400	9.2	143	17
11	3.7	15	7.7	7.7	6.8	6.3	5.8	13	668	8.2	e135	23
12	3.7	15	8.7	e7.4	6.8	7.4	6.7	9.9	333	7.2	e115	22
13	3.6	16	9.3	e7.3	7.3	8.6	6.9	6.8	199	6.6	e93	125
14	3.9	14	9.2	e7.2	9.7	8.4	6.3	4.5	131	7.0	e79	112
15	7.8	11	8.9	e7.1	10	12	5.9	5.8	102	9.2	e66	349
16	8.0	10	8.6	e7.0	9.8	9.5	6.7	89	83	11	e51	5040
17	168	10	8.6	e6.9	11	7.7	24	161	67	11	e35	7110
18	68	8.9	8.6	e6.9	8.1	6.7	36	63	53	21	e28	e2060
19	19	25	7.7	6.8	7.8	5.9	12	21	43	273	e23	1290
20	9.3	143	7.3	e6.9	7.4	5.3	10	10	35	111	e21	971
21	32	31	6.8	e7.0	6.9	5.6	7.8	6.3	32	50	e20	652
22	18	16	6.8	11	6.3	5.0	9.2	4.3	30	31	e20	465
23	8.6	13	6.8	13	6.2	4.4	9.5	6.6	29	22	e19	358
24	6.8	14	7.9	9.3	5.9	5.3	7.1	11	35	19	e19	270
25	17	14	8.6	8.6	6.9	7.5	6.0	45	26	13	19	321
26	15	14	8.6	10	8.4	7.5	4.3	106	29	9.1	15	315
27	7.5	11	8.6	12	6.8	5.5	4.5	230	46	6.0	11	284
28	6.3	9.1	12	9.0	6.8	5.0	4.5	119	48	4.3	11	215
29	5.8	8.6	14	8.6	---	5.7	3.9	114	24	3.4	10	193
30	4.5	8.5	11	8.6	---	6.6	3.9	229	16	6.2	10	233
31	4.4	---	9.7	9.8	---	7.2	---	211	---	8.1	9.5	---
TOTAL	479.6	598.9	276.0	263.7	214.4	229.9	253.2	2467.2	25739	885.5	22413.5	20497.7
MEAN	15.5	20.0	8.90	8.51	7.66	7.42	8.44	79.6	858	28.6	723	683
MAX	168	143	14	13	11	12	36	380	11200	273	9130	7110
MIN	3.3	3.1	6.8	6.8	5.9	4.4	3.9	4.3	16	3.4	9.5	6.4
AC-FT	951	1190	547	523	425	456	502	4890	51050	1760	44460	40660
CFSM	.01	.01	.00	.00	.00	.00	.00	.04	.39	.01	.33	.31
IN.	.01	.01	.00	.00	.00	.00	.00	.04	.44	.02	.38	.35

RED RIVER BASIN--Continued
07307800 PEASE RIVER NEAR CHILDRESS, TX

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	92.4	23.5	17.5	20.3	23.0	30.3	43.0	90.5	216	40.6	69.7	103
MAX	895	153	132	158	170	181	215	341	858	172	723	683
(WY)	1984	1987	1992	1992	1992	1973	1973	1982	1995	1979	1995	1995
MIN	1.68	3.04	3.74	2.70	2.83	2.78	3.32	5.99	4.08	.28	.13	1.23
(WY)	1981	1978	1979	1971	1971	1971	1974	1975	1970	1980	1980	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	6505.85		74318.6			
ANNUAL MEAN	17.8		204		64.1	
HIGHEST ANNUAL MEAN					204	1995
LOWEST ANNUAL MEAN					15.8	1994
HIGHEST DAILY MEAN	526	Jul 10	11200	Jun 5	14800	Oct 20 1983
LOWEST DAILY MEAN	.59	Aug 8	3.1	Nov 2	.00	Aug 10 1969
ANNUAL SEVEN-DAY MINIMUM	.76	Aug 7	4.3	Oct 8	.00	Aug 10 1969
INSTANTANEOUS PEAK FLOW			28500	Jun 5	28500	Jun 5 1995
INSTANTANEOUS PEAK STAGE			a17.12	Jun 5	a17.12	Jun 5 1995
ANNUAL RUNOFF (AC-FT)	12900		147400		46400	
ANNUAL RUNOFF (CFSM)	.008		.093		.029	
ANNUAL RUNOFF (INCHES)	.11		1.26		.40	
10 PERCENT EXCEEDS	38		232		88	
50 PERCENT EXCEEDS	7.7		9.5		8.7	
90 PERCENT EXCEEDS	1.9		5.6		1.6	

e Estimated
a From flood mark.

RED RIVER BASIN--Continued
07307800 PEASE RIVER NEAR CHILDRESS, TX

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1994 to September 1995.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1994 to September 1995.
TEMPERATURE: October 1994 to September 1995.

INSTRUMENTATION.--Since October 1994 to September 1995, specific conductance and temperature were continuously recorded at this station.

REMARKS.--Interuptions in the record are due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 36,800 microsiemens Feb. 9, 1995; minimum, 957 microsiemens May 29, 30, 1995.
TEMPERATURE: Maximum, 38.0°C July 9, 10, 1995; minimum, 0.0°C Mar. 2, 7, 8 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 36,800 microsiemens Feb. 9, 1995; minimum, 957 microsiemens May 29, 30, 1995.
TEMPERATURE: Maximum, 38.0°C July 9, 10, 1995; minimum, 0.0°C Mar. 2, 7, 8, 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
30...	1040	8.5	34300	8.2	6.5	10.0	3600	3500	1100	210
JAN										
19...	1005	6.9	34700	7.6	4.0	10.5	3600	3500	1100	210
MAR										
14...	1210	7.6	34300	8.0	14.5	8.4	3600	3500	1100	210
APR										
28...	0840	4.8	35700	8.0	13.5	8.1	3700	3500	1100	220
JUN										
13...	1225	195	11100	8.0	25.0	7.5	1800	1600	520	120
AUG										
10...	1120	155	13100	8.0	27.0	--	2000	1900	560	150

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV									
30...	7000	51	21	140	2900	11000	0.50	12	22300
JAN									
19...	7000	51	19	130	2900	11000	0.50	10	22300
MAR									
14...	6400	46	25	130	2800	11000	0.50	8.5	21600
APR									
28...	7000	50	20	130	3200	11000	0.50	9.9	22400
JUN									
13...	2000	21	11	140	1400	3200	0.80	14	7350
AUG									
10...	2300	22	13	150	1600	3700	0.60	17	8430

RED RIVER BASIN--Continued
07307800 PEASE RIVER NEAR CHILDRESS, TX

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	32200	30900	31700	35300	34200	34800	33400	32400	32900	34200	33300	34000
2	32500	31700	32100	35000	33800	34500	33100	32100	32600	34200	32300	33700
3	32400	31300	31900	34500	33200	34000	33200	32100	32700	33200	33200	33200
4	32300	31600	32000	34100	17200	30000	33300	32200	32900	34100	33200	33600
5	32800	31900	32400	28400	2970	19300	33100	32600	32900	34100	33200	33700
6	32800	32400	32700	33500	27600	30600	33000	32400	32700	34100	33100	33200
7	32800	28500	e27000	34600	33700	34200	33300	32600	32900	34100	32200	33200
8	---	---	e29000	34600	27700	33900	33500	32700	33200	33100	32200	32600
9	---	---	e31000	29900	24200	27500	33700	32800	33400	33100	31200	32200
10	---	---	e32300	---	---	30500	33800	32700	33500	32200	31200	31700
11	---	---	e32400	---	---	33400	33900	33100	33700	32100	31200	31600
12	---	---	e32600	---	---	33900	34000	32900	33600	31200	30300	30800
13	---	---	e32800	---	---	33100	33600	32700	33400	31200	29300	30500
14	---	---	e33000	---	---	33500	33600	32500	33100	31100	29300	29900
15	---	---	e33200	---	---	34000	33300	32800	33000	32000	30200	31000
16	---	---	e33600	34200	33300	33800	33500	32700	33100	32900	32000	32100
17	---	---	e22000	34500	32900	33700	33900	32100	33300	32900	31100	32400
18	---	---	e30800	34500	32800	33600	33800	32800	33300	32900	31100	32000
19	---	---	e31900	33400	14300	23800	33600	32600	33200	33000	31100	32600
20	---	---	e33000	23700	2840	8950	33600	32600	33000	33000	30300	32300
21	---	---	e33800	25000	9190	18400	33500	31700	32700	33300	32200	32700
22	---	---	e33900	30700	25000	28300	32600	30700	32000	32500	30600	31600
23	---	---	e34000	31900	30800	31400	32600	29700	30700	33700	32500	32900
24	---	---	e34100	32100	31400	31800	29700	28800	29200	33800	32800	33600
25	---	---	e34100	32100	31000	31600	29700	27900	29000	33900	33000	33400
26	---	---	e34000	32200	31600	32000	29700	27800	29000	33200	31200	32600
27	35600	33300	34500	33100	32200	32700	28800	27800	28300	34400	31300	33500
28	36700	35900	36400	33500	32600	33000	32400	27800	29200	34600	33500	34200
29	36600	35600	36100	33400	32500	33000	34300	31500	32800	34800	33700	34300
30	36100	35300	35700	33400	32600	33100	34300	33300	33700	34800	33900	34300
31	35900	35000	35500	---	---	---	34200	33300	33600	35000	33200	34500
MONTH	36700	28500	32600	35300	2840	30500	34300	27800	32300	35000	29300	32700

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	35200	34200	34600	---	---	e35400	34000	33000	33800	34500	33400	34000
2	34500	33400	34300	---	---	e34000	35000	34000	34100	34400	32200	33500
3	35700	34500	34600	---	---	e33000	34000	32000	33500	34100	32100	33000
4	35800	34700	35200	---	---	e31500	35000	32000	33200	34100	32900	33400
5	36000	34000	35100	---	---	e32000	35000	34000	34400	32900	24600	31200
6	36200	34200	35300	---	---	e33000	35000	33000	34100	29700	4080	12400
7	36600	35300	35400	---	---	e30000	35000	33000	33900	7140	6090	6520
8	36600	34600	35700	---	---	e31000	35000	33000	34600	---	---	e9000
9	36800	33700	35100	---	---	e32000	35000	33000	34300	---	---	e15000
10	36000	33900	35000	---	---	e33000	35000	34000	34500	28200	22600	25000
11	36300	35100	35200	---	---	e34000	35000	34000	34600	36100	28200	32100
12	36400	35400	35800	---	---	e31000	35000	33000	34100	---	---	e33000
13	35500	33400	34200	---	---	e32500	35000	34000	34200	---	---	e33600
14	33600	32500	32800	34000	33000	e34000	35000	34000	34300	---	---	e33900
15	33900	31700	32900	34000	33000	33700	---	---	34800	---	---	e34000
16	34100	31900	33300	35000	34000	34300	---	---	e35500	---	---	e22800
17	34300	32100	33400	35000	33000	34300	---	---	e29000	15900	13100	14200
18	34500	33200	33800	35000	33000	34200	---	---	e19500	18700	5550	13600
19	34700	33500	34100	35000	34000	34700	---	---	e30800	18800	5760	14300
20	34900	33700	34300	35000	34000	34400	34100	32000	33400	---	---	e20000
21	35100	33900	34500	35000	33000	34100	35400	33300	34600	---	---	e22000
22	35200	33000	34400	35000	34000	34400	35400	27400	33300	---	---	e24000
23	35400	33200	34500	35000	34000	34300	34800	33600	34500	---	---	e27000
24	34600	33400	34300	35000	34000	34300	35100	33900	34700	---	25600	e32000
25	34900	33600	34600	35000	34000	34400	36300	34100	35200	25600	13300	17600
26	35100	33800	34600	35000	34000	34700	35500	34300	35300	14200	10400	11600
27	---	---	e35300	35000	34000	34300	35600	33600	34700	15200	1900	4570
28	---	---	e35400	35000	34000	34300	34800	33700	34700	8590	1900	5490
29	---	---	---	34000	34000	34000	34700	33600	34500	8590	957	4560
30	---	---	---	34000	34000	34000	34600	33400	34000	961	957	959
31	---	---	---	34000	33000	33800	---	---	---	13500	961	3090
MONTH	36800	31700	34600	35000	33000	33500	36300	27400	33500	36100	957	20600

e Estimated

RED RIVER BASIN--Continued
07307800 PEASE RIVER NEAR CHILDRESS, TX

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4830	966	2680	---	---	e20300	21700	4330	12800	---	---	e30100
2	4910	1960	3610	---	---	e19800	---	---	e2220	---	---	e30200
3	2020	997	1620	---	---	e19000	---	---	e1750	31000	27000	30300
4	2090	1010	1500	---	---	e18500	3260	2170	2500	31000	30000	30600
5	2350	1070	1870	---	---	e20000	4350	3260	3750	---	---	e31000
6	6450	2300	3760	24300	21200	22000	6530	1090	3990	---	---	e30700
7	9920	1910	4660	26400	24300	25300	8720	2180	6760	---	---	30500
8	11300	3630	6240	28500	26400	27500	10900	2180	5240	---	---	30500
9	9640	5960	8350	28600	27600	28500	13100	3270	10900	31000	27000	29000
10	8080	3900	6420	29700	28600	28800	14000	7530	13300	28000	20000	23400
11	5750	3130	4170	---	---	e29400	---	---	e14500	30000	18000	25300
12	3130	2670	2890	---	---	e30000	---	---	e16000	---	---	26300
13	13500	2570	9010	---	---	e31000	18000	14700	17200	---	---	e14500
14	13600	5380	6910	31100	23100	26100	18900	15600	18100	---	---	e12000
15	---	---	e9000	25300	22300	23700	19800	14500	18400	---	---	10000
16	---	---	e11500	24500	21300	22700	20600	17500	19800	8220	4980	6090
17	---	---	e12200	24600	18500	22100	---	---	e20600	6960	1550	4300
18	---	---	e12900	26800	18600	23000	---	---	e21500	---	---	e4900
19	---	---	e13200	25900	5210	9690	---	---	e22400	---	---	6000
20	---	---	e14000	12600	5210	7940	---	---	e23500	---	---	e6200
21	---	---	e15600	15800	4210	10600	---	---	e24500	---	---	e6400
22	---	---	e16900	24400	8450	21200	---	---	e25300	---	---	e6500
23	---	---	e17200	30000	24400	26800	---	---	e26200	---	---	e6650
24	---	---	e17800	30000	23600	26200	---	---	e27100	---	---	e6800
25	---	---	e17600	30200	25900	28400	---	---	e28000	---	---	e7100
26	---	---	e18600	30200	23800	27400	---	---	e28300	---	---	e8800
27	---	---	e18000	27000	23800	24700	---	---	e28600	---	---	e11000
28	---	---	e17500	23800	22700	23400	---	---	e29000	---	---	e12900
29	---	---	e18700	23800	22700	23200	---	---	e29500	---	---	e14000
30	---	---	e19500	22700	7580	20200	---	---	e29800	---	---	e14600
31	---	---	---	13000	7580	10500	---	---	e30000	---	---	---
MONTH	13600	966	10500	31100	4210	22500	21700	1090	18100	31000	1550	16900
YEAR	36800	957	26500									

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	30.5	16.0	22.0	22.0	10.0	14.5	12.0	3.0	7.0	10.5	2.0	5.0
2	31.5	18.0	23.5	19.0	12.0	15.5	14.5	6.5	10.0	9.5	.5	4.5
3	32.5	15.5	23.0	24.5	14.0	18.0	12.0	5.5	8.0	6.0	2.5	4.5
4	29.0	19.0	22.5	20.5	12.0	16.0	15.0	4.5	9.5	6.0	1.0	3.0
5	28.0	18.5	22.0	19.0	10.5	14.0	11.5	6.5	8.5	3.0	1.0	2.5
6	29.0	17.5	22.5	20.5	9.5	14.5	12.5	8.0	9.5	10.5	2.0	5.0
7	24.5	16.0	19.0	21.5	11.0	15.5	12.0	6.5	9.0	11.5	.5	5.5
8	24.5	13.0	17.5	24.5	14.0	18.0	10.0	6.0	8.0	18.0	4.5	10.0
9	26.5	10.5	17.5	17.5	11.0	14.0	11.5	2.0	6.0	18.0	4.5	10.0
10	27.0	10.0	17.0	19.0	7.5	11.5	10.5	3.0	6.0	18.5	6.0	11.0
11	27.0	10.0	17.0	12.0	9.0	10.5	7.0	2.5	4.0	17.0	6.0	11.0
12	27.0	10.5	17.0	16.0	8.5	11.5	10.0	1.5	5.0	18.5	8.0	12.0
13	27.0	10.5	17.5	21.0	13.0	15.5	9.5	5.0	7.0	17.0	5.5	10.5
14	19.0	15.0	16.5	18.5	10.0	13.0	16.5	5.0	10.5	17.5	3.5	9.0
15	24.0	14.0	17.5	17.0	7.0	11.0	10.5	9.5	9.5	16.0	4.5	9.5
16	25.5	17.5	20.5	16.5	5.0	10.0	15.0	6.5	10.0	13.0	8.5	10.5
17	31.0	15.0	23.5	17.5	7.5	11.5	15.0	3.5	8.0	16.5	4.5	10.0
18	29.5	11.0	20.0	11.5	4.5	8.5	14.5	3.5	8.5	15.0	6.0	9.5
19	32.0	10.5	20.0	13.5	10.5	12.0	16.5	5.5	10.0	14.0	2.0	7.0
20	30.0	13.0	20.5	13.5	8.0	11.0	15.0	6.0	9.5	17.0	2.5	8.5
21	29.0	12.5	19.0	14.5	5.5	10.0	13.5	3.5	8.0	10.5	6.5	8.0
22	31.5	7.5	18.0	9.0	6.0	7.5	14.0	3.0	7.5	7.0	2.5	5.0
23	30.0	9.5	19.0	8.5	3.0	6.5	12.0	3.5	7.5	15.0	1.0	6.5
24	22.5	12.5	17.0	14.5	6.5	9.5	15.0	5.5	9.0	12.5	2.5	7.5
25	15.0	8.0	10.5	10.0	8.5	9.5	14.5	2.5	7.5	17.5	3.5	9.5
26	20.5	10.5	14.5	14.5	8.0	11.0	14.5	2.5	7.5	17.5	8.0	11.5
27	20.0	12.0	15.5	13.0	6.0	10.5	11.5	5.0	8.5	18.5	6.5	11.5
28	20.0	11.5	14.5	11.5	2.5	7.0	10.5	9.0	9.5	14.5	8.0	10.0
29	23.0	13.5	17.0	10.5	2.5	6.0	15.0	7.5	10.5	8.5	4.0	7.0
30	21.5	14.5	17.5	10.5	2.0	5.0	10.0	6.5	8.5	16.0	1.0	7.5
31	21.0	11.5	15.5	---	---	---	12.0	4.5	8.5	14.5	2.0	7.5
MONTH	32.5	7.5	18.5	24.5	2.0	11.5	16.5	1.5	8.5	18.5	.5	8.0

RED RIVER BASIN--Continued
07307800 PEASE RIVER NEAR CHILDRESS, TX

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	18.0	3.5	9.5	4.0	1.0	2.5	26.0	7.0	15.5	26.5	13.5	19.0
2	21.0	5.5	12.0	3.0	.0	1.0	24.0	9.0	15.5	22.0	12.5	15.5
3	16.5	7.5	11.0	7.5	.5	3.5	17.0	13.0	14.5	32.0	12.5	20.5
4	18.0	3.5	10.0	12.5	3.5	7.0	24.0	12.5	17.0	30.0	15.0	21.0
5	18.0	5.5	10.5	12.5	6.5	9.0	24.0	11.5	17.0	18.0	14.5	15.5
6	19.0	4.0	10.5	14.0	4.0	9.5	27.5	13.5	19.0	23.0	13.5	17.5
7	15.5	5.5	9.0	13.0	.0	5.5	30.5	13.5	20.5	24.5	19.5	21.5
8	15.0	1.5	7.0	16.5	.0	7.0	28.5	13.0	19.5	20.5	14.5	18.0
9	18.5	3.5	10.0	18.0	2.0	8.5	29.5	12.0	19.0	---	---	---
10	17.5	6.0	10.0	18.5	3.5	12.0	21.0	7.5	14.5	---	---	---
11	7.0	2.0	4.5	---	---	---	23.5	5.0	13.0	26.5	15.0	20.0
12	4.0	1.0	2.0	---	---	---	27.5	7.0	16.0	30.5	16.5	22.0
13	4.5	1.5	3.0	---	---	---	28.0	9.0	17.5	29.5	16.0	22.5
14	8.5	3.0	5.5	16.5	10.5	13.0	27.5	12.5	18.5	29.5	16.0	22.0
15	15.5	6.5	9.5	20.5	12.0	15.0	27.0	12.5	20.0	28.5	17.5	22.5
16	8.5	3.5	6.0	23.5	10.0	16.0	---	---	---	24.0	19.0	21.0
17	17.5	1.0	7.5	25.0	9.5	16.5	---	---	---	25.5	18.5	22.0
18	15.0	3.0	8.5	26.0	10.0	17.0	---	---	---	24.5	12.0	18.0
19	20.0	5.5	11.5	25.5	12.0	17.5	---	---	---	23.5	14.5	19.0
20	22.0	5.0	12.5	25.5	10.5	17.0	27.5	5.5	17.0	21.5	17.0	19.0
21	21.0	7.0	13.0	27.5	10.5	18.0	30.0	10.5	18.5	22.5	17.0	19.5
22	23.0	10.0	15.0	24.5	13.5	17.5	14.5	9.5	11.5	23.0	18.0	20.5
23	22.0	9.5	14.0	25.0	10.0	16.5	18.0	7.5	12.5	21.0	18.5	20.0
24	21.0	7.0	13.0	26.5	12.5	18.5	26.0	8.0	15.0	18.5	16.0	17.5
25	17.5	8.0	12.5	23.0	16.5	19.0	26.5	9.0	16.5	16.5	14.5	15.5
26	23.0	12.0	16.0	23.5	10.0	15.5	24.0	12.0	16.5	22.0	16.0	18.5
27	15.5	10.0	12.5	24.5	7.0	14.5	26.5	9.0	16.0	21.0	18.0	19.0
28	10.5	4.0	7.0	12.0	8.5	9.5	26.0	13.0	18.0	21.5	19.5	20.5
29	---	---	---	13.0	8.0	10.0	30.5	15.0	21.5	20.5	16.5	18.0
30	---	---	---	14.0	8.0	10.0	20.5	15.0	17.0	22.5	17.0	19.0
31	---	---	---	22.5	8.0	13.5	---	---	---	24.5	18.0	21.0
MONTH	23.0	1.0	9.5	27.5	.0	12.0	30.5	5.0	17.0	32.0	12.0	19.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.5	17.5	21.5	---	---	---	24.5	20.5	21.5	35.5	22.0	28.0
2	24.0	19.5	21.5	---	---	---	22.0	20.5	21.5	34.0	21.5	27.0
3	23.0	19.0	21.0	---	---	---	25.5	22.0	23.5	34.5	21.5	27.0
4	21.5	17.5	18.5	---	---	---	28.5	24.5	26.0	35.5	21.0	27.5
5	21.5	16.5	18.5	---	---	---	32.0	25.5	28.5	36.0	22.0	28.0
6	28.5	19.0	23.0	34.5	21.0	27.0	33.5	26.5	30.0	35.0	22.5	27.5
7	27.0	23.0	25.0	35.5	22.5	28.5	33.5	26.0	29.5	30.5	22.0	25.0
8	28.0	25.5	26.0	36.5	23.0	29.0	33.5	26.0	29.5	27.5	18.5	22.0
9	29.5	25.0	27.0	38.0	22.5	29.5	31.5	24.5	28.0	20.5	18.5	19.5
10	28.0	21.0	23.5	38.0	23.5	30.5	33.0	23.5	27.5	25.0	19.0	21.0
11	24.0	18.5	21.5	36.5	23.0	29.5	33.0	23.5	28.0	29.5	20.0	23.5
12	27.0	20.5	22.5	36.0	23.0	29.0	34.0	24.0	28.5	34.5	21.0	25.5
13	29.5	20.5	25.0	35.0	23.5	28.5	34.0	24.5	28.5	29.5	19.5	24.0
14	25.5	21.5	23.5	34.0	23.0	28.0	34.0	24.0	28.5	27.0	22.5	24.5
15	---	---	---	35.0	23.0	27.0	34.0	24.5	28.5	24.5	20.5	22.0
16	---	---	---	36.5	22.5	28.5	35.0	24.5	29.0	26.0	20.5	22.5
17	---	---	---	32.0	25.0	27.5	33.0	23.0	28.0	25.5	22.0	24.0
18	---	---	---	31.5	24.0	26.5	32.0	24.0	27.5	24.5	23.0	23.5
19	---	---	---	29.5	23.0	25.5	32.0	24.0	28.0	23.5	21.0	22.0
20	---	---	---	35.0	23.5	28.5	32.0	25.5	28.5	23.0	18.5	21.0
21	---	---	---	36.5	24.5	30.0	33.0	25.5	29.0	22.0	12.5	17.0
22	---	---	---	36.0	24.5	29.5	33.0	24.5	28.5	18.0	11.5	14.0
23	---	---	---	35.0	22.5	28.5	32.5	25.0	28.5	20.5	12.5	16.0
24	---	---	---	35.5	22.0	28.0	32.0	24.0	28.0	18.5	14.5	16.5
25	---	---	---	36.0	23.5	29.0	34.5	23.5	28.5	18.5	15.0	16.5
26	---	---	---	34.5	23.5	28.0	32.5	24.5	28.0	22.0	13.5	18.0
27	---	---	---	33.0	22.0	27.5	35.0	24.5	29.0	27.5	17.5	22.0
28	---	---	---	34.5	21.5	27.5	36.0	23.0	28.5	30.0	21.0	25.0
29	---	---	---	34.5	24.5	28.5	35.0	23.0	28.0	29.5	21.5	25.5
30	---	---	---	31.0	23.5	26.5	34.5	22.5	28.0	26.5	21.5	24.0
31	---	---	---	28.0	23.5	25.5	35.0	22.5	27.5	---	---	---
MONTH	29.5	16.5	23.0	38.0	21.0	28.0	36.0	20.5	27.5	36.0	11.5	22.5
YEAR	38.0	.0	17.0									

07308200 PEASE RIVER NEAR VERNON, TX

LOCATION.--Lat 34°10'45", long 99°16'40", Wilbarger County, Hydrologic Unit 11130105, near left bank at downstream side of bridge on U. S. Highway 283, 1.9 mi north of Vernon, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,488 mi², of which 559 mi² probably is noncontributing.

PERIOD OF RECORD.--December 1959 to September 1982, and March 1992 to current year. October 1982 to September 1987, annual maximums.
Water-quality records.--Chemical analyses: November 1967 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 1,166.03 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are four small diversions for irrigation above station. For statement regarding regulation by Soil Conservation Service floodwater-retarding structures, see station 07307800.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1890, 24 ft in 1891. The flood in September 1936 reached a stage of 23.5 ft, and the flood of June 2, 1957, reached a stage of 22.0 ft, from information by local residents.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	1400	3,920	12.66	June 10	0430	18,200	17.00
May 6	2030	3,700	12.57	Aug. 2	1200	32,800	19.23
May 8	0700	2,600	11.77	Sep. 16	1430	2,940	11.33
June 5	1030	31,700	19.09				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.0	6.4	24	19	24	12	23	25	1280	201	467	e93
2	e2.9	6.6	23	20	26	15	20	21	2000	196	20300	e93
3	e2.8	7.2	24	17	21	17	23	23	1970	190	17300	e90
4	e2.7	11	23	14	19	18	27	23	1260	181	4130	e88
5	e2.6	79	19	15	17	21	23	22	20400	188	2410	e85
6	e2.5	39	18	14	18	24	26	1270	11000	189	962	e80
7	e25	36	16	17	15	19	26	1700	2510	193	685	e74
8	e4.9	46	15	20	15	21	24	1620	1770	173	531	74
9	e2.8	34	13	19	16	18	14	698	1790	163	503	80
10	e1.9	27	12	19	15	13	13	339	11900	155	440	83
11	e1.1	26	13	21	12	14	8.8	194	3370	146	366	86
12	1.0	32	11	19	13	16	8.0	145	1040	139	328	87
13	1.0	39	11	16	13	85	8.8	120	e522	130	306	204
14	.92	36	13	17	15	157	7.8	98	e414	124	267	139
15	2.5	31	13	17	19	97	7.2	87	e396	117	238	151
16	2.5	35	14	19	28	73	16	80	e371	114	215	1790
17	15	32	14	16	50	61	724	82	e354	118	196	1650
18	4.9	27	14	18	41	50	1070	73	e343	122	183	1650
19	105	34	15	22	36	41	265	144	e324	168	178	1850
20	38	1900	14	26	34	35	108	99	e311	183	168	1970
21	40	584	12	21	31	27	67	76	285	204	148	1240
22	84	112	13	17	29	29	67	63	260	227	123	940
23	52	81	11	20	24	18	86	59	241	179	109	733
24	31	92	11	20	21	20	81	110	262	150	104	569
25	28	84	11	23	19	29	56	77	367	136	102	568
26	32	68	11	27	21	26	44	312	265	125	103	580
27	30	54	11	29	18	18	35	1380	230	121	103	576
28	18	44	17	25	14	13	33	806	221	122	104	516
29	13	33	20	24	---	15	31	414	211	118	e103	477
30	11	28	21	24	---	15	27	829	207	114	e99	394
31	8.4	---	25	23	---	18	---	862	---	112	e94	---
TOTAL	570.42	3664.2	482	618	624	1035	2969.6	11851	65874	4798	51365	17010
MEAN	18.4	122	15.5	19.9	22.3	33.4	99.0	382	2196	155	1657	567
MAX	105	1900	25	29	50	157	1070	1700	20400	227	20300	1970
MIN	.92	6.4	11	14	12	12	7.2	21	207	112	94	74
AC-FT	1130	7270	956	1230	1240	2050	5890	23510	130700	9520	101900	33740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995h, BY WATER YEAR (WY)

MEAN	111	43.2	24.8	23.4	28.9	47.4	77.4	221	385	134	130	204
MAX	1057	206	163	116	172	269	359	777	2196	1185	1657	895
(WY)	1961	1993	1960	1973	1993	1973	1973	1977	1995	1975	1995	1965
MIN	.000	.000	.000	.000	.000	.000	.000	6.12	18.0	.000	.000	.20
(WY)	1964	1971	1971	1971	1971	1971	1971	1961	1994	1964	1980	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995h	
ANNUAL TOTAL	19183.93		160861.22			
ANNUAL MEAN	52.6		441		118	
HIGHEST ANNUAL MEAN					441	1995
LOWEST ANNUAL MEAN					12.6	1964
HIGHEST DAILY MEAN	1900	Nov 20	20400	Jun 5	20400	Jun 5 1995
LOWEST DAILY MEAN	.21	Aug 14	.92	Oct 14	.00	Aug 7 1960
ANNUAL SEVEN-DAY MINIMUM	.43	Aug 8	1.6	Oct 10	.00	Aug 7 1960
INSTANTANEOUS PEAK FLOW			32800	Aug 2	40500	Oct 2 1983
INSTANTANEOUS PEAK STAGE			19.23	Aug 2	20.15	Oct 2 1983
ANNUAL RUNOFF (AC-FT)	38050		319100		85260	
10 PERCENT EXCEEDS	89		690		176	
50 PERCENT EXCEEDS	18		39		14	
90 PERCENT EXCEEDS	2.8		12		.00	

e Estimated
h See PERIOD OF RECORD paragraph.

07308500 RED RIVER NEAR BURKBURNETT, TX

LOCATION.--Lat 34°06'36", long 98°31'53", Cotton County, Okla., Hydrologic Unit 11130102, on downstream guardrail of downstream bridge on U.S. Highways 277 and 281, 2.5 mi northeast of Burkburnett, and at mile 933.

DRAINAGE AREA.--20,570 mi², of which 5,936 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1924 to August 1925 (monthly discharge only), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 952.57 ft above sea level. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft downstream at same datum. Dec. 16, 1959, to Jan. 11, 1960, nonrecording gage at present site and datum.

REMARKS.--Records good through June 5 then poor from June 6 to September 30. There are many small diversions upstream from station for irrigation, but total amounts are unknown.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 3, 1957, reached a stage of 13.54 ft, from floodmarks. According to local residents, higher stages occurred in 1891 and June 1941.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Apr. 18	1400	9,000	8.40	June 10	1800	113,000	a13.43
May 7	1530	10,800	8.66	Aug. 3	2300	101,000	a13.95
May 29	1430	9,610	8.50	Sep. 18	Unknown	14,000	a7.48
June 6	0730	174,000	16.61				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	259	435	266	227	164	270	367	3130	e3190	e30400	1000
2	26	237	398	264	225	171	268	341	3550	e3050	e70900	914
3	26	217	384	262	204	179	258	334	4470	e2940	e74500	860
4	40	923	359	259	200	190	282	300	6910	e2710	e39500	784
5	24	2810	339	253	189	196	302	318	87200	e2450	e20100	712
6	20	1320	332	250	177	206	327	1210	e144000	e2020	e13500	646
7	68	739	323	250	166	205	320	7390	e98600	e1680	e9100	584
8	100	630	322	248	160	205	305	9310	e40900	e1470	e7500	527
9	76	528	338	241	163	208	383	6920	e26100	e1060	e6350	518
10	63	543	314	243	162	208	397	4820	e88300	e840	e5350	555
11	51	486	304	236	156	213	386	4010	e90700	e700	e4650	594
12	45	613	293	233	157	217	333	3240	e41400	e610	e4050	736
13	43	547	290	230	163	273	323	2110	e23600	e500	e3750	1210
14	39	468	288	223	182	358	329	1430	e15000	e468	e3250	2090
15	46	403	282	211	187	463	350	1150	e9810	e445	e2910	3170
16	52	378	287	205	189	788	459	830	e6730	e423	e2690	3970
17	66	377	279	203	236	530	718	664	e5310	e507	e2560	e9930
18	79	364	279	227	275	519	5050	536	e4560	e427	e2450	e12300
19	e107	412	275	244	242	444	4300	452	e4230	e540	e2330	e13100
20	e1270	519	270	232	221	349	2740	418	e4000	e1640	e2230	e10800
21	e1650	e4600	262	208	200	310	1670	434	e3770	e1360	e2200	e9500
22	e1820	e3210	257	208	183	289	1150	359	e3710	e756	e2050	e7620
23	e1940	e2180	254	220	171	279	1700	333	e3630	e773	e2000	e6030
24	e1730	e1640	254	231	161	266	1700	349	e3570	e1600	e1960	e4920
25	1220	e1230	249	230	162	268	975	459	e3500	e2550	e1880	e4040
26	968	e890	246	245	159	298	667	1550	e3480	e3550	e1810	e3860
27	692	e797	248	254	158	279	529	4300	e3410	e2880	e1690	e4050
28	519	e671	252	242	159	279	486	7650	e3350	e1130	e1520	e4090
29	416	549	271	234	---	270	449	8870	e3300	e646	e1310	e3730
30	342	485	271	235	---	278	391	5470	e3250	e625	e1220	e3240
31	294	---	268	229	---	279	---	3960	---	e653	1120	---
TOTAL	13861	29025	9223	7316	5234	9181	27817	79884	743470	44193	326830	116080
MEAN	447	967	298	236	187	296	927	2577	24780	1426	10540	3869
MAX	1940	4600	435	266	275	788	5050	9310	144000	3550	74500	13100
MIN	20	217	246	203	156	164	258	300	3130	423	1120	518
AC-FT	27490	57570	18290	14510	10380	18210	55180	158400	1475000	87660	648300	230200

07308500 RED RIVER NEAR BURKBURNETT, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

MEAN	1593	688	515	453	546	719	812	2343	3652	850	811	1230
MAX	14900	4960	4435	2040	3024	3552	5987	12470	24780	5947	10540	4244
(WY)	1987	1987	1992	1992	1987	1987	1973	1977	1995	1975	1995	1965
MIN	21.9	.96	2.98	5.53	8.37	7.97	.15	11.4	148	.058	1.29	32.2
(WY)	1971	1971	1971	1971	1971	1971	1971	1971	1970	1970	1964	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995	
ANNUAL TOTAL	267847		1412114			
ANNUAL MEAN	734		3869		1188	
HIGHEST ANNUAL MEAN					4424	1987
LOWEST ANNUAL MEAN					178	1964
HIGHEST DAILY MEAN	7650	May 27	144000	Jun 6	144000	Jun 6 1995
LOWEST DAILY MEAN	20	Oct 6	20	Oct 6	.00	Jul 19 1964
ANNUAL SEVEN-DAY MINIMUM	28	Sep 30	33	Oct 1	.00	Jul 19 1964
INSTANTANEOUS PEAK FLOW			174000	Jun 6	174000	Jun 6 1995
INSTANTANEOUS PEAK STAGE			16.61	Jun 6	16.90	Oct 21 1983
ANNUAL RUNOFF (AC-FT)	531300		2801000		860400	
10 PERCENT EXCEEDS	1830		5330		2290	
50 PERCENT EXCEEDS	332		468		287	
90 PERCENT EXCEEDS	88		181		50	

e Estimated
a From floodmark

07308500 RED RIVER NEAR BURKBURNETT, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: May 1968 to current year. Biochemical analyses: October 1974 to August, 1994. Pesticide analyses: October 1973 to September 1982.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to September 1981, October 1994 to September 1995.
WATER TEMPERATURE: July 1968 to September 1981, October 1994 to September 1995.

INSTRUMENTATION.--From December 1968 to September 1979, specific conductance was continuously recorded at this station. From October 1994 to September 1995 specific conductance and water temperature were continuously recorded at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 17,400 microsiemens July 30, 1972; minimum, 889 microsiemens Sept. 24, 1970.
WATER TEMPERATURE: Maximum, 35.5°C June 29, 1980; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 10,800 microsiemens Jan. 22; minimum, 1,620 microsiemens Aug. 8.
WATER TEMPERATURE: Maximum recorded, 33.0°C Aug. 20,21,27,28, Sept. 2; minimum 0.0°C Mar. 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 05...	1010	340	6760	8.6	10.0	--	1200	1000	330	94
JAN 12...	1045	237	9280	8.2	11.0	--	1500	1400	400	130
MAR 09...	1227	216	9080	8.1	9.0	15.1	1600	1400	410	140
APR 20...	0955	2660	1470	7.4	15.0	9.7	280	190	76	21
MAY 31...	1420	3920	3400	7.9	20.5	7.6	660	560	200	39
JUL 07...	1026	1800	9600	7.9	27.5	7.2	1500	1400	410	110

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 05...	1100	14	9.9	200	890	1600	0.80	12	4160
JAN 12...	1500	17	8.3	150	1200	2400	0.40	3.9	5740
MAR 09...	1400	15	9.2	170	1300	2200	0.40	3.7	5560
APR 20...	170	4	6.9	83	200	330	0.30	6.7	861
MAY 31...	500	8	9.6	96	460	730	0.40	10	2010
JUL 07...	1600	18	12	120	1200	2500	0.40	11	5920

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	13861	5380	3360	126000	1200	45500	920	34400	1100
NOV.	1994	29025	3740	2330	183000	800	62700	680	53600	780
DEC.	1994	9223	7290	4570	114000	1800	43900	1100	28100	1300
JAN.	1995	7316	8820	5540	109000	2200	44400	1200	24600	1500
FEB.	1995	5234	8500	5330	75400	2100	30200	1200	17300	1400
MAR.	1995	9181	6950	4350	108000	1700	41500	1100	26800	1300
APR.	1995	27817	4010	2500	188000	890	66800	700	52600	810
MAY	1995	79884	2870	1790	386000	600	128800	540	117300	620
JUNE	1995	743470	3370	2100	4221E3	720	1454100	610	1233500	700
JULY	1995	44193	6760	4240	506000	1700	196900	1000	122800	1200
AUG.	1995	326830	2920	1820	1604E3	610	536100	550	486500	630
SEPT	1995	116080	3040	1890	593000	630	199000	570	179300	650
TOTAL		1412114	**	**	8213000	**	2850000	**	2377000	**
WTD.AVG.		3869	3450	2150	**	750	**	620	**	720

07308500 RED RIVER NEAR BURKBURNETT, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e6200	---	---	e6700	---	---	e5400	---	---	e8600
2	---	---	e6300	---	---	e6750	---	---	e5960	---	---	e8700
3	---	---	e6400	---	---	e6800	---	---	e6150	---	---	8770
4	---	---	e5500	---	---	e6750	---	---	e6300	9770	8980	9320
5	---	---	e5800	---	---	e3800	---	---	e6480	10200	9770	10000
6	---	---	e6000	---	---	e2950	---	---	e6550	10600	9630	9920
7	---	---	e5400	---	---	e3200	---	---	e6700	9630	9190	9360
8	---	---	e4800	---	---	e3500	---	---	e6800	9190	8990	9050
9	---	---	e5400	---	---	e3750	---	---	e7000	9000	8900	8970
10	---	---	e6100	---	---	e4000	---	---	e7200	8900	8740	8860
11	---	---	e6230	---	---	e4800	---	---	e7300	8900	8630	8720
12	6540	6150	6310	---	---	e4600	---	---	e7400	9140	8900	9070
13	6920	6540	6740	---	---	e4400	---	---	e7550	9120	8820	8980
14	7070	6920	7010	---	---	e4900	---	---	7650	8820	8620	8700
15	7020	6840	6910	---	---	e5300	7660	7560	7620	8620	8350	8520
16	6930	6820	6840	---	---	e5550	7690	7600	7660	8350	7850	8110
17	6930	6720	6820	---	---	e5700	---	---	7680	7850	7530	7680
18	6720	6520	6630	---	---	e5900	---	---	e7650	7540	6740	6970
19	6890	6430	6560	---	---	e6000	---	---	e7620	6800	6490	6600
20	---	---	e6200	---	---	e5600	---	---	e7700	6570	6230	6340
21	---	---	e4690	---	---	e2300	---	---	e7780	6310	6250	6290
22	---	---	e4300	---	---	e2900	---	---	e7800	10800	6210	9350
23	---	---	e4000	---	---	e2500	---	---	e7900	10400	10200	10300
24	---	---	e5260	---	---	e3400	---	---	e7980	10200	9540	9880
25	---	---	e6150	---	---	e3800	---	---	e8000	9540	8860	9370
26	---	---	e6210	---	---	e4000	---	---	e8050	9030	8510	8690
27	---	---	e6290	---	---	e4200	---	---	e8150	8990	8410	8600
28	---	---	e6400	---	---	e4350	---	---	e8250	9240	8820	9110
29	---	---	e6510	---	---	e4600	---	---	e8400	9800	9230	9460
30	---	---	e6600	---	---	e4900	---	---	e8480	10600	9800	10300
31	---	---	e6680	---	---	---	---	---	e8500	10700	10100	10400
MONTH	7070	6150	6040	---	---	4600	7690	7560	7410	10800	6210	8810

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10100	9500	9750	8360	8230	8300	6530	6370	6440	---	---	e6300
2	9520	9320	9420	8300	8000	8240	6620	6490	6550	---	---	e7170
3	9790	9470	9610	8460	8240	8310	6620	6250	6560	7270	7140	7190
4	9950	9760	9870	8640	8460	8560	6270	5550	5970	7420	7270	7310
5	9800	9500	9660	8670	8620	8650	5550	5080	5280	7530	7140	7430
6	9550	9240	9430	8650	8470	8590	5800	5220	5530	7220	2750	5420
7	9250	9040	9160	8770	8530	8670	5780	5270	5600	---	---	1920
8	9070	8900	8990	8890	8690	8760	5610	5200	5350	---	---	e1710
9	8900	8750	8830	9350	8890	9100	5370	4790	5100	---	---	e2600
10	8800	8690	8750	9990	9100	9520	5900	4920	5280	---	---	e2800
11	8810	8700	8760	10200	9980	10100	5630	4440	4980	---	---	e3600
12	8700	8550	8610	10200	6370	9040	7480	4090	5550	---	---	e3950
13	8570	8400	8500	8070	6960	7580	7590	7360	7500	---	---	e4050
14	8410	8050	8240	7590	6620	7230	7520	6700	7090	---	---	e4510
15	8440	8340	8380	7070	6540	6710	7520	6730	7090	---	---	e4750
16	8440	8190	8310	7540	3470	5490	10200	6620	7370	---	---	e4810
17	8260	7700	8030	4680	3310	4040	9870	7610	9400	---	---	e4980
18	7850	7180	7620	4730	4300	4540	7610	3310	5650	---	---	e5240
19	7670	7240	7390	5660	4280	4580	---	---	e2000	---	---	e5300
20	8100	7670	7940	7620	5650	6550	---	---	e1470	---	---	e5450
21	8190	8070	8130	8860	7190	8000	---	---	e1800	---	---	e5560
22	8500	8150	8380	8860	7770	8320	---	---	e2350	---	---	e5600
23	8570	8260	8430	8020	7360	7750	---	---	e2200	---	---	e5610
24	8600	5210	6470	7960	6750	7640	---	---	e3000	---	---	e5620
25	8570	5110	6800	7850	6780	7540	---	---	e3800	---	---	e4650
26	8430	7890	8140	7410	6710	7030	---	---	e4600	---	---	e2850
27	8210	7900	8070	7000	6480	6580	---	---	e4900	---	---	e1700
28	8250	8090	8170	6480	6180	6270	---	---	e5300	---	---	e1430
29	---	---	---	6250	6180	6210	---	---	e5700	---	---	e2650
30	---	---	---	6330	6220	6270	---	---	e6000	---	---	e3110
31	---	---	---	6430	6280	6340	---	---	---	---	---	e3400
MONTH	10100	5110	8490	10200	3310	7440	10200	3310	5180	7530	2750	4470

e Estimated

07308500 RED RIVER NEAR BURKBURNETT, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	e5200	---	---	e7800	5500	4930	5170	6030	5930	5970
2	---	---	e5550	---	---	e8050	---	---	3460	6220	6030	6130
3	---	---	e3650	---	---	e8300	---	---	e1960	6350	6220	6280
4	---	---	e2250	---	---	e8500	---	---	e1740	6400	6320	6370
5	---	---	e2100	---	---	e8850	---	---	e1650	6390	6310	6350
6	---	---	e1990	---	---	e9400	---	---	e1460	6400	6310	6360
7	---	---	e1630	---	---	e9600	---	---	1640	6680	5890	6480
8	---	---	e1530	---	---	e9610	2550	1620	2160	6660	6180	6490
9	---	---	e2200	---	---	e9600	2900	2080	2600	6470	5600	6120
10	---	---	e3940	---	---	e9610	3480	2740	3120	---	---	3600
11	---	---	e5400	---	---	e9630	3740	3380	3560	---	---	e2800
12	---	---	e5500	---	---	e9650	4280	3180	3710	---	---	e3200
13	---	---	e5510	---	---	e9670	---	---	e3800	---	---	e4600
14	---	---	e5510	---	---	e9690	---	---	e3900	---	---	4900
15	---	---	e5520	---	---	e9710	---	---	e4000	5220	4190	4680
16	---	---	e5510	---	---	e9720	---	---	e4050	5360	3120	4450
17	---	---	e5520	---	---	e7380	---	---	e4210	---	---	e2100
18	---	---	e5500	---	---	e7490	---	---	e4350	---	---	e1850
19	---	---	e5510	---	---	e6100	---	---	e4470	---	---	e1600
20	---	---	e5600	---	---	e3250	---	---	4590	---	---	e1950
21	---	---	e5610	---	---	e4000	5080	4350	4690	---	---	e2750
22	---	---	e5700	---	---	e4300	4720	4180	4390	---	---	e2960
23	---	---	e5720	---	---	e4600	4590	4080	4280	---	---	e3210
24	---	---	e5850	---	---	e5000	4630	4210	4420	---	---	e3460
25	---	---	e5890	---	---	e4500	5790	4310	4800	---	---	e3610
26	---	---	e5940	---	---	2440	5880	5710	5800	---	---	e3690
27	---	---	e6450	---	---	e3850	5880	5520	5790	---	---	3760
28	---	---	e6840	---	---	e4600	5730	5540	5640	3690	3170	3340
29	---	---	e7250	---	---	e4890	5830	5630	5720	4220	3170	3780
30	---	---	e7600	---	---	e5210	5950	5790	5860	4850	4130	4570
31	---	---	---	---	---	5500	5990	5920	5960	---	---	---
MONTH	---	---	4930	---	---	7110	5990	1620	3970	6680	3120	4250
YEAR	10800	1620	6050									

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	7.0	3.0	5.5
2	---	---	---	---	---	---	---	---	---	5.5	1.5	4.0
3	---	---	---	---	---	---	---	---	---	5.0	1.5	3.5
4	---	---	---	---	---	---	---	---	---	---	---	---
5	28.5	20.0	23.5	---	---	---	---	---	---	---	---	---
6	27.0	17.5	21.5	---	---	---	---	---	---	7.5	2.0	4.0
7	21.0	16.0	18.5	---	---	---	---	---	---	6.5	1.0	4.0
8	21.5	14.5	17.5	---	---	---	---	---	---	11.0	3.0	6.5
9	23.0	12.5	17.0	---	---	---	---	---	---	11.5	4.5	8.0
10	24.0	12.5	17.5	---	---	---	---	---	---	13.5	7.0	10.0
11	23.5	13.0	18.0	---	---	---	---	---	---	13.5	7.0	10.5
12	23.5	12.5	17.5	---	---	---	---	---	---	14.0	9.0	11.0
13	23.0	14.5	18.5	---	---	---	---	---	---	13.0	8.5	10.5
14	19.0	15.5	17.0	---	---	---	---	---	---	12.5	6.0	9.0
15	17.0	14.5	15.5	---	---	---	8.5	8.0	8.5	12.5	6.0	9.0
16	22.0	16.5	19.0	---	---	---	12.0	8.0	9.5	12.5	7.5	10.0
17	24.5	19.5	21.5	---	---	---	---	---	---	14.0	9.0	11.5
18	27.0	20.0	22.5	---	---	---	---	---	---	10.0	6.5	8.0
19	26.5	18.0	22.0	---	---	---	---	---	---	10.0	4.0	7.0
20	---	---	---	---	---	---	13.0	8.5	10.5	11.5	4.0	7.5
21	---	---	---	---	---	---	11.5	6.5	9.0	8.5	6.5	7.5
22	---	---	---	---	---	---	10.5	5.5	8.0	6.5	2.5	4.5
23	---	---	---	---	---	---	9.5	5.0	7.5	8.5	.5	4.0
24	---	---	---	---	---	---	9.0	5.5	7.0	9.0	2.5	6.0
25	---	---	---	---	---	---	9.5	3.5	6.5	12.0	5.0	8.5
26	---	---	---	---	---	---	10.0	4.0	7.0	12.5	8.5	10.5
27	---	---	---	---	---	---	10.0	5.0	7.5	15.0	8.5	11.5
28	---	---	---	---	---	---	9.5	8.5	9.0	11.5	7.5	9.0
29	---	---	---	---	---	---	12.5	8.0	10.0	7.5	4.0	5.5
30	---	---	---	---	---	---	10.5	6.5	9.0	10.0	2.0	5.5
31	---	---	---	---	---	---	12.0	7.0	9.5	11.0	3.5	7.0
MONTH	28.5	12.5	19.0	---	---	---	13.0	3.5	8.5	15.0	.5	7.5

07308500 RED RIVER NEAR BURKBURNETT, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.5	5.0	9.0	4.5	.0	2.0	18.0	12.5	15.0	18.5	17.0	17.5
2	16.0	7.5	12.0	---	---	---	18.5	14.5	16.5	18.0	10.5	16.0
3	14.0	8.5	11.0	---	---	---	17.5	15.0	16.0	22.0	14.5	17.5
4	13.5	6.5	10.0	6.0	3.0	4.5	19.0	15.0	16.5	26.5	17.5	21.5
5	13.0	6.0	9.5	10.0	6.0	7.5	18.0	15.0	16.5	21.5	17.0	18.5
6	15.0	6.0	10.5	14.0	7.0	10.0	19.5	15.5	17.0	21.0	16.5	18.5
7	11.0	7.0	9.0	9.5	1.5	5.5	21.0	16.5	18.5	20.5	19.0	20.0
8	11.5	3.5	7.0	11.5	.5	6.0	22.0	18.0	20.0	20.5	18.0	19.5
9	13.5	5.0	9.0	13.5	3.5	8.0	22.5	18.0	20.0	22.5	17.5	19.5
10	10.0	7.0	8.5	15.0	5.0	9.5	21.5	13.5	18.0	22.5	19.0	21.0
11	7.5	2.0	4.5	17.0	8.5	12.5	15.0	10.0	12.5	23.5	19.5	21.0
12	---	---	---	16.5	13.0	14.5	20.0	11.5	15.0	24.0	19.5	21.5
13	2.5	.5	1.5	14.5	13.0	14.0	23.5	13.5	18.0	28.5	22.0	25.0
14	5.5	1.5	3.0	15.0	12.0	13.5	22.0	15.5	18.5	28.5	23.5	25.5
15	10.0	5.5	7.5	18.0	13.0	15.5	24.0	15.5	19.5	28.0	22.5	25.0
16	6.0	3.5	4.5	20.5	15.0	17.5	26.5	19.5	22.0	26.0	22.0	23.5
17	11.5	1.0	6.0	23.0	15.5	19.0	24.5	18.5	21.5	27.0	22.0	24.0
18	11.5	4.5	8.0	23.0	16.0	19.5	21.0	16.5	19.0	23.5	16.5	20.0
19	15.0	6.5	10.5	23.0	16.0	19.0	19.0	15.0	16.0	27.0	17.0	21.5
20	17.5	8.0	12.5	23.0	15.0	19.0	20.0	13.0	17.0	26.0	19.5	22.5
21	18.5	9.5	14.0	24.5	15.0	19.5	23.0	16.0	19.0	27.0	19.5	23.0
22	18.0	10.5	14.0	24.0	17.5	21.0	18.0	12.5	13.5	28.5	20.5	24.0
23	19.0	12.0	15.0	23.0	15.0	19.0	13.0	11.0	12.0	25.5	21.5	23.5
24	18.0	9.5	13.5	24.0	15.5	19.0	16.0	12.5	14.0	21.5	19.0	20.0
25	15.5	11.0	13.5	20.0	18.0	19.0	17.5	15.0	16.0	19.0	16.0	17.0
26	20.5	13.5	16.5	22.0	15.5	18.0	17.5	15.5	16.5	22.0	16.5	19.0
27	17.0	12.0	15.5	19.0	12.0	15.5	17.0	14.0	15.5	23.5	19.5	21.5
28	12.0	4.5	7.5	16.0	11.0	13.0	18.0	15.0	16.5	24.5	20.5	22.5
29	---	---	---	12.5	10.5	11.5	20.0	17.5	18.5	23.5	19.5	21.0
30	---	---	---	14.0	10.0	11.5	19.5	17.5	18.0	22.5	19.0	20.0
31	---	---	---	16.5	10.5	13.5	---	---	---	22.0	20.0	21.0
MONTH	20.5	.5	9.5	24.5	.0	13.5	26.5	10.0	17.0	28.5	10.5	21.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.0	20.0	22.5	---	---	---	27.0	24.5	25.5	32.5	27.0	29.5
2	---	---	---	---	---	---	---	---	---	33.0	27.5	30.0
3	---	---	---	---	---	---	---	---	---	32.0	27.5	29.5
4	---	---	---	---	---	---	---	---	---	30.5	26.5	28.5
5	---	---	---	---	---	---	---	---	---	32.0	27.0	29.0
6	---	---	---	---	---	---	---	---	---	31.0	26.5	28.5
7	---	---	---	---	---	---	---	---	---	28.5	25.0	26.5
8	---	---	---	---	---	---	30.5	28.0	29.5	26.5	22.0	24.0
9	---	---	---	---	---	---	30.0	27.5	29.0	23.0	21.0	22.0
10	---	---	---	---	---	---	29.5	26.5	28.0	24.5	21.0	22.5
11	---	---	---	---	---	---	30.5	27.5	29.0	24.0	22.5	23.0
12	---	---	---	---	---	---	30.5	28.0	29.5	27.0	23.0	24.5
13	---	---	---	---	---	---	30.5	28.0	29.0	28.5	23.0	25.5
14	---	---	---	---	---	---	31.0	27.5	29.0	27.5	25.5	26.5
15	---	---	---	---	---	---	29.5	27.0	28.5	26.5	24.5	25.5
16	---	---	---	---	---	---	30.5	27.0	28.5	27.0	24.0	25.0
17	---	---	---	---	---	---	30.5	27.0	28.5	26.5	25.0	26.0
18	---	---	---	---	---	---	31.0	27.0	29.0	26.5	24.0	25.0
19	---	---	---	---	---	---	32.5	28.0	30.0	24.0	23.0	23.5
20	---	---	---	---	---	---	33.0	29.0	31.0	23.0	21.5	22.0
21	---	---	---	---	---	---	33.0	29.5	31.0	21.5	16.0	19.0
22	---	---	---	---	---	---	32.0	28.0	30.0	16.5	14.5	15.5
23	---	---	---	---	---	---	32.0	28.5	30.0	17.5	14.5	16.0
24	---	---	---	---	---	---	31.5	27.5	29.5	18.0	15.5	16.5
25	---	---	---	---	---	---	31.0	27.0	29.0	17.0	16.0	16.5
26	---	---	---	31.0	27.0	29.0	32.5	27.5	29.5	19.0	15.5	17.0
27	---	---	---	---	---	---	33.0	28.5	30.5	22.0	18.0	19.5
28	---	---	---	---	---	---	33.0	28.5	31.0	25.0	21.0	23.0
29	---	---	---	---	---	---	32.5	28.5	30.0	26.0	23.0	24.5
30	---	---	---	---	---	---	31.5	27.5	29.0	26.0	23.0	24.0
31	---	---	---	---	---	---	31.5	26.5	28.5	---	---	---
MONTH	26.0	20.0	22.5	31.0	27.0	29.0	33.0	24.5	29.5	33.0	14.5	23.5
YEAR	33.0	.0	17.0									

07311600 NORTH WICHITA RIVER NEAR PADUCAH, TX

LOCATION.--Lat 33°57'02", long 100°03'52", Cottle County, Hydrologic Unit 11130204, left downstream end of old abandoned county bridge, 4.0 mi downstream from Cottonwood Creek, 7 mi downstream from Salt Creek,10 mi upstream from Middle Fork, 14 mi southeast of Paducah, and 211.3 mi upstream from mouth.

DRAINAGE AREA.--540 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1951-54 (occasional low-flow measurements), 1961 to 1982, October 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,530 ft above sea level.

REMARKS.--Records are good except those for estimated daily discharges, which are fair. One small diversion for irrigation above station.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 5	0300	18,100	19.76	Aug. 4	2130	1,400	7.36
Aug. 2	2200	4,420	11.18				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	14	14	12	13	13	12	13	188	25	82	19
2	e12	14	e14	13	14	14	12	13	42	28	2350	19
3	e13	14	e14	13	13	14	12	14	27	143	2530	18
4	e13	14	e13	13	13	14	12	14	3120	61	867	18
5	14	14	e13	13	13	14	12	15	8930	34	680	18
6	13	14	e13	13	13	14	12	269	411	28	113	18
7	12	12	e14	13	13	14	12	127	99	26	70	17
8	12	12	e13	12	13	14	12	32	64	24	56	18
9	12	11	e13	13	13	14	12	21	51	24	49	25
10	12	12	e13	13	13	14	10	18	44	23	44	28
11	12	12	e12	13	13	14	11	17	40	23	40	29
12	12	13	e13	12	13	14	11	17	37	23	37	22
13	12	13	e13	12	13	14	12	17	35	22	36	22
14	12	13	17	12	13	14	13	17	33	22	34	20
15	12	12	14	13	13	15	13	17	31	28	33	29
16	12	11	13	13	14	14	13	20	30	29	32	161
17	12	11	12	13	14	14	79	17	29	30	29	115
18	13	12	11	14	13	14	29	16	28	74	28	35
19	12	14	11	13	13	14	16	17	28	73	26	33
20	13	64	11	13	13	13	15	17	27	56	25	46
21	46	39	12	13	14	14	14	17	27	35	25	44
22	31	17	12	13	14	14	15	17	26	27	24	42
23	15	13	12	13	13	13	16	18	26	28	23	40
24	14	12	13	13	13	14	17	19	33	25	23	36
25	16	11	13	13	14	14	14	19	31	23	22	33
26	14	12	13	14	14	13	13	32	27	24	22	35
27	14	11	13	13	13	13	13	33	27	24	21	33
28	14	11	13	13	13	13	13	27	26	24	21	29
29	14	11	14	13	---	14	13	109	25	24	21	26
30	14	13	13	13	---	13	13	329	25	24	20	24
31	14	---	13	13	---	13	---	164	---	24	19	---
TOTAL	453	456	402	400	371	427	471	1492	13567	1078	7402	1052
MEAN	14.6	15.2	13.0	12.9	13.2	13.8	15.7	48.1	452	34.8	239	35.1
MAX	46	64	17	14	14	15	79	329	8930	143	2530	161
MIN	12	11	11	12	13	13	10	13	25	22	19	17
AC-FT	899	904	797	793	736	847	934	2960	26910	2140	14680	2090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995h, BY WATER YEAR (WY)

MEAN	18.7	11.3	10.7	10.2	10.2	11.6	17.6	40.4	73.7	15.2	39.3	35.2
MAX	62.4	17.9	14.6	15.0	16.0	21.5	71.8	186	452	80.4	239	141
(WY)	1966	1970	1966	1973	1975	1979	1967	1982	1995	1975	1995	1974
MIN	3.08	3.94	4.58	4.84	4.77	4.93	5.30	3.63	10.1	2.12	1.98	2.06
(WY)	1964	1965	1965	1965	1965	1965	1964	1966	1964	1966	1964	1964

SUMMARY STATISTICS	FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995h	
ANNUAL TOTAL	27571			
ANNUAL MEAN	75.5		24.7	
HIGHEST ANNUAL MEAN			75.5	1995
LOWEST ANNUAL MEAN			6.10	1964
HIGHEST DAILY MEAN	8930	Jun 5	8930	Jun 5 1995
LOWEST DAILY MEAN	10	Apr 10	.50	Sep 2 1964
ANNUAL SEVEN-DAY MINIMUM	11	Apr 6	.74	Aug 31 1964
ANNUAL RUNOFF (AC-FT)	54690		17920	
10 PERCENT EXCEEDS	42		18	
50 PERCENT EXCEEDS	14		11	
90 PERCENT EXCEEDS	12		4.8	

e Estimated
h See PERIOD OF RECORD paragraph.

07311600 NORTH WICHITA RIVER NEAR PADUCAH, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1994 to September 1995.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1994 to September 1995.
WATER TEMPERATURE: October 1994 to September 1995.

INSTRUMENTATION.--October 1994 to current year a two-parameter water-quality monitor continuously records specific conductance and water temperature at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 28,600 microsiemens May 25, 1995; minimum, 325 microsiemens Aug. 2, 1995.
WATER TEMPERATURE: Maximum, 34.0°C July 9, 10, 25, and 28, 1995; minimum, 2.5°C Mar. 2 and 3, 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 28,600 microsiemens May 25, 1995; minimum, 325 microsiemens Aug. 2, 1995.
WATER TEMPERATURE: Maximum, 34.0°C July 9, 10, 25, and 28, 1995; minimum, 2.5°C Mar. 2, 3, 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC										
01...	1020	14	19500	7.9	7.5	10.4	2400	2300	710	160
JAN										
24...	0935	13	20900	8.0	6.0	10.4	2500	2400	740	170
MAR										
20...	1025	14	21000	7.9	17.0	7.7	2700	2600	810	170
APR										
26...	0910	13	19500	7.9	16.5	7.4	2200	2100	640	150
JUN										
16...	1150	31	15600	8.0	25.5	9.9	2400	2300	700	170
AUG										
17...	0850	29	14400	7.7	27.0	--	2300	2200	650	170

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC									
01...	3600	32	16	150	2100	5600	0.50	8.1	12300
JAN									
24...	3900	34	14	160	2300	5900	0.60	9.3	13100
MAR									
20...	4000	33	17	160	2200	6200	0.60	9.5	13500
APR									
26...	3800	35	13	120	2000	5400	0.50	1.8	12100
JUN									
16...	2800	25	12	170	2000	4200	0.50	9.3	9990
AUG									
17...	2600	23	12	170	1900	3800	0.50	9.4	9240

07311600 NORTH WICHITA RIVER NEAR PADUCAH, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e19300	17100	16700	16900	---	---	e19200	20200	20200	20200
2	---	---	e19100	---	---	e17300	---	---	e19600	20300	20200	20200
3	---	---	e18900	---	---	e17200	---	---	e19700	20300	20200	20300
4	---	---	e19000	---	---	e17400	---	---	e20000	20300	20200	20200
5	---	---	e19000	---	---	e17800	---	---	e20200	20200	20200	20200
6	20100	17800	18400	---	---	e18000	---	---	e20400	20300	20200	20300
7	22200	18700	19200	---	---	e18100	---	---	e20400	20300	20200	20300
8	20000	18000	19000	---	---	e18100	---	---	e20500	20300	20300	20300
9	19100	17200	18300	---	---	e18600	---	---	e20600	20300	20300	20300
10	18200	16500	17500	---	---	e18900	---	---	e20300	20300	20300	20300
11	17500	15700	16700	---	---	e19100	---	---	e19700	20300	20300	20300
12	16700	15000	16000	---	---	e19400	---	---	e19400	20300	20300	20300
13	16200	14900	15700	---	---	e19500	---	---	e19600	20300	20300	20300
14	16600	15600	16300	---	---	e19700	20000	19900	20000	20300	20300	20300
15	16800	15900	16400	---	---	e19700	20000	19900	20000	20300	20300	20300
16	16700	15500	16100	---	---	e19400	20000	19900	20000	20400	20300	20400
17	16200	15400	15800	---	---	e19000	20000	20000	20000	20400	20400	20400
18	16900	15900	16400	---	---	e18600	20100	20000	20000	20400	20300	20400
19	17400	16300	16800	---	---	e18000	20100	20000	20100	20400	20400	20400
20	17000	9010	15500	---	---	e13700	20100	20000	19800	20400	20400	20400
21	14300	10700	11400	---	---	e15000	20100	20100	20100	20400	20400	20400
22	14600	12900	13900	---	---	e15800	20100	20100	20100	20400	20400	20400
23	13200	12800	13000	---	---	e16300	20100	20100	20100	20400	20400	20400
24	15900	13200	14500	---	---	e16600	20100	20100	20100	20400	20400	20400
25	---	---	15000	---	---	e16800	20100	20100	20100	20400	20400	20400
26	---	---	15200	---	---	e17100	20100	20100	20100	20500	20400	20500
27	---	---	15600	---	---	e17400	20100	20100	20100	20500	20500	20500
28	---	---	15500	---	---	e17900	20200	20100	20200	20500	20500	20500
29	15800	15400	15600	---	---	e18400	20200	20100	20200	20500	20500	20500
30	16100	15800	16000	---	---	e19000	20200	20200	20200	20600	20500	20500
31	16700	16100	16500	---	---	---	20200	20200	20200	20600	20500	20500
MONTH	22200	9010	16500	17100	16700	17800	20200	19900	20000	20600	20200	20400

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	20500	20500	20500	20900	20800	20900	21000	21000	21000	19800	19300	19500
2	20500	20400	20500	20900	20800	20800	21000	21000	21000	20000	19800	19900
3	20500	20100	20500	20800	20800	20800	21100	21000	21000	20000	19600	19800
4	20600	20500	20500	20800	20800	20800	21100	21000	21000	20100	19800	19900
5	20600	20600	20600	20900	20700	20800	21000	21000	21000	20200	18800	19800
6	20700	20600	20600	20900	20800	20900	21100	21000	21000	19900	800	12900
7	20600	20600	20600	21000	20900	20900	21000	21000	21000	6300	900	2980
8	20600	20600	20600	20900	20900	20900	21100	21000	21000	10400	6300	8450
9	20700	20600	20600	21000	20900	20900	21100	21100	21100	14000	10400	12500
10	20700	20600	20600	21000	20900	21000	21100	21100	21100	18300	14000	16000
11	20700	20600	20600	20900	20800	20900	21200	21100	21100	20600	18300	19600
12	20700	20700	20700	20900	20800	20900	21100	21100	21100	22700	20600	21500
13	20700	20700	20700	20900	20900	20900	21500	21100	21300	23400	22700	23000
14	20700	20600	20700	20900	20800	20900	---	---	21300	24100	23200	23700
15	20700	20700	20700	21000	20900	20900	---	---	21400	24700	23800	24300
16	20700	20600	20700	21000	21000	21000	---	---	21400	24600	23800	24200
17	20700	20700	20700	21000	21000	21000	---	---	21500	26000	24500	25400
18	20700	20700	20700	21000	21000	21000	---	---	20800	26100	23300	24700
19	20700	20700	20700	21100	21000	21000	---	---	21300	27000	24800	26300
20	20700	20700	20700	21100	21000	21000	19300	19100	19200	27300	26500	26900
21	20700	20700	20700	21100	21000	21000	19500	19300	19400	28100	26600	27300
22	20700	20700	20700	21100	21000	21100	19600	19200	19500	28300	26800	27600
23	20700	20600	20700	21100	21000	21000	19800	19600	19600	27900	26800	27400
24	20800	20700	20800	21100	21000	21100	19800	19300	19600	28500	27800	28200
25	20800	20800	20800	21100	21000	21100	19800	19300	19600	28600	27200	28300
26	20800	20800	20800	21100	21000	21000	20000	19800	19900	27700	19700	23000
27	20800	20800	20800	21100	21000	21000	20000	19900	19900	21900	14000	18000
28	20800	20800	20800	21100	21000	21100	19900	19900	19900	20800	15100	18300
29	---	---	---	21100	21000	21100	20000	19900	19900	17200	7200	13600
30	---	---	---	21100	21000	21100	20000	18900	19600	17200	1300	2990
31	---	---	---	21100	21000	21100	---	---	---	7500	3100	5960
MONTH	20800	20100	20700	21100	20700	21000	21500	18900	20600	28600	800	19700

07311600 NORTH WICHITA RIVER NEAR PADUCAH, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6000	1600	3110	14100	13800	14000	17700	14100	16200	19600	18800	19300
2	10900	6000	8700	14300	13800	14100	14100	325	1730	20400	18700	19500
3	11200	8400	9820	15400	1960	9070	1960	326	795	20700	19300	20000
4	15700	566	7240	6690	2730	4690	2730	1310	2090	20300	18300	19400
5	1670	456	739	10300	6690	8840	4730	1100	2270	20800	19100	20000
6	7490	1670	4680	12600	10300	11400	10100	4730	7730	20700	19000	20100
7	10700	7490	9320	13300	12600	13100	12500	10100	11500	21100	20100	20700
8	12400	10700	11600	13600	12900	13300	14500	12500	13500	21200	20300	20800
9	13600	12400	13000	13400	13000	13200	16000	14500	15100	21600	20700	21100
10	14800	13600	14200	13900	13300	13600	16500	16000	16200	21100	20600	20900
11	15200	14800	15000	15600	13500	14900	17000	16100	16500	21300	20700	20900
12	15700	15100	15400	16100	15600	15900	17200	16100	16700	21100	16200	18800
13	15600	15100	15400	17800	15900	16600	17200	15800	16600	16500	15700	16100
14	15700	15200	15400	17200	16500	16900	16700	15200	16000	17900	16500	17000
15	15600	15000	15300	17800	11500	16600	16000	14900	15500	18800	15500	18000
16	15700	15300	15500	16000	13600	14600	15300	14000	14800	18300	4320	12800
17	16000	15600	15800	18500	16000	17100	14400	13500	14000	4320	2930	3360
18	16100	15800	16000	18500	5570	15000	16100	13600	14600	6160	4030	5090
19	16400	15700	16200	16400	6210	9110	17100	15800	16600	7460	2460	6000
20	16600	16200	16300	11700	5440	6690	17900	14400	16700	4130	2460	3130
21	16600	16200	16500	8750	5940	7070	17600	16700	17200	7020	4130	5450
22	16800	16200	16600	10100	8750	9660	18400	16800	17400	8250	7020	7750
23	16900	16400	16700	11500	10100	10800	19000	17700	18300	10100	7830	8930
24	16700	15100	15500	12300	10900	11600	19300	17700	18300	12100	10100	11200
25	15600	15100	15300	13800	12300	13100	19500	18300	18900	13200	12100	12700
26	15500	12900	14300	15400	13800	14700	18700	17600	18300	13900	13200	13700
27	13300	12600	13000	16300	15400	16000	19800	17000	17800	13300	12700	12900
28	13000	12600	12700	16700	16100	16400	19900	18900	19500	13200	10800	12400
29	13700	13000	13300	16800	16200	16500	20000	19100	19400	12700	9640	11300
30	14100	13700	13900	17300	16700	17100	20200	18700	19800	10800	8670	9780
31	---	---	---	17900	17300	17700	20200	18900	19700	---	---	---
MONTH	16900	456	12900	18500	1960	13200	20200	325	14500	21600	2460	14300
YEAR	28600	325	17600									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	19.0	14.0	16.5	12.5	8.0	10.5	8.5	5.5	7.0
2	---	---	---	18.0	15.0	16.5	14.5	10.0	12.0	7.5	4.0	5.5
3	---	---	---	21.5	16.0	18.5	15.0	11.5	13.0	6.5	5.0	6.0
4	---	---	---	19.5	16.0	18.0	14.5	10.5	12.5	5.0	3.5	4.5
5	---	---	---	18.5	14.5	16.5	13.0	10.5	11.5	4.0	3.5	4.0
6	26.0	22.0	23.5	19.0	14.0	16.5	13.0	11.0	12.0	7.5	3.0	5.0
7	24.5	21.0	22.5	19.5	14.0	17.0	12.5	10.5	11.5	8.5	4.0	6.0
8	22.5	17.5	20.0	20.5	16.5	18.5	11.5	9.5	11.0	11.5	6.0	8.0
9	22.0	16.0	19.0	20.0	15.0	17.0	10.5	7.5	9.0	12.5	7.5	9.5
10	21.5	15.0	18.5	17.5	12.0	14.5	10.0	7.0	8.5	13.5	8.5	10.5
11	21.5	15.0	18.5	15.0	12.0	13.0	8.5	6.0	7.0	13.5	8.5	11.0
12	21.5	15.0	18.5	13.5	11.5	12.5	8.0	6.0	7.0	13.5	10.0	11.5
13	22.0	15.5	19.0	17.5	13.5	15.5	8.5	7.5	8.0	13.0	9.0	10.5
14	20.5	17.5	18.5	17.5	13.5	15.5	13.5	7.5	9.5	12.5	7.5	9.5
15	21.0	16.5	18.0	15.5	11.5	13.5	10.5	10.0	10.5	12.0	7.5	9.5
16	23.5	18.5	20.5	14.0	9.5	12.0	13.0	8.5	10.5	11.5	9.0	10.0
17	25.0	21.0	23.0	15.0	11.5	13.0	12.0	6.5	9.5	12.0	8.0	10.0
18	23.5	19.0	21.5	12.5	9.5	11.0	12.0	7.0	9.5	11.5	8.5	10.0
19	22.5	18.0	20.5	15.0	11.5	12.5	13.5	8.0	10.5	11.0	6.5	8.5
20	24.0	19.0	21.5	14.5	12.5	13.5	13.0	8.5	10.5	12.0	6.5	9.0
21	23.0	18.0	20.5	13.5	11.5	12.5	12.0	8.0	9.5	10.5	8.5	9.5
22	22.0	18.5	20.5	13.0	11.0	12.0	11.5	7.0	9.0	9.0	6.5	8.0
23	22.0	18.5	20.0	11.0	10.0	10.0	10.5	7.0	8.5	10.0	4.5	7.0
24	21.0	19.0	20.0	13.0	10.0	11.0	12.0	7.5	9.5	9.5	5.5	7.5
25	20.0	15.5	17.0	12.5	11.5	12.0	11.5	7.0	9.0	11.5	6.0	8.5
26	17.0	13.0	15.0	14.5	11.5	13.0	11.0	6.5	8.5	13.5	9.0	11.0
27	16.0	13.5	14.5	15.0	12.5	13.5	10.5	7.5	9.0	14.0	9.5	11.5
28	17.5	13.5	15.5	13.0	9.5	11.5	10.5	9.5	10.0	12.5	9.5	11.0
29	20.0	15.0	17.0	12.5	8.5	10.5	13.0	9.0	10.5	10.0	7.0	8.5
30	19.5	17.0	18.0	12.0	7.5	10.0	10.5	9.5	10.0	10.5	5.0	7.5
31	19.0	15.5	17.5	---	---	---	11.5	8.0	10.0	11.0	6.0	8.0
MONTH	26.0	13.0	19.0	21.5	7.5	14.0	15.0	6.0	10.0	14.0	3.0	8.5

07311600 NORTH WICHITA RIVER NEAR PADUCAH, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.0	6.5	9.5	7.0	3.5	5.0	21.0	11.5	16.0	24.0	17.5	20.5
2	15.5	8.5	11.5	3.5	2.5	3.0	21.5	14.0	17.0	20.5	17.0	18.5
3	14.5	10.0	12.0	5.5	2.5	3.5	17.5	16.0	16.5	26.0	16.0	20.0
4	14.0	8.0	10.5	9.5	4.5	6.5	20.0	15.0	17.0	26.5	19.0	22.5
5	14.0	9.0	11.0	11.5	7.5	9.5	23.0	16.0	18.5	23.0	17.5	19.0
6	14.5	8.0	11.0	13.0	9.0	10.5	24.5	17.0	20.0	20.0	16.5	17.5
7	12.5	9.0	10.5	11.0	5.5	8.0	26.0	18.0	21.0	22.5	17.5	20.0
8	12.0	6.5	8.5	12.5	4.5	8.0	25.0	18.0	21.0	21.5	17.5	20.0
9	13.5	7.0	9.5	13.5	6.5	9.5	25.0	17.0	20.5	25.5	17.5	21.0
10	13.5	9.0	11.0	15.0	8.0	11.0	21.5	15.0	18.5	25.5	19.0	22.0
11	10.5	6.0	8.5	18.5	10.5	14.0	19.0	11.0	15.0	25.5	19.5	22.0
12	6.0	4.0	4.5	19.0	14.0	16.0	22.0	12.0	16.5	27.0	19.5	23.0
13	4.5	4.0	4.0	16.5	14.0	15.5	25.5	15.0	20.0	29.0	21.0	24.5
14	7.0	4.5	5.5	15.0	13.0	13.5	25.5	18.0	21.0	28.0	21.0	24.5
15	11.5	7.0	9.0	16.5	13.0	14.5	24.5	18.5	21.5	28.5	22.0	25.0
16	9.0	6.5	8.0	20.5	13.0	16.5	27.0	20.5	23.0	25.0	23.0	23.5
17	12.0	4.5	7.5	22.0	14.0	17.5	24.0	18.0	20.0	26.0	22.0	23.5
18	12.5	6.5	9.0	22.5	15.0	18.5	23.0	15.5	19.0	25.0	17.5	21.0
19	15.0	8.0	11.0	22.0	15.5	18.5	21.5	17.0	19.0	27.0	17.5	22.0
20	16.5	9.5	12.5	22.5	15.5	18.5	23.5	16.0	19.5	26.5	20.0	23.0
21	17.5	11.0	13.5	24.0	15.5	19.5	25.5	16.5	20.0	28.5	20.0	24.0
22	18.0	12.5	14.5	21.5	17.0	19.5	19.5	12.0	15.0	30.0	22.5	25.5
23	18.5	13.0	15.0	22.0	15.0	18.0	15.5	10.5	12.5	26.5	22.5	24.5
24	17.5	12.0	14.5	24.0	16.5	19.5	20.5	12.0	15.5	22.5	19.0	20.0
25	15.0	12.5	13.5	21.0	18.5	19.5	23.0	14.5	18.5	19.0	17.0	18.0
26	18.5	13.0	15.0	21.5	15.5	18.0	23.0	16.0	19.0	20.5	17.0	18.5
27	15.0	13.0	14.0	20.5	13.5	16.5	22.0	15.0	18.0	26.0	19.0	22.0
28	13.0	7.0	10.0	16.0	11.5	13.5	22.0	16.5	19.0	26.5	21.5	24.0
29	---	---	---	12.5	10.5	11.5	26.0	18.0	21.5	24.0	17.0	20.0
30	---	---	---	13.0	10.5	11.5	22.5	19.5	20.5	21.5	16.0	18.5
31	---	---	---	17.5	10.0	13.5	---	---	---	21.5	18.0	20.0
MONTH	18.5	4.0	10.5	24.0	2.5	13.5	27.0	10.5	18.5	30.0	16.0	21.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	18.5	21.5	29.0	23.0	25.5	26.5	22.0	24.0	32.5	26.5	29.0
2	25.5	22.0	23.5	29.0	24.0	26.0	22.0	20.5	21.5	31.5	26.5	28.5
3	27.5	22.5	24.5	26.0	24.0	25.0	24.5	22.0	23.0	31.5	26.0	28.5
4	25.0	16.0	20.5	28.0	22.5	25.0	26.5	24.0	25.0	32.0	26.0	28.5
5	20.0	17.0	18.0	31.0	25.0	27.5	29.5	25.5	27.5	32.5	26.0	29.0
6	25.5	19.5	22.0	32.0	26.0	28.5	30.5	26.5	28.5	31.5	26.5	28.5
7	27.5	22.5	25.0	33.0	27.0	29.5	31.0	26.5	29.0	28.5	25.5	27.0
8	28.0	24.5	26.0	33.5	27.0	30.0	31.0	27.0	29.0	26.5	23.5	25.0
9	28.0	25.0	26.5	34.0	27.0	30.0	29.5	26.5	28.5	24.0	21.0	22.0
10	27.0	21.0	24.0	34.0	27.5	30.5	30.0	25.5	28.0	23.5	20.5	21.5
11	24.5	19.0	21.5	33.5	27.5	30.5	30.0	26.0	28.0	26.5	22.5	24.0
12	26.0	21.0	23.5	33.5	27.5	30.0	31.0	26.5	28.5	29.5	24.0	26.0
13	27.5	22.5	25.0	33.5	27.5	30.0	31.5	27.0	29.0	29.5	24.0	26.0
14	28.0	23.0	25.5	33.0	27.5	30.0	31.5	27.0	29.0	27.5	25.0	26.0
15	28.0	23.5	25.5	33.5	27.0	29.0	31.0	27.5	29.0	25.0	22.5	24.0
16	28.5	23.5	25.5	33.5	26.0	29.0	31.5	27.0	29.0	25.5	22.5	23.5
17	27.0	24.0	25.5	31.0	28.5	29.5	31.5	27.0	29.0	26.5	23.5	25.0
18	28.0	24.0	25.5	31.5	24.5	27.5	31.5	26.5	28.5	25.5	24.0	24.5
19	29.5	24.5	26.5	28.0	24.0	25.5	32.0	27.0	29.0	24.5	21.0	23.0
20	30.0	25.0	27.0	31.0	25.5	28.0	32.5	27.5	29.5	24.0	20.0	21.5
21	31.0	25.5	27.5	32.5	27.5	29.5	32.5	28.0	30.0	23.0	15.5	19.5
22	31.0	25.5	28.0	33.0	27.5	30.0	32.5	27.5	29.5	18.0	14.0	15.5
23	32.0	26.0	28.5	32.5	27.0	29.5	32.0	27.5	29.5	20.0	15.5	17.5
24	28.5	25.5	26.5	33.0	26.5	29.5	32.0	26.5	29.0	20.0	17.5	18.5
25	30.0	24.0	27.0	34.0	27.0	30.0	32.0	26.5	28.5	19.0	17.5	18.0
26	31.5	25.5	28.0	33.0	27.5	30.0	32.0	27.0	29.0	20.5	16.0	18.5
27	31.0	25.5	28.0	32.5	26.5	29.5	32.5	27.0	29.5	25.5	19.0	22.0
28	32.5	26.0	28.5	34.0	26.5	30.0	33.0	27.0	29.5	27.5	23.0	25.0
29	29.5	26.0	28.0	32.5	28.0	30.0	32.5	27.0	29.5	28.0	23.5	25.5
30	28.0	24.0	25.5	31.0	27.0	29.0	32.0	27.0	29.0	27.0	23.0	25.0
31	---	---	---	28.5	26.5	27.5	32.0	26.5	29.0	---	---	---
MONTH	32.5	16.0	25.5	34.0	22.5	29.0	33.0	20.5	28.0	32.5	14.0	24.0
YEAR	34.0	2.5	18.5									

07311630 MIDDLE WICHITA RIVER NEAR GUTHRIE, TX

LOCATION.--Lat 33°47'45", long 100°04'29", King County, Hydrologic Unit 11130204, on right bank 100 ft (32 m) downstream from inflatable dam. One mile downstream from ranch road crossing, 0.71 miles upstream from Forrer Creek, 12 miles upstream from confluence with North Wichita River and 19 miles northeast of Guthrie, Tx.

DRAINAGE AREA.-- Undetermined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.-- June 1994 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,583.90 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Daily discharges above 30 ft^3/s are not published. There are no known diversions upstream from station. Low flow is maintained by springs that enter river in the vicinity of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 16.02 ft Aug. 2, 1995; minimum daily discharge, 3.0 ft^3/s Mar. 2, 1995.

EXTREMES FOR CURRNENT YEAR.--Maximum gage height, 16.02 Aug. 2 at 1200 hours; minimum daily discharge, 3.0 ft^3/s Mar. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	5.2	5.4	4.1	4.8	3.1	4.8	4.4	e21	7.3	---	19
2	7.3	5.3	6.0	4.1	5.1	3.0	4.9	4.2	e7.1	11	---	6.5
3	7.0	5.4	6.0	3.9	5.5	3.3	5.0	4.0	e7.1	21	---	6.5
4	6.9	5.6	5.5	3.8	5.0	3.9	5.8	4.6	e17	8.7	---	6.5
5	6.9	5.8	5.8	3.9	4.9	4.1	5.3	6.4	---	7.8	---	6.8
6	6.6	5.4	6.3	4.3	4.9	4.1	5.0	11	e13	7.8	30	6.8
7	e8.4	5.4	5.9	4.1	4.3	3.1	4.8	13	e6.5	8.0	26	6.3
8	e7.6	5.5	5.3	5.2	4.1	3.3	4.7	7.5	e6.5	8.2	e22	16
9	e7.3	5.3	4.8	5.3	4.8	3.8	14	7.2	e6.5	9.0	e20	9.5
10	e6.9	5.4	4.8	5.5	5.2	4.8	4.8	6.7	e6.5	9.0	e17	7.7
11	e6.9	5.4	4.4	5.4	3.7	5.0	4.8	6.1	e6.3	8.8	e15	8.5
12	e6.9	5.6	4.9	5.6	3.5	5.8	5.1	6.0	e6.3	8.5	e13	8.1
13	e6.5	5.8	5.1	5.1	3.5	4.7	5.0	6.0	e6.3	8.5	e11	8.0
14	e6.5	5.5	5.9	5.0	4.2	4.5	4.4	6.0	e6.5	8.8	e11	7.3
15	e6.3	5.5	5.4	5.1	4.5	4.7	4.2	7.0	e6.7	9.1	e9.3	11
16	e6.5	5.4	5.4	5.7	3.6	5.3	4.1	7.3	e6.5	16	e8.8	9.4
17	e6.3	5.6	5.0	5.4	3.8	5.5	17	6.2	e6.5	9.7	e8.6	7.7
18	e6.3	5.7	5.1	4.7	4.1	5.5	9.4	6.1	e6.7	---	e8.4	7.4
19	e8.8	6.6	6.0	4.4	4.8	5.8	6.8	5.9	e6.7	---	e8.4	15
20	e19	8.1	5.9	4.6	5.0	5.4	6.7	6.3	e6.9	12	e8.2	7.4
21	e7.5	6.8	5.3	4.5	5.3	5.5	5.4	6.1	e6.7	9.5	e8.2	7.2
22	e6.0	5.5	4.9	4.0	5.6	5.1	6.0	6.6	6.6	9.4	e7.8	7.1
23	e5.8	5.2	4.8	4.2	6.0	4.8	6.0	7.8	6.4	9.5	e7.8	7.1
24	e5.6	5.6	5.0	4.4	5.4	4.9	6.1	8.0	10	9.2	7.7	e6.9
25	e6.0	5.7	4.7	4.7	5.5	5.1	6.2	9.6	7.1	9.1	7.4	e6.9
26	5.4	5.9	4.9	5.5	6.0	5.4	5.9	---	7.0	8.8	7.4	e7.0
27	5.4	5.8	5.0	5.5	5.7	4.9	5.9	e23	7.1	8.3	7.4	e6.9
28	5.3	5.3	5.0	5.0	3.7	4.5	5.3	e8.2	7.1	8.8	7.3	6.8
29	5.3	5.1	5.0	4.0	---	4.6	5.0	e8.0	7.1	9.0	7.4	13
30	5.4	5.1	4.7	4.3	---	4.7	4.9	e20	7.2	11	7.3	6.9
31	5.3	---	5.0	4.5	---	4.7	---	e9.5	---	---	7.3	---
TOTAL	215.3	169.5	163.2	145.8	132.5	142.9	183.3	---	---	---	---	257.2
MEAN	6.95	5.65	5.26	4.70	4.73	4.61	6.11	---	---	---	---	8.57
MAX	19	8.1	6.3	5.7	6.0	5.8	17	---	---	---	---	19
MIN	5.3	5.1	4.4	3.8	3.5	3.0	4.1	---	---	---	---	6.3
AC-FT	427	336	324	289	263	283	364	---	---	---	---	510

e Estimated

07311630 MIDDLE WICHITA RIVER NEAR GUTHRIE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1993 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1994 to September 1995.
TEMPERATURE: October 1994 to September 1995.

INSTRUMENTATION.--Since October 1994 to current year, specific conductance and water temperature were continuously recorded at this station.

REMARKS.--Interuptions in record are due to malfunctions of the instrument.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 15,500 microsiemens Apr. 16, 1995; minimum, 4,250 microsiemens May 31, 1995.
TEMPERATURE: Maximum, 35.0°C July 9,10, 1995; minimum, 2.0°C Mar. 2, 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 15,500 microsiemens Apr. 16; minimum, 4,250 microsiemens May 31.
TEMPERATURE: Maximum, 35.0°C July 9,10; minimum, 2.0°C Mar. 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC										
02...	0940	6.0	13100	8.1	9.5	9.6	2500	2400	790	140
JAN										
24...	1245	4.4	13400	8.1	8.5	11.6	2600	2400	790	150
MAR										
21...	1040	5.5	13300	7.9	16.0	9.3	2600	2400	790	150
APR										
26...	1140	6.6	13300	7.7	18.0	9.3	2500	2300	730	160
JUN										
22...	1100	7.0	13000	7.9	25.0	9.8	2400	2200	690	160
AUG										
16...	1200	8.4	11500	7.9	27.5	--	2400	2200	720	140

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC									
02...	2000	17	12	200	2200	3200	0.70	13	8470
JAN									
24...	2100	18	11	180	2300	3300	0.60	13	8780
MAR									
21...	2200	19	15	170	2300	3400	0.60	13	8970
APR									
26...	2100	18	12	170	2200	3400	0.50	8.6	8710
JUN									
22...	2100	19	12	160	2400	3200	0.50	6.7	8660
AUG									
16...	1800	16	11	170	2100	2900	0.50	10	7780

07311630 MIDDLE WICHITA RIVER NEAR GUTHRIE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12900	12400	12700	---	---	e12500	12500	11900	12200	13000	12700	12900
2	12700	12400	12600	12800	11500	12500	12800	12200	12500	13000	12800	12900
3	12800	12400	12600	12800	12500	12700	12300	11800	12100	13000	12800	12900
4	12700	12500	12600	12700	12500	12700	---	---	e12200	13100	13000	13000
5	12700	12500	12600	12600	12300	12500	---	---	e12200	13100	13000	13100
6	12800	12500	12700	12800	12400	12600	---	---	e12300	13100	12800	13000
7	12800	12100	12500	12800	12400	12600	---	---	e12300	13100	12700	12900
8	12600	12200	12400	12600	12200	12400	---	---	e12400	13100	12500	12800
9	12800	12600	12700	12800	12200	12600	---	---	e12300	13000	12400	12700
10	13000	12600	12800	13000	12600	12800	---	---	e12400	12900	12400	12700
11	12900	12600	12800	13000	12800	12900	---	---	e12500	12900	12400	12600
12	12900	12600	12700	13000	12700	12900	13900	11100	12600	12800	12400	12600
13	12800	12500	12700	12700	12400	12600	13700	13100	13400	12900	12500	12700
14	12700	12600	12700	12700	12500	12600	13100	12500	12800	13200	12600	12800
15	12600	12300	12400	13000	12700	12800	12600	12300	12500	13100	12600	12900
16	12400	12200	12300	13200	12700	13000	12600	12400	12500	13000	12600	12800
17	12400	12200	12300	13000	12600	12800	12700	12400	12600	13100	12700	12900
18	12600	12300	12500	13200	12800	13000	12700	12300	12600	12900	12500	12600
19	12600	12500	12600	---	---	12900	12700	12200	12500	13100	12800	12900
20	12600	12000	12200	---	---	12500	12600	12300	12500	13300	12700	13000
21	12100	6680	8190	12400	12000	12200	12800	12400	12600	13200	12900	13100
22	13900	8030	12200	12800	12400	12600	12800	12500	12700	13400	13100	13200
23	14400	13900	14100	12900	12800	12800	12800	12500	12700	13400	12900	13300
24	14300	13500	13900	12900	12600	12700	12800	12400	12600	13400	13200	13300
25	13600	12600	13000	12700	12600	12700	12900	12400	12700	13400	13300	13300
26	---	---	12300	12600	12200	12400	12900	12500	12700	13400	13200	13300
27	---	---	e12300	12300	12100	12200	12900	12400	12600	13400	13300	13300
28	---	---	e12300	12300	10000	10300	12600	12200	12400	13500	13300	13400
29	---	---	e12400	11300	10600	11000	12600	12200	12400	13600	13300	13400
30	---	---	e12400	11900	11300	11600	12700	12400	12600	13500	13400	13500
31	---	---	e12500	---	---	---	12900	12400	12500	13500	13400	13400
MONTH	14400	6680	12500	13200	10000	12500	13900	11100	12500	13600	12400	13000

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13500	13400	13400	---	---	13600	13800	13700	13800	12400	12100	12200
2	13500	13400	13400	---	---	13200	---	---	e13700	12300	11800	11900
3	13500	13400	13500	---	---	13300	13700	13500	13600	11900	11600	11800
4	13600	13400	13500	13400	13100	13400	13500	12300	13300	11800	11500	11600
5	13600	13400	13500	---	---	13400	13400	12900	13100	11600	8260	10900
6	13600	13400	13500	---	---	13300	13600	13300	13400	12800	6430	11300
7	13500	13400	13500	13400	13100	13300	13900	13500	13700	13100	11300	11700
8	13700	13400	13500	---	---	13400	13900	13600	13800	13400	11100	12500
9	13700	13400	13500	13500	13400	13400	13900	13200	13700	13600	12600	13200
10	13600	13400	13500	13500	13500	13500	13800	13300	13600	13200	12900	13100
11	13600	13400	13500	13600	13500	13500	13800	13600	13700	13500	13200	13300
12	13700	13600	13600	13600	13100	13400	13800	13700	13700	13500	13100	13300
13	13600	13500	13500	13200	13100	13200	14000	13600	13800	13300	12900	13100
14	13500	13300	13400	13300	13300	13300	14500	14000	14200	13300	13100	13200
15	13400	13400	13400	---	---	e13300	14900	14500	14700	13200	9910	12900
16	13400	12300	12900	13500	13200	13300	15500	14900	15200	12400	11300	12200
17	13200	12600	13000	13700	13400	13600	---	---	13000	12800	12400	12500
18	13500	13200	13400	13700	13600	13700	---	---	10200	12900	12500	12700
19	13600	13500	13600	13700	13600	13600	12700	10500	11600	13000	12400	12800
20	13600	13500	13600	13600	13500	13600	12300	10600	11400	12900	12500	12800
21	13600	13500	13600	13700	13500	13600	12600	11900	12200	12900	12400	12700
22	13600	13500	13500	13700	13500	13600	12700	11000	12100	12800	12400	12600
23	13600	13500	13500	13700	13500	13600	12400	10900	12000	12800	12300	12600
24	13600	13500	13500	13800	13600	13600	12800	12300	12500	12500	12200	12400
25	13700	13200	13400	13800	13500	13600	13300	12800	12800	12500	10400	11500
26	13400	13200	13300	13700	13500	13600	13500	13200	13300	11700	7270	10800
27	13400	13300	13400	13700	13500	13600	13300	12900	13100	10500	7520	8540
28	13500	13300	13500	13700	13600	13700	12900	12700	12800	11900	10400	11200
29	---	---	---	13800	13600	13700	12700	12500	12600	12300	8020	10700
30	---	---	---	13800	13400	13700	12600	12100	12300	11000	8730	10000
31	---	---	---	13700	13600	13600	---	---	---	11000	4250	8830
MONTH	13700	12300	13400	13800	13100	13500	15500	10500	13100	13600	4250	12000

e Estimated

07311630 MIDDLE WICHITA RIVER NEAR GUTHRIE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11000	9940	10100	12300	12000	12200	10100	7510	8500	12400	11800	12100
2	11200	11100	11200	12400	10100	12100	---	---	e4000	12100	11800	12000
3	11500	11100	11300	10400	9430	10000	---	---	e2500	12200	11800	12000
4	11600	7890	10500	10000	9680	9900	---	---	e7800	12200	11800	12000
5	9780	8020	8670	---	9940	e11000	---	---	9500	12200	11800	12000
6	10100	9750	9900	---	9870	e11200	10300	10100	10200	12400	12100	12200
7	12400	10000	11400	---	9860	e11300	10500	10300	10400	12500	12300	12400
8	12900	12400	12700	---	9780	e11700	10700	10500	10600	12400	12300	12400
9	12800	12400	12600	---	---	e11900	10900	10700	10800	12400	9000	11700
10	12600	12300	12500	---	---	e12100	11000	10900	10900	12000	11300	11700
11	12400	12100	12300	---	9710	e12200	11100	11000	11000	12100	10500	11800
12	12500	12100	12300	---	9670	e12200	11200	11100	11200	12100	10700	11900
13	12700	12400	12600	---	9670	e12200	11300	11200	11300	11800	10600	11500
14	12800	12600	12700	---	9670	e12300	11300	11200	11300	12300	11800	12100
15	12800	12600	12700	---	9640	e11500	11400	11300	11400	12400	11900	12100
16	12800	12500	12700	---	9590	e11000	11700	10800	11300	11900	11800	11900
17	12800	12600	12700	---	---	e9700	11000	10700	10900	12100	11800	11900
18	13000	12800	12900	---	9070	9560	11200	11000	11100	12400	12200	12300
19	13100	12800	13000	9070	7900	8060	11300	11200	11300	12400	12100	12200
20	13100	12800	13000	8570	8070	8430	11400	11300	11400	12200	12100	12100
21	13100	12700	13000	8740	8510	8640	11500	11400	11400	12400	12200	12300
22	13000	12800	12900	8860	8720	8780	11600	11500	11500	12400	12200	12300
23	13100	12700	12900	9740	8860	9150	11700	11400	11600	12400	12100	12300
24	12000	11300	11600	9130	9010	9070	11700	11600	11700	12400	12200	12300
25	11700	11300	11600	9210	9110	9160	11900	11700	11800	12300	10800	11800
26	11800	11500	11700	9290	9160	9220	11900	11700	11800	12100	11800	11900
27	11900	11600	11800	9390	9280	9340	11900	11700	11800	12200	12000	12100
28	11900	11600	11800	9490	9370	9430	12000	11700	11800	12300	12200	12200
29	12100	11900	12000	9590	9490	9540	12000	11800	11900	12400	11900	12200
30	12200	12000	12100	9670	9590	9630	12000	11800	11900	12300	12100	12200
31	---	---	---	9990	9620	9690	12200	12000	12100	---	---	---
MONTH	13100	7890	12000	12400	7900	10400	12200	7510	10500	12500	9000	12100
YEAR	15500	4250	12300									

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	27.5	18.5	22.5	20.0	12.5	16.0	12.0	6.0	8.5	9.0	5.0	6.5
2	27.5	20.0	23.0	18.5	14.5	16.5	15.0	9.0	11.5	8.5	2.5	5.5
3	27.5	18.0	22.5	23.0	16.0	19.0	15.0	10.0	12.5	7.0	4.5	6.5
4	28.0	20.5	24.0	20.5	15.5	18.5	13.5	8.5	11.0	5.0	3.5	4.5
5	27.5	21.0	24.0	19.5	14.5	16.5	12.0	8.5	10.5	4.5	3.5	4.0
6	27.0	20.0	23.0	19.5	12.0	15.5	13.5	10.5	11.5	9.5	4.0	6.0
7	23.5	19.0	21.0	20.0	13.0	16.0	13.0	10.0	11.5	9.5	3.5	6.0
8	21.5	16.0	18.5	23.0	16.0	19.0	11.0	9.0	10.5	13.5	6.0	9.0
9	21.5	13.0	17.0	20.0	13.5	16.5	10.0	7.0	8.5	14.0	6.5	10.0
10	21.5	12.0	16.5	16.5	10.0	13.0	10.0	6.0	7.5	15.0	8.5	11.0
11	21.5	12.0	16.5	12.5	10.0	11.0	8.0	5.0	6.5	14.5	8.0	11.0
12	22.0	12.5	17.0	14.0	10.0	12.0	9.0	5.0	7.0	14.5	9.0	11.5
13	22.5	12.5	17.5	19.0	13.5	16.0	10.0	7.5	8.5	14.0	8.5	10.5
14	18.5	15.5	16.5	17.5	13.0	14.5	14.0	9.0	11.0	13.0	5.5	9.0
15	22.0	15.5	18.0	14.5	10.0	12.0	11.5	11.0	11.0	13.0	6.5	9.5
16	25.0	19.0	21.5	13.5	7.0	10.0	13.0	8.5	10.5	13.0	9.0	11.0
17	27.5	21.0	23.5	16.0	10.0	12.5	12.0	5.0	8.5	13.5	7.5	10.5
18	25.5	19.0	21.5	11.5	7.5	9.5	12.0	5.5	8.5	12.5	8.0	10.0
19	25.0	17.0	20.5	15.5	10.5	12.5	14.0	8.0	10.5	12.0	5.5	8.0
20	27.5	20.0	23.0	15.0	11.0	13.5	13.5	8.5	10.5	13.5	5.5	9.0
21	24.5	18.5	21.0	14.5	8.5	11.0	12.0	6.0	8.5	12.0	8.5	10.0
22	25.5	17.0	21.0	10.5	8.5	9.5	11.5	5.0	7.5	9.0	6.0	8.0
23	25.0	17.0	20.5	9.5	8.0	8.5	10.5	5.0	7.5	11.5	3.5	7.0
24	22.5	19.0	21.0	12.5	9.0	10.5	12.5	7.0	9.0	10.5	5.5	7.5
25	21.0	15.0	17.0	11.5	9.5	10.5	11.5	5.0	8.0	12.5	5.5	9.0
26	17.5	11.5	14.5	15.0	10.5	12.5	11.5	4.5	8.0	15.5	9.5	12.0
27	18.5	14.0	16.0	14.5	10.5	12.5	11.0	6.5	8.5	15.0	9.0	11.5
28	19.5	14.0	16.5	11.5	7.0	9.0	11.0	10.0	10.5	13.0	9.5	11.0
29	23.0	16.0	18.5	10.5	6.0	8.0	13.5	8.5	10.5	9.5	6.5	8.0
30	21.5	18.0	19.5	10.5	5.0	7.5	11.0	8.0	9.5	11.5	4.0	7.0
31	20.5	15.0	18.0	---	---	---	13.0	8.0	10.5	12.0	5.0	8.0
MONTH	28.0	11.5	19.5	23.0	5.0	13.0	15.0	4.5	9.5	15.5	2.5	8.5

07311630 MIDDLE WICHITA RIVER NEAR GUTHRIE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.5	6.0	9.5	---	---	---	---	---	---	26.0	16.5	20.5
2	17.0	8.0	12.0	3.0	2.0	2.5	---	---	---	20.0	15.5	17.0
3	15.0	9.5	11.5	7.5	2.5	5.0	18.5	16.0	17.0	28.5	14.5	20.5
4	14.0	6.0	10.0	13.0	5.5	9.5	21.5	15.0	17.5	28.0	18.0	22.0
5	14.0	7.0	10.0	14.5	9.5	11.5	25.5	16.0	19.5	19.5	16.0	17.0
6	15.0	6.5	10.0	16.0	9.5	13.0	27.5	16.5	21.0	23.5	15.5	19.0
7	13.0	7.5	9.5	12.5	4.5	8.0	28.5	17.5	22.5	27.0	20.0	23.5
8	12.0	4.0	8.0	---	---	---	28.0	17.5	21.5	24.0	16.5	20.0
9	14.5	6.0	9.5	---	---	---	28.0	11.5	21.5	28.0	15.5	21.0
10	15.5	8.5	11.0	---	---	---	24.0	14.5	19.5	27.5	17.0	21.5
11	10.0	5.5	8.0	---	---	---	22.0	10.0	15.5	26.5	17.5	22.0
12	5.5	3.5	4.5	20.0	14.5	17.0	25.0	11.5	17.5	28.0	18.5	23.0
13	6.0	4.5	5.0	---	---	---	27.0	13.0	19.5	30.5	19.5	25.0
14	10.0	5.5	7.5	---	---	---	27.0	16.0	20.5	29.5	19.0	24.0
15	13.5	9.0	11.0	---	---	---	25.5	17.0	21.0	30.0	21.0	25.5
16	9.5	6.5	8.0	---	---	---	27.5	19.5	22.5	24.0	21.0	22.5
17	14.0	4.0	8.0	24.0	13.0	17.5	23.5	17.0	20.0	27.5	21.0	23.0
18	13.5	6.5	9.5	24.5	13.5	18.5	25.5	14.5	19.0	26.5	15.5	21.0
19	17.0	8.0	11.5	24.0	15.0	19.0	22.5	14.5	8.5	28.5	15.5	21.5
20	18.5	8.5	12.5	24.5	15.0	19.0	23.5	13.0	18.5	28.0	18.0	22.5
21	18.5	9.5	13.5	26.0	14.5	19.5	26.5	13.0	18.5	31.0	19.0	24.0
22	19.0	12.0	15.0	---	---	---	16.5	11.0	13.5	31.5	21.0	26.5
23	19.5	12.0	15.5	---	---	---	16.5	9.0	12.5	27.5	21.5	24.5
24	18.0	11.0	14.0	26.0	16.0	20.0	22.0	9.5	15.0	21.5	18.0	19.5
25	16.0	11.5	13.5	23.0	19.0	20.5	24.5	12.0	17.5	18.0	15.0	17.0
26	20.0	13.5	16.0	23.5	14.5	18.0	24.5	14.0	17.5	23.0	16.5	20.0
27	16.0	13.0	14.5	22.0	11.0	16.0	23.0	13.0	17.0	28.5	18.5	23.5
28	13.0	6.0	9.0	14.5	10.5	12.0	23.0	16.0	19.0	29.0	19.5	23.5
29	---	---	---	13.5	9.5	11.0	27.5	17.0	21.5	23.0	17.0	20.0
30	---	---	---	14.5	10.5	12.0	23.0	18.0	20.0	26.0	17.0	21.5
31	---	---	---	---	---	---	---	---	---	26.5	18.0	22.0
MONTH	20.0	3.5	10.5	26.0	2.0	14.0	28.5	9.0	18.5	31.5	14.5	21.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.5	18.0	24.5	30.0	19.5	25.0	25.5	21.0	23.0	31.0	25.5	27.5
2	28.0	21.0	24.5	30.0	21.5	25.0	---	---	---	31.0	23.0	27.0
3	29.0	22.5	25.5	30.5	22.0	26.5	---	---	---	31.0	23.0	26.5
4	25.5	18.5	22.0	32.5	22.5	27.5	---	---	---	31.5	23.0	27.0
5	22.5	17.5	20.0	33.0	23.0	28.0	26.5	25.5	26.0	31.5	23.5	27.0
6	26.5	20.5	23.5	34.0	23.5	29.0	30.5	26.0	27.0	28.0	23.5	26.0
7	32.0	25.0	28.5	34.0	24.5	29.0	31.0	26.0	28.5	28.0	25.5	26.5
8	32.0	25.0	28.0	34.5	25.0	29.5	31.5	26.0	27.5	26.0	22.0	24.0
9	32.5	25.0	28.5	35.0	24.5	30.0	30.0	25.0	27.0	22.5	19.0	21.0
10	27.5	20.5	24.0	35.0	24.5	29.5	30.0	24.0	27.0	23.0	18.5	20.5
11	28.5	18.5	22.5	34.5	24.5	29.5	27.0	24.0	25.5	27.0	20.5	23.5
12	30.5	19.0	24.5	34.5	24.5	29.5	27.5	26.0	26.5	29.0	22.0	25.5
13	31.0	21.0	26.0	34.0	25.0	29.5	27.0	26.5	26.5	27.0	21.0	24.0
14	31.0	21.5	25.5	33.5	25.5	29.5	32.0	26.5	28.0	26.5	23.5	24.5
15	31.5	22.0	26.0	34.0	25.5	29.5	30.5	25.5	27.5	24.0	21.5	23.0
16	32.0	22.0	27.0	34.0	24.5	29.5	32.0	25.0	28.5	22.0	21.0	21.5
17	30.5	22.0	26.0	31.0	26.0	28.5	32.0	24.5	28.5	24.0	22.0	23.0
18	30.0	22.0	26.0	29.5	25.0	27.5	28.5	24.0	26.5	24.5	23.5	24.0
19	31.5	22.0	26.5	28.5	22.5	25.5	28.5	26.0	27.0	23.5	21.0	22.0
20	31.5	22.5	27.0	27.5	24.5	26.0	27.5	26.5	27.0	22.5	19.0	21.0
21	32.5	23.0	27.5	29.0	27.5	28.0	28.0	26.5	27.0	23.0	16.0	19.5
22	33.0	22.5	28.0	29.0	27.0	28.0	27.5	26.0	27.0	18.5	13.5	16.0
23	33.5	23.5	28.5	29.0	27.5	28.5	31.0	26.0	28.5	22.0	13.5	17.5
24	29.5	22.5	26.0	29.0	28.0	28.5	27.0	23.0	25.0	21.0	16.0	18.5
25	31.5	21.5	26.0	29.0	27.5	28.5	26.5	25.0	26.0	19.0	16.5	17.5
26	33.0	22.5	27.0	30.5	27.5	29.0	26.5	25.5	26.0	21.5	14.5	17.5
27	32.5	23.0	27.5	30.0	28.5	29.0	26.5	25.5	26.0	21.5	17.5	19.5
28	34.0	23.5	29.0	28.5	28.0	28.5	26.5	26.0	26.0	23.0	21.0	22.0
29	29.0	23.5	26.0	29.0	28.0	28.5	26.5	26.0	26.0	28.5	22.5	25.5
30	27.5	21.0	24.5	28.5	27.5	28.0	26.5	26.0	26.5	27.5	22.0	24.0
31	---	---	---	27.5	25.5	27.0	26.5	26.0	26.0	---	---	---
MONTH	34.0	17.5	26.0	35.0	19.5	28.0	32.0	21.0	26.5	31.5	13.5	22.5
YEAR	35.0	2.0	18.5									

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX

LOCATION.--Lat 33°49'14", long 99°47'10", Foard-Knox County line, Hydrologic Unit 11130204, near right bank at downstream side of bridge on State Highway 6, 4.5 mi north of Truscott, about 47.6 mi upstream from confluence with South Wichita River, and 188.4 mi upstream from mouth.

DRAINAGE AREA.--937 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1952-57 (occasional low-flow measurements), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,351.78 ft above sea level. Prior to Jan. 2, 1960, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There is one small diversion for irrigation upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1900 occurred in September 1919; the next highest flood occurred in May 1954, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	0700	1,740	13.67	June 5	1230	19,500	21.59
May 7	2300	1,420	12.62	Aug. 2	1900	7,090	18.76
May 27	0630	2,650	15.97	Aug. 5	0230	2,940	16.25

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	23	e23	23	24	21	22	552	50	985	36
2	9.8	15	23	e23	22	25	20	22	273	57	4800	35
3	9.8	12	23	e23	22	25	20	22	122	286	5290	34
4	9.7	56	22	e23	22	25	21	22	388	236	2740	33
5	10	39	23	23	22	25	21	27	13000	102	2300	31
6	11	22	23	e23	22	28	21	473	4800	71	599	28
7	20	21	23	e22	22	27	21	970	592	59	275	26
8	17	21	22	e22	22	26	20	750	300	52	187	25
9	17	20	22	22	22	24	20	165	203	48	146	79
10	16	20	e22	e22	22	24	20	80	193	46	119	71
11	14	21	e22	e22	22	23	20	56	243	44	103	163
12	15	21	e22	e23	22	25	20	44	137	43	95	69
13	14	22	e23	e23	23	53	20	38	112	41	86	46
14	12	21	e60	e23	23	29	20	33	98	41	84	41
15	17	24	e29	e23	24	34	19	28	87	40	80	38
16	18	19	e24	e24	30	33	19	47	79	65	79	125
17	17	20	e23	e25	33	27	410	44	74	52	73	291
18	17	14	e23	26	27	25	320	31	71	51	68	132
19	18	14	e23	25	25	24	123	23	68	104	65	445
20	70	1010	e23	25	24	23	61	20	67	113	59	307
21	411	436	e22	24	23	22	40	18	64	91	55	160
22	150	132	e22	25	23	21	43	17	62	63	52	129
23	96	65	e22	25	22	21	46	156	59	48	49	100
24	49	46	e22	25	22	21	31	134	101	45	47	79
25	46	39	e22	25	23	21	31	127	85	45	46	122
26	39	36	e21	25	25	22	26	321	67	41	44	101
27	34	30	e21	24	24	22	24	1880	59	39	42	81
28	26	26	e21	22	23	21	23	241	54	38	40	70
29	24	24	e21	23	---	21	22	206	52	36	38	64
30	23	23	e22	24	---	21	22	639	51	37	37	59
31	20	---	e22	23	---	21	---	438	---	37	36	---
TOTAL	1261.3	2286	736	730	659	783	1545	7094	22113	2121	18719	3020
MEAN	40.7	76.2	23.7	23.5	23.5	25.3	51.5	229	737	68.4	604	101
MAX	411	1010	60	26	33	53	410	1880	13000	286	5290	445
MIN	9.7	12	21	22	22	21	19	17	51	36	36	25
AC-FT	2500	4530	1460	1450	1310	1550	3060	14070	43860	4210	37130	5990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995, BY WATER YEAR (WY)

MEAN	111	31.3	25.9	24.6	28.7	32.0	46.9	117	160	43.5	87.8	112
MAX	1170	76.2	120	68.5	149	102	275	771	737	317	1266	818
(WY)	1984	1995	1992	1992	1992	1990	1990	1987	1995	1975	1966	1965
MIN	3.90	10.4	11.8	8.23	6.16	5.49	7.61	16.4	11.9	.72	1.17	3.51
(WY)	1964	1968	1964	1965	1965	1965	1964	1965	1970	1964	1964	1968

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995	
ANNUAL TOTAL	13859.1		61067.3			
ANNUAL MEAN	38.0		167		68.4	
HIGHEST ANNUAL MEAN					193	1966
LOWEST ANNUAL MEAN					17.2	1983
HIGHEST DAILY MEAN	1010	Nov 20	13000	Jun 5	19400	Sep 19 1965
LOWEST DAILY MEAN	4.5	Aug 29	9.7	Oct 4	.02	Aug 22 1974
ANNUAL SEVEN-DAY MINIMUM	5.2	Aug 7	12	Oct 1	.13	Jul 30 1965
INSTANTANEOUS PEAK FLOW			19500	Jun 5	28900	Sep 19 1965
INSTANTANEOUS PEAK STAGE			21.59	Jun 5	21.96	Sep 19 1965
ANNUAL RUNOFF (AC-FT)	27490		121100		49590	
10 PERCENT EXCEEDS	45		189		68	
50 PERCENT EXCEEDS	24		26		20	
90 PERCENT EXCEEDS	8.4		20		7.5	

e Estimated

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: February 1954 to March 1959, July 1968 to December 1989, September 1990 to June 1992. Sediment analyses: April 1978 to December 1989. Chemical and biochemical analyses: September 1990 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to December 1989, September 1990 to June 1992, October 1994 to September 1995.
WATER TEMPERATURE: July 1968 to December 1989, September 1990 to June 1992, October 1994 to September 1995.

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

INSTRUMENTATION.--From August 1968 to December 1989, September 1990 to June 1992, specific conductance was recorded continuously at this station. From June 1982 to December 1989, September 1990 to June 1992, water temperature was recorded continuously at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 35,800 microsiemens Oct. 9, 1982; minimum, 400 microsiemens June 7, 8, 1985.
WATER TEMPERATURE: Maximum, 39.0°C Aug. 21, 23, 1969, Aug. 22, 1973; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 21,000 microsiemens Oct. 15; minimum, 501 microsiemens, June 5.
WATER TEMPERATURE: Maximum, 35.0°C July 10; minimum, 0.5°C Mar. 2 and 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC											
08...	1155	23	15600	8.2	9.5	12.0	116	2400	2300	690	170
FEB											
07...	1057	22	17300	8.0	8.5	12.5	118	2700	2600	780	180
APR											
05...	1235	21	17400	8.0	17.0	11.9	137	2600	2500	730	180
MAY											
23...	1215	17	14100	7.9	25.0	8.3	110	2500	2400	690	180
AUG											
15...	1120	80	9260	7.8	27.5	7.9	108	2100	2000	550	180
24...	1135	48	11600	7.8	27.0	8.9	123	2200	2100	600	180

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
DEC											
08...	2900	26	14	120	2200	4500	0.50	1.5	10600	0.100	--
FEB											
07...	3300	28	14	110	2400	5200	0.50	2.2	11900	0.360	0.360
APR											
05...	3300	28	14	83	2400	5300	0.50	0.50	12000	--	--
MAY											
23...	2500	22	14	83	2000	3800	0.40	2.5	9240	--	--
AUG											
15...	1400	13	65	160	1800	2100	0.30	8.8	6200	--	--
24...	1800	17	13	150	2000	2800	0.20	7.0	7490	0.130	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
DEC										
08...	<0.010	0.100	0.100	0.090	--	<0.20	<0.010	<0.010	1	<100
FEB										
07...	0.020	0.380	0.380	0.070	0.13	0.20	<0.010	<0.010	--	--
APR										
05...	<0.010	--	<0.050	0.090	--	<0.20	0.010	<0.010	--	--
MAY										
23...	<0.010	--	<0.050	0.110	--	<0.20	<0.010	<0.010	--	--
AUG										
15...	<0.010	--	<0.050	0.120	--	<0.20	<0.010	<0.010	3	100
24...	<0.010	0.130	0.130	0.110	0.09	0.20	<0.010	<0.010	--	--

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC										
08...	<1.0	<1	3	4100	<4	1200	1.6	9	<1.0	790
FEB										
07...	--	--	--	--	--	--	--	--	--	--
APR										
05...	--	--	--	--	--	--	--	--	--	--
MAY										
23...	--	--	--	--	--	--	--	--	--	--
AUG										
15...	<1.0	<1	3	<10	<2	20	0.5	5	<1.0	<10
24...	--	--	--	--	--	--	--	--	--	--

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	1261.3	11200	7580	25800	3000	10200	1800	6060	*
NOV.	1994	2286	6900	4520	27900	1700	10500	1200	7410	1300
DEC.	1994	736	15800	10800	21500	4400	8750	2400	4690	*
JAN.	1995	730	17200	11900	23400	4900	9660	2500	4870	*
FEB.	1995	659	16900	11700	20800	4800	8550	2500	4360	*
MAR.	1995	783	16900	11700	24800	4800	10200	2400	5170	*
APR.	1995	1545	10100	6740	28100	2600	10900	1700	7040	*
MAY	1995	7094	3820	2430	46500	860	16500	730	14000	770
JUNE	1995	22113	1770	1110	66600	390	23200	350	20800	370
JULY	1995	2121	8780	5730	32800	2100	12200	1600	8890	1600
AUG.	1995	18719	2060	1300	65700	450	22900	400	20300	420
SEPT	1995	3020	6900	4460	36400	1600	13400	1300	10200	1300
TOTAL		61067.3	**	**	420000	**	157000	**	114000	**
WTD.AVG.		167	3910	2550	**	950	**	690	**	730

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20000	19600	19800	---	---	e14000	12200	11400	11900	16800	16400	16600
2	20000	19700	19800	---	---	e14200	12700	12200	12500	17000	16800	16900
3	20200	19900	20000	---	---	e15300	13100	12700	12900	17000	16800	16900
4	20300	20000	20200	---	---	e15000	13600	13100	13300	17100	17000	17100
5	20500	20200	20300	---	---	e15500	14000	13600	13800	17200	17100	17200
6	20800	20500	20600	---	---	e15800	15800	14000	15400	17200	16900	17100
7	20600	10300	18000	---	---	e16100	14900	14400	14600	17300	17000	17200
8	19300	10400	15900	---	---	e17000	15600	14900	15400	17300	17000	17100
9	19900	19300	19600	---	---	e17400	15900	15600	15700	17200	17000	17100
10	20200	19800	20000	---	---	e17900	16000	15800	16000	17400	17200	17300
11	20400	19800	20100	---	---	e18100	16200	16000	16200	17300	17100	17200
12	20000	19600	19800	---	---	e18100	16400	16200	16300	17300	17100	17200
13	20200	19800	20000	---	---	e18000	16400	16400	16400	17500	17300	17400
14	20800	20200	20600	---	---	e18200	16500	16300	16400	17600	17400	17500
15	21000	20600	20800	---	---	e18400	16400	16300	16300	17800	17500	17600
16	---	---	e20000	---	---	e18300	16500	16300	16400	17700	17500	17600
17	---	---	e20500	---	---	e17100	16700	16400	16500	17700	17500	17600
18	---	---	e21000	---	---	e15700	16700	16500	16600	17600	16800	17000
19	---	---	e21000	---	---	e13400	16600	16400	16500	17200	16900	17000
20	---	---	e16000	---	---	e4990	16600	16400	16500	17300	16900	17100
21	---	---	e5780	4430	2900	3480	16800	16600	16700	17100	16900	17000
22	---	---	e8500	---	3990	e3500	16900	16700	16800	17300	17000	17100
23	---	---	e8900	3990	3420	3580	16900	16700	16800	17500	17100	17300
24	---	---	e10000	5050	---	4530	16800	16600	16700	17300	17100	17200
25	---	---	e11000	6120	5050	5590	17000	16600	16800	17300	17100	17200
26	---	---	e12200	7180	6120	6650	17000	16800	16900	17200	16800	17000
27	---	---	e12500	8240	7180	7710	16900	16700	16800	17100	16800	17000
28	---	---	e12800	9310	8240	8770	16700	16300	16500	17300	17100	17100
29	---	---	e13000	10300	9310	9830	16500	16300	16400	17300	17000	17200
30	---	---	e13400	11400	10300	10900	16500	16400	16500	17200	17000	17100
31	---	---	e13800	---	---	---	16400	16200	16300	17300	16900	17100
MONTH	21000	10300	16600	11400	2900	12800	17000	11400	15800	17800	16400	17200

e Estimated

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	17100	16800	16900	18000	17700	17900	17500	17300	17300	15200	14400	14800
2	17000	16700	16800	18000	17800	17900	17300	17000	17200	15600	14500	15000
3	17100	16800	17000	18000	17800	17900	17300	17100	17200	16700	15600	16200
4	17300	17000	17100	17900	17600	17800	17200	16600	16800	17200	16700	16900
5	17300	17100	17200	17700	17500	17600	16700	16500	16600	17500	7170	16200
6	17400	17100	17200	17700	17400	17500	16800	16400	16600	15400	1850	8060
7	17400	17200	17300	17600	17200	17400	16600	16300	16500	10200	1070	4370
8	17600	17300	17400	17800	17600	17800	16900	16500	16700	1770	1060	1350
9	17600	17200	17400	17700	17500	17500	17100	16800	17000	3170	1770	2430
10	17500	17300	17400	17800	17600	17800	17400	16700	17000	4340	3170	3770
11	17800	17400	17600	17800	17500	17600	17800	17400	17600	5590	4340	4990
12	17900	17800	17900	17700	17200	17500	17800	17300	17600	6490	5590	6050
13	17900	17800	17900	17300	16900	17000	17800	17300	17600	7300	6490	6900
14	17800	17400	17600	18800	18000	18400	18100	17600	17800	8150	7300	7700
15	17400	17200	17300	18100	15700	17300	18200	17800	18000	8920	8150	8550
16	17500	15000	16600	16700	10600	13400	17900	17400	17700	9250	4600	8030
17	15600	14800	15300	13100	10200	11000	17800	2960	10100	12000	8780	10200
18	16000	15600	15700	15700	13100	14700	6360	3680	5140	12500	11700	12100
19	16000	15600	15800	16200	15600	15900	6260	5960	6100	12800	12500	12600
20	16200	16000	16100	15900	15400	15500	---	---	e6800	13500	12800	13100
21	16400	16200	16300	16700	15900	16400	---	---	e7300	13600	12900	13300
22	16600	16400	16600	17000	16700	16900	---	---	e8400	13600	13000	13300
23	17000	16600	16800	17600	17300	17400	---	---	e9300	14200	1500	10500
24	17300	17000	17200	17700	17400	17500	---	---	e10000	7510	2640	5690
25	17400	16900	17200	17600	17400	17500	---	---	e10600	7370	2300	5010
26	17100	15800	16600	17500	17400	17400	12000	10600	11300	8150	1280	4530
27	17200	16500	17000	17600	17400	17500	10600	9880	10200	1570	1080	1330
28	17700	17100	17400	17900	17500	17700	13200	10300	11800	3430	1550	2280
29	---	---	---	17800	17600	17700	14400	13200	13800	7230	2810	5080
30	---	---	---	17600	17500	17600	15200	14400	14900	5210	1880	4230
31	---	---	---	17700	17300	17500	---	---	---	1890	1430	1660
MONTH	17900	14800	16900	18800	10200	17000	18200	2960	13700	17500	1060	8260

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	3080	1890	2420	12800	12600	12700	10300	1340	4990	12500	12400	12500
2	2200	1610	1840	12800	4820	11800	1900	826	1260	12600	12400	12500
3	3260	2200	2790	9580	2550	4490	916	567	673	12700	12500	12600
4	3550	1220	2730	13100	5320	9540	1330	667	1030	12800	12400	12600
5	1350	501	804	12900	5830	8180	1420	965	1190	12700	12100	12600
6	1880	531	948	5830	5530	5650	3370	1350	2390	12900	12700	12800
7	4540	1880	3330	6250	5800	6060	5010	3370	4200	13100	12600	13000
8	---	---	e4000	6420	6250	6340	6090	5010	5600	13300	9300	12900
9	---	---	e6000	6720	6420	6570	6950	6090	6520	13000	3620	8060
10	---	---	e5900	7310	6720	7010	7600	6940	7280	12700	3830	10500
11	---	---	e5000	8160	7310	7760	8140	7550	7870	10700	1820	7190
12	---	---	e6000	9040	7990	8580	8560	8140	8370	10600	6920	9310
13	---	---	e7000	9980	9040	9480	8860	8560	8760	10800	8750	10000
14	---	---	e7800	10600	9980	10300	9210	8820	9050	11200	10300	10800
15	---	---	e8600	11100	10400	10800	9480	8940	9210	11600	9920	11200
16	---	---	e9100	12300	11000	11500	9900	9460	9690	12100	9370	11000
17	---	---	e9700	13600	8380	12800	10300	9770	9980	14900	5920	9530
18	---	---	e10500	13600	13200	13500	10400	10200	10300	7050	3920	4330
19	---	---	e11000	13400	7070	11200	10700	10400	10600	4120	1090	2480
20	---	---	e11400	13600	8930	11800	10800	10600	10700	6740	3070	4770
21	11600	11500	11500	8930	7810	8150	11200	10800	11000	4160	2730	3070
22	11800	11600	11700	9760	7990	8380	11300	11100	11200	4990	3400	4150
23	11900	11800	11800	11800	9760	11300	11500	11300	11400	5780	4990	5370
24	11900	7790	10100	11300	8960	10200	11700	11500	11600	7460	5780	6700
25	10500	8910	10300	8960	8180	8560	11800	11600	11700	7500	5540	6480
26	11400	10200	10900	8180	7960	8060	11800	11500	11600	6920	5450	6080
27	11800	11400	11600	8460	8120	8280	12000	11400	11700	8120	6920	7680
28	12000	11700	11800	9060	8460	8740	12100	11900	12000	9070	7970	8410
29	12500	12000	12300	9290	9060	9190	12200	12000	12100	9570	9070	9380
30	12600	12500	12500	9420	8590	9270	12400	12000	12200	10100	9570	9880
31	---	---	---	10100	7620	9310	12500	12300	12400	---	---	---
MONTH	12600	501	7710	13600	2550	9210	12500	567	8340	14900	1090	8930
YEAR	21000	501	12700									

e Estimated

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	27.5	19.5	23.5	18.0	12.0	15.0	10.5	5.0	8.0	7.5	4.0	5.5
2	27.5	21.0	24.0	17.5	14.0	16.0	13.0	8.5	10.5	5.5	1.5	4.0
3	28.0	20.0	24.0	22.0	15.5	18.5	13.5	9.5	11.5	5.5	2.5	4.5
4	28.5	21.5	24.5	20.0	13.0	18.0	12.0	7.5	10.0	3.0	1.5	2.0
5	27.5	22.0	24.5	16.5	12.0	14.5	10.5	8.5	9.5	2.5	1.5	2.0
6	27.0	20.0	23.5	17.0	11.5	14.5	12.0	9.5	10.5	6.5	2.0	4.0
7	24.5	19.0	21.5	18.0	12.5	15.5	11.0	8.5	10.0	6.0	2.0	4.0
8	21.5	16.0	18.5	21.5	15.0	18.0	10.0	7.5	9.0	9.5	4.0	6.5
9	21.5	14.0	17.5	20.0	13.0	16.0	7.5	5.5	6.5	10.0	5.0	8.0
10	21.5	13.5	17.5	15.0	9.5	12.5	8.0	4.0	6.0	11.5	7.0	9.5
11	21.5	13.5	17.5	12.5	10.0	10.5	6.0	3.0	4.5	11.5	7.0	9.0
12	22.0	13.5	18.0	12.5	9.5	11.0	6.5	3.0	5.0	12.0	8.5	10.0
13	22.5	14.0	18.5	17.0	12.5	14.5	7.5	6.0	6.5	11.5	7.5	9.5
14	19.5	17.0	18.0	15.5	12.5	14.0	11.0	7.0	8.5	10.5	5.5	8.0
15	20.5	16.0	18.0	13.5	9.5	11.5	10.5	9.0	9.5	10.5	5.5	8.0
16	25.0	19.0	21.5	12.0	6.5	9.5	10.5	7.5	9.0	10.5	8.0	9.5
17	26.5	21.5	23.5	14.5	10.0	12.0	9.5	4.5	7.5	11.0	7.0	9.5
18	24.5	19.5	22.0	11.0	7.0	9.0	9.5	5.0	7.5	9.5	7.5	8.5
19	24.0	17.5	21.0	14.5	10.0	12.0	11.5	6.5	9.0	8.5	4.0	6.5
20	25.5	19.0	22.0	15.0	11.5	13.5	11.5	8.5	10.0	9.5	4.0	7.0
21	23.5	17.5	20.5	11.5	10.0	10.5	9.5	5.5	7.5	9.0	6.5	8.0
22	22.5	17.5	20.0	---	---	---	8.5	4.5	7.0	7.5	4.5	6.0
23	22.0	17.0	19.5	8.0	7.0	7.5	8.0	4.5	6.5	7.5	2.0	5.0
24	21.0	18.5	19.5	11.0	7.5	9.0	9.0	5.5	7.5	8.0	3.5	6.0
25	19.5	12.5	15.0	10.0	8.5	9.5	8.0	3.5	6.0	10.0	4.5	7.5
26	15.5	10.5	13.0	12.5	9.0	11.0	8.0	3.5	6.0	13.0	8.5	10.5
27	15.5	13.0	14.0	13.5	10.0	12.0	7.5	5.5	6.5	13.0	8.0	10.5
28	15.5	12.5	14.0	10.5	6.0	8.5	8.5	7.5	8.0	11.0	9.0	10.0
29	19.5	13.0	16.0	9.5	5.5	7.5	10.5	6.5	8.5	9.0	5.5	7.5
30	19.5	16.5	18.0	9.5	4.0	7.0	8.5	6.5	7.5	9.0	3.0	6.0
31	18.5	14.5	17.0	---	---	---	11.0	7.5	9.0	9.0	4.0	7.0
MONTH	28.5	10.5	19.5	22.0	4.0	12.5	13.5	3.0	8.0	13.0	1.5	7.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.5	5.0	8.5	6.0	1.5	3.5	---	---	---	25.5	17.5	21.0
2	14.0	7.5	11.0	1.5	.5	1.0	---	---	---	20.5	16.0	17.5
3	13.0	9.0	11.0	4.5	.5	2.5	18.0	15.5	16.5	27.5	15.0	20.5
4	12.5	6.0	9.5	8.5	4.0	5.5	19.5	14.5	17.0	27.0	19.0	23.0
5	12.0	7.5	9.5	9.5	7.0	8.0	21.5	15.5	18.0	22.5	15.0	18.5
6	12.5	6.0	9.5	13.0	7.5	10.0	25.0	16.0	20.0	20.0	16.0	17.5
7	11.5	7.5	9.5	10.0	4.0	7.0	26.5	17.5	22.0	21.0	19.0	20.0
8	10.0	4.0	7.0	---	---	---	26.0	18.0	22.0	21.0	18.0	19.5
9	12.0	5.0	8.5	---	---	---	25.0	17.5	21.0	24.5	17.0	20.5
10	12.5	7.5	10.0	---	---	---	22.0	14.5	19.0	25.5	19.0	22.0
11	10.5	4.5	7.0	---	---	---	19.0	9.5	14.5	25.0	18.5	22.0
12	4.5	2.0	3.0	18.5	14.0	15.5	22.0	11.5	16.5	27.0	19.0	23.0
13	3.5	2.5	3.0	15.5	13.5	14.5	24.0	13.5	19.0	29.5	21.0	25.0
14	7.0	3.0	4.5	14.5	11.0	13.0	25.0	16.5	20.5	28.5	21.5	25.0
15	11.0	7.0	8.5	16.5	13.0	14.5	24.0	17.0	20.5	28.0	22.0	25.0
16	8.0	5.0	6.5	20.0	12.5	16.5	26.0	20.0	22.5	25.0	21.5	23.0
17	10.0	2.0	6.0	21.0	13.5	17.5	23.0	17.0	19.5	27.0	22.0	24.0
18	10.5	4.5	7.5	22.5	13.5	18.0	20.5	16.0	18.0	25.0	16.0	21.0
19	14.0	7.0	10.5	22.5	15.0	19.0	19.0	16.0	17.5	27.0	17.0	22.0
20	15.5	7.5	11.5	22.5	15.0	18.5	22.0	14.0	18.0	27.0	19.5	23.0
21	16.0	9.5	13.0	24.5	15.0	19.5	23.0	13.0	18.5	29.5	19.5	24.0
22	16.0	11.5	14.0	---	---	---	16.5	8.5	12.0	30.5	22.0	26.0
23	18.0	11.5	14.5	---	---	---	15.0	6.5	11.0	27.0	19.5	23.0
24	16.5	10.5	13.5	24.0	16.5	20.0	19.5	6.0	13.5	20.0	18.5	19.0
25	13.5	11.0	12.5	20.5	18.0	19.5	23.0	11.0	17.5	18.5	14.0	16.5
26	19.0	12.5	15.5	21.0	14.5	17.5	23.0	14.5	18.5	21.5	16.0	18.5
27	16.0	13.0	14.0	19.5	11.5	15.5	22.0	13.0	17.5	23.5	18.0	20.0
28	13.0	6.0	9.0	15.5	10.0	12.0	22.5	16.5	19.5	25.5	20.0	22.5
29	---	---	---	12.5	9.0	10.5	27.0	18.0	22.0	24.0	17.5	20.0
30	---	---	---	13.5	9.5	11.5	23.0	18.5	20.5	20.5	18.0	19.0
31	---	---	---	18.0	9.5	13.5	---	---	---	22.0	18.0	20.0
MONTH	19.0	2.0	9.5	24.5	.5	13.0	27.0	6.0	18.5	30.5	14.0	21.5

07311700 NORTH WICHITA RIVER NEAR TRUSCOTT, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	19.5	22.0	29.0	21.0	25.0	25.5	21.0	23.0	31.0	25.5	28.5
2	25.5	22.5	24.0	28.5	22.5	25.5	23.0	21.5	22.0	31.0	25.5	28.5
3	27.5	23.0	25.0	26.5	20.5	23.5	24.0	22.5	23.0	31.0	26.0	28.5
4	26.0	18.5	22.5	29.5	25.5	27.0	26.0	24.0	25.0	31.5	25.5	28.5
5	20.0	18.0	19.0	31.5	25.0	28.5	28.5	26.0	27.0	32.5	26.0	29.0
6	26.0	19.5	22.0	32.5	25.5	29.0	30.0	27.0	28.5	30.5	26.5	28.5
7	28.5	24.0	26.5	33.5	26.0	29.5	30.5	27.5	29.0	28.5	25.0	26.5
8	29.0	26.0	27.5	34.0	26.0	30.0	31.0	27.5	29.0	26.0	22.5	24.5
9	29.5	26.0	27.5	34.5	26.0	30.0	30.0	26.5	28.0	23.5	18.0	20.5
10	27.5	20.5	24.5	35.0	26.5	30.5	30.0	25.5	27.5	22.0	18.5	20.5
11	26.0	19.5	22.5	34.5	26.5	30.5	30.5	25.5	28.0	25.5	20.5	22.5
12	28.0	20.5	24.0	34.5	26.5	30.5	31.0	26.0	28.5	28.0	23.0	25.0
13	29.0	22.5	25.5	34.0	26.5	30.0	31.0	26.0	28.5	28.0	22.5	25.5
14	29.0	22.5	25.5	33.0	26.5	29.5	31.5	26.0	28.5	26.5	24.0	25.5
15	29.5	23.0	26.0	33.5	26.0	29.5	30.5	26.0	28.5	25.0	22.5	23.5
16	29.5	22.5	26.0	31.5	26.0	29.0	31.5	26.0	28.5	26.0	22.0	24.0
17	28.0	22.5	25.5	33.0	26.5	29.5	31.0	25.5	28.5	26.0	24.5	25.5
18	27.5	22.5	25.0	29.5	27.0	28.5	31.0	25.0	28.0	25.5	23.5	24.5
19	29.0	22.5	25.5	29.5	25.0	27.0	31.5	26.0	29.0	23.5	20.0	22.0
20	30.0	23.0	26.5	32.5	26.0	29.0	32.5	26.5	29.5	23.5	20.5	22.0
21	29.5	23.5	27.0	33.5	27.5	30.0	32.0	27.0	29.5	22.5	15.0	19.0
22	31.0	23.5	27.0	34.0	26.5	30.0	32.0	26.0	29.0	17.5	13.5	15.5
23	31.5	24.0	27.5	33.5	26.5	30.0	31.0	26.5	29.0	20.0	14.5	17.0
24	28.0	22.5	25.5	33.5	25.5	29.0	31.5	26.0	28.5	20.5	16.0	18.5
25	30.0	23.0	26.5	34.0	26.0	30.0	31.0	25.5	28.0	19.5	16.5	17.5
26	31.5	23.5	27.5	34.0	26.5	29.5	31.5	26.0	29.0	20.5	15.0	17.5
27	31.0	24.0	27.5	33.0	25.5	29.0	31.0	26.5	29.0	25.0	18.0	21.5
28	33.0	24.5	28.5	34.0	25.0	29.5	31.0	26.5	29.0	28.0	22.0	25.0
29	29.0	25.0	27.0	32.5	27.5	30.0	31.5	26.5	29.0	28.0	23.0	25.5
30	26.0	22.0	24.0	30.0	26.0	28.0	31.0	26.0	28.5	26.5	22.5	24.5
31	---	---	---	27.5	25.5	26.5	31.0	25.5	28.0	---	---	---
MONTH	33.0	18.0	25.5	35.0	20.5	29.0	32.5	21.0	28.0	32.5	13.5	23.5
YEAR	35.0	.5	18.0									

07311782 SOUTH WICHITA RIVER AT LOW FLOW DAM NEAR GUTHRIE, TX

LOCATION.--Lat 33°37'19", long 100°12'31", King County, Hydrologic Unit 11130205, on right bank 1.0 mi downstream from ranch road crossing, 2.9 mi upstream from Willow Creek, 6.6 mi east of Guthrie, and 91.5 mi upstream from confluence with North Wichita River.

DRAINAGE AREA.--223 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to September 1985, May 1987 to current year (discharge to 07311669 Truscott Brine Lake near Truscott).

GAGE.--Water-stage recorder. Datum of gage is 1,590.0 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Discharge represents flow diverted by pumping from South Wichita River at Low Flow Dam near Guthrie (station 07311782) via pipeline to Truscott Brine Lake near Truscott (station 07311669). Flow is determined from digital recorder monitoring flowmeter in pipeline. From May 1987 to current year, specific conductivity and discharge values collected at this station have been used for computation of water quality loads for station 07311669. Satellite telemeter at station.

COOPERATION.--Flow data furnished by the U.S. Army Corps of Engineers, Tulsa District.

PEAK DISCHARGES FOR CURRENT YEAR.--Not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.4	8.0	7.7	7.5	7.1	7.9	8.2	4.3	8.8	8.1	9.2	8.6
2	3.7	6.5	5.9	7.5	7.1	7.8	8.2	5.6	13	8.0	1.7	8.6
3	7.0	7.9	.00	7.5	7.1	7.9	8.2	8.2	9.3	8.3	.00	8.6
4	7.4	7.9	.00	7.5	7.1	7.8	5.8	8.2	8.0	3.8	.00	8.6
5	5.7	7.8	6.4	.97	7.1	7.8	8.2	5.4	2.3	1.4	.00	8.6
6	.00	7.8	12	4.4	7.1	5.7	7.9	4.1	4.5	2.1	.00	8.6
7	4.4	6.4	8.1	7.1	7.0	7.7	8.1	7.6	13	8.2	2.5	8.6
8	7.6	7.8	7.1	7.0	7.1	7.8	8.1	6.2	14	8.2	5.4	8.6
9	6.2	7.8	7.1	7.0	7.1	7.8	8.1	7.3	7.6	8.2	8.1	4.8
10	.00	7.8	7.1	7.0	7.1	7.9	5.7	7.3	3.8	7.8	12	4.8
11	6.3	7.9	7.1	7.0	7.2	7.9	7.1	7.4	.00	8.2	13	4.8
12	8.5	7.9	7.8	7.0	7.2	5.9	e7.5	7.3	.00	2.5	3.2	5.3
13	7.8	7.9	7.1	7.0	6.9	4.9	e8.2	7.3	.00	2.2	3.2	4.8
14	7.9	7.9	6.2	1.5	7.5	7.9	e8.2	7.3	.00	8.1	13	4.8
15	7.9	7.9	7.2	.00	7.9	7.9	e8.2	6.8	.00	8.1	13	4.3
16	7.7	7.8	7.6	.00	7.9	5.7	e8.2	5.2	4.1	8.1	9.4	8.5
17	7.6	7.8	7.5	4.1	7.9	7.9	e3.5	12	8.3	6.6	7.8	8.5
18	7.6	7.8	7.5	7.0	7.9	3.7	e5.5	8.0	4.1	5.3	8.6	8.5
19	7.7	7.8	7.0	7.0	7.8	1.8	e.00	7.4	.00	4.4	7.9	8.5
20	4.0	7.7	4.7	9.3	7.8	6.9	e4.5	8.2	.00	4.5	7.9	8.5
21	.70	7.7	6.8	10	5.6	5.6	e8.0	8.2	.00	.00	10	6.2
22	.00	7.7	6.9	7.7	5.8	8.1	8.0	5.3	.00	10	10	8.5
23	.00	7.7	6.9	7.7	7.6	5.6	8.2	7.7	.00	13	9.5	8.2
24	.97	7.7	6.9	7.7	6.2	8.1	e7.9	7.6	.00	3.2	7.7	8.2
25	.00	7.7	1.5	7.7	8.0	2.0	8.2	8.3	.00	.00	8.4	8.2
26	.00	7.8	.00	7.4	7.9	.00	8.3	5.6	.00	1.8	7.9	8.2
27	.39	7.7	7.9	7.2	6.4	3.2	7.9	.00	3.9	7.4	7.9	8.2
28	5.5	7.7	11	7.2	7.6	8.3	e7.0	.00	9.7	4.4	9.9	12
29	8.1	7.7	7.5	7.2	---	8.3	8.2	.00	8.9	7.4	11	12
30	8.0	7.7	7.5	7.1	---	8.3	8.2	3.2	8.2	7.4	8.8	8.7
31	7.9	---	7.5	7.1	---	7.4	---	4.5	---	4.9	7.7	---
TOTAL	153.96	231.2	201.50	197.37	202.0	201.50	217.30	191.50	131.50	181.60	224.70	233.3
MEAN	4.97	7.71	6.50	6.37	7.21	6.50	7.24	6.18	4.38	5.86	7.25	7.78
MAX	8.5	8.0	12	10	8.0	8.3	8.3	12	14	13	13	12
MIN	.00	6.4	.00	.00	5.6	.00	.00	.00	.00	.00	.00	4.3
AC-FT	305	459	400	391	401	400	431	380	261	360	446	463

e Estimated

07311782 SOUTH WICHITA RIVER AT LOW FLOW DAM NEAR GUTHRIE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1984 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1984 to current year. October 1986 to April 1987 published under station 07311783.
WATER TEMPERATURE: October 1984 to current year. October 1986 to April 1987 published under station 07311783.

INSTRUMENTATION.--Since October 1984, specific conductance and water temperature are recorded continuously at this station.

REMARKS.--Interruptions in the record are due to malfunction of the instrument or when the pumps were not running. Where maximum and minimum specific conductance values are not shown, mean values are sometimes estimated. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 43,800 microsiemens Sept. 14, 1994; minimum, 200 microsiemens July 3, 1986.
WATER TEMPERATURE: Maximum, 33.5°C July 9, 28, 1995; minimum, 0.0°C Dec. 23, 1989, Dec. 22, 1990.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 42,400 microsiemens Mar. 28; minimum estimated daily, 2,500 microsiemens Aug. 4.
WATER TEMPERATURE: Maximum, 33.5°C July 9 and 28; minimum 2.0°C Mar. 2, 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC 06...	1150	12	38100	7.7	12.5	--	--	3900	3700	1100
JAN 23...	0945	7.7	36600	7.4	3.0	10.7	97	3800	3700	1100
MAR 10...	1052	7.9	39900	7.9	11.5	10.3	116	3900	3700	1100
APR 27...	1030	7.9	38500	7.7	17.0	8.4	106	3600	3500	1000
AUG 17...	1130	7.8	29600	7.9	29.0	--	--	3300	3200	930

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 06...	270	7800	55	34	140	2700	12000	0.60	11	24000
JAN 23...	260	7500	53	32	140	2500	12000	0.60	9.7	23500
MAR 10...	270	7000	49	43	120	2800	13000	0.50	9.7	24300
APR 27...	270	8100	59	31	100	3000	12000	0.50	5.6	24500
AUG 17...	240	5900	45	26	140	2500	9600	0.50	9.1	19300

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	154.01	39800	27200	11300	13900	5790	3300	1370	*
NOV.	1994	231.6	34400	23300	14600	11700	7320	3000	1880	*
DEC.	1994	201.02	36100	24500	13300	12300	6690	3100	1700	*
JAN.	1995	197.11	36800	24900	13300	12600	6710	3200	1680	*
FEB.	1995	201.8	37900	25800	14100	13100	7150	3200	1750	*
MAR.	1995	201.69	39200	26700	14600	13700	7440	3300	1780	*
APR.	1995	217.37	39700	27100	15900	13900	8160	3300	1930	*
MAY	1995	191.19	35300	23900	12300	12100	6230	3000	1570	*
JUNE	1995	131.68	18300	11900	4230	5500	1960	1900	674	*
JULY	1995	181.76	29300	19600	9610	9600	4710	2700	1340	*
AUG.	1995	223.89	28900	19300	11600	9400	5690	2700	1630	*
SEPT	1995	233.3	33100	22200	14000	11100	6970	3000	1870	*
TOTAL		2366.43	**	**	149000	**	74800	**	19200	**
WTD.AVG.		6.5	34400	23300	**	12000	**	3000	**	**

07311782 SOUTH WICHITA RIVER AT LOW FLOW DAM NEAR GUTHRIE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	40100	39500	39800	40000	39100	39500	35200	34100	34900	37100	36300	36800
2	39800	38300	39200	40000	39000	39500	35500	34200	35000	36600	35700	36100
3	40400	39000	39900	39500	38000	39200	35500	35000	35300	36900	35100	36300
4	40600	40200	40400	39300	38500	38900	35400	34900	35100	37000	36300	36700
5	40300	39700	40000	38900	37600	38400	35800	35100	35400	37500	37100	37300
6	39900	38900	39700	39100	37600	38700	36100	34000	35300	37500	34800	36400
7	40000	38600	39500	39200	37800	38800	36300	34900	36000	37100	35800	36800
8	41000	38900	40200	38800	37700	38400	36300	34100	35300	37000	35900	36400
9	41000	40300	40500	38600	38000	38400	36500	35600	36100	37000	36200	36700
10	40700	40100	40400	38500	38100	38400	36400	34800	35800	36700	36100	36500
11	40700	40000	40400	38400	38100	38300	36900	36000	36500	37000	36100	36600
12	41900	39900	40600	38300	38000	38200	37200	35800	36500	37000	36200	36700
13	41900	40900	41300	38100	36800	37900	36600	36200	36400	37300	36700	37000
14	41100	40100	40500	38000	37500	37800	36800	35300	36200	37300	37000	37200
15	40300	39800	40000	37700	37300	37600	36700	35500	36300	37300	37000	37200
16	39900	39500	39800	38000	37500	37800	37200	34300	35900	37300	37000	37200
17	39800	39400	39600	38500	37800	38200	37200	36100	36600	37300	36400	36800
18	39600	38800	39200	38300	37400	37900	36800	36200	36500	36700	35500	36100
19	39400	38900	39200	37600	26200	36400	36900	36300	36600	36600	34700	35700
20	39600	38800	39300	32200	11600	23800	36900	36400	36700	37000	36200	36700
21	39900	38800	39500	27100	20700	23300	36600	35000	36200	36800	34700	35600
22	40100	39400	39800	21800	20500	21000	37000	35600	36600	35500	34900	35200
23	40400	39700	40100	25300	21800	23200	37000	35500	36300	35700	34800	35300
24	40800	40200	40400	29000	25200	26700	37500	35900	36700	38600	35000	36800
25	40800	40200	40500	29800	24500	26800	37700	35600	37100	38800	35500	37600
26	41300	40400	40900	33800	28500	30300	37700	37100	37500	38800	35800	37200
27	41200	40800	41000	31400	26700	28500	37500	37000	37300	38500	36000	37900
28	41100	40700	40900	33900	30500	32400	37200	35200	36600	38700	38200	38500
29	40700	34900	37800	34700	33900	34300	37100	34700	35900	38700	38300	38500
30	40300	36100	38300	35000	33300	34500	37000	34500	35900	38900	36500	37800
31	40000	39300	39400	---	---	---	36900	34400	35600	39000	37200	38100
MONTH	41900	34900	39900	40000	11600	34400	37700	34000	36100	39000	34700	36800

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	39200	34500	37300	39900	39100	39400	---	---	e40000	41700	40600	41000
2	39100	38000	38600	39200	38500	38900	---	---	e40400	41800	40900	41200
3	39100	38600	38900	40300	38800	39600	---	---	e40700	42000	40600	41100
4	39400	36500	38500	39600	37500	38900	40000	37800	39400	42200	41000	41500
5	39400	37900	38900	38300	36300	37300	40700	36500	39400	41200	38900	40400
6	39500	37100	38500	38300	37700	38100	41100	38800	40300	40100	33000	37700
7	39900	38700	39400	38900	37600	38400	---	---	e40500	33500	20700	26400
8	39900	38200	39500	38800	38000	38500	---	---	e40500	25900	19500	21500
9	40200	38700	39300	---	---	e38500	---	---	e40600	26400	22300	24000
10	39600	38200	38900	39600	38700	39300	---	---	e40700	30100	25600	27100
11	40100	39000	39700	---	---	e39200	41100	40600	40800	34600	27800	32600
12	40100	39400	39700	39100	36800	38800	---	---	e41400	36100	32000	35100
13	40100	37700	39200	---	---	e38800	---	---	e41400	37600	35700	36700
14	40400	36400	38500	---	---	e39000	---	---	e41000	38600	37200	37800
15	39700	30100	36200	---	---	e39400	---	---	e40200	39200	37200	38600
16	39300	22100	32300	39100	35100	37400	---	---	e39500	38600	34700	37900
17	38000	31700	35700	39500	35200	37400	---	---	e39000	39600	37000	38900
18	36800	32600	35300	38600	34100	37500	---	---	e38600	---	---	e38200
19	37000	34200	36300	---	---	e38600	---	---	e39700	---	---	e37500
20	37100	35200	36400	---	---	e38300	---	---	e35000	38100	36100	37100
21	37800	36500	37200	---	---	e39200	38300	37100	37700	38400	36600	38000
22	37900	37100	37600	---	---	e39400	39000	37300	38100	38900	36800	38300
23	38000	36800	37600	---	---	e39700	38000	37000	37600	39100	37600	38400
24	38900	36800	38400	---	---	e40400	38700	37600	38200	38200	37700	38100
25	39200	36600	38300	41100	40400	40900	39100	37800	38600	38200	24900	36900
26	39400	37800	39000	41200	40600	40900	39200	38000	38700	37700	23400	37100
27	39500	37700	39000	40900	40000	40700	40000	38100	39300	36600	18200	34500
28	39900	39000	39500	42400	40900	41800	40100	39300	39700	36200	17000	32700
29	---	---	---	42300	41000	41700	41400	39800	40600	27400	19700	23400
30	---	---	---	---	---	e40000	41800	40900	41400	23000	13100	17500
31	---	---	---	---	---	e39900	---	---	---	17700	13300	15600
MONTH	40400	22100	38000	42400	34100	39200	41800	36500	39600	42200	13100	34300

e Estimated

07311782 SOUTH WICHITA RIVER AT LOW FLOW DAM NEAR GUTHRIE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17500	8910	12200	24300	22600	23800	36700	25500	29000	33100	32200	32700
2	16400	10300	14200	24800	23400	24400	---	---	e10000	33600	32900	33200
3	20600	16300	18300	24800	23800	24400	---	---	e8000	33800	33400	33600
4	21800	16100	19400	24800	23800	24500	---	---	e2500	33900	33500	33700
5	21500	12700	14900	25100	21800	23100	---	---	e6500	33700	33300	33600
6	15900	12300	13900	23900	21900	23000	---	---	e8700	33900	32700	33400
7	---	---	e15600	25000	22800	23600	---	---	e12400	34200	33700	34000
8	---	---	e20700	26400	24600	25200	---	---	e20000	34100	33400	33700
9	---	---	e23900	26900	24900	25900	---	---	e21300	34000	33100	33400
10	---	---	e23200	28000	26400	27200	---	---	e23100	33700	32900	33400
11	---	---	e23000	28900	27000	28100	---	---	e24800	33800	29500	32400
12	---	---	e22600	29600	28300	29000	---	---	e26200	32600	29100	31500
13	---	---	e22000	30200	29200	29700	---	---	e27200	32900	32000	32500
14	---	---	e21600	30400	29100	30000	---	---	e28100	33400	31700	32800
15	---	---	e21100	31100	29700	30500	---	---	e28700	33400	30500	31800
16	---	---	e15000	31900	29000	31100	30100	29100	29600	33700	30300	32300
17	---	---	e15500	32100	30000	31400	30200	29300	29800	33800	30100	32900
18	---	---	e16000	32000	29000	31000	30000	29600	29800	33500	30600	32800
19	---	---	e17000	32500	26800	30300	30300	29900	30100	32600	28300	30500
20	---	---	e18000	32200	26900	30700	30800	30200	30500	33400	26200	32800
21	---	---	e19000	32900	30000	31400	31200	30700	30800	33300	31200	32900
22	---	---	e20000	33100	31800	32500	31100	30600	30900	33600	33200	33400
23	---	---	e20400	32300	28700	30300	31400	30800	31100	33300	32300	33100
24	---	---	e20800	30600	28900	29900	31500	30800	31300	33400	32900	33100
25	---	---	e21500	30500	28600	30200	31700	31200	31400	33300	32500	32800
26	---	---	e22000	32600	30400	31300	31900	31400	31700	33700	32600	33300
27	22900	21300	22400	34200	32200	33200	32400	31800	32100	34300	32900	33700
28	22500	20600	21900	36000	33800	34800	32600	32100	32300	33900	33100	33500
29	21800	20400	20900	36400	35500	36000	32600	32100	32400	33800	33100	33500
30	23600	21800	22900	36700	34500	36100	32900	31800	32500	34000	33400	33700
31	---	---	---	36900	35900	36400	32900	31800	32700	---	---	---
MONTH	23600	8910	19300	36900	21800	29300	36700	25500	25000	34300	26200	33000
YEAR	42400	8910	33800									

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.5	21.0	22.5	19.0	15.0	17.5	12.5	8.5	11.0	11.0	9.0	10.0
2	23.5	22.0	23.0	17.5	16.5	17.5	13.5	9.5	12.0	11.0	8.0	9.5
3	27.0	21.0	23.5	20.0	14.5	18.0	13.5	12.5	13.0	10.5	8.0	9.0
4	26.5	22.0	23.5	20.0	17.5	18.5	14.0	12.0	13.0	9.0	7.5	8.0
5	25.5	22.5	24.0	19.0	16.0	17.5	13.5	12.5	13.0	8.5	6.5	7.5
6	23.5	23.0	23.0	19.0	15.5	17.5	14.0	12.5	13.0	8.0	4.5	6.5
7	23.0	20.5	22.0	18.5	15.5	17.0	14.0	12.0	13.0	8.5	6.0	7.5
8	22.5	19.0	20.5	21.0	17.0	19.0	13.0	11.0	12.0	12.0	7.5	10.0
9	22.0	17.0	19.5	19.5	16.0	17.5	12.0	10.5	11.0	12.5	9.0	11.5
10	20.5	17.5	18.5	18.0	14.0	16.0	11.0	7.5	10.0	14.0	11.0	12.5
11	20.0	17.0	18.5	15.0	13.0	13.5	10.0	9.0	9.5	13.5	11.0	12.5
12	21.5	16.5	18.5	14.0	12.5	13.5	10.5	7.0	9.0	14.0	11.5	13.0
13	22.0	16.5	19.5	17.5	14.0	15.5	10.5	10.0	10.5	13.5	11.0	12.5
14	19.5	18.0	18.0	17.5	14.5	15.5	13.0	10.0	11.5	12.0	10.5	11.0
15	20.5	17.0	18.5	15.5	13.5	14.5	13.0	12.0	12.5	11.5	11.0	11.0
16	23.0	18.5	20.5	14.5	10.5	13.0	14.0	9.5	12.5	12.0	11.5	12.0
17	24.5	20.5	22.5	15.0	12.0	13.0	14.0	10.5	12.5	13.0	10.5	12.0
18	24.0	20.5	22.0	12.5	11.5	12.0	13.5	11.0	12.5	---	---	---
19	23.0	19.5	21.0	15.0	12.0	13.5	14.0	10.5	12.5	---	---	---
20	23.0	19.5	21.5	15.0	11.5	14.0	13.0	11.5	12.5	---	---	---
21	24.0	22.0	23.0	13.0	8.5	11.5	12.5	9.5	11.5	---	---	---
22	23.0	21.0	21.5	11.5	10.0	10.5	14.0	11.0	12.0	---	---	---
23	21.5	20.0	21.0	10.5	9.5	9.5	13.0	11.5	12.5	9.5	4.5	6.5
24	21.5	20.5	21.0	13.0	9.5	11.0	14.0	11.5	12.5	9.0	4.0	7.0
25	21.5	18.0	19.0	12.0	9.5	10.5	13.0	9.5	12.0	9.5	4.0	7.0
26	18.0	16.5	17.0	14.0	11.0	12.0	12.5	11.5	12.0	12.0	7.0	9.5
27	17.5	17.0	17.0	13.0	10.5	11.5	13.0	11.5	12.0	11.0	8.0	9.5
28	17.5	16.0	17.0	13.0	7.0	11.0	12.5	11.5	12.0	10.5	8.0	9.5
29	19.5	15.5	17.0	12.0	10.0	11.5	14.5	11.5	12.5	9.5	7.0	8.0
30	19.5	16.5	18.0	12.0	8.5	10.5	14.0	10.5	13.0	9.0	5.0	7.0
31	19.0	17.0	18.0	---	---	---	13.5	11.0	12.0	9.0	5.0	7.5
MONTH	27.0	15.5	20.5	21.0	7.0	14.0	14.5	7.0	12.0	14.0	4.0	9.5

07311782 SOUTH WICHITA RIVER AT LOW FLOW DAM NEAR GUTHRIE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.5	4.0	7.5	8.5	4.5	6.5	---	---	---	23.0	19.0	20.5
2	12.5	7.0	10.0	4.5	2.0	2.5	---	---	---	23.0	19.0	20.5
3	11.5	8.5	10.0	5.5	2.0	4.0	---	---	---	24.5	18.0	21.0
4	12.0	6.0	9.5	9.0	4.0	6.0	---	---	---	25.5	20.0	22.5
5	11.5	6.5	10.0	10.5	6.0	8.5	---	---	---	22.5	19.5	20.5
6	12.5	8.0	10.5	---	---	---	---	---	---	23.0	19.0	20.5
7	11.0	8.0	10.0	---	---	---	---	---	---	23.0	21.5	22.5
8	9.5	6.5	8.5	---	---	---	---	---	---	23.0	20.0	21.5
9	11.0	6.5	9.0	---	---	---	---	---	---	24.0	18.5	21.5
10	11.0	7.5	9.5	---	---	---	---	---	---	25.5	19.5	22.5
11	10.0	7.5	8.0	---	---	---	---	---	---	25.5	21.5	24.0
12	7.5	4.5	5.0	14.0	10.0	12.0	---	---	---	26.0	22.0	24.0
13	5.5	2.5	4.5	---	---	---	---	---	---	28.0	23.0	25.5
14	7.5	3.0	5.5	10.5	8.5	9.5	---	---	---	27.0	23.0	25.5
15	10.0	5.5	7.5	---	---	---	---	---	---	28.0	23.5	26.0
16	8.0	3.0	5.5	---	---	---	---	---	---	26.0	24.0	24.5
17	10.5	3.5	6.5	15.5	9.5	12.5	---	---	---	26.0	23.5	24.5
18	10.0	4.0	7.5	13.5	9.0	11.5	---	---	---	24.0	19.0	22.0
19	12.0	7.0	9.0	---	---	---	---	---	---	26.5	19.5	23.0
20	14.0	8.0	11.0	15.5	12.5	14.0	---	---	---	26.0	21.5	23.5
21	13.5	9.5	12.0	---	---	---	---	---	---	28.5	21.5	24.5
22	13.5	11.0	12.5	---	---	---	21.0	14.0	16.5	28.0	23.5	25.0
23	14.5	10.5	13.0	---	---	---	16.0	12.5	14.0	28.0	24.0	25.5
24	13.5	11.0	12.5	---	---	---	19.5	13.0	16.0	24.0	21.5	22.0
25	13.5	11.0	12.5	15.0	14.5	14.5	21.0	15.0	18.0	21.5	18.0	19.5
26	15.5	12.0	13.5	14.5	13.0	13.5	22.0	16.5	19.0	21.5	18.5	19.5
27	13.5	12.0	12.5	14.5	11.0	13.0	22.0	16.5	19.0	21.0	20.0	21.0
28	12.5	8.5	10.0	13.5	9.0	11.0	20.5	17.5	18.5	21.5	17.5	21.0
29	---	---	---	9.5	8.0	9.0	25.5	19.0	21.5	21.5	20.0	21.0
30	---	---	---	---	---	---	23.5	20.5	21.5	25.5	18.0	21.0
31	---	---	---	12.5	6.0	9.5	---	---	---	22.5	20.5	21.0
MONTH	15.5	2.5	9.5	15.5	2.0	10.0	25.5	12.5	18.0	28.5	17.5	22.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.0	19.5	22.5	27.0	23.5	25.5	28.5	22.5	24.5	29.0	26.5	28.0
2	27.0	23.0	24.5	27.5	24.5	25.5	23.0	21.5	22.0	29.0	26.5	28.0
3	26.5	24.5	25.0	28.5	24.0	26.0	24.5	23.0	24.0	29.5	26.5	28.0
4	26.0	22.5	24.5	28.5	25.0	26.5	25.5	24.0	24.5	29.5	26.0	28.0
5	22.5	19.0	20.0	31.0	23.5	27.5	26.0	25.5	25.5	29.5	26.5	28.0
6	27.5	20.5	22.5	---	---	---	26.0	26.0	26.0	29.5	27.0	28.0
7	---	---	---	31.5	27.0	29.0	28.0	26.0	26.5	28.5	26.0	27.0
8	---	---	---	31.5	27.0	29.0	30.5	26.5	28.5	27.5	25.0	26.0
9	---	---	---	33.5	27.5	30.0	29.5	27.5	28.5	25.5	22.5	24.0
10	---	---	---	32.0	28.0	30.0	29.0	27.0	28.0	23.0	22.5	22.5
11	---	---	---	32.5	28.0	30.0	29.0	27.0	28.0	25.5	23.0	24.0
12	---	---	---	30.0	28.0	29.0	30.0	27.5	28.0	26.5	23.5	25.0
13	---	---	---	30.5	28.0	29.0	30.5	27.0	28.5	28.0	23.5	25.5
14	---	---	---	31.0	28.0	29.5	30.0	27.5	29.0	26.5	25.0	25.5
15	---	---	---	31.5	28.0	29.5	31.0	28.0	29.0	25.0	23.0	24.0
16	---	---	---	33.0	27.5	30.0	29.5	27.0	28.5	27.5	22.5	25.0
17	---	---	---	32.5	28.0	30.0	29.5	27.5	28.5	26.0	24.0	25.0
18	---	---	---	30.5	27.5	28.5	29.5	26.5	28.0	24.5	23.5	24.0
19	---	---	---	29.5	24.5	27.5	29.5	27.0	28.5	24.0	22.0	23.0
20	---	---	---	32.0	25.5	28.5	31.5	27.5	29.5	24.0	21.5	22.5
21	---	---	---	31.0	27.5	29.0	32.5	28.0	29.5	23.0	17.5	20.0
22	---	---	---	32.5	28.0	30.0	31.0	27.5	29.0	20.0	17.0	18.0
23	---	---	---	31.5	27.5	29.5	31.0	27.5	29.0	19.5	16.5	18.0
24	---	---	---	32.0	27.0	29.0	29.5	27.0	28.5	20.5	17.5	18.5
25	---	---	---	29.5	28.5	29.0	30.0	26.5	28.0	19.0	17.5	18.5
26	---	---	---	30.5	27.5	28.5	30.0	27.0	28.0	20.0	17.0	18.5
27	30.0	28.0	29.0	31.5	27.0	29.0	30.0	27.0	28.5	23.5	18.5	20.5
28	32.5	26.0	29.0	33.5	28.0	30.0	30.5	27.5	29.0	24.5	22.0	23.0
29	29.0	26.5	28.0	32.5	29.0	31.0	30.5	27.0	28.5	26.0	23.0	24.5
30	27.5	25.0	26.5	31.0	28.0	29.5	29.0	26.5	28.0	26.0	24.0	25.0
31	---	---	---	30.5	28.5	29.5	29.5	26.0	27.5	---	---	---
MONTH	32.5	19.0	25.0	33.5	23.5	29.0	32.5	21.5	27.5	29.5	16.5	24.0
YEAR	33.5	2.0	18.5									

07311783 SOUTH WICHITA RIVER BELOW DAM NEAR GUTHRIE, TX

LOCATION.--Lat 33°37'19", long 100°12'31", King County, Hydrologic Unit 11130205, on right bank 1.1 mi downstream from ranch road crossing, 2.8 mi upstream from Willow Creek, 6.6 mi east of Guthrie, and 91.4 mi upstream from confluence with North Wichita River.

DRAINAGE AREA.--223 mi².

PERIOD OF RECORD.--October 1985 to current year. Water-quality records.--Specific conductance: May 1987 to September 1989. Water temperature: May 1987 to September 1989.

GAGE.--Water-stage recorder. Datum of gage is 1,590.0 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Diversions from station 07311782 via pipeline to station 07311669 began in May 1987. Specific conductance and water temperature for October 1986 to April 1987 were collected at station 07311782, but are published at this station and are used for computation of water quality loads at this station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1950, 20.8 ft in May 1954, at station 07311780 located about 1.1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.05	.05	.15	.04	e.03	.03	.03	15	.10	46	e.20
2	.02	.05	.05	.17	.05	e.02	.03	.03	.84	.06	e391	e.20
3	.02	.05	2.8	.16	.05	e.02	.03	.03	.25	.05	e21	e.46
4	.03	.05	4.6	.13	.04	e.02	.03	.04	13	3.4	e6.4	e.53
5	.02	.04	2.1	.12	.04	e.02	.03	.04	46	2.7	e2.1	e.42
6	3.5	.04	.05	.24	.05	e.03	.02	12	9.1	.04	e1.2	e.33
7	.03	.04	.05	.16	.05	e.03	.02	7.7	.02	.03	e1.2	e.25
8	.02	.04	.05	.20	.05	e.03	.02	3.7	.02	.04	e.58	e.25
9	.03	.05	.05	.19	.05	.04	.02	.01	.02	.05	e.66	4.8
10	.02	.05	.05	.20	.03	.05	.02	.01	16	.06	e.65	2.7
11	.02	.05	.05	.20	.03	.05	.02	.01	39	.06	e.40	.21
12	.02	.05	.05	.17	.03	.04	.03	.02	5.1	.06	e.20	.23
13	.02	.05	.05	.20	.03	.03	.04	.02	2.8	.05	e.20	.25
14	.02	.05	.06	3.2	.03	.03	.04	.01	.79	.04	e.20	.25
15	.02	.05	.12	8.2	.03	.03	.04	.02	.05	.05	e.20	.25
16	.03	.05	.16	6.7	.04	.02	.04	1.9	.04	.05	e.20	.24
17	.03	.05	.18	3.3	.03	.02	.03	.03	.04	.04	e2.1	.20
18	.03	.05	.17	.40	.03	.02	.03	.03	.07	.04	e1.3	.20
19	.03	.08	.16	.25	.04	.51	.04	.03	.21	1.3	e2.1	.26
20	.04	9.5	.15	.10	.04	.01	.04	.03	.18	3.0	e1.5	.42
21	.03	2.8	.14	.05	.03	.01	.03	.03	.04	4.8	e.98	.39
22	.49	.40	.13	.05	.03	.02	.03	.04	.04	7.2	e.65	.32
23	3.1	.10	.13	.04	.03	.03	.02	.04	.04	1.8	e.20	.37
24	2.5	.05	.13	.04	.03	.03	.03	.03	6.0	1.0	e.73	.36
25	2.5	.05	.15	.04	.04	3.8	.03	.05	5.2	.21	e1.1	1.1
26	3.0	.05	5.0	.05	.04	2.7	.03	28	6.3	2.2	e1.1	.68
27	2.5	.05	2.6	.05	e.04	3.4	.03	148	2.4	.03	e1.2	.29
28	1.2	.05	.13	.04	e.04	.03	.03	19	.08	.14	e.63	.05
29	.05	.05	.13	.03	---	.03	.03	12	.07	.04	e.30	.05
30	.04	.05	.17	.03	---	.03	.03	10	.13	.06	e.20	.06
31	.04	---	.20	.04	---	.03	---	37	---	.12	e.20	---
MEAN	.63	.47	.64	.80	.038	.36	.030	9.03	5.63	.93	15.7	.54
MAX	3.5	9.5	5.0	8.2	.05	3.8	.04	148	46	7.2	391	4.8
MIN	.02	.04	.05	.03	.03	.01	.02	.01	.02	.03	.20	.05
AC-FT	39	28	39	49	2.1	22	1.8	555	335	57	965	32

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995, BY WATER YEAR (WY)

MEAN	5.67	1.80	2.97	3.43	3.66	1.91	2.00	8.93	5.06	17.4	4.28	9.18
MAX	30.6	8.51	9.34	9.16	17.8	5.20	9.16	53.2	13.8	154	15.7	49.6
(WY)	1987	1987	1992	1990	1992	1992	1990	1987	1991	1986	1995	1991
MIN	.030	.046	.028	.073	.038	.016	.030	.043	.11	.025	.021	.016
(WY)	1989	1988	1989	1989	1995	1991	1995	1988	1994	1993	1994	1990

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1986 - 1995	
ANNUAL MEAN	.93		2.94		5.55	
HIGHEST ANNUAL MEAN					20.8	1986
LOWEST ANNUAL MEAN					.75	1988
HIGHEST DAILY MEAN	49	May 12	391	Aug 2	3520	Jul 3 1986
LOWEST DAILY MEAN	.01	Apr 3	.01	Mar 20	.00	Jan 4 1986
ANNUAL SEVEN-DAY MINIMUM	.01	Apr 9	.01	May 9	.01	Sep 15 1990
INSTANTANEOUS PEAK FLOW			1200	Aug 2		
INSTANTANEOUS PEAK STAGE			8.44	Aug 2		
ANNUAL RUNOFF (AC-FT)	674		2130		4020	
10 PERCENT EXCEEDS	1.0		3.2		8.3	
50 PERCENT EXCEEDS	.04		.05		.07	
90 PERCENT EXCEEDS	.01		.02		.02	

e Estimated

07311790 SOUTH WICHITA RIVER AT ROSS RANCH NEAR BENJAMIN, TX

LOCATION.--Lat 33°39'18", long 100°00'49", King County, Hydrologic Unit 11130205, on left bank 170 ft (52 m) upstream from ranch road, 1.6 mi (2.6 km) downstream from Ox Yoke Creek, 13.7 mi (22.0 km) northwest of Benjamin, and 64.5 mi (103.8 km) upstream from mouth.

PERIOD OF RECORD.--Chemical analyses: August 1970 to September 1979, March 1988 to current year. Sediment analyses: April 1978 to September 1979.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1970 to September 1979.

INSTRUMENTATION.--From October 1970 to September 1979, specific conductance was continuously recorded at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 51,000 microsiemens July 28, 1978; minimum, 1,500 microsiemens May 28, 1975.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC 13...	1010	1.9	17200	8.1	6.0	14.9	133	3200	3000	850
JAN 23...	1230	2.0	17400	8.2	6.5	12.3	111	3000	2800	810
MAR 20...	1320	1.1	17600	8.2	21.5	9.0	114	3100	3000	820
APR 27...	0815	1.7	11400	8.6	17.5	9.0	102	2200	2200	610
JUN 19...	1235	12	7600	8.0	26.5	9.0	120	2100	2000	540
AUG 15...	1035	30	9930	7.7	28.0	--	--	2600	2400	680

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 13...	250	3200	25	19	130	2600	5100	0.30	3.9	12100
JAN 23...	230	3000	24	18	130	2500	4800	0.40	1.9	11400
MAR 20...	260	3100	24	25	84	2700	4900	0.40	2.0	11900
APR 27...	170	1800	17	13	58	2000	2800	0.40	0.60	7430
JUN 19...	190	960	9	14	120	2000	1500	0.50	4.5	5280
AUG 15...	210	1400	12	16	170	2200	2200	0.50	10	6820

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX

LOCATION.--Lat 33°38'39", long 99°48'02", Knox County, Hydrologic Unit 11130205, on right bank at upstream side of bridge on State Highway 6, 2 mi downstream from Panhandle and Santa Fe Railway Co. bridge, 4 mi north of Benjamin, and 41 mi upstream from confluence with North Wichita River.

DRAINAGE AREA.--584 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1952-57 (occasional low-flow measurements), December 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,334.23 ft above sea level. Prior to Jan. 2, 1960, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are low flow diversions upstream on the South Wichita River at Low Flow Dam near Guthrie (station 07311782) to evaporation lake (station 07311669). There were other minor diversions upstream from station during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1903 occurred in September 1919 (stage and discharge unknown), from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	1000	1,840	13.86	July 3	Unknown	1,100	11.28b
May 6	1700	1,540	12.87	Aug. 2	Unknown	6,000	16.18a
May 27	0500	2,610	15.12	Aug. 3	2000	8,860	16.58
June 5	Unknown	5,690	16.21b				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	8.8	3.5	2.8	2.6	1.5	1.4	.89	187	7.3	e878	.83
2	.08	10	4.5	2.7	3.3	1.5	1.6	.77	e170	12	e3730	.66
3	.08	10	2.6	2.2	1.9	1.7	1.5	.73	126	e768	5880	.38
4	.06	54	2.5	1.7	2.3	2.4	1.9	.50	292	e198	5670	.55
5	.05	85	2.0	1.8	1.8	2.6	1.5	27	e2370	e55	e820	.32
6	.05	27	3.3	2.3	2.0	3.6	1.4	805	402	e35	e195	.26
7	94	16	2.0	1.8	1.6	2.7	1.3	382	207	e30	e111	.23
8	29	11	9.2	2.4	1.5	2.7	1.0	272	151	e28	e87	.20
9	2.8	11	7.2	1.8	1.8	2.1	.90	100	115	e26	e76	19
10	1.1	9.3	3.8	2.0	1.9	2.4	2.3	64	150	e22	e72	3.6
11	.93	8.4	3.4	1.6	1.4	3.0	.91	45	e716	e20	e69	8.9
12	.98	9.1	2.8	1.7	1.3	4.2	.75	36	298	e18	e59	11
13	1.1	11	2.7	1.4	1.4	7.9	.73	30	152	e13	e48	17
14	.96	11	2.8	1.4	2.5	6.3	.80	26	114	e11	e39	7.1
15	1.2	5.9	2.5	1.4	2.1	18	.77	27	82	e8.0	32	7.3
16	1.3	6.3	2.2	1.6	2.9	15	.72	72	61	e15	26	2.4
17	1.9	5.4	1.9	1.4	5.6	8.9	13	26	48	e24	23	2.8
18	.67	7.6	1.8	4.0	7.3	4.7	10	8.9	40	e25	22	19
19	.67	27	2.0	4.1	9.2	3.3	6.2	4.3	34	e21	19	82
20	79	1100	2.0	8.5	5.7	2.4	66	2.4	29	e32	16	18
21	223	87	1.6	6.8	4.9	2.2	23	2.2	25	e65	12	24
22	44	47	1.5	3.5	5.8	1.5	46	1.9	22	e26	7.8	11
23	22	29	1.6	3.1	4.3	1.2	29	6.3	18	e54	4.4	1.6
24	15	24	1.4	3.1	3.4	1.2	10	145	131	e18	4.9	1.5
25	30	16	1.3	2.4	3.4	1.2	3.8	160	32	e15	3.9	18
26	21	14	1.3	3.9	5.1	1.1	2.5	260	21	e14	2.2	7.2
27	13	11	2.0	3.4	2.5	.98	1.6	2170	16	e10	1.7	2.1
28	12	6.7	3.8	1.9	1.7	.94	1.4	559	12	e10	1.3	1.5
29	12	4.5	2.5	1.9	---	1.0	1.2	315	10	e8.0	1.1	1.4
30	12	3.4	2.3	2.1	---	1.0	.99	298	8.3	e9.0	1.2	1.1
31	10	---	5.3	2.6	---	1.1	---	e336	---	e16	1.0	---
TOTAL	630.06	1676.4	89.3	83.3	91.2	110.32	234.17	6183.89	6039.3	1613.3	17913.5	270.93
MEAN	20.3	55.9	2.88	2.69	3.26	3.56	7.81	199	201	52.0	578	9.03
MAX	223	1100	9.2	8.5	9.2	18	66	2170	2370	768	5880	82
MIN	.05	3.4	1.3	1.4	1.3	.94	.72	.50	8.3	7.3	1.0	.20
AC-FT	1250	3330	177	165	181	219	464	12270	11980	3200	35530	537
IN.	.04	.11	.01	.01	.01	.01	.01	.39	.38	.10	1.14	.02

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

MEAN	76.2	19.1	12.8	11.8	17.6	20.2	29.2	77.4	87.9	25.6	51.4	73.5
MAX	656	65.1	77.5	60.3	172	88.7	187	256	458	162	578	502
(WY)	1984	1987	1992	1992	1992	1970	1990	1989	1990	1986	1995	1966
MIN	.17	1.14	.73	.68	1.39	.97	.073	.92	1.49	.013	.000	.034
(WY)	1980	1988	1989	1989	1989	1989	1989	1988	1976	1965	1963	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995	
ANNUAL TOTAL	9144.68		34935.67			
ANNUAL MEAN	25.1		95.7		42.5	
HIGHEST ANNUAL MEAN					107	1966
LOWEST ANNUAL MEAN					11.2	1988
HIGHEST DAILY MEAN	1690	Sep 15	5880	Aug 3	8260	Oct 20 1983
LOWEST DAILY MEAN	.00	Jun 30	.05	Oct 5	.00	May 24 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 13	.37	Sep 2	.00	Jun 27 1960
INSTANTANEOUS PEAK FLOW			8860	Aug 3	14900	Jun 1 1990
INSTANTANEOUS PEAK STAGE			16.58	Aug 3	17.07	Jun 1 1990
ANNUAL RUNOFF (AC-FT)	18140		69290		30760	
ANNUAL RUNOFF (INCHES)	.58		2.23		.99	
10 PERCENT EXCEEDS	26		112		46	
50 PERCENT EXCEEDS	2.2		5.4		7.0	
90 PERCENT EXCEEDS	.00		1.0		.38	

e Estimated
a From flood mark.
b From drawn graph based on similarity of recorded rise of May 27

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: July 1949 to March 1959, July 1966 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to current year.
WATER TEMPERATURE: October 1967 to current year.

INSTRUMENTATION.--Since August 1968, specific conductance and water temperature was recorded continuously at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 48,900 microsiemens May 13, 1971; minimum, 427 microsiemens Sept. 11, 1989.
WATER TEMPERATURE: Maximum, 39.0°C July 31, 1989; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 17,900 microsiemens Feb. 24 and Apr. 9; minimum, 587 microsiemens, Aug. 2.
WATER TEMPERATURE: Maximum, 34.0°C July 10; minimum, 0.0°C Mar. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC											
08...	1025	3.4	9070	8.1	10.0	11.6	111	2500	2300	640	210
FEB											
07...	0945	1.5	15000	8.0	7.5	12.4	113	3300	3200	830	310
APR											
05...	1005	1.3	15500	8.0	17.5	9.4	108	3300	3100	780	320
MAY											
23...	1110	1.7	9250	8.0	26.0	7.8	104	2800	2600	760	210
AUG											
15...	1020	32	10000	7.8	26.5	7.7	103	2900	2700	730	250
24...	1030	4.9	11700	7.8	25.0	8.6	114	2900	2700	710	270

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC										
08...	1400	12	16	170	2100	2200	0.20	6.2	6670	0.060
FEB										
07...	2400	18	18	190	2700	4100	0.20	4.6	10500	--
APR										
05...	2600	20	20	140	2800	4300	0.20	2.3	10900	--
MAY										
23...	1300	11	17	150	2100	2100	0.30	8.1	6590	--
AUG										
15...	1400	11	17	190	2300	2200	0.30	11	7020	0.070
24...	1700	14	17	200	2400	2700	0.30	10	7930	0.130

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)
DEC										
08...	<0.010	0.060	0.060	0.070	--	<0.20	<0.010	<0.010	4	100
FEB										
07...	<0.010	--	<0.050	0.070	--	<0.20	<0.010	<0.010	--	--
APR										
05...	<0.010	--	<0.050	0.070	--	<0.20	<0.010	<0.010	--	--
MAY										
23...	<0.010	--	<0.050	0.120	--	<0.20	<0.010	<0.010	--	--
AUG										
15...	<0.010	0.070	0.070	0.170	--	<0.20	<0.010	<0.010	5	100
24...	<0.010	0.130	0.130	0.110	0.09	0.20	<0.010	<0.010	--	--

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC										
08...	<1.0	<1	2	180	<4	130	0.3	1	<1.0	50
FEB										
07...	--	--	--	--	--	--	--	--	--	--
APR										
05...	--	--	--	--	--	--	--	--	--	--
MAY										
23...	--	--	--	--	--	--	--	--	--	--
AUG										
15...	<1.0	<1	5	<10	<2	10	0.5	1	<1.0	<10
24...	--	--	--	--	--	--	--	--	--	--

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	630.06	3110	2100	3570	650	1100	760	1290	840
NOV.	1994	1676.4	2570	1730	7850	540	2440	620	2810	690
DEC.	1994	89.3	8870	6040	1460	2100	504	1900	454	2100
JAN.	1995	83.3	13600	9320	2100	3500	782	2600	582	*
FEB.	1995	91.2	15700	10800	2660	4200	1030	2800	693	*
MAR.	1995	110.32	14000	9580	2850	3600	1080	2600	775	*
APR.	1995	234.17	9420	6420	4060	2300	1440	1900	1230	2200
MAY	1995	6183.89	3160	2140	35700	670	11100	760	12700	850
JUNE	1995	6039.3	3960	2670	43600	850	13800	940	15300	1000
JULY	1995	1613.3	3790	2560	11200	820	3590	880	3850	990
AUG.	1995	17913.5	1800	1210	58700	370	18000	440	21300	490
SEPT	1995	270.93	7050	4780	3500	1600	1170	1600	1140	1800
TOTAL		34935.67	**	**	177000	**	56100	**	62200	**
WTD.AVG.		96	2780	1880	**	590	**	660	**	730

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6860	6380	6510	7780	6330	6960	---	---	e4450	11000	10300	10600
2	7080	5760	6470	8420	7520	7890	8090	4140	5910	11500	10900	11200
3	6440	6120	6280	---	---	e8000	7560	5340	6580	12000	11400	e11700
4	6720	6320	6460	---	---	e6570	5800	5030	5380	12300	11700	e12000
5	6880	6420	6610	---	---	e2630	7490	5800	6630	12800	12100	e12400
6	7240	6720	6890	---	---	e2440	9560	7490	8470	13000	12400	e12800
7	---	---	e2200	---	---	e3040	8640	8000	8400	13400	12600	e13100
8	---	---	e2800	---	---	e3930	---	---	7150	13700	13100	e13400
9	---	---	e2900	---	---	e5110	7880	7340	7580	13900	13300	e13400
10	---	---	e3600	---	---	e6120	8390	7740	8040	13800	13400	13600
11	---	---	e4000	7260	---	e6860	8760	8170	8480	13900	13400	13600
12	---	---	5000	---	---	e7280	9040	8620	8850	13900	13600	13700
13	5540	4720	5090	---	---	e7760	9310	8930	9150	14100	13600	13900
14	5660	5280	5500	---	---	e7850	9690	9280	9480	14200	13700	14000
15	6160	5360	5700	---	---	e8040	9890	9580	9750	14200	13700	14000
16	6780	5980	6400	8910	---	e8290	10400	9770	10100	14000	13700	13900
17	7220	6460	6810	10100	8760	9210	10900	8990	10400	14300	13900	14100
18	7460	6900	7110	11700	9480	10200	11400	10700	11100	14100	11100	12600
19	7860	7200	7430	11800	1350	9220	11800	11100	11500	13700	11500	12400
20	---	---	e4900	2470	1030	1720	12800	11500	12000	14800	13200	14200
21	---	---	e2000	2310	1320	1760	13400	12100	12600	14800	13200	14500
22	---	---	e2500	2560	1240	1870	13500	12700	13100	---	---	e14600
23	---	---	e3600	1260	860	1070	13900	13400	13600	---	---	e14700
24	---	---	e3800	3140	1220	2190	14700	13700	14200	---	---	e14700
25	---	---	e4000	3980	3140	3600	15100	14200	14700	---	---	e15000
26	---	---	4100	4660	3920	4300	15700	14200	15000	---	---	e13800
27	4780	3900	4400	5640	4660	5090	15700	8840	9510	---	---	e14200
28	5240	4780	4980	6000	5420	5650	10200	9030	9290	---	---	e14400
29	5780	5160	5400	6040	4680	5300	9680	9320	9450	---	---	e14500
30	6240	5560	5820	---	---	e4510	9750	9310	9540	---	---	e14300
31	6600	5980	6280	---	---	---	10400	9560	9830	---	---	e14000
MONTH	7860	3900	5020	11800	860	5480	15700	4140	9680	14800	10300	13500

e Estimated

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	e14000	16800	16600	16700	---	---	e15600	---	---	e14000
2	---	---	e13600	17000	16500	16700	---	---	16300	---	---	e14500
3	---	---	e14000	16600	15900	16400	16100	15500	15900	---	---	e14000
4	---	---	e13800	16500	15900	16200	15700	14500	15300	---	---	e13500
5	---	---	e14200	16200	15900	16100	15800	15000	15400	---	---	e8300
6	---	---	e14800	16400	15900	16200	16800	15500	16100	9020	1340	2540
7	---	---	15300	16400	15400	16000	17200	16000	16500	3320	1720	2530
8	16000	15500	15800	16300	15900	16100	17700	16500	17100	2940	1940	2520
9	15900	15500	15800	16800	16200	16500	17900	17000	17400	5360	2900	4130
10	15800	15400	15600	17000	16200	16500	17400	15500	16000	5640	4540	4980
11	16100	15700	15900	17400	16600	16800	16700	14800	15900	6920	5240	6190
12	16000	15800	15900	17000	15600	16500	15800	14400	15300	11600	4820	7470
13	15900	15500	15700	17200	15800	16500	17100	14800	16100	11700	9680	10900
14	15700	15000	15300	17200	14600	16600	17100	16100	16700	10300	10000	10100
15	15600	15000	15200	---	---	9900	16900	15700	16300	---	---	e8200
16	15600	14200	15100	14800	12100	13700	16700	15500	16100	---	---	e6250
17	15600	14700	15100	12500	10900	11700	17700	14100	16100	---	---	e6500
18	16000	15500	15800	13000	11500	10600	17900	9120	12700	---	---	e7800
19	16300	15700	16000	13700	11100	12700	9120	6880	8380	---	---	e8200
20	16200	15200	15900	14600	13700	14200	9740	3720	6900	---	---	e7500
21	16000	15000	15400	14600	13500	14300	10200	6980	9360	---	---	e8600
22	17500	16000	16800	14100	13700	14000	13800	3100	10200	---	---	e9600
23	17500	17000	17200	14700	13800	14100	8680	2300	5250	---	---	9000
24	17900	17100	17300	14700	13800	14300	10100	8420	9510	---	---	7200
25	17500	16100	16800	14500	14100	14300	9660	6820	8750	---	---	e5500
26	16600	16200	16400	15000	14200	14500	---	---	e9000	---	---	2800
27	16900	16100	16500	15100	14500	14700	---	---	e10500	---	---	e2000
28	16900	16600	16700	15200	14700	14900	---	---	e12000	---	---	e5800
29	---	---	---	15100	14700	14900	---	---	e12800	4340	1510	2620
30	---	---	---	15000	14600	14800	---	---	e13600	---	---	2900
31	---	---	---	15300	14700	15000	---	---	---	3860	1330	2260
MONTH	17900	14200	15600	17400	10900	14900	17900	2300	13400	11700	1330	7040

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5320	2460	4100	9100	8300	8680	6940	757	2620	---	---	e11800
2	---	---	6000	9200	4720	8400	1180	587	829	---	---	e12000
3	---	---	8000	2560	1360	1740	1570	913	1310	---	---	e12200
4	---	---	6500	4200	1820	3160	2830	793	1470	---	---	e12400
5	---	---	e2000	4480	3480	3800	4960	2830	3990	12800	12200	12600
6	---	---	e3500	5900	4480	5310	6130	4920	5470	12800	12400	12700
7	---	---	e4200	6100	5540	5790	7270	6120	6670	13000	12700	12900
8	---	---	e4800	7100	6100	6560	8050	7270	7610	13000	12800	12900
9	---	---	e5600	8040	7100	7510	8580	8050	8300	12900	4230	9750
10	---	---	e5000	8840	8000	8370	8690	8570	8680	12300	8290	11300
11	---	---	e4700	9140	8640	8810	---	---	e8800	11300	3190	7620
12	---	---	e5100	9480	9000	9280	---	---	e8900	11900	3080	10200
13	---	---	e5800	9680	9340	9540	---	---	e9100	12100	3000	9590
14	---	---	e6200	10000	9660	9840	---	---	e9200	12000	11400	11800
15	---	---	e6600	10200	9840	10100	10000	9170	9400	11400	10600	10800
16	---	---	e6900	10400	9880	10100	10200	9930	10100	10800	10200	10400
17	---	---	e7200	10400	9900	10200	10600	10200	10300	10500	4540	9800
18	---	---	e7500	10300	8800	10100	10900	10200	10600	11200	4450	7060
19	---	---	7900	10200	3240	7810	11100	10600	10900	10900	1770	5840
20	---	---	8000	6440	2120	4200	11400	10800	11100	7130	2470	4540
21	8240	7700	7970	4700	3700	4330	11700	11200	11400	9370	3970	7080
22	8140	7100	7700	4360	3940	4140	12100	11400	11700	9080	5150	6250
23	7480	3620	5730	5060	3140	4610	11900	11200	11600	8960	6580	8230
24	4220	2380	3520	6520	5220	5670	11600	10900	11200	9120	4020	6390
25	5720	3760	4560	7220	5120	6620	---	---	e10000	5690	3590	4090
26	5980	2480	3170	6780	5160	6040	---	---	e10300	4480	3730	4130
27	7820	3340	6660	5820	5120	5480	---	---	e10600	3990	3750	3880
28	8320	7640	7970	6200	5600	5870	---	---	e11000	4050	3750	3880
29	8180	7460	7680	6680	6160	6440	---	---	e11200	4200	3760	3930
30	8480	7560	7980	6940	6480	6670	---	---	e11400	4360	4200	4270
31	---	---	---	8420	2740	6610	---	---	e11600	---	---	---
MONTH	8480	2380	5950	10400	1360	6830	12100	587	8620	13000	1770	8680
YEAR	17900	587	9530									

e Estimated

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	20.0	12.0	15.0	---	---	---	8.5	6.0	7.0
2	---	---	---	19.5	14.0	16.5	---	---	---	6.0	5.0	5.5
3	26.0	19.0	22.0	24.0	15.5	19.0	14.5	9.0	11.0	6.0	5.0	5.5
4	26.5	20.5	23.0	21.5	12.0	17.5	13.0	8.0	10.0	5.0	4.0	4.5
5	24.5	20.5	22.5	16.5	12.0	14.0	11.5	8.5	9.5	4.0	3.5	3.5
6	23.5	19.5	21.5	16.0	15.0	15.5	13.5	9.5	11.0	5.5	3.5	4.5
7	---	---	---	16.5	15.0	15.5	13.0	8.5	10.0	6.0	4.0	5.0
8	---	---	---	18.0	16.0	16.5	9.5	7.0	8.5	7.0	4.5	6.0
9	---	---	---	18.0	16.0	17.0	7.5	5.5	6.5	15.5	6.0	9.0
10	---	---	---	16.0	13.5	14.5	9.0	4.0	6.0	15.5	7.0	10.0
11	---	---	---	15.0	12.5	13.0	7.5	3.5	5.0	14.0	7.0	10.0
12	---	---	---	13.0	12.0	12.5	8.0	3.0	5.0	15.0	8.0	10.0
13	25.5	12.5	18.0	15.5	13.0	14.0	8.0	6.0	7.0	15.0	7.0	9.5
14	17.5	15.0	16.0	15.0	14.0	15.0	13.0	7.0	9.0	14.5	5.0	8.0
15	22.5	14.5	17.0	14.5	12.5	13.5	10.0	9.0	9.5	13.0	5.0	8.0
16	27.0	17.5	21.0	---	---	---	12.0	6.5	9.0	13.0	6.5	9.0
17	28.0	19.5	23.0	18.0	8.5	11.5	11.5	5.0	7.5	15.0	6.0	9.0
18	27.5	18.0	21.5	12.0	5.5	9.0	11.5	5.0	7.5	11.0	5.5	7.5
19	26.5	16.0	20.5	16.5	10.0	13.0	14.0	6.5	9.0	11.0	3.5	6.5
20	---	---	---	16.0	12.5	14.5	14.0	7.0	9.5	10.5	4.5	7.0
21	---	---	---	12.5	10.0	11.5	12.5	6.0	8.0	9.5	7.0	8.0
22	---	---	---	10.0	9.0	9.5	11.5	4.5	7.0	7.0	3.5	5.5
23	---	---	---	10.5	9.0	9.5	9.0	4.5	6.5	9.5	2.0	5.0
24	---	---	---	12.5	10.0	11.0	11.0	5.5	7.5	9.0	3.5	5.5
25	---	---	---	13.5	12.0	12.5	10.0	4.5	6.5	12.0	4.0	7.0
26	---	---	---	15.0	13.5	14.0	9.5	4.0	6.5	15.5	7.0	10.0
27	15.0	11.5	13.0	15.0	13.0	14.0	7.5	6.0	7.0	14.5	7.5	10.5
28	16.0	11.0	13.0	13.0	12.0	12.5	8.0	7.5	8.0	12.5	8.0	9.5
29	20.0	12.0	15.0	12.0	11.0	11.5	9.0	7.5	8.5	8.0	4.5	7.0
30	20.0	15.5	17.5	---	---	---	9.0	8.0	8.5	12.0	3.0	6.0
31	20.5	13.5	16.5	---	---	---	9.5	8.0	8.5	11.5	3.5	6.5
MONTH	28.0	11.0	19.0	24.0	5.5	13.5	14.5	3.0	8.0	15.5	2.0	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.5	4.5	8.5	5.0	1.5	3.0	---	---	---	---	---	---
2	---	---	---	1.5	.5	1.0	---	---	---	---	---	---
3	---	---	---	5.5	.0	2.5	---	---	---	---	---	---
4	---	---	---	12.0	3.0	6.0	20.0	14.0	16.5	---	---	---
5	---	---	---	11.0	6.0	8.0	24.5	15.0	17.5	---	---	---
6	---	---	---	15.5	7.0	10.5	27.5	14.5	19.5	20.5	14.5	17.5
7	---	---	---	13.0	3.5	7.0	28.5	16.0	20.5	22.5	20.0	21.0
8	13.0	3.5	7.5	15.5	3.0	10.0	27.5	16.0	20.0	21.5	17.0	19.5
9	14.5	4.5	8.5	---	---	---	28.0	15.5	20.5	25.5	16.5	21.0
10	13.0	7.0	9.0	---	---	---	21.0	15.0	18.0	26.5	18.0	22.5
11	9.0	4.0	6.5	22.5	9.5	14.5	19.0	11.5	15.0	26.0	18.5	22.0
12	5.5	3.0	4.0	23.0	13.0	16.0	20.5	11.5	15.5	24.0	19.5	22.0
13	4.5	3.0	4.0	---	---	---	21.5	13.0	17.0	24.0	21.0	22.5
14	10.0	3.5	6.0	---	---	---	21.5	15.0	18.0	---	---	---
15	12.5	7.0	8.5	---	---	---	22.0	16.0	19.0	---	---	---
16	9.5	5.0	7.0	20.5	13.0	16.5	24.0	18.5	20.5	---	---	---
17	12.5	3.0	7.0	24.0	15.0	18.5	25.5	18.5	20.5	26.0	20.5	23.0
18	12.5	5.0	8.0	25.0	14.5	18.5	25.5	15.0	19.5	24.0	16.0	20.0
19	16.0	7.0	10.0	25.0	15.5	19.0	25.0	15.5	18.5	23.0	15.5	19.0
20	19.0	8.0	12.0	25.5	15.0	19.0	21.0	12.5	16.5	22.0	16.5	19.5
21	19.0	9.5	13.0	26.5	14.5	19.0	22.0	14.0	18.0	24.5	17.5	21.0
22	19.0	11.0	13.5	---	---	---	18.5	9.0	13.5	25.5	19.5	22.5
23	20.0	11.5	14.0	---	---	---	14.5	7.5	11.0	28.0	20.0	22.5
24	20.5	10.0	13.5	26.5	15.5	19.5	21.5	9.5	15.0	21.5	18.0	19.5
25	16.0	11.0	13.0	21.5	16.0	19.0	23.0	14.0	18.0	18.0	15.5	16.5
26	21.5	12.0	15.5	24.5	13.0	17.0	25.0	15.0	18.5	24.0	16.0	19.5
27	17.0	11.5	14.0	22.5	10.0	15.0	23.0	13.5	17.5	24.0	18.5	20.5
28	11.5	5.0	8.0	12.5	9.0	11.0	---	---	---	24.0	21.0	22.5
29	---	---	---	15.0	9.0	11.0	---	---	---	23.5	18.0	20.5
30	---	---	---	19.0	8.5	11.5	---	---	---	22.5	17.5	20.0
31	---	---	---	21.5	9.0	16.0	---	---	---	23.0	17.5	20.0
MONTH	21.5	3.0	9.5	26.5	.0	13.0	28.5	7.5	17.5	28.0	14.5	20.5

07311800 SOUTH WICHITA RIVER NEAR BENJAMIN, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.0	19.0	23.0	28.5	19.5	24.0	25.5	21.5	23.0	31.0	23.0	27.0
2	28.5	23.0	25.5	29.0	19.5	25.0	24.5	21.5	22.5	30.5	23.0	27.0
3	27.5	23.5	25.5	27.0	19.5	23.0	24.5	23.0	24.0	30.5	23.0	26.5
4	25.0	18.0	22.0	30.5	23.0	26.0	28.0	24.0	25.5	31.5	22.0	27.0
5	22.5	17.5	19.5	32.5	23.5	28.0	29.5	26.5	28.0	31.0	22.5	27.5
6	26.0	21.0	23.5	31.0	24.5	28.0	31.0	28.0	29.5	30.5	23.5	27.0
7	30.0	25.0	27.0	32.0	25.0	28.5	31.5	28.5	30.0	28.5	23.0	25.5
8	30.0	26.5	28.0	32.5	25.0	29.0	32.0	28.5	30.0	25.0	20.0	22.5
9	30.5	25.5	27.5	33.5	25.0	29.5	30.5	27.5	29.0	22.5	17.5	19.0
10	27.5	18.5	24.0	34.0	26.0	30.0	---	---	---	23.5	18.5	21.0
11	21.5	14.0	18.0	33.0	26.0	30.0	---	---	---	25.5	20.0	23.0
12	24.0	18.5	21.0	33.0	26.0	29.5	---	---	---	29.0	20.5	25.0
13	27.5	22.0	24.5	32.5	26.5	29.0	---	---	---	29.0	20.0	24.5
14	28.5	22.5	25.5	31.5	26.0	28.5	---	---	---	27.0	23.5	25.0
15	28.5	22.5	25.0	32.5	25.5	28.0	32.5	26.0	29.5	25.0	22.0	23.0
16	28.5	22.0	25.0	32.5	25.0	28.0	32.0	26.0	28.5	28.0	21.5	25.0
17	27.5	22.0	25.0	32.5	25.5	28.5	31.5	25.5	28.0	27.5	24.5	25.5
18	27.0	21.5	24.5	31.0	24.5	26.5	31.5	24.5	28.0	25.5	23.0	24.0
19	29.5	21.5	25.5	26.5	22.0	25.0	32.5	24.5	28.0	23.0	19.5	22.0
20	29.5	22.0	26.0	32.0	25.0	27.5	32.5	25.5	28.5	24.0	18.5	21.5
21	28.5	22.5	26.0	32.0	26.5	29.0	32.5	25.5	28.5	22.5	14.0	17.5
22	27.0	23.0	25.5	33.5	26.0	29.5	32.0	24.5	28.0	18.5	12.0	15.0
23	27.5	24.0	25.5	32.5	24.0	29.0	31.5	24.5	28.0	20.0	14.0	17.0
24	27.5	20.5	23.5	29.0	24.5	27.0	31.5	23.5	27.5	20.5	17.0	18.5
25	30.0	21.5	25.5	29.0	27.0	28.0	30.0	23.0	26.5	20.0	16.5	18.0
26	29.5	23.5	26.5	28.0	26.5	27.0	31.5	24.0	27.5	20.0	15.5	17.5
27	31.5	22.5	27.5	26.5	25.0	25.5	31.0	23.5	27.5	24.0	18.5	21.0
28	33.5	24.0	28.5	26.5	24.0	25.5	30.5	24.0	27.5	26.0	22.0	24.0
29	28.5	23.0	26.0	27.5	26.0	26.5	31.0	23.5	27.0	27.0	22.5	25.0
30	25.0	20.5	23.0	27.0	25.5	26.5	31.0	23.5	27.0	27.0	22.0	24.5
31	---	---	---	27.0	25.0	26.0	30.5	23.0	27.0	---	---	---
MONTH	33.5	14.0	24.5	34.0	19.5	27.5	32.5	21.5	27.5	31.5	12.0	23.0
YEAR	34.0	.0	17.5									

07312000 LAKE KEMP NEAR MABELLE, TX

LOCATION.--Lat 33°45'30", long 99°09'03", Baylor County, Hydrologic Unit 11130206, in outlet gate tower near center of dam on Wichita River, 6.2 mi north of Mabelle, 13 mi northeast of Seymour, and 126.7 mi upstream from mouth.

DRAINAGE AREA.--2,086 mi².

PERIOD OF RECORD.--October 1922 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1972, nonrecording gage at different site and at datum 2.40 ft higher.

REMARKS.--The lake is formed by a rolled earthfill dam 8,890 ft long. The original dam was completed Aug. 25, 1923, but deliberate impoundment had begun Oct. 1, 1922. Enlargement of the dam was completed in November 1973. The 3,000-foot-wide uncontrolled spillway is located approximately 600 ft to right and slightly upstream from right end of dam. The controlled outlet works near center of dam consist of two hydraulically operated slide gates 5 ft 8-in by 13 ft with a 13-foot-diameter conduit and spillway basin. The dam and lake are owned by the city of Wichita Falls and the Wichita County Water Improvement District No. 2. Water is used for irrigation in the Wichita River Valley, oil field operation, municipal, and industrial uses. The capacity table is based on a resurvey made in 1973. Satellite telemeter at station. Figures given herein represents total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,183.0	-
Crest of spillway	1,160.0	603,000
Top of flood-control pool	1,156.0	502,900
Top of conservation pool	1,144.0	268,000
Lowest gated outlet (invert)	1,090.0	1,400

COOPERATION.--Capacity table No. 4-C was provided by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 420,900 acre-ft June 30, 1941 (elevation, 1,152.0 ft), present datum; minimum since first appreciable storage, 26,160 acre-ft June 30, 1953 (elevation, 1,108.0 ft), present datum.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 368,300 acre-ft Aug. 8 at 1600 hours (elevation, 1,149.74 ft); minimum daily contents, 174,900 acre-ft Oct. 7 (elevation, 1,136.89 ft).

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

1108.0	26,160	1136.0	166,200	1142.0	238,200
1118.0	58,000	1138.0	186,700	1147.0	317,700
1128.0	108,000	1140.0	210,900	1152.0	407,600

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	177700	198300	220500	223400	223100	218700	215300	211700	274700	294900	285200	277800
2	177000	198400	221000	223100	223100	217900	215200	211800	275500	293700	295200	277000
3	177000	198800	221400	222900	222700	217300	215700	210900	274400	290100	312200	276500
4	176700	200800	222200	223300	224200	217400	215600	211400	285000	287300	331100	276200
5	175700	205600	221300	223500	222600	217300	215000	211700	299700	285800	347800	275700
6	175100	207100	221300	223000	223000	217500	215300	214400	313200	284800	359700	274700
7	176600	207000	221300	223300	222500	216100	215200	220200	330100	283400	366000	273300
8	177600	208400	221700	223400	223000	216100	215600	223900	340800	282900	367700	272200
9	177600	207900	222100	223700	222900	215800	215300	226300	343200	281900	366200	273000
10	177200	208000	221900	223800	222500	215300	214200	227000	345200	281100	362700	272300
11	177000	207700	221300	222900	221700	215800	213700	227300	349300	280500	358700	273100
12	176600	208100	222100	222700	221400	216200	213400	227100	351300	280300	354500	274100
13	176400	208100	221800	222600	221900	216000	213300	228000	353000	279400	349800	275500
14	176200	208000	222200	221900	222300	216300	213300	227000	353700	279400	345800	275000
15	175700	208100	222200	221400	222200	216700	212800	227300	352100	278700	340800	274900
16	175600	207700	222100	221100	222500	217300	213600	228400	349100	278400	336300	274700
17	175500	208400	222600	221500	222200	217200	214000	229400	346500	277300	331500	273900
18	175600	208100	222200	222300	222100	217400	213800	228500	343200	277400	327200	274700
19	175200	211600	223100	222600	222700	217900	213400	228400	340000	277400	322700	279000
20	179500	212400	223000	222600	222500	216900	214200	228000	336000	277800	318200	280200
21	187200	216100	222500	222600	222500	217200	214000	227800	332400	277800	313700	280000
22	191700	218600	223000	222600	222100	216600	213400	228100	328600	277800	310100	277800
23	193100	219700	222600	222700	221800	216700	213600	229200	324700	277900	306300	274900
24	193800	219400	222500	222600	221100	216500	213400	229100	321800	276600	302200	272200
25	196200	219900	222600	222700	220700	218100	213000	237200	318100	276600	298400	270200
26	197400	220500	222500	223300	220900	217000	212600	243700	314900	276200	294700	268500
27	198200	220900	222700	222700	220500	216500	212200	251500	310600	275800	291100	268500
28	198600	220300	223800	222600	219100	215800	212500	257100	307700	275800	287600	268500
29	198200	220900	223500	222700	---	215800	212200	262400	303300	274600	283400	268000
30	198400	220600	223400	223000	---	215700	212200	266900	298800	274100	279500	267100
31	198200	---	223800	222600	---	215400	---	271400	---	273900	277400	---
MAX	198600	220900	223800	223800	224200	218700	215700	271400	353700	294900	367700	280200
MIN	175100	198300	220500	221100	219100	215300	212200	210900	274400	273900	277400	267100
(+)	1138.99	1140.73	1140.97	1140.88	1140.62	1140.34	1140.10	1144.21	1145.90	1144.37	1144.59	1143.94
(@)	+19600	+22400	+3200	-1200	-3500	-3700	-3200	+59200	+27400	-21900	+3500	-10300

CAL YR 1994 MAX 243000 MIN 175100 (@) +14800
WTR YR 1995 MAX 367700 MIN 175100 (@) +88500

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

07312100 WICHITA RIVER NEAR MABELLE, TX

LOCATION.--Lat 33°45'36", long 99°08'33", Baylor County, Hydrologic Unit 11130206, near left bank at downstream side of bridge on U.S. Highways 183 and 283, 0.3 mi downstream from Lake Kemp Dam, 6.2 mi north of Mabelle, and 13 mi northeast of Seymour.

DRAINAGE AREA.--2,086 mi², all of which is above Lake Kemp Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1952-58 (occasional discharge measurements), October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,062.72 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Lake Kemp (station 07312000) 0.3 mi upstream. Water is released from Lake Kemp to supply Lake Diversion, 12.5 mi downstream. Water from Lake Diversion is released for mining, recreation, and for irrigation in the vicinity of Wichita Falls.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	1.2	1.4	1.5	1.5	127	70	70	171	2190	101	e110
2	162	1.2	1.4	1.5	1.5	127	69	68	560	2190	16	e110
3	161	1.2	1.4	1.5	1.6	127	70	68	809	2180	2.4	e110
4	162	3.0	1.4	1.5	1.5	125	72	68	750	2180	2.1	e110
5	161	3.4	1.4	1.4	1.6	126	70	68	29	e1660	2.0	109
6	160	1.5	1.5	1.4	1.6	126	71	33	2.5	e700	1.9	200
7	142	1.4	1.5	1.5	1.7	128	70	14	1.8	399	1.8	257
8	107	1.4	1.6	1.4	1.6	127	69	3.3	1.5	397	262	255
9	106	1.5	1.7	1.6	1.5	97	70	1.9	1.5	396	1440	257
10	106	1.4	1.6	52	1.6	125	71	1.9	2.3	396	2120	258
11	106	1.4	1.5	157	1.8	126	72	1.8	3.3	232	2700	260
12	106	1.4	1.4	158	1.7	126	72	1.6	1.4	135	2700	259
13	106	1.4	1.5	158	1.6	127	72	1.7	1.4	130	2710	261
14	105	1.4	1.5	158	1.6	101	71	1.8	1.4	126	2700	260
15	105	1.5	1.5	158	1.7	63	71	1.8	617	126	2690	260
16	106	1.4	1.5	60	1.8	67	72	1.6	1790	126	2690	258
17	105	1.4	1.5	1.8	1.8	68	72	1.5	1810	125	2680	256
18	77	1.4	1.4	1.9	1.8	68	71	1.5	1810	124	2670	257
19	60	1.5	1.4	1.6	1.8	66	73	1.6	2010	126	2670	269
20	59	1.3	1.5	1.4	78	68	71	1.6	2240	126	2660	631
21	20	1.4	1.5	1.4	127	68	73	1.4	2240	126	2520	1070
22	1.5	1.5	1.5	1.5	127	68	75	1.4	2230	126	2220	1250
23	1.4	1.5	1.5	1.5	130	70	74	1.9	2230	126	2190	1600
24	1.4	1.4	1.5	1.4	129	70	72	1.8	2230	127	2190	1590
25	1.6	1.4	1.5	1.4	126	70	72	24	2220	126	2180	1590
26	1.4	1.4	1.5	1.4	124	69	73	4.3	2220	50	2180	e1140
27	1.3	1.4	1.5	1.4	125	70	73	11	2210	44	2170	e497
28	1.3	1.4	1.5	1.4	127	71	72	1.9	2210	136	2170	e255
29	1.3	1.5	1.5	1.5	---	70	71	2.4	2210	139	2160	e255
30	1.4	1.5	1.6	1.5	---	70	70	2.0	2200	140	2150	e191
31	1.4	---	1.5	1.5	---	70	---	1.6	---	141	e1050	---
TOTAL	2398.0	45.7	46.2	936.9	1124.3	2881	2144	466.3	34813.1	15345	53999.2	14185
MEAN	77.4	1.52	1.49	30.2	40.2	92.9	71.5	15.0	1160	495	1742	473
MAX	162	3.4	1.7	158	130	128	75	70	2240	2190	2710	1600
MIN	1.3	1.2	1.4	1.4	1.5	63	69	1.4	1.4	44	1.8	109
AC-FT	4760	91	92	1860	2230	5710	4250	925	69050	30440	107100	28140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

MEAN	136	112	41.4	64.9	67.3	149	168	154	320	322	288	177
MAX	952	1271	247	648	769	659	659	1246	1810	923	1742	915
(WY)	1987	1987	1987	1992	1992	1968	1968	1990	1992	1967	1995	1986
MIN	.66	.39	.42	.60	.51	.50	.89	6.53	2.59	140	30.9	1.66
(WY)	1985	1974	1974	1979	1979	1989	1981	1977	1989	1975	1978	1974

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995	
ANNUAL TOTAL	37872.54		128384.7			
ANNUAL MEAN	104		352		167	
HIGHEST ANNUAL MEAN					522	1987
LOWEST ANNUAL MEAN					59.9	1981
HIGHEST DAILY MEAN	760	Aug 7	2710	Aug 13	3530	Jun 24 1992
LOWEST DAILY MEAN	.96	Mar 28	1.2	Nov 1	.09	May 8 1989
ANNUAL SEVEN-DAY MINIMUM	1.1	Mar 16	1.3	Oct 28	.14	May 7 1989
INSTANTANEOUS PEAK FLOW			2720	Aug 12	4290	Mar 24 1976
INSTANTANEOUS PEAK STAGE			8.35	Aug 12	10.47	Mar 24 1976
ANNUAL RUNOFF (AC-FT)	75120		254700		121200	
10 PERCENT EXCEEDS	242		2050		412	
50 PERCENT EXCEEDS	99		70		12	
90 PERCENT EXCEEDS	1.2		1.4		.73	

e Estimated

07312100 WICHITA RIVER NEAR MABELLE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: December 1965 to May 1993, October 1994 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to May 1993, October 1994 to current year.
WATER TEMPERATURE: July 1968 to May 1993, October 1994 to current year.

INSTRUMENTATION.--From 1968 to May 1993 daily samples collected manually, October 1994 to current year specific conductance and temperature continuously recorded on an hourly basis by automatic monitors.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 7,110 microsiemens May 13, 14, 1980; minimum daily, 561 microsiemens May 28, 1975.
WATER TEMPERATURE: Maximum, 34.1°C Aug. 5, 1995; minimum daily, 0.0°C Dec. 20, 1973, Feb. 9, 17, 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 5,320 microsiemens Feb. 12, 13; minimum, 793 microsiemens May 22.
WATER TEMPERATURE: Maximum, 34.1°C Aug.5; minimum, 5.1°C Feb. 12.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 29...	1230	1.4	5100	8.0	11.0	960	770	250	81
JAN 20...	1325	0.55	5070	7.9	16.5	940	750	250	77
MAR 16...	1230	67	5080	8.2	10.5	1000	940	280	78
APR 26...	1215	71	5020	8.2	17.5	950	860	250	80
JUN 14...	1057	1.4	4870	7.7	24.0	980	800	260	80
AUG 09...	1055	1720	3770	8.3	28.0	780	680	210	61

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
NOV 29...	800	11	6.8	190	740	1200	0.40	9.5	3200
JAN 20...	710	10	7.2	190	750	1100	0.40	10	3020
MAR 16...	690	9	9.8	78	870	1100	0.30	7.3	3080
APR 26...	790	11	8.1	93	900	1000	0.30	6.6	3090
JUN 14...	720	10	6.2	180	750	1100	0.40	9.4	3030
AUG 09...	510	8	7.3	94	640	800	0.30	8.2	2290

07312100 WICHITA RIVER NEAR MABELLE, TX--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	2398.0	4790	2940	19100	1100	7160	720	4640	860
NOV.	1994	45.7	4680	2880	355	1100	133	700	87	850
DEC.	1994	46.2	4960	3050	381	1200	144	740	92	890
JAN.	1995	936.9	4870	2990	7570	1100	2850	730	1840	880
FEB.	1995	1124.3	4960	3050	9260	1200	3500	740	2240	890
MAR.	1995	2881	5050	3100	24100	1200	9160	750	5830	900
APR.	1995	2144	5000	3080	17800	1200	6750	740	4310	900
MAY	1995	466.3	4790	2950	3710	1100	1400	720	902	860
JUNE	1995	34813.1	4180	2570	242000	940	88500	640	60200	770
JULY	1995	15345	3960	2430	101000	880	36600	610	25300	740
AUG.	1995	53999.2	3340	2060	300000	730	105800	530	76900	640
SEPT	1995	14185	3570	2190	84000	780	29900	560	21400	670
TOTAL		128384.7	**	**	809000	**	292000	**	204000	**
WTD.AVG.		352	3790	2330	**	840	**	590	**	710

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5220	5160	5190	4840	4730	4790	5000	4950	4970	5140	5090	5120
2	5170	5110	5130	4870	4830	4850	4960	4930	4950	5140	5100	5130
3	5110	5060	5080	4860	4770	4820	4930	4900	4920	5160	5080	5140
4	5060	5010	5030	4840	3450	4330	4920	4900	4910	5200	5100	5170
5	5010	4920	4970	3620	3190	3320	4930	4910	4920	5200	5110	5170
6	4940	4890	4920	4350	3370	4070	4920	4860	4910	5160	5080	5130
7	4900	4690	4850	4500	4290	4440	4880	4760	4870	5170	5110	5150
8	4850	4810	4830	4550	4480	4510	4880	4790	4860	5160	5110	5150
9	4810	4750	4780	4690	4550	4610	4790	4700	4720	5160	5100	5140
10	4760	4710	4740	4790	4680	4730	4760	4710	4730	5160	4850	5050
11	4720	4650	4690	4840	4770	4800	4850	4760	4810	4850	4780	4840
12	4670	4620	4650	4930	4830	4890	4890	4710	4870	4850	4790	4840
13	4630	4580	4610	4930	4850	4890	4900	4730	4880	4850	4830	4850
14	4620	4590	4610	4910	4870	4890	4910	4750	4890	4860	4810	4850
15	4620	4600	4610	4930	4880	4910	4930	4770	4910	4860	4840	4850
16	4620	4600	4610	4970	4900	4930	4940	4850	4920	4870	4830	4860
17	4620	4590	4610	4980	4940	4960	4970	4890	4950	4980	4710	4880
18	4630	4600	4620	4980	4950	4970	4990	4950	4980	5000	4920	4960
19	4640	4600	4630	4960	4890	4940	4990	4940	4970	4980	4910	4960
20	4640	3320	3830	4890	4810	4860	4980	4940	4960	5040	4960	5010
21	3720	1430	2000	4890	4840	4870	5030	4920	5000	5110	5030	5070
22	2380	1760	2050	4940	4880	4910	5060	5010	5040	5180	4850	5140
23	3200	2380	2760	4960	4940	4960	5080	4960	5050	5190	5140	5180
24	3810	3200	3540	4960	4940	4950	5100	5010	5070	5190	5120	5170
25	4010	3810	3970	4960	4900	4940	5120	5080	5110	5200	5120	5170
26	4120	3440	3870	4950	4880	4940	5140	5050	5120	5170	5070	5140
27	4200	3660	3940	4930	4900	4910	5130	5110	5120	5180	5100	5140
28	4500	4200	4380	4960	4920	4950	5120	5080	5110	5190	5100	5160
29	4610	4500	4550	4990	4950	4970	5160	5100	5130	5220	5140	5200
30	4630	4520	4580	5000	4970	4990	5170	5120	5160	5230	5150	5210
31	4740	4520	4690	---	---	---	5160	5080	5120	5220	5120	5190
MONTH	5220	1430	4370	5000	3190	4760	5170	4700	4970	5230	4710	5070

07312100 WICHITA RIVER NEAR MABELLE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5210	5120	5170	5040	4870	4970	5040	5010	5020	4980	4940	4960
2	5200	5090	5170	5050	4620	4860	5030	5000	5010	4960	4930	4950
3	5210	4540	5150	5050	4990	5030	5010	4940	5000	4950	4900	4930
4	5230	4870	5120	5050	4890	5040	5000	4990	5000	4940	4920	4930
5	5240	4860	5140	5050	5000	5040	5010	4990	5000	5110	4920	5030
6	5260	5150	5230	5060	4950	5040	5000	4970	4990	---	---	5080
7	5250	5230	5240	5090	5020	5080	4990	4960	4970	---	---	e5060
8	5270	5150	5250	5090	5050	5080	5030	4950	4980	---	---	e5050
9	5260	4910	5240	5100	5070	5080	5040	5010	5020	---	---	e5040
10	5240	5220	5230	5100	4920	5060	5020	4990	5010	---	---	e5020
11	5300	5230	5260	5050	4890	4960	5030	5000	5020	---	---	e5000
12	5320	5290	5310	5060	4980	5040	5010	4990	5010	---	---	e5000
13	5320	5250	5290	5050	5010	5040	5010	4970	4990	---	---	e5000
14	5310	5240	5280	5040	5000	5030	5000	4960	4980	---	---	e4990
15	5250	5100	5200	5040	4950	5000	5010	4990	5000	---	---	e4980
16	5230	5130	5210	5140	4980	5080	5000	4800	4980	---	---	4980
17	5220	5130	5200	5150	5130	5140	4990	4950	4980	5100	4980	5030
18	5210	5100	5170	5140	5120	5130	5000	4970	4990	5140	5050	5110
19	5200	5100	5170	5130	5090	5120	5020	5000	5010	5140	4990	5080
20	5190	4210	4890	5130	5110	5120	5030	5010	5020	5150	5020	5100
21	5000	4930	4970	5140	5110	5120	5040	5010	5030	5130	5020	5090
22	4980	4950	4970	5120	5110	5110	5040	5000	5030	5120	5000	5080
23	5050	4640	4830	5120	5110	5110	5040	5030	5030	5110	3150	4750
24	5050	4740	5010	5110	5080	5100	5040	5020	5030	5040	3810	4660
25	5020	5000	5020	5090	4970	5070	5040	5000	5020	5160	793	3140
26	5020	4990	5000	5070	5050	5060	5040	5020	5030	4520	1200	3260
27	5020	4950	5010	5060	5040	5050	5040	5010	5030	3860	845	2460
28	5030	4620	4850	5050	5040	5050	5020	4990	5000	4880	3690	4530
29	---	---	---	5050	5040	5040	5000	4960	4980	4970	2720	4190
30	---	---	---	5050	5040	5040	4990	4970	4980	4640	3270	3970
31	---	---	---	5040	5020	5030	---	---	---	5000	4240	4680
MONTH	5320	4210	5130	5150	4620	5060	5040	4800	5000	5160	793	4710

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4810	4460	4700	4010	3460	3670	4430	1340	3410	---	---	e3150
2	4790	4630	4710	4080	3580	3820	2990	1310	2190	---	---	e3300
3	4930	4660	4850	4100	3760	3940	3810	2990	3430	---	---	e3400
4	5090	1340	4590	4130	3830	4010	4000	3810	3890	---	---	e3450
5	4590	986	3130	4160	3850	4020	4110	3920	4020	---	---	3500
6	4770	4020	4410	4150	3830	4050	4270	4080	4200	3720	3470	3620
7	4920	4530	4750	4090	3870	4000	4390	4230	4320	3780	3510	3620
8	5000	4770	4900	4020	3930	3980	4510	3890	4300	3560	3500	3540
9	5030	4860	4940	4000	3840	3950	3920	3270	3760	3610	3540	3580
10	5080	1810	4520	3970	3850	3930	3770	3590	3690	3620	3540	3600
11	4790	1960	4110	3970	3690	3870	3680	3560	3610	3590	3170	3450
12	4910	4530	4760	4000	3870	3930	3670	3520	3580	3700	3120	3490
13	4990	4750	4890	4040	3960	4000	3620	3420	3520	3790	3340	3600
14	5040	4860	4950	4170	4040	4110	3570	3440	3500	3760	3600	3710
15	5080	4230	4730	4260	4170	4190	3610	3410	3520	3670	3440	3600
16	4380	4210	4290	4260	4200	4230	3460	3360	3420	3550	2270	3090
17	4410	4260	4340	4260	4220	4240	3450	3340	3400	3720	2800	3670
18	4410	4240	4310	4330	4230	4250	3440	3330	3390	3700	3660	3680
19	4330	4200	4270	4300	4240	4270	3400	3330	3360	3660	3530	3630
20	4270	4210	4250	4310	4240	4270	3360	3270	3320	3680	3560	3630
21	4260	4210	4240	4290	4220	4260	3320	3210	3270	3690	3490	3600
22	4260	4160	4210	4310	4210	4250	3300	3200	3250	3610	3430	3540
23	4220	4160	4200	4310	4240	4270	3260	3150	3210	3640	3490	3590
24	4210	4050	4130	4370	4270	4300	3190	3090	3130	3650	3540	3590
25	4080	3950	4050	4310	4260	4280	3160	3060	3120	3610	3530	3570
26	4080	3860	4000	5190	4310	4640	3170	3040	3120	3630	3550	3600
27	4000	3670	3920	5200	4240	4850	3170	3120	3140	3580	3410	3510
28	4100	3830	3960	4280	4240	4260	3160	3030	3080	3590	3480	3550
29	4100	3780	4010	4340	4260	4290	3170	2930	3060	3570	3520	3550
30	4040	3750	3930	4350	4320	4340	3170	2870	3000	3560	3490	3530
31	---	---	---	4430	4350	4390	---	---	3100	---	---	---
MONTH	5090	986	4370	5200	3460	4160	4510	1310	3430	3790	2270	3530
YEAR	5320	793	4540									

e Estimated

07312100 WICHITA RIVER NEAR MABELLE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.0	22.0	22.0	15.5	13.0	14.5	10.0	7.5	8.5	10.0	6.0	7.0
2	23.0	21.5	22.0	17.5	14.5	16.0	12.0	9.5	10.5	6.5	5.0	5.5
3	23.0	22.0	22.5	20.5	17.0	19.0	13.0	12.0	12.0	6.5	4.5	5.5
4	23.0	21.5	22.0	20.0	16.0	18.5	13.5	11.5	12.5	4.5	3.0	3.5
5	23.0	21.5	22.5	16.0	14.0	14.5	13.0	11.0	11.5	4.5	3.0	3.5
6	23.0	21.5	22.0	16.0	14.5	15.0	14.0	10.5	12.0	7.0	4.5	6.0
7	22.0	21.0	21.5	16.5	14.0	15.5	14.0	10.0	11.5	7.0	5.0	6.0
8	22.0	21.0	21.0	20.0	16.0	17.5	10.0	9.0	9.5	9.0	6.0	7.0
9	22.0	20.5	21.0	20.0	14.5	17.0	9.0	7.0	7.5	10.5	7.5	8.5
10	21.5	20.0	20.5	14.5	12.5	13.5	8.0	6.5	7.5	11.0	7.5	9.0
11	21.5	20.0	20.5	13.0	11.5	12.0	7.5	6.0	6.5	8.5	7.0	7.5
12	21.5	20.0	20.5	13.0	12.0	12.5	7.5	5.5	6.5	8.0	7.0	7.5
13	21.0	20.0	20.0	16.5	13.0	14.5	7.5	7.0	7.5	8.0	7.0	7.5
14	20.0	19.5	20.0	17.0	14.5	16.0	10.0	7.5	8.5	8.0	7.0	7.5
15	20.5	19.5	19.5	14.5	12.0	13.0	10.0	9.5	10.0	8.5	7.5	8.0
16	21.0	20.0	20.0	12.0	10.0	11.0	10.5	9.5	10.0	12.0	7.5	9.5
17	21.0	20.0	20.5	15.0	11.5	13.0	10.0	8.0	9.0	12.0	10.0	10.5
18	21.5	20.0	20.5	14.0	11.0	12.0	9.5	8.0	8.5	10.0	8.5	9.0
19	21.5	19.5	20.5	16.0	11.5	12.5	13.0	9.0	10.5	8.5	7.5	8.0
20	21.5	20.0	20.5	16.5	12.0	14.0	12.5	11.0	11.5	9.0	7.0	8.0
21	21.5	19.5	20.0	12.0	10.5	11.5	11.0	9.0	9.5	9.0	7.5	8.5
22	20.5	19.0	19.5	11.5	9.5	10.5	9.5	7.5	8.5	7.5	5.5	6.5
23	20.0	18.0	19.0	9.5	8.5	9.0	8.5	7.0	7.5	7.0	5.0	5.5
24	19.5	19.0	19.0	11.0	9.0	9.5	8.0	7.5	7.5	8.0	6.0	7.0
25	19.0	14.0	16.0	11.0	10.5	10.5	7.5	5.5	6.0	9.5	7.0	8.0
26	14.0	12.5	13.5	13.5	10.5	11.5	8.0	5.5	6.5	13.0	9.5	11.0
27	14.5	13.0	14.0	14.0	12.0	13.5	9.5	7.5	8.0	12.5	9.5	11.0
28	15.0	14.5	14.5	12.0	9.0	10.0	9.5	9.5	9.5	11.5	9.5	10.0
29	16.0	14.5	15.0	9.5	7.5	8.5	10.0	9.5	9.5	9.5	6.5	7.5
30	17.5	16.0	16.5	9.0	7.0	8.0	9.5	8.0	8.5	8.0	6.0	6.5
31	18.0	15.5	17.0	---	---	---	11.5	8.5	9.5	8.5	6.5	7.5
MONTH	23.0	12.5	19.5	20.5	7.0	13.0	14.0	5.5	9.0	13.0	3.0	7.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.0	7.5	8.5	8.5	8.0	8.5	15.0	13.5	14.0	18.0	17.0	17.0
2	12.5	9.0	10.5	8.0	8.0	8.0	15.5	14.0	14.5	17.5	17.0	17.0
3	12.5	10.5	11.5	8.5	8.0	8.0	15.0	14.0	14.5	19.0	17.0	17.5
4	11.0	9.0	10.0	8.5	8.0	8.0	15.0	14.0	14.5	18.5	17.0	17.5
5	10.5	8.5	9.5	8.0	8.0	8.0	15.0	14.0	14.5	18.0	17.5	17.5
6	10.0	8.0	9.0	9.0	8.0	8.5	16.0	14.0	15.0	23.5	17.5	20.0
7	10.0	8.0	8.5	8.5	7.0	7.5	16.0	14.5	15.5	24.0	18.5	20.5
8	8.0	6.0	7.0	8.5	7.0	7.5	17.0	15.5	16.0	23.0	16.0	19.0
9	9.5	7.0	8.0	11.0	7.0	8.0	17.5	16.0	16.5	29.0	14.5	21.0
10	10.0	9.0	9.5	9.0	7.0	8.0	17.0	15.5	16.5	27.5	16.0	21.0
11	9.5	5.0	7.0	9.5	7.5	8.5	16.0	15.0	15.5	27.0	16.0	20.5
12	5.0	3.0	3.5	10.0	8.5	9.0	16.5	15.5	16.0	29.0	16.5	22.0
13	4.0	3.5	3.5	9.0	8.5	9.0	17.0	15.5	16.0	32.0	20.0	25.0
14	6.5	4.0	4.5	9.5	8.5	9.0	17.5	16.0	16.5	28.5	19.0	23.5
15	9.5	6.5	8.5	10.0	9.0	9.5	17.0	16.0	16.5	29.0	19.5	23.5
16	8.5	6.0	6.5	11.0	9.0	10.0	18.0	16.5	17.0	24.0	20.5	22.0
17	7.5	5.5	6.5	11.5	10.0	10.5	17.5	16.0	17.0	26.0	19.5	22.0
18	9.5	6.5	7.5	13.0	10.0	11.5	18.0	16.5	17.0	25.5	14.0	19.5
19	11.5	8.5	10.0	14.0	12.0	13.0	17.5	16.5	17.0	28.5	14.5	20.5
20	10.5	7.0	8.5	13.5	12.0	12.5	17.5	16.5	17.0	27.0	16.0	20.5
21	9.0	7.0	8.0	14.0	12.0	13.0	18.0	16.5	17.5	28.5	17.0	22.0
22	10.0	8.5	9.0	14.5	13.0	13.5	16.5	16.0	16.5	29.5	18.5	23.0
23	9.0	8.0	8.5	14.0	13.0	13.5	16.5	15.5	16.0	25.0	20.0	22.0
24	9.5	7.5	8.5	15.5	13.5	14.5	17.0	15.5	16.5	20.0	17.5	19.0
25	9.5	8.5	9.0	15.0	14.0	14.5	17.5	16.0	16.5	17.5	15.0	16.0
26	10.5	9.0	9.5	15.0	13.5	14.0	18.0	16.0	16.5	25.0	16.5	19.5
27	10.0	9.0	9.5	15.5	14.5	15.0	17.0	16.0	16.5	27.0	18.0	22.0
28	9.0	8.5	9.0	14.5	14.0	14.5	17.0	16.0	16.5	27.5	17.0	22.0
29	---	---	---	14.5	14.0	14.0	18.0	16.5	17.0	22.0	17.5	19.0
30	---	---	---	14.5	13.5	14.0	17.5	16.5	17.0	26.5	17.5	20.5
31	---	---	---	14.5	13.5	14.0	---	---	---	26.0	17.0	20.5
MONTH	12.5	3.0	8.0	15.5	7.0	11.0	18.0	13.5	16.0	32.0	14.0	20.5

07312100 WICHITA RIVER NEAR MABELLE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.0	17.0	20.0	26.0	25.5	25.5	27.5	24.0	26.0	---	---	---
2	22.0	21.0	21.5	26.0	25.0	25.5	27.5	22.5	24.5	---	---	---
3	22.0	21.5	21.5	25.5	25.0	25.5	26.5	21.5	23.5	---	---	---
4	21.5	18.5	21.0	25.5	25.0	25.5	29.5	22.0	25.5	---	---	---
5	27.5	18.0	22.0	26.0	25.5	25.5	34.0	22.0	27.5	---	---	---
6	31.0	18.5	24.0	26.0	25.0	26.0	32.5	22.5	27.0	28.0	27.0	27.5
7	31.0	20.5	25.5	26.5	25.0	25.5	33.0	22.0	27.0	28.0	27.0	27.5
8	29.5	21.0	25.0	26.5	25.0	26.0	33.0	22.5	26.5	27.5	27.0	27.0
9	31.0	21.5	25.0	27.5	25.5	26.5	28.0	27.0	27.5	27.0	26.0	26.5
10	23.0	19.5	20.5	27.5	25.5	26.5	28.0	27.5	27.5	26.0	25.5	26.0
11	27.0	18.5	22.0	26.5	25.5	26.0	28.5	27.5	28.0	26.0	25.5	25.5
12	30.0	17.0	23.0	26.5	25.5	26.0	28.5	27.5	28.0	26.0	25.0	25.5
13	30.0	18.0	23.5	26.5	25.5	26.0	28.5	28.0	28.0	25.5	25.0	25.5
14	30.0	19.0	24.0	26.5	25.0	25.5	28.5	28.0	28.0	25.5	25.0	25.0
15	27.5	19.0	23.0	26.5	25.0	25.5	28.5	27.5	28.0	25.5	25.0	25.0
16	25.0	24.0	24.5	27.0	25.5	26.5	28.5	27.5	28.0	25.5	25.0	25.0
17	24.5	24.0	24.0	27.5	26.0	26.5	28.5	27.5	28.0	25.5	25.0	25.5
18	24.5	23.5	24.0	27.5	25.5	27.0	28.5	27.5	28.0	25.5	25.0	25.0
19	25.0	24.0	24.5	27.0	25.5	26.5	28.5	28.0	28.0	25.0	24.5	25.0
20	25.5	24.5	25.0	27.5	25.5	26.5	28.5	28.0	28.0	24.5	24.5	24.5
21	26.0	24.5	25.0	28.0	26.0	27.0	28.5	28.0	28.0	24.5	23.0	24.0
22	26.0	25.5	25.5	28.5	25.5	27.0	28.5	28.0	28.0	23.0	22.5	23.0
23	26.0	25.0	25.5	28.0	25.5	27.0	28.5	28.0	28.0	22.5	22.0	22.0
24	26.0	25.0	25.5	27.5	25.0	26.5	28.5	28.0	28.0	22.0	21.5	22.0
25	26.5	25.5	26.0	28.5	27.0	27.5	29.0	28.0	28.5	21.5	21.0	21.0
26	26.5	26.0	26.5	31.5	24.0	28.0	29.0	28.5	28.5	21.5	21.0	21.0
27	26.5	26.0	26.5	30.0	21.0	25.5	29.0	28.5	28.5	22.0	21.0	21.0
28	27.5	26.0	26.0	28.0	27.0	28.0	29.0	28.5	28.5	22.0	20.5	21.0
29	26.0	26.0	26.0	28.0	27.0	27.5	29.5	28.5	29.0	22.0	20.5	21.5
30	26.0	26.0	26.0	28.0	27.0	27.5	29.0	28.0	28.5	22.0	21.5	21.5
31	---	---	---	27.5	27.0	27.5	---	---	---	---	---	---
MONTH	31.0	17.0	24.0	31.5	21.0	26.5	34.0	21.5	27.5	28.0	20.5	24.0
YEAR	34.0	3.0	17.0									

07312110 SOUTH SIDE CANAL NEAR DUNDEE, TX

LOCATION.--Lat 33°48'50", long 98°55'57", Archer County, Hydrologic Unit 11130206, on left bank, 125 ft downstream from Lake Diversion headgates, and 5.3 mi northwest of Dundee.

DRAINAGE AREA.--2,194 mi² (for Lake Diversion on Wichita River, provided by Wichita County Water Improvement District No. 2).

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

GAGE.--Water-stage recorder. Datum of gage is 1,039.70 ft above sea level (Wichita County Water Improvement District benchmark).

REMARKS.--Records good including those for estimated daily discharges. Records of discharge are of water released from Lake Diversion into a cannal system for mining, industrial, recreation, and irrigation use. Several observations of water temperature were made during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	43	.32	.12	.07	74	70	64	2.1	121	117	151
2	137	6.4	.32	.11	.09	74	72	65	2.5	122	119	149
3	133	5.9	.30	.08	.06	74	73	67	2.7	122	118	147
4	106	5.8	.30	.07	.07	77	56	67	3.1	122	117	146
5	104	5.6	.32	.02	.07	76	23	86	8.7	135	116	146
6	106	5.3	.32	.01	.08	76	21	48	41	154	115	145
7	101	4.9	.30	.00	.07	75	20	8.1	43	159	115	144
8	79	4.6	.32	.00	.10	77	20	8.1	44	158	114	145
9	55	4.9	.31	.00	.09	80	20	8.3	44	156	114	145
10	55	4.5	.30	.00	.14	89	25	3.3	46	174	115	146
11	55	4.2	.25	.01	.18	91	56	.81	45	199	118	142
12	55	4.4	.26	.10	.20	92	72	.91	44	209	120	121
13	65	5.0	.21	.19	.20	90	73	.85	45	220	120	120
14	81	4.2	.24	.14	.15	90	87	.90	45	218	121	119
15	82	4.2	.22	.13	.14	79	99	.91	45	217	120	119
16	83	4.0	.20	.19	.17	67	101	.99	45	216	120	119
17	83	4.0	.17	.22	.15	67	72	.98	46	206	119	119
18	83	4.6	.12	.24	.12	66	40	47	46	190	118	120
19	83	4.5	.08	.18	.10	67	42	82	46	188	116	121
20	85	2.8	.08	.19	.11	79	39	84	45	187	124	121
21	85	.94	.08	.20	.14	92	40	76	61	173	143	122
22	85	.63	e.07	.12	17	91	42	54	99	139	142	123
23	86	.61	e.07	.08	24	89	41	53	119	113	141	125
24	86	.54	e.07	.07	31	71	41	32	118	111	140	126
25	87	.42	e.07	.09	43	71	43	2.3	119	110	147	128
26	86	.36	e.07	.09	51	68	42	1.6	120	109	164	127
27	87	.32	e.07	.10	73	69	48	1.5	120	107	165	126
28	87	.33	.07	.08	74	71	66	1.6	121	105	165	124
29	87	.37	.05	.09	---	71	64	1.9	120	107	168	122
30	86	.38	.05	.07	---	72	65	2.2	121	106	156	120
31	86	---	.08	.07	---	71	---	2.2	---	107	141	---
TOTAL	2717	137.70	5.69	3.06	315.50	2396	1573	872.45	1807.1	4760	4028	3928
MEAN	87.6	4.59	.18	.099	11.3	77.3	52.4	28.1	60.2	154	130	131
MAX	138	43	.32	.24	74	92	101	86	121	220	168	151
MIN	55	.32	.05	.00	.06	66	20	.81	2.1	105	114	119
AC-FT	5390	273	11	6.1	626	4750	3120	1730	3580	9440	7990	7790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1995#, BY WATER YEAR (WY)

MEAN	67.7	11.5	13.6	20.3	13.6	23.6	59.5	73.7	124	204	183	119
MAX	141	41.0	76.3	66.1	52.2	77.3	150	218	240	344	282	219
(WY)	1978	1978	1978	1989	1975	1995	1972	1984	1984	1974	1980	1983
MIN	3.10	.000	.000	.000	.000	.000	2.56	17.6	20.1	124	50.8	45.2
(WY)	1977	1985	1985	1985	1985	1985	1979	1982	1982	1992	1989	1986

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1972 - 1995#	
ANNUAL TOTAL	30496.37		22543.50			
ANNUAL MEAN	83.6		61.8		76.6	
HIGHEST ANNUAL MEAN					120	1984
LOWEST ANNUAL MEAN					46.6	1989
HIGHEST DAILY MEAN	255	Aug 8	220	Jul 13	374	Jul 22 1974
LOWEST DAILY MEAN	.05	Dec 29	.00	Jan 7	.00	Oct 20 1973
ANNUAL SEVEN-DAY MINIMUM	.06	Dec 24	.01	Jan 5	.00	Oct 20 1973
INSTANTANEOUS PEAK FLOW			229	Jul 13	374	Jul 22 1974
INSTANTANEOUS PEAK STAGE			7.37	Aug 29		
ANNUAL RUNOFF (AC-FT)	60490		44720		55480	
10 PERCENT EXCEEDS	218		141		201	
50 PERCENT EXCEEDS	83		56		50	
90 PERCENT EXCEEDS	.24		.09		.22	

e Estimated
Period of regulated streamflow.

07312200 BEAVER CREEK NEAR ELECTRA, TX

LOCATION.--Lat 33°54'21", long 98°54'17", Wichita County, Hydrologic Unit 11130207, near right bank at downstream side of bridge on Farm Road 2326, 6.5 mi northwest of Kamay, 8 mi upstream from Wichita River, and 9 mi south of Electra.

DRAINAGE AREA.--652 mi².

PERIOD OF RECORD.--February 1960 to current year.
Water-quality records.--Chemical analyses: October 1968 to June 1970. Water temperatures: October 1968 to June 1970. Sediment records: April 1966 to September 1975.

GAGE.--Water-stage recorder. Datum of gage is 991.3 ft above sea level (Texas Department of Transportation reference point).

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation by Santa Rosa Lake (capacity, 11,570 acre-ft) about 30 miles upstream. There are several diversions above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1925, 36.0 ft, probably occurred Oct. 2, 1941 (partly caused by breaching of Santa Rosa Dam to avoid its failure), from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 8	0100	1,320	22.13	June 6	0830	8,420	33.51
May 26	0630	2,290	25.39	Aug. 3	0400	11,700	34.87
May 28	1330	2,820	26.64				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	5.0	7.3	7.5	6.2	5.8	6.1	5.1	797	31	317	e33
2	3.8	5.0	7.5	7.2	6.1	5.8	6.0	6.2	822	31	5400	e29
3	4.5	5.1	7.6	e7.2	6.0	5.9	6.2	6.1	730	31	10300	e26
4	4.0	260	7.7	e7.0	6.0	6.2	8.6	6.3	866	30	6400	e21
5	3.7	665	7.6	e6.9	5.9	6.3	6.4	6.4	6080	28	4000	e18
6	3.7	140	7.5	e6.8	6.1	6.3	5.4	199	7990	24	4660	e19
7	23	24	7.3	e6.9	6.1	e6.3	6.0	979	5490	23	3470	e16
8	59	8.9	7.8	e6.8	6.1	e6.3	5.1	985	4340	22	2180	e17
9	12	29	8.7	e6.9	6.0	6.2	4.7	224	4430	21	1360	e17
10	6.5	41	8.8	e6.8	6.0	4.6	5.4	47	3330	20	866	e19
11	4.9	9.7	7.5	e7.0	6.1	4.6	5.0	19	2870	19	530	e28
12	4.6	6.7	7.2	e6.7	6.1	6.0	4.5	12	2710	17	254	e36
13	4.5	6.2	7.1	6.2	5.9	15	4.4	9.6	949	16	154	e47
14	4.4	5.9	7.3	6.2	6.1	22	5.4	9.1	363	15	123	e28
15	4.7	5.7	7.6	6.3	6.0	28	4.9	11	248	14	108	e45
16	5.1	5.6	7.7	6.2	6.3	22	5.9	9.7	170	16	102	581
17	5.2	5.8	7.6	5.2	7.2	13	28	8.2	127	16	90	e409
18	7.7	6.1	7.6	7.2	8.1	8.1	30	7.2	103	16	75	e180
19	7.9	6.9	7.6	15	6.5	7.1	28	6.3	86	25	70	e490
20	28	88	7.5	8.6	6.0	5.7	62	6.8	74	25	65	e731
21	100	170	7.4	6.4	4.8	5.7	32	6.3	66	20	61	339
22	64	33	7.3	6.4	4.6	5.1	39	6.1	58	16	55	320
23	10	11	7.4	6.5	4.8	5.1	175	6.1	52	31	50	308
24	5.8	7.7	7.5	6.3	5.0	5.1	80	20	50	27	46	287
25	40	7.1	7.5	6.2	4.6	7.9	28	451	56	21	45	240
26	86	7.1	7.5	6.3	5.9	19	14	1950	47	15	45	206
27	17	7.2	7.4	6.4	6.1	13	9.5	1950	43	13	47	152
28	7.1	7.2	7.7	6.4	6.0	7.5	8.2	2780	40	13	e44	138
29	5.8	6.7	8.6	6.1	---	6.4	7.4	2720	37	12	e40	128
30	5.4	6.7	8.0	6.0	---	6.2	5.5	2370	35	12	e40	110
31	5.1	---	7.5	6.2	---	6.2	---	1120	---	12	e37	---
TOTAL	546.6	1593.3	236.3	213.8	166.6	278.4	636.6	15942.5	43059	632	41034	5018
MEAN	17.6	53.1	7.62	6.90	5.95	8.98	21.2	514	1435	20.4	1324	167
MAX	100	665	8.8	15	8.1	28	175	2780	7990	31	10300	731
MIN	3.2	5.0	7.1	5.2	4.6	4.6	4.4	5.1	35	12	37	16
AC-FT	1080	3160	469	424	330	552	1260	31620	85410	1250	81390	9950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

MEAN	121	39.4	30.7	21.3	52.4	78.7	63.3	149	158	65.8	76.3	117
MAX	1108	319	385	185	553	592	760	921	1435	727	1324	1107
(WY)	1987	1973	1992	1985	1993	1961	1990	1987	1995	1975	1995	1986
MIN	.14	.82	.71	.27	.84	.65	.89	3.10	3.37	1.84	1.35	1.14
(WY)	1964	1966	1971	1966	1963	1965	1982	1988	1966	1964	1983	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995	
ANNUAL TOTAL	8552.56		109357.1			
ANNUAL MEAN	23.4		300		82.0	
HIGHEST ANNUAL MEAN					300	1995
LOWEST ANNUAL MEAN					11.4	1983
HIGHEST DAILY MEAN	1070	Feb 22	10300	Aug 3	11000	May 29 1987
LOWEST DAILY MEAN	.80	Apr 1	3.2	Oct 1	.00	Jun 23 1960
ANNUAL SEVEN-DAY MINIMUM	1.7	Jan 16	4.8	Oct 11	.00	May 11 1962
INSTANTANEOUS PEAK FLOW			11700	Aug 3	11700	Mar 17 1961
INSTANTANEOUS PEAK STAGE			34.87	Aug 3	34.94	May 29 1987
ANNUAL RUNOFF (AC-FT)	16960		216900		59410	
10 PERCENT EXCEEDS	31		426		119	
50 PERCENT EXCEEDS	5.6		8.8		5.7	
90 PERCENT EXCEEDS	2.6		5.4		.73	

e Estimated

07312500 WICHITA RIVER AT WICHITA FALLS, TX

LOCATION.--Lat 33°54'34", long 98°32'00", Wichita County, Hydrologic Unit 11130206, near center of stream at downstream side of bridge on Beverly Drive in Wichita Falls, 4 mi upstream from Fort Worth and Denver Railway Co. bridge, 8.4 mi upstream from Holliday Creek, and 55.3 mi upstream from mouth.

DRAINAGE AREA.--3,140 mi², of which 2,086 mi² is above Lake Kemp Dam.

PERIOD OF RECORD.--February 1901 to January 1902 (monthly discharge only, published in WSP 1311, 1901 water year no longer used in computation of average discharge because of poor accuracy of record. October 1910 to December 1911 (gage heights only), March 1938 to current year.
Water-quality records.--Chemical analyses: April 1966 to July 1975. Chemical and biochemical analyses: November 1981 to August 1989. Sediment analyses: April 1966 to July 1975. Specific Conductance: October 1981 to September 1989. Water temperature: October 1981 to September 1989.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 924.26 ft above sea level. February 1900 to February 1902 and Oct. 1, 1910, to Dec. 31, 1911, nonrecording gages at site 4 mi downstream at different datum. Mar. 30, 1938, to Dec. 1, 1959, nonrecording gage at present site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow from 2,086 mi² above this station is regulated by Lake Kemp (capacity 603,000 acre-ft) 71 mi upstream. Since completion of Lake Kemp in 1923, no outflow has been permitted to pass over the spillway. Water is diverted from Lake Diversion (capacity 40,000 acre-ft) 41 mi upstream for the irrigation of 42,000 acres under permit in the vicinity of Wichita Falls. During the current water year, the Wichita County Water Improvement District No. 2 diverted 44,710 acre-ft from Lake Diversion for mining, industrial, irrigation, and for recreational uses. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 50,000 ft³/s June 8, 1915, computed by Vernon L. Sullivan, engineer for Big Wichita River Irrigation Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	56	31	29	24	46	70	33	2110	1820	368	1760
2	52	55	31	27	23	33	66	31	1150	1810	1950	1580
3	56	52	32	28	20	33	70	29	1080	1830	2730	966
4	62	161	31	31	18	33	84	29	1090	1880	3590	608
5	72	944	30	31	17	33	68	29	2840	1860	5310	443
6	76	892	29	32	18	35	53	188	3720	1790	6580	359
7	120	267	31	31	16	35	44	1360	4500	1700	6490	297
8	193	136	31	30	16	33	41	3190	5440	1350	e5760	256
9	181	105	41	30	16	30	41	2340	6080	911	e4900	221
10	122	81	36	29	15	34	36	563	6050	648	e3510	224
11	70	122	33	30	15	35	43	209	6310	525	e1710	254
12	47	87	33	29	15	26	49	128	5610	458	e1450	316
13	44	69	30	28	16	61	50	100	4540	396	e1600	351
14	43	61	29	27	16	101	15	75	3340	331	e1760	360
15	47	53	29	26	18	123	57	86	1000	264	e1910	323
16	51	48	29	27	19	96	79	94	612	244	e2060	399
17	56	47	29	27	18	82	136	68	494	240	e2130	901
18	52	45	28	42	17	58	154	54	626	215	e2130	698
19	51	48	27	41	16	43	102	50	1040	244	e2120	585
20	95	50	28	40	17	32	85	49	1330	246	e2120	1020
21	129	64	27	48	14	24	115	50	1500	433	e2120	1150
22	187	214	27	36	13	25	113	100	1660	276	e2120	776
23	179	114	26	30	12	53	122	107	1780	214	2100	886
24	107	64	27	28	9.8	93	228	195	1840	298	1980	1050
25	101	47	26	28	9.7	86	166	475	1860	201	1850	1280
26	121	42	27	32	10	82	101	2400	1870	184	1790	1440
27	171	40	27	32	23	91	55	2660	1870	168	1770	1540
28	110	35	29	28	56	93	44	2480	1860	158	1770	1440
29	77	32	34	26	---	83	40	2350	1860	152	1760	1150
30	63	31	32	24	---	78	37	2490	1840	141	1760	841
31	59	---	33	23	---	73	---	2560	---	145	1790	---
TOTAL	2848	4062	933	950	497.5	1783	2364	24572	76902	21132	80988	23474
MEAN	91.9	135	30.1	30.6	17.8	57.5	78.8	793	2563	682	2613	782
MAX	193	944	41	48	56	123	228	3190	6310	1880	6580	1760
MIN	43	31	26	23	9.7	24	15	29	494	141	368	221
AC-FT	5650	8060	1850	1880	987	3540	4690	48740	152500	41920	160600	46560

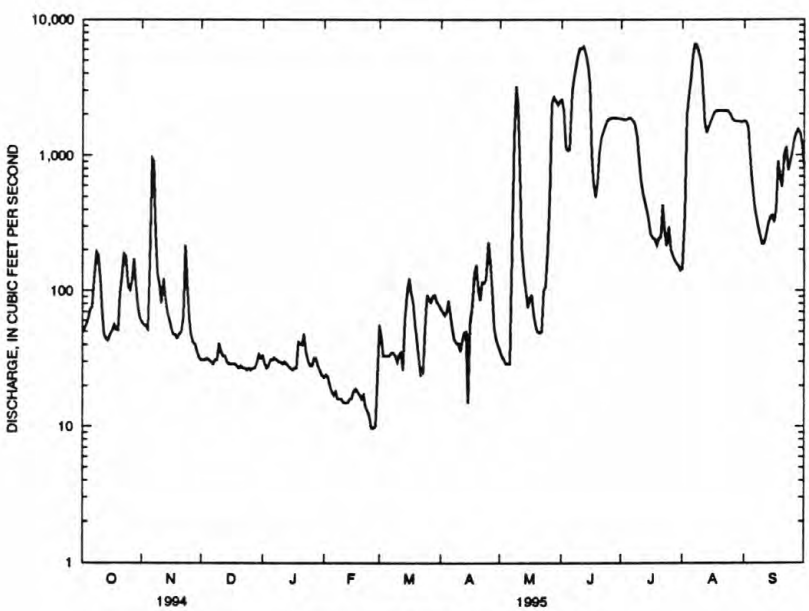
07312500 WICHITA RIVER AT WICHITA FALLS, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1995, BY WATER YEAR (WY)

MEAN	427	213	121	93.1	151	192	233	579	546	248	273	336
MAX	4017	1784	1091	859	1252	1412	1450	4105	4475	1201	2791	2619
(WY)	1942	1973	1992	1992	1992	1993	1990	1941	1941	1975	1950	1950
MIN	55.1	34.9	25.3	22.5	17.8	26.9	37.3	52.0	71.0	60.6	61.9	63.8
(WY)	1983	1982	1979	1974	1995	1975	1989	1988	1944	1986	1986	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1938 - 1995	
ANNUAL TOTAL	30615		240505.5			
ANNUAL MEAN	83.9		659		281	
HIGHEST ANNUAL MEAN					977	1941
LOWEST ANNUAL MEAN					64.3	1983
HIGHEST DAILY MEAN	1710	Feb 23	6580	Aug 6	17300	Oct 3 1941
LOWEST DAILY MEAN	14	Jan 1	9.7	Feb 25	7.7	Apr 9 1978
ANNUAL SEVEN-DAY MINIMUM	15	Jan 1	12	Feb 20	11	Mar 6 1975
INSTANTANEOUS PEAK FLOW			6730	Aug 6	17800	Oct 3 1941
INSTANTANEOUS PEAK STAGE			20.31	Aug 6	24.00	Oct 3 1941
ANNUAL RUNOFF (AC-FT)	60720		477000		203800	
10 PERCENT EXCEEDS	130		1960		594	
50 PERCENT EXCEEDS	58		84		84	
90 PERCENT EXCEEDS	23		26		36	

e Estimated



07312500 WICHITA RIVER AT WICHITA FALLS, TX
MEAN DAILY DISCHARGE (CFS)

07312700 WICHITA RIVER NEAR CHARLIE, TX

LOCATION.--Lat 34°03'11", long 98°17'47", Clay County, Hydrologic Unit 11130206, on right bank at upstream side of bridge on Farm Road 810, 3.0 mi southeast of Charlie, and 5.7 mi northwest of Petrolia.

DRAINAGE AREA.--3,439 mi², of which 2,086 mi² is above Lake Kemp Dam and 143 mi² is above Lake Wichita Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 872.71 ft above sea level.

REMARKS.--Records good. For statement regarding regulation and diversions, see station 07312500. Records furnished by the city of Wichita Falls show that 14,080 acre-ft was returned to river above this station as sewage effluent.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	105	58	62	44	84	82	74	2410	2220	569	2030
2	73	89	62	60	45	83	78	68	1890	2050	2050	2000
3	78	97	64	57	45	110	77	74	1280	1980	2840	1770
4	82	139	64	56	45	107	125	85	1210	1970	2800	1210
5	104	681	59	56	44	110	116	69	1700	1990	3270	838
6	110	1150	58	54	42	104	86	410	2840	1960	3970	641
7	132	859	59	49	45	101	67	1160	3540	1910	4750	542
8	405	352	63	47	46	91	57	2730	3750	1830	5320	480
9	290	199	72	49	49	89	51	3410	4170	1550	5550	431
10	226	149	110	51	51	84	48	2260	4920	1140	5450	400
11	153	121	79	49	49	82	53	671	5960	884	4880	418
12	101	149	67	49	46	90	54	359	6160	734	2940	566
13	68	121	65	49	47	168	55	256	6020	651	1890	530
14	67	105	64	48	47	398	60	209	5750	583	2020	546
15	70	101	58	45	49	458	40	186	5140	501	2190	542
16	73	87	59	44	50	282	90	205	3050	421	2300	650
17	78	78	60	48	53	183	265	196	1180	413	2350	734
18	84	71	63	52	59	146	291	155	934	393	2360	1230
19	79	69	60	115	49	115	261	138	1010	468	2350	981
20	110	97	60	80	46	96	364	125	1390	425	2320	1040
21	135	121	60	58	44	91	165	136	1620	867	2310	1420
22	196	98	58	62	44	83	133	166	1700	663	2310	1360
23	253	250	57	60	41	89	172	232	1780	480	2300	1050
24	230	151	57	55	39	98	163	789	1870	454	2280	1190
25	166	105	56	50	40	110	266	681	2010	476	2170	1410
26	224	82	53	52	40	110	192	2360	2040	360	2080	1630
27	167	74	57	84	39	103	125	2490	2060	334	2040	1730
28	221	76	60	69	39	101	92	2540	2140	307	2020	1790
29	152	68	66	51	---	99	83	2350	2440	266	2020	1670
30	119	61	90	48	---	92	75	2260	2480	197	2020	1370
31	109	---	71	44	---	87	---	2350	---	234	2030	---
TOTAL	4427	5905	1989	1753	1277	4044	3786	29194	84444	28711	85749	32199
MEAN	143	197	64.2	56.5	45.6	130	126	942	2815	926	2766	1073
MAX	405	1150	110	115	59	458	364	3410	6160	2220	5550	2030
MIN	67	61	53	44	39	82	40	68	934	197	569	400
AC-FT	8780	11710	3950	3480	2530	8020	7510	57910	167500	56950	170100	63870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	388	325	206	182	269	392	340	586	732	314	334	454
MAX	2032	2194	1556	1005	1411	1832	2377	3094	2815	1330	2766	2598
(WY)	1987	1973	1992	1992	1992	1993	1990	1990	1995	1992	1995	1986
MIN	101	63.2	51.5	46.1	45.6	70.2	61.2	103	135	92.5	111	111
(WY)	1971	1982	1979	1974	1995	1972	1989	1988	1994	1972	1994	1994

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	50927		283478			
ANNUAL MEAN	140		777		377	
HIGHEST ANNUAL MEAN					986	1987
LOWEST ANNUAL MEAN					125	1983
HIGHEST DAILY MEAN	1620	Feb 24	6160	Jun 12	7740	May 7 1990
LOWEST DAILY MEAN	37	Feb 15	39	Feb 24	24	Feb 4 1989
ANNUAL SEVEN-DAY MINIMUM	38	Feb 13	40	Feb 22	29	Jan 30 1974
INSTANTANEOUS PEAK FLOW			6230	Jun 12	7760	May 7 1990
INSTANTANEOUS PEAK STAGE			22.77	Jun 12	25.80	May 7 1990
ANNUAL RUNOFF (AC-FT)	101000		562300		273000	
10 PERCENT EXCEEDS	245		2310		934	
50 PERCENT EXCEEDS	100		138		143	
90 PERCENT EXCEEDS	52		49		65	

07312700 WICHITA RIVER NEAR CHARLIE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1967 to September 1981, October 1989 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1981.
WATER TEMPERATURE: October 1967 to September 1981.

EXTREMES FOR PERIOD OF DAILY RECORD
SPECIFIC CONDUCTANCE: Maximum daily, 10,000 microsiemens Apr. 25, 1972; minimum daily, 384 microsiemens Aug. 16, 1971.
WATER TEMPERATURE: Maximum daily, 34.5°C July 25, 1981; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC											
06...	1010	59	4370	8.1	12.0	11.0	107	0.9	940	750	220
FEB											
02...	0910	46	4260	8.6	8.5	15.6	139	1.7	810	640	190
APR											
13...	0855	54	3810	8.6	16.0	12.2	128	3.4	760	630	180
MAY											
25...	1025	440	1830	7.5	20.0	5.8	66	3.1	350	270	92
AUG											
10...	1050	5680	755	7.7	28.5	5.0	67	1.4	180	93	48
23...	0835	2310	3730	8.0	29.0	7.3	99	1.1	730	640	190

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC											
06...	94	640	9	8.7	190	520	1100	0.70	6.9	2720	3.38
FEB											
02...	82	540	8	9.8	170	440	1000	0.70	1.4	2390	3.65
APR											
13...	76	550	9	8.9	130	510	880	0.60	0.20	2300	2.32
MAY											
25...	30	230	5	7.6	79	230	400	0.30	4.9	1050	0.840
AUG											
10...	14	74	2	6.8	85	85	120	0.20	14	414	0.130
23...	63	510	8	7.7	98	610	800	0.30	9.2	2250	0.150

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
DEC										
06...	3.38	0.020	3.40	3.40	<0.015	--	0.40	0.920	0.940	2.9
FEB										
02...	3.65	0.050	3.70	3.70	0.030	0.57	0.60	0.960	0.930	2.9
APR										
13...	2.32	0.080	2.40	2.40	0.020	0.48	0.50	0.650	0.670	2.1
MAY										
25...	0.840	0.030	0.870	0.870	0.100	0.30	0.40	0.280	0.280	0.86
AUG										
10...	0.130	0.010	0.140	0.140	0.060	0.34	0.40	0.070	0.070	0.21
23...	--	<0.010	0.150	0.150	0.040	0.26	0.30	0.020	0.020	0.06

07314000 LAKE KICKAPOO NEAR ARCHER CITY, TX

LOCATION.--Lat 33°39'47", long 98°46'43", Archer County, Hydrologic Unit 11130209, on intake tower near left end of dam on North Fork Little Wichita River, 8.2 mi south of Mankins, and 9.2 mi northwest of Archer City.

DRAINAGE AREA.--275 mi².

PERIOD OF RECORD.--February 1946 to current year. Prior to October 1965, end of month contents only.
Water-quality records.--Chemical analyses: October 1969 to September 1984.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by City of Wichita Falls). Prior to Oct. 8, 1946, water-stage recorder at same site and datum. Non-recording gage read twice daily prior to Feb. 17, 1974, once daily thereafter.

REMARKS.--The lake is formed by a rolled earthfill dam 8,200 ft long, including a 483-foot-wide reinforced concrete ogee-type uncontrolled spillway near right end of dam. The dam was completed Dec. 15, 1945, and storage began Feb. 1, 1946. The service outlet consists of two gate-controlled 4- by 5-foot conduits. The dam and lake are owned by the City of Wichita Falls, which uses the water for their municipal supply. The capacity table is based on U.S. Geological Survey topographic maps, dated 1929. The capacity curve, dated November 1946, was entitled "Lake Kickapoo Area & Capacity Curve". Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	1,062.0	--
Design flood (2-foot freeboard)	1,060.0	221,000
Crest of spillway	1,045.0	106,000
Lowest gated outlet (invert)	1,000.92	0

COOPERATION.--Capacity curve, record of lake elevations, and diversions for municipal use are provided by the city of Wichita Falls.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 134,300 acre-ft Aug. 2, 1950 (elevation, 1,049.2 ft); minimum observed since first filling in July 1950, 35,660 acre-ft June 30, 1953 (elevation, 1,029.8 ft).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 108,600 acre-ft Aug. 6 (elevation, 1045.4 ft); minimum daily contents, 78,700 acre-ft May 4-6 (elevation, 1,040.4 ft).

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

1,030.0	36,200	1,042.0	87,700	1,048.0	126,000
1,038.0	66,500	1,044.0	99,700	1,049.0	132,900
1,040.0	76,500	1,046.0	112,500	1,050.0	140,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84850	87700	87130	85420	83710	82000	80350	79250	99090	106000	102200	102800
2	84850	87700	87130	85420	83710	82000	80350	79250	99090	105400	104700	102800
3	84850	87700	87130	85420	83710	82000	80350	79250	99700	105400	106000	102800
4	84850	87130	87130	85420	83710	82000	80350	78700	99090	105400	107300	102800
5	84280	88290	86560	85420	83140	82000	80350	78700	100300	105400	107900	102200
6	84280	88290	86560	85420	83710	82000	80350	78700	100300	104700	108600	102200
7	84280	87700	86560	84850	83140	81450	79800	81450	101000	104700	107900	102200
8	84850	88290	86560	84850	83140	80900	80350	82000	101600	104700	107900	101600
9	84850	88290	86560	84850	83710	81450	79800	81450	102200	104700	107900	101600
10	83710	88290	86560	84280	83140	81450	80350	90060	102200	104700	107300	101000
11	83710	88290	86560	84850	82570	81450	80350	89470	106000	104700	107300	101600
12	83710	87700	85990	84280	82570	80900	79800	89470	104700	104100	107300	101000
13	84280	87700	85990	84850	82570	80900	79250	89470	106000	104100	106600	101600
14	83710	88290	85990	84280	82570	81450	79250	89470	106000	103500	106600	101600
15	83710	88290	85990	84280	82570	79800	79800	89470	106000	103500	106600	101000
16	83710	88290	85990	84850	82000	82000	79250	89470	106000	103500	106000	101600
17	83710	88290	85990	84280	82570	82000	80350	90060	106000	103500	106000	101000
18	84280	88290	85990	84280	82570	82000	80900	90060	105400	102800	106000	101000
19	84280	88880	85420	84280	82570	82000	80350	88880	107900	103500	106000	101600
20	84850	88290	85420	84280	82570	81450	80900	88880	107300	102800	105400	101600
21	85420	87700	85420	84280	82570	81450	80350	88880	107300	102800	104700	101600
22	87130	87700	85420	84280	82000	81450	80350	90060	107300	102800	104100	101000
23	87130	87130	85420	84850	82000	80900	79800	89470	107300	103500	104700	101000
24	87130	87130	85420	84280	82000	81450	79800	90650	107300	102200	104100	101000
25	87130	87130	84850	84280	82000	81450	79800	91240	106600	101600	104100	101600
26	87700	87130	85420	84280	82000	81450	79800	95430	106600	102200	104100	101600
27	88290	87130	85420	84850	82000	81450	79250	97260	106600	102200	103500	101600
28	88290	87700	85420	84850	82000	80900	79250	98480	106600	101000	103500	101600
29	88290	87130	85420	84850	---	80900	79250	98480	106000	101000	103500	101600
30	87700	87130	85420	83710	---	80350	79250	99090	106000	100300	103500	101600
31	87700	---	85420	83710	---	80350	---	98480	---	100300	103500	---
MAX	88290	88880	87130	85420	83710	82000	80900	99090	107900	106000	108600	102800
MIN	83710	87130	84850	83710	82000	79800	79250	78700	99090	100300	102200	101000
(+)	1042.0	1041.9	1041.6	1041.3	1041.0	1040.7	1040.5	1043.8	1045.0	1044.1	1044.6	1044.3
(@)	+2850	-570	-1710	-1710	-1710	-1650	-1100	+19230	+7520	-5700	+3200	-1900
(++)	1162	1198	1112	1076	808	1017	951	648	1102	1303	1138	1189

CAL YR 1994 MAX 99700 MIN 83710 (@) -10620 (++) 12200
WTR YR 1995 MAX 108600 MIN 78700 (@) +16750 (++) 12704

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.
(++) Diversions, in acre-feet, for municipal use by the City of Wichita Falls, and for wholesale customer use.

07314500 LITTLE WICHITA RIVER NEAR ARCHER CITY, TX

LOCATION.--Lat 33°39'45", long 98°36'46", Archer County, Hydrologic Unit 11130209, on left bank at downstream side of bridge on State Highway 79, 1.5 mi downstream from confluence of North and Middle Forks, and 4.8 mi north of Archer City.

DRAINAGE AREA.--481 mi², of which 275 mi² is above Lake Kickapoo.

PERIOD OF RECORD.--May 1932 to January 1956, August 1966 to current year.
Water-quality records.--Chemical analyses: January 1953 to January 1956. Water temperatures: January 1953 to January 1956. Sediment records: May 1968 to September 1975.

REVISED RECORDS.--WSP 827: 1932-35. WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 934.72 ft above sea level. Aug. 17, 1954, to Jan. 6, 1956, nonrecording gage at present site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation by Lake Kickapoo (station 07314000) on North Fork Little Wichita River. Records furnished by the city of Wichita Falls show that 12,704 acre-ft was diverted from Lake Kickapoo for municipal use and wholesale customers during the current year.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--13 years (water years 1933-45) 110 ft³/s (79,700 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1933-45).--Maximum discharge, 17,900 ft³/s Oct. 31, 1941 (gage height, 21.80 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1930 reached a stage of about 28 ft, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	e.74	.73	2.0	.12	.02	.28	.12	16	.32	209	.04
2	.01	e.77	.73	1.3	.28	.02	.27	.06	28	.32	902	.03
3	.00	e.77	.75	.80	.28	.02	.26	.06	11	.33	961	.03
4	.00	e.74	.76	.62	.28	.02	.26	.07	4.4	.28	216	.02
5	.02	e.74	.74	.52	.26	.02	.24	1.9	225	.24	44	.00
6	.02	e.70	.72	.45	.26	.01	.24	290	392	.24	27	.00
7	e17	e.70	.70	.39	.24	.00	.24	439	156	.21	16	.00
8	e24	e.81	1.0	.33	.23	.00	.24	729	36	.18	7.7	.00
9	e4.1	e66	96	.33	.21	.00	.21	597	11	.17	3.8	.00
10	e1.1	e35	99	.32	.17	.00	.25	66	71	.15	1.7	.00
11	e.77	e8.2	36	.31	.17	.00	.27	11	690	.09	.77	.00
12	e.74	e2.0	12	.28	.17	.00	.21	3.7	1610	.07	.37	.00
13	e.74	e1.2	6.3	.26	.17	.03	.17	1.7	1580	.07	.33	.00
14	e.70	e.88	4.5	.26	.17	7.6	.11	1.0	696	.03	.30	.00
15	e.70	e.83	3.1	.26	.16	172	.01	1.7	121	.00	.29	.00
16	e.67	e.83	2.5	.25	.13	119	.02	2.0	73	.00	.26	.00
17	e.70	e.80	2.3	.26	.12	21	270	1.1	44	.00	.25	.00
18	e.67	e.83	1.9	.44	.06	6.8	108	.51	23	.00	.26	.00
19	e.64	e.80	1.6	40	.06	3.1	13	.37	12	.00	.23	.02
20	e.64	e.84	1.3	27	.07	1.7	16	.37	6.6	.00	.18	1.5
21	e82	e33	1.1	5.4	.07	.94	7.2	.40	1.6	.13	.13	1.1
22	e115	18	.99	2.1	.06	.65	2.4	.36	.55	.32	.12	.30
23	e25	4.7	1.2	.95	.05	.82	2.1	1.8	.79	.36	.08	.16
24	e9.2	2.8	.87	.44	.04	.51	3.8	176	.70	.32	.07	.16
25	e4.6	1.9	.71	.48	.03	.36	2.1	275	3.0	.29	.06	.15
26	e2.4	1.4	.62	.37	.01	.35	.92	885	2.2	.26	.05	.96
27	e1.3	1.1	.55	.33	.02	.32	.50	628	1.4	.21	.06	1.6
28	e.80	.98	.54	.29	.02	.28	.32	176	.50	.17	.03	.61
29	e.77	1.2	.72	.29	---	.28	.23	43	.42	.10	.06	.21
30	e.77	1.0	2.5	.30	---	.28	.11	17	.38	.07	.06	.04
31	e.77	---	3.8	.28	---	.28	---	9.0	---	.05	.05	---
TOTAL	295.86	190.26	286.23	87.61	3.91	336.41	429.96	4358.22	5817.54	4.98	2392.21	6.93
MEAN	9.54	6.34	9.23	2.83	.14	10.9	14.3	141	194	.16	77.2	.23
MAX	115	66	99	40	.28	172	270	885	1610	.36	961	1.6
MIN	.00	.70	.54	.25	.01	.00	.01	.06	.38	.00	.03	.00
AC-FT	587	377	568	174	7.8	667	853	8640	11540	9.9	4740	14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1995#, BY WATER YEAR (WY)

MEAN	59.5	16.2	23.3	14.6	23.3	42.1	42.9	168	126	24.3	48.2	70.5
MAX	771	160	194	154	176	309	637	1224	944	282	1337	624
(WY)	1982	1987	1992	1990	1993	1990	1990	1982	1985	1950	1950	1989
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1953	1946	1946	1953	1947	1950	1971	1984	1953	1974	1967	1954

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1946 - 1995#	
ANNUAL TOTAL	4379.84		14210.12			
ANNUAL MEAN	12.0		38.9		54.5	
HIGHEST ANNUAL MEAN					252	1990
LOWEST ANNUAL MEAN					2.49	1984
HIGHEST DAILY MEAN	504	May 14	1610	Jun 12	9550	Aug 2 1950
LOWEST DAILY MEAN	.00	Jan 28	.00	Oct 3	.00	Oct 31 1945
ANNUAL SEVEN-DAY MINIMUM	.00	Mar 19	.00	Sep 5	.00	Oct 31 1945
INSTANTANEOUS PEAK FLOW			1770	Jun 12	20100	May 16 1989
INSTANTANEOUS PEAK STAGE			22.76	Jun 12	27.03	May 16 1989
ANNUAL RUNOFF (AC-FT)	8690		28190		39450	
10 PERCENT EXCEEDS	14		41		66	
50 PERCENT EXCEEDS	.35		.51		.32	
90 PERCENT EXCEEDS	.00		.02		.00	

e Estimated
Period of regulated streamflow.

07314800 LAKE ARROWHEAD NEAR HENRIETTA, TX

LOCATION.--Lat 33°45'51", long 98°22'17", Clay County, Hydrologic Unit 11130209, at intake tower near center of dam on Little Wichita River, 2.3 mi upstream from Lake Creek, 11 mi southwest of Henrietta, and 12.3 mi southeast of Wichita Falls.

DRAINAGE AREA.--822 mi².

PERIOD OF RECORD.--June 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.40 ft below sea level.

REMARKS.--The lake is formed by a rolled earthfill dam 15,900 ft long, including an uncontrolled reinforced concrete ogee spillway 1,581 ft wide located near the left end of dam. The dam was completed in December 1966 and storage began in June 1967. The service outlet works, located in a cylindrical service tower at upstream side of dam, consist of two gated 5-foot-diameter inlets that can be used for controlled releases. The dam was built by the city of Wichita Falls to impound water for municipal, industrial, and recreational uses. The area-capacity curves are based on U.S. Geological Survey topographic maps. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and lake are given in the following table:

	Gage height (feet)	Capacity (acre-feet)
Top of dam	944.4	-
Design flood	939.95	551,400
Crest of spillway (top of conservation pool)	926.4	262,100
Lowest gated outlet (invert)	874.1	-

COOPERATION.--Capacity table provided by Homer Hunter and Associates and Biggs and Mathews, Consulting Engineers, for the city of Wichita Falls. Area-capacity curves provided by Homer Hunter and Associates. Record of diversions provided by the city of Wichita Falls.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 287,500 acre-ft May 4, 1990 (gage height, 927.92 ft); minimum since first appreciable storage, 4,640 acre-ft Aug. 31 to Sept. 4, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 267,400 acre-ft June 14 at 1600 hours (gage height, 926.72 ft); minimum, 188,100 acre-ft Oct. 7 (gage height, 921.32 ft).

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

921.0	183,900	924.0	225,200	927.0	272,000
922.0	197,000	925.0	240,100	928.0	288,900
923.0	210,800	926.0	255,700		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191000	214700	216300	e218700	219200	216000	219900	218300	251300	261500	253500	250800
2	190800	214700	216300	e218900	219000	215700	219000	218200	251000	261100	258100	250700
3	190400	214900	216300	e218900	218600	216400	220200	217900	251300	260500	261300	250500
4	190500	214700	216600	e218900	218400	215900	220300	218400	251600	260300	263200	249700
5	190100	215300	216200	e219000	218900	215700	220300	220300	252200	259200	263100	249400
6	189600	215300	216400	e219000	218300	215700	220200	221500	254100	258400	262800	248800
7	191600	215000	216000	e219000	218200	215900	220500	225300	254400	258400	262300	247900
8	191400	215300	216900	e219200	218300	216000	220300	228600	254100	257800	261600	247100
9	191200	215000	217900	e219200	218000	215700	219700	231200	254100	257900	261100	246900
10	191000	215300	218300	e219300	218000	215600	219400	232400	255900	257500	260500	246600
11	191000	215300	218700	e218700	217300	215700	219200	232700	258400	256000	259900	246800
12	190700	215000	218700	218700	217300	216600	219400	233000	262600	255700	259100	246300
13	190400	216200	219000	218000	217200	217600	219000	232600	265700	254900	258400	247700
14	190100	216300	219300	218000	217900	219300	218400	232400	266900	254600	258100	247500
15	190000	217000	219200	218300	217400	220500	218700	232400	266200	253600	257300	247700
16	189900	217000	219400	217900	217400	221700	219700	232400	264700	253600	257000	247500
17	194100	217000	219000	218300	217700	222100	220300	232700	263900	252900	256500	247900
18	196500	217200	219000	219300	217000	222400	220300	232000	263400	253000	255900	248000
19	199100	216700	219200	219300	217400	222200	221200	231500	262800	253500	255900	247500
20	202800	217700	219200	219700	217300	222100	221500	230800	262800	252500	255400	246900
21	207000	216900	218700	219200	217600	222100	220300	230800	262400	252900	254900	245800
22	210900	216700	218700	219000	217400	221800	220300	230500	263300	252700	254400	246100
23	212900	217200	218600	219400	217200	221500	220600	231800	262800	252400	254100	245800
24	213700	216700	218600	219300	217300	221200	220600	232000	261900	251900	253600	245100
25	215000	216700	218600	219300	217200	221700	219400	239800	261800	251900	253600	246300
26	215300	216900	e218600	219300	217000	221400	219300	246000	261600	251600	253300	246100
27	215900	216700	e218600	219300	216600	220900	219000	249300	261100	251000	253000	246000
28	215900	216400	e218600	218200	216000	220000	219200	250400	260800	250500	252700	246300
29	215500	216300	e218600	218900	---	220300	218700	250700	262100	250200	252100	246000
30	215700	216200	e218700	218900	---	219900	218400	251100	261500	246300	251800	245200
31	215300	---	e218700	219000	---	220200	---	251400	---	248600	251400	---
MAX	215900	217700	219400	219700	219200	222400	221500	251400	266900	261500	263200	250800
MIN	189600	214700	216000	217900	216000	215600	218400	217900	251000	246300	251400	245100
(+)	923.32	923.38	923.56	923.58	923.37	923.66	923.54	925.73	926.36	925.51	925.73	925.33
(@)	+24100	+900	+2500	+300	-3000	+4200	-1800	+33000	+10100	-12900	+2800	-6200
(++)	754	355	364	417	640	832	870	1124	1129	2143	1896	1223

CAL YR 1994 MAX 223100 MIN 189600 (@) -1600 (++) 12682
WTR YR 1995 MAX 266900 MIN 189600 (@) +54000 (++) 11747

e Estimated
(+) Gage height, in feet, at end of month.
(@) Change in contents, in acre-feet.
(++) Diversions, in acre-feet, for municipal use by the City of Wichita Falls, and for wholesale customer use.

07314900 LITTLE WICHITA RIVER ABOVE HENRIETTA, TX

LOCATION.--Lat 33°49'36", long 98°14'23", Clay County, Hydrologic Unit 11130209, on right bank at downstream side of bridge on U.S. Highways 822 and 287, 1.0 mi downstream from Duck Creek, 2.8 mi west of Henrietta, 6.6 mi upstream from Turkey Creek, and 7.6 mi upstream from Dry Fork Little Wichita River.

DRAINAGE AREA.--1,037 mi².

PERIOD OF RECORD.--January 1953 to current year. Prior to October 1974, published as "near Henrietta".
Water-quality records.--Chemical analyses: December 1952 to January 1956, November 1959 to September 1966. January 1968 to September 1985.

REVISED RECORDS.--TX-93-1: Daily discharge.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 831.57 ft above sea level. Prior to June 26, 1953, nonrecording gage. Prior to July 11, 1975, at site 2.6 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair. Flow largely regulated by Lake Arrowhead, 39 mi upstream (capacity, 262,100 acre-feet). The city of Wichita Falls diverted 12,704 acre-ft from Lake Kickapoo and 11,747 acre-ft from Lake Arrowhead for municipal uses, and returned 14,076 acre-ft as sewage effluent and filter plant wash water to the Wichita River below station 07312500 at Wichita Falls and above station 07312700 near Charlie. The city of Henrietta diverted 428 acre-ft from pool at gage for municipal use. Records of diversions were furnished by the cities of Wichita Falls and Henrietta.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--13 years (water years 1954-66) prior to completion of Lake Arrowhead, 124 ft³/s (89,840 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1954-66).--Maximum discharge, 6,390 ft³/s May 2, 1957; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 21 ft at former site, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	7.0	1.8	3.4	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	1.3	1.7	674	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.03	8.3	361	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	45	206	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	5.2	36	207	.00
6	.00	.87	.00	.00	.00	.00	.00	7.0	158	15	236	.00
7	.00	1.1	.00	.00	.00	.00	.00	18	351	6.9	214	.00
8	4.8	.04	2.5	.00	.00	.00	.00	214	156	1.9	159	.00
9	.74	.00	34	.00	.00	.00	.00	154	43	.19	131	.00
10	.00	.00	12	.00	.00	.00	.00	61	34	.33	85	8.0
11	.00	.00	.51	.00	.00	.00	.00	21	325	.61	39	17
12	.00	.00	.00	.00	.00	.00	.00	5.2	220	.73	19	20
13	.00	.00	.00	.00	.00	.00	.14	.02	193	.33	13	21
14	.00	2.8	.00	.00	.00	9.0	.00	.00	489	.19	8.8	18
15	.00	4.8	.00	.00	.00	49	.00	.00	841	.41	6.3	14
16	.00	.00	.00	.00	.00	4.4	.40	.00	954	.29	5.9	.27
17	29	.00	.00	.00	.00	.00	1.6	.00	709	.00	3.7	.00
18	7.2	.00	.00	.00	.00	.00	1.3	.00	453	.00	1.5	.00
19	.00	.00	.00	.00	.00	.00	1.1	.00	283	12	.00	.00
20	12	2.2	.00	.00	.00	.00	1.6	.00	188	11	.00	.00
21	63	4.5	.00	.00	.00	.00	4.5	.00	114	5.1	.00	.00
22	19	.03	.00	.00	.00	.00	2.5	.00	65	2.1	.00	.00
23	.16	.00	.00	.00	.00	.00	1.4	.00	37	.60	.00	.00
24	.00	.00	.00	.00	.00	.00	.62	.00	22	.01	.00	.00
25	11	.00	.00	.00	.00	.00	.00	320	12	.00	.00	.00
26	5.7	.00	.00	.00	.00	.00	.00	1640	4.6	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	1030	.84	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	383	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	.00	67	1.8	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	29	7.9	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	15	---	.00	.00	---
TOTAL	152.60	16.34	49.01	0.00	0.00	62.40	15.16	3964.22	5675.67	150.49	2373.60	98.27
MEAN	4.92	.54	1.58	.000	.000	2.01	.51	128	189	4.85	76.6	3.28
MAX	63	4.8	34	.00	.00	49	4.5	1640	954	45	674	21
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	303	32	97	.00	.00	124	30	7860	11260	298	4710	195

07314900 LITTLE WICHITA RIVER ABOVE HENRIETTA, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995#, BY WATER YEAR (WY)

MEAN	31.8	13.8	25.4	16.2	31.9	93.3	93.7	237	225	33.3	5.96	55.5
MAX	329	141	251	131	275	937	2169	2272	1652	549	76.6	549
(WY)	1982	1987	1992	1992	1987	1990	1990	1982	1992	1992	1995	1989
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1968	1967	1967	1967	1967	1967	1971	1971	1977	1968	1967	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995#	
ANNUAL TOTAL	1125.80		12557.76			
ANNUAL MEAN	3.08		34.4		71.9	
HIGHEST ANNUAL MEAN					498	1990
LOWEST ANNUAL MEAN					2.30	1978
HIGHEST DAILY MEAN	86	May 26	1640	May 26	10500	May 3 1990
LOWEST DAILY MEAN	.00	Jan 1	.00	Oct 1	.00	Oct 16 1966
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 19 1966
INSTANTANEOUS PEAK FLOW			1800	May 26	14200	May 3 1990
INSTANTANEOUS PEAK STAGE			20.39	May 26	24.96	May 3 1990
ANNUAL RUNOFF (AC-FT)	2230		24910		52100	
10 PERCENT EXCEEDS	11		41		57	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

Period of regulated streamflow.

07315200 EAST FORK LITTLE WICHITA RIVER NEAR HENRIETTA, TX

LOCATION.--Lat 33°48'46", long 98°05'05", Clay County, Hydrologic Unit 11130209, at downstream side of bridge on U.S. Highway 82, 5.8 mi upstream from Little Wichita River, 6.4 mi east of Henrietta, and 8.9 mi west of Ringgold.

DRAINAGE AREA.--178 mi².

PERIOD OF RECORD.--November 1963 to current year.

REVISED RECORDS.--WDR TX-72-1: 1966(M).

GAGE.--Water-stage recorder. Datum of gage is 825.32 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. There are no known diversions upstream from this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1941 reached a stage of 28.8 ft, from information by local residents.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 15	2200	860	17.06	June 12	1506	549	14.57
May 08	0730	845	16.96	Aug. 3	2241	776	16.45
May 26	0030	1,740	20.73				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.69	2.3	5.5	2.3	.89	2.2	3.0	e29	.91	.73	.03
2	.01	.60	2.2	3.9	2.0	.90	2.2	3.1	e22	.93	373	.02
3	.01	.53	2.2	3.2	1.8	.93	2.4	3.6	e16	.88	711	.02
4	.00	.61	1.9	2.5	1.7	.93	122	3.6	e11	.84	363	.01
5	.00	.87	1.7	2.2	1.5	.94	105	3.6	e8.3	.78	45	.01
6	.00	.88	1.6	2.1	1.5	.93	25	43	e6.9	.74	7.7	.01
7	.14	.77	1.6	2.0	1.4	1.5	13	341	e5.3	.75	2.7	.01
8	1.0	.69	8.2	1.9	1.2	1.0	8.5	797	e4.0	1.2	1.1	.01
9	.38	4.3	203	1.9	1.2	.87	5.9	744	e3.0	1.4	.75	.01
10	.28	4.1	190	1.9	1.2	.86	32	257	4.8	1.0	.53	.02
11	.21	2.8	84	1.8	1.2	.89	47	26	311	.87	.40	.06
12	.17	1.4	29	1.7	1.1	.93	17	13	508	.78	.37	.06
13	.13	1.1	14	1.7	1.1	13	11	8.7	80	.68	.26	.10
14	.10	278	9.8	1.6	1.1	110	7.3	6.7	17	.63	.22	1.3
15	.07	821	7.4	1.6	1.2	178	5.0	5.0	8.8	.62	.19	1.4
16	.05	496	6.2	1.6	1.1	76	19	3.9	5.2	.57	.18	.64
17	.37	28	4.8	1.6	1.2	28	115	3.5	3.6	.51	.17	.39
18	1.1	13	4.2	2.5	1.1	15	74	2.8	2.7	.51	.17	.25
19	.96	8.1	3.5	4.2	1.1	10	74	2.3	2.1	1.2	.16	.21
20	4.4	293	3.1	5.2	1.1	7.5	29	2.1	1.8	.98	.15	.18
21	111	470	2.6	3.6	1.0	5.8	16	1.9	1.5	.75	.14	.16
22	32	93	2.3	2.9	1.0	4.6	10	1.7	1.4	.65	.12	.16
23	10	21	2.1	2.4	1.0	3.9	7.2	1.6	1.2	.57	.12	.16
24	3.2	11	2.0	2.1	1.0	3.4	5.2	2.4	1.2	.50	.12	.14
25	3.7	7.2	1.9	1.9	1.0	3.2	4.2	394	1.1	.44	.11	.15
26	2.8	4.9	1.8	7.3	1.0	3.2	3.8	1240	1.0	.40	.11	.14
27	4.7	3.8	1.8	12	1.0	2.9	3.5	e594	.96	.38	.10	.13
28	3.3	3.2	1.9	6.6	.95	2.6	3.4	e138	.92	.33	.08	.13
29	1.4	2.7	5.7	3.7	---	2.5	3.3	e76	.92	.31	.07	.11
30	.87	2.4	7.7	2.8	---	2.4	3.1	e57	.94	.29	.07	.09
31	.77	---	7.1	2.6	---	2.3	---	e41	---	.27	.04	---
TOTAL	183.14	2575.64	617.6	98.5	35.05	485.87	776.2	4820.5	1061.64	21.67	1508.86	6.11
MEAN	5.91	85.9	19.9	3.18	1.25	15.7	25.9	155	35.4	.70	48.7	.20
MAX	111	821	203	12	2.3	178	122	1240	508	1.4	711	1.4
MIN	.00	.53	1.6	1.6	.95	.86	2.2	1.6	.92	.27	.04	.01
AC-FT	363	5110	1230	195	70	964	1540	9560	2110	43	2990	12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

MEAN	40.8	12.9	22.8	13.0	18.3	47.5	44.2	113	71.7	6.71	6.08	13.8
MAX	902	97.3	303	139	143	295	686	453	508	123	48.7	102
(WY)	1982	1974	1992	1985	1987	1985	1990	1989	1992	1973	1995	1980
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1979	1972	1966	1966	1966	1967	1971	1971	1971	1964	1969	1979

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	9784.45		12190.78			
ANNUAL MEAN	26.8		33.4		35.2	
HIGHEST ANNUAL MEAN					128	1982
LOWEST ANNUAL MEAN					3.04	1984
HIGHEST DAILY MEAN	2610	May 27	1240	May 26	16900	Oct 13 1981
LOWEST DAILY MEAN	.00	Aug 8	.00	Oct 4	.00	Dec 1 1963
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 7	.01	Sep 3	.00	Dec 1 1963
INSTANTANEOUS PEAK FLOW			1740	May 26	32500	Oct 13 1981
INSTANTANEOUS PEAK STAGE			20.73	May 26	31.70	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	19410		24180		25500	
10 PERCENT EXCEEDS	20		44		21	
50 PERCENT EXCEEDS	.70		1.9		.17	
90 PERCENT EXCEEDS	.07		.13		.00	

e Estimated

07315500 RED RIVER NEAR TERRAL, OK

LOCATION.--Lat 33°52'43", long 97°56'03", Jefferson County, Hydrologic Unit 11130201, on left bank at downstream side of bridge abutment on U.S. Highway 81, 0.5 mi downstream from Chicago, Rock Island, and Railroad Co. bridge, 1.2 mi south of Terral, 3.6 mi downstream from Little Wichita River, and at mile 872.

DRAINAGE AREA.--28,723 mi², of which 5,936 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.31 ft above sea level. Prior to Jan. 12, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There are many small diversions upstream from station for irrigation, oil field operations, and for municipal uses. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 19, 1935, reached a stage of 27.2 ft, although floods in 1891 and on May 1, 1908, are reported to have reached about the same stage.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 21,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 8	0930	45,700	17.38	June 11	2100	187,000	28.78
May 28	2000	35,400	16.38	Aug. 4	1730	96,500	24.53
June 7	1130	236,000	30.56				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	588	871	468	701	422	803	2210	9380	7050	e579	3270
2	151	523	795	451	700	430	e786	2180	8910	6780	2060	3230
3	148	397	751	453	693	462	774	1760	8070	6540	46300	3110
4	137	362	697	440	639	469	e1190	1120	8130	6190	90200	2810
5	129	7410	651	436	535	474	e965	1030	28300	6000	86000	2380
6	127	9340	615	433	509	500	e942	1530	107000	5820	51000	e1910
7	161	4900	591	433	503	513	783	9860	215000	5800	30800	e1740
8	217	3490	606	425	465	500	624	43300	99200	5770	18000	e1610
9	409	2630	984	428	382	510	578	40000	43500	5340	13900	e1530
10	516	2250	1200	425	367	511	630	22300	35900	4880	11900	e1500
11	414	1820	1120	420	359	505	746	12200	141000	3650	10500	e1780
12	340	1600	947	416	351	458	576	6490	146000	2530	9210	e1840
13	267	1500	785	410	346	474	519	5160	60900	e1940	7300	1570
14	215	1630	599	397	344	862	497	4490	31100	e1640	6440	1590
15	202	1910	556	396	348	3020	469	4370	17600	e1450	6240	1950
16	183	1680	550	391	351	4050	476	4390	13700	e1200	5760	2830
17	185	792	532	382	355	e4470	1080	4090	10900	e981	5290	3680
18	278	492	516	393	360	e3370	2380	3830	9470	e861	4870	11100
19	302	449	503	399	374	e2370	12000	3810	8590	1490	4620	12700
20	264	590	494	410	440	e1830	e11400	3810	8440	1380	4410	13600
21	606	4120	475	464	480	e1370	e10000	3730	8320	e1050	4350	15900
22	2520	13200	465	426	430	e1180	5530	3650	8120	2230	4250	13200
23	2560	9090	455	408	396	e1010	4300	3610	7850	1860	4090	8030
24	1820	5430	449	407	368	e928	6640	4070	7640	1230	3980	6910
25	2000	3230	443	400	406	e827	8250	5050	7460	1440	3860	6440
26	1810	2280	440	450	448	e838	4930	7890	7380	3510	3700	5220
27	1120	1730	435	543	453	e843	3640	13300	7090	3340	3530	5100
28	1040	1380	436	593	437	894	3210	25700	7000	1780	3440	5550
29	879	1130	453	571	---	896	2780	29500	7300	1490	3360	5800
30	718	969	460	506	---	857	2330	21300	7700	937	3320	4880
31	636	---	467	538	---	826	---	10500	---	e636	3280	---
TOTAL	20504	86912	19341	13712	12540	36669	89828	306230	1086950	96795	456539	152760
MEAN	661	2897	624	442	448	1183	2994	9878	36230	3122	14730	5092
MAX	2560	13200	1200	593	701	4470	12000	43300	215000	7050	90200	15900
MIN	127	362	435	382	344	422	469	1030	7000	636	579	1500
AC-FT	40670	172400	38360	27200	24870	72730	178200	607400	2156000	192000	905500	303000

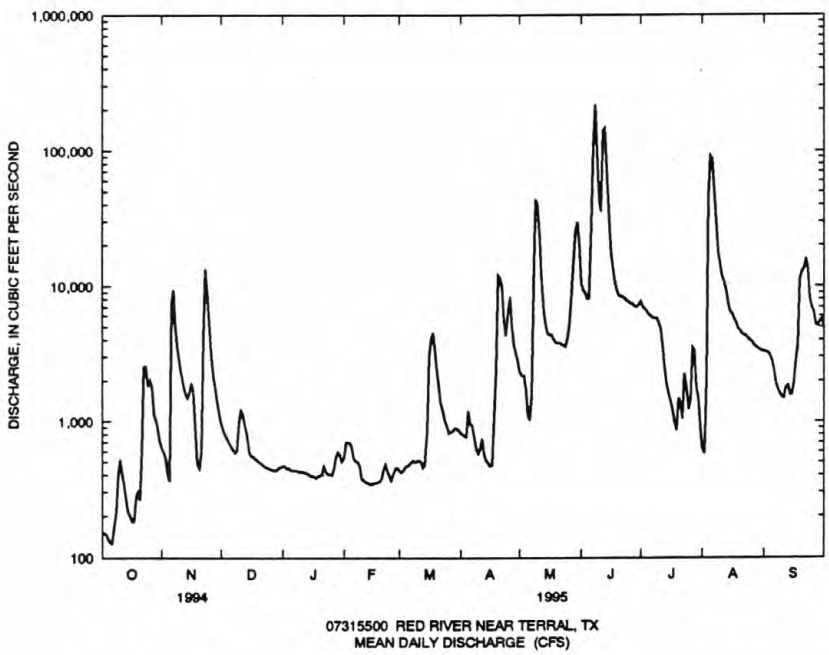
07315500 RED RIVER NEAR TERRAL, OK--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1995, BY WATER YEAR (WY)

MEAN	3093	1513	1111	886	1241	1806	2492	6836	6545	1689	1324	2014
MAX	23900	9713	11810	5306	9320	12560	18080	43580	37460	8077	14730	9653
(WY)	1987	1987	1992	1992	1987	1990	1990	1957	1941	1950	1995	1986
MIN	108	102	91.2	76.5	136	66.1	142	134	517	158	155	109
(WY)	1953	1940	1939	1940	1953	1940	1971	1971	1966	1964	1970	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1938 - 1995	
ANNUAL TOTAL	479862		2378780			
ANNUAL MEAN	1315		6517		2546	
HIGHEST ANNUAL MEAN					8925	1987
LOWEST ANNUAL MEAN					523	1953
HIGHEST DAILY MEAN	20200	May 28	215000	Jun 7	215000	Jun 7 1995
LOWEST DAILY MEAN	127	Oct 6	127	Oct 6	46	Mar 20 1940
ANNUAL SEVEN-DAY MINIMUM	142	Sep 30	143	Oct 1	47	Mar 18 1940
INSTANTANEOUS PEAK FLOW			236000	Jun 7	236000	Jun 7 1995
INSTANTANEOUS PEAK STAGE			30.56	Jun 7	33.60	Oct 22 1983
ANNUAL RUNOFF (AC-FT)	951800		4718000		1844000	
10 PERCENT EXCEEDS	3220		11000		5560	
50 PERCENT EXCEEDS	525		1490		578	
90 PERCENT EXCEEDS	218		397		174	

e Estimated



07315500 RED RIVER NEAR TERRAL, TX
MEAN DAILY DISCHARGE (CFS)

07315500 RED RIVER NEAR TERRAL, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1967 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to current year.
WATER TEMPERATURE: October 1967 to current year.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 13,000 microsiemens June 15, 1984; minimum daily, 255 microsiemens Jan. 1, 1985.
WATER TEMPERATURE: Maximum daily, 35.0°C Aug. 13, 16, 17, 1983; minimum daily, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 6,380 microsiemens Jan. 10; minimum daily, 621 microsiemens June 11.
WATER TEMPERATURE: Maximum daily, 33.5°C July 12; minimum daily, 3.0°C Jan. 4.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC 13...	1130	808	3470	8.1	6.5	--	630	460	160	56
JAN 06...	1112	432	6060	8.5	5.5	--	1100	880	270	93
MAR 08...	1421	503	4790	8.3	8.0	15.2	910	750	230	82
APR 19...	1438	17400	1830	7.9	18.0	5.6	330	240	88	26
JUN 09...	1011	50800	1200	7.6	26.0	7.6	300	200	89	18
AUG 23...	0956	4130	4800	8.0	28.5	--	910	800	240	75

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
DEC 13...	460	8	6.4	170	420	770	0.40	7.8	1980
JAN 06...	910	12	6.9	180	790	1400	0.40	3.9	3580
MAR 08...	690	10	7.7	160	660	1000	0.40	2.6	2770
APR 19...	280	7	6.1	83	210	350	0.30	6.8	1020
JUN 09...	120	3	6.8	95	210	170	0.30	12	683
AUG 23...	670	10	7.9	110	740	1100	0.30	11	2910

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	20504	2830	1610	88900	580	32400	400	22000	510
NOV.	1994	86912	1570	861	202000	300	71200	220	51600	290
DEC.	1994	19341	4090	2420	126000	910	47800	570	30000	720
JAN.	1995	13712	5420	3320	123000	1300	47900	760	28200	930
FEB.	1995	12540	5000	3030	103000	1200	39500	700	23800	860
MAR.	1995	36669	3030	1740	173000	640	63700	430	42100	540
APR.	1995	89828	1520	839	204000	300	72100	210	51800	280
MAY	1995	306230	1340	724	599000	250	208600	190	154900	250
JUNE	1995	1086950	1320	717	2103E3	250	735300	180	541800	240
JULY	1995	96795	3710	2160	566000	810	211400	520	136100	650
AUG.	1995	456539	1790	1000	1233E3	360	442800	250	309100	320
SEPT	1995	152760	2810	1600	661000	590	241600	390	162600	500
TOTAL		2378780	**	**	6179000	**	2214000	**	1554000	**
WTD.AVG.		6517	1730	962	**	340	**	240	**	310

07315500 RED RIVER NEAR TERRAL, OK--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4740	3110	e3270	e5210	3740	4690	e3540	e2140	1900	e3610	e3500	e4530
2	e4760	3110	3590	5200	3940	e4700	e3600	e2320	2120	e3800	3480	e4540
3	e4770	4290	e3810	5210	4160	e4710	3650	2500	e2400	e4010	965	e4550
4	4780	4410	e4030	5300	e4350	e4710	2320	3240	e1800	e4150	1180	e4570
5	4720	805	4240	5410	e4550	e4720	2980	3290	1710	e4210	1170	e4580
6	4780	e765	4370	5600	4730	4730	3090	3050	1340	e4230	e1230	e4600
7	e2200	724	e4460	e5790	4800	4760	3320	1560	1290	e4250	e1290	e4620
8	e2580	831	4560	e5980	e5270	4630	e3850	876	1170	e4270	1350	e4630
9	e2950	899	2840	e6180	5730	4750	e4150	765	1260	e4250	1590	e4640
10	3310	1150	e2970	6380	5910	4880	3970	771	1670	e4260	e1650	e4630
11	2230	1450	3100	6090	e5830	e5040	e4140	836	621	e4280	e1700	e3100
12	2580	3480	3250	5990	e5740	e5200	4300	1290	687	e4270	e2150	e2550
13	3010	e2000	e3650	5930	5650	5390	4780	1730	815	e4280	e2810	e3000
14	3220	e1900	4050	e6040	5630	4490	e4800	e1670	1070	e4300	e3250	e3110
15	e3280	1820	4380	6140	5620	2340	e4820	1600	1360	e4310	e3410	e3200
16	e3340	1750	4740	e6080	5430	1630	e3150	1600	1800	e4330	e3690	e3300
17	3390	e2900	e4820	e6000	5500	1830	2160	1560	e2130	e4340	e3850	e3250
18	2400	4040	e4900	5920	e5640	e2160	1860	e1500	e2470	e4350	e4000	e2250
19	2670	e4450	4970	e5860	e5780	e2490	1610	1450	2800	e2500	e4200	e2100
20	3640	e3820	5060	5800	5910	2820	1000	e1480	2830	e2700	e4400	e1900
21	1540	e2100	5170	e5680	e4500	3520	785	e1500	e2970	e3110	e4600	e1520
22	e1990	e1400	e5110	e5560	4810	3160	868	1530	3110	e1910	e4700	e1800
23	e2440	e1600	5060	5440	5150	3610	e990	1700	3170	e2210	e4800	e2950
24	2880	e1800	e5130	5280	5430	3820	1030	1720	3210	e2510	4390	e3010
25	2550	e1900	e5200	5230	5770	3670	966	1570	e3180	e2100	e4400	e3060
26	2940	e2150	e5270	e4810	e5100	3940	1170	1130	3150	e1850	e4450	3170
27	4370	e2340	5330	4620	4690	3430	1530	993	3330	e2000	e4460	3200
28	3170	e2480	5310	e3300	4610	3600	1710	e1200	3430	e2410	e4470	3220
29	2710	2610	5270	e4020	---	3210	e1840	1770	3580	e2850	e4500	3290
30	2780	2950	5230	4720	---	3450	1960	2410	3510	e3240	e4510	3400
31	3280	---	---	5330	---	3490	---	2030	---	e3410	e4530	---
MEAN	3230	2300	4440	5490	5140	3860	2660	1700	2200	3490	3250	3410
MAX	4780	4450	5330	6380	5910	5390	4820	3290	3580	4350	4800	4640
MIN	1540	724	2840	3300	3740	1630	785	765	621	1850	965	1520

WTR YR 1995 MEAN 3420 MAX 6380 MIN 621

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	16.5	---	---	11.0	5.0	---	---	24.0	---	---	---
2	---	18.5	10.5	6.0	13.5	---	---	---	25.0	---	28.5	---
3	---	22.5	---	4.0	12.5	---	17.5	18.0	---	28.0	26.0	---
4	28.5	19.5	---	3.0	---	---	19.0	23.0	---	---	27.5	---
5	27.5	17.0	12.5	3.5	---	---	18.0	20.0	22.5	29.0	29.5	---
6	26.5	---	15.5	6.5	12.5	13.0	21.0	20.0	24.5	30.0	---	---
7	---	16.0	---	---	10.0	9.0	23.5	19.5	25.5	30.0	---	---
8	---	19.0	9.5	---	---	10.0	---	20.0	27.0	---	---	---
9	---	15.5	7.5	---	12.5	11.5	---	20.5	27.0	---	30.0	---
10	21.0	15.0	---	12.5	10.5	13.0	18.0	21.5	24.5	31.0	---	---
11	21.0	15.5	6.5	13.0	---	---	---	23.0	21.0	---	---	---
12	21.0	16.0	6.5	13.5	---	---	20.0	21.5	22.5	33.5	---	---
13	22.0	---	---	12.0	3.5	14.5	22.0	25.0	24.5	---	---	---
14	19.0	---	5.0	---	4.5	14.5	---	---	26.0	---	---	---
15	---	15.0	8.5	12.5	8.0	15.0	---	25.5	26.0	---	---	---
16	---	14.5	10.5	---	5.5	17.0	---	24.0	26.0	---	---	---
17	23.5	---	---	---	10.0	17.5	23.0	25.0	---	32.5	---	---
18	24.0	13.0	---	8.0	---	---	22.0	---	---	33.0	---	---
19	25.5	---	11.5	---	---	---	18.0	23.0	27.0	33.0	---	---
20	24.5	---	12.5	10.0	15.0	20.0	19.5	---	28.0	---	---	---
21	23.0	---	11.5	---	---	21.5	19.5	---	---	31.0	---	---
22	---	---	---	---	16.0	22.0	15.5	25.0	29.0	---	---	---
23	---	---	10.0	7.5	18.0	21.5	---	24.0	29.0	---	28.5	---
24	19.5	---	---	8.0	17.0	21.5	15.5	22.0	29.0	---	32.0	---
25	16.5	---	---	10.5	15.0	20.0	16.5	20.0	---	---	---	---
26	16.0	---	---	---	---	19.5	19.0	21.5	29.0	---	---	17.0
27	16.0	---	10.0	12.5	18.5	19.0	19.0	22.5	25.0	---	---	18.0
28	17.0	---	9.5	---	9.5	13.5	20.0	---	29.0	---	---	18.0
29	16.5	9.5	11.5	---	---	14.5	---	22.5	27.5	---	---	23.0
30	19.0	9.5	10.5	8.5	---	15.0	18.0	22.0	26.0	---	---	24.0
31	17.0	---	---	9.5	---	17.5	---	23.0	---	---	---	---
MEAN	21.2	15.8	10.0	8.9	11.7	15.9	19.2	22.2	26.0	31.1	28.9	20.0
MAX	28.5	22.5	15.5	13.5	18.5	22.0	23.5	25.5	29.0	33.5	32.0	24.0
MIN	16.0	9.5	5.0	3.0	3.5	5.0	15.5	18.0	21.0	28.0	26.0	17.0

WTR YR 1995 MEAN 18.4 MAX 33.5 MIN 3.0

07315950 MOSS LAKE NEAR GAINESVILLE, TX

LOCATION.--Lat 33°46'26", long 97°12'50", Cooke County, Hydrologic Unit 11130201, on top of upstream side of dam adjacent to guardrail of roadway about 250 ft from right end of Fish Creek dam on Fish Creek, 1.6 mi upstream from Bearhead Creek, 3.7 mi upstream from mouth, and 10 mi northwest of Gainesville.

DRAINAGE AREA.--65.0 mi².

PERIOD OF RECORD.--October 1967 to current year.
Water-quality records.--Chemical analyses: October 1969 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Apr. 20, 1979, recording gage at site about 150 ft upstream at same datum.

REMARKS.--The lake is formed by a rolled earthfill dam 1,460 ft long. The dam was completed and storage began Dec. 2, 1966. An uncontrolled morning-glory-type spillway with a 7- by 7-foot opening is designed to discharge 2,500 ft³/s at a 10-foot head. A 400-foot-wide spillway has been cut through natural ground, and is located about 100 ft to left of the left end of dam. The dam was built by the city of Gainesville to impound water for municipal use. Area and capacity tables are based on a 1961 survey. There was no diversion from the lake during the current water year. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	740.0	-
Top of design flood pool	736.0	55,230
Crest of spillway	725.0	36,440
Crest of spillway morning-glory type (top of conservation pool)	715.0	23,210
Lowest gated outlet (invert)	666.0	78

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 50,990 acre-ft Oct. 13, 1981 (elevation, 733.72 ft); minimum since lake filled in May 1968, 11,490 acre-ft Jan. 18, 1990 (elevation, 702.08 ft, from graph).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 26,850 acre-ft May 8 at 0800 hours (elevation, 718.06 ft); minimum, 15,630 acre-ft Feb. 15 (elevation, 707.33 ft).

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

702.0	11,400	716.0	24,400	727.0	39,600
707.0	15,300	718.0	26,800	730.0	44,400
710.0	18,000	720.0	29,300	733.0	49,700
712.0	20,000	722.0	32,100	734.0	51,500
714.0	22,100	724.0	35,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23120	23000	22260	20660	16630	16050	21250	23270	23260	23090	22810	22150
2	23090	22860	22120	20520	16710	16070	21300	23260	23260	23090	22810	22130
3	23080	22670	21990	20370	16740	16110	21510	23340	23230	23080	22810	22120
4	23070	22490	21830	20200	16780	16160	22340	23350	23210	23010	22810	22080
5	23070	22420	21660	20010	16830	16190	22540	23350	23230	23030	22800	22050
6	23040	22250	21530	19850	16880	16250	22700	24150	23220	23040	22790	22000
7	23150	22090	21320	19680	16790	16250	22810	25230	23210	23020	22770	21970
8	23150	21940	22580	19520	16640	16290	22900	25610	23200	23000	22750	21920
9	23120	21940	23570	19360	16480	16320	22980	24530	23170	22990	22710	21890
10	23110	21820	23570	19200	16320	16350	23190	24030	23290	22990	22700	21870
11	23100	21680	23380	19050	16150	16380	23240	23780	23310	22970	22680	21860
12	23110	21530	23280	18870	15990	16500	23280	23660	23280	22970	22660	21870
13	23090	21390	23190	18690	15840	18700	23290	23580	23240	22920	22640	21900
14	23080	24240	23120	18510	15680	19440	23300	23510	23210	22910	22590	21870
15	23110	24080	23020	18340	15640	19800	23300	23460	23190	22880	22580	21870
16	23130	23730	22970	18200	15670	20010	23320	23420	23170	22880	22550	21870
17	23130	23510	22870	18000	15720	20170	23570	23370	23170	22860	22520	22140
18	23180	23310	22760	17860	15750	20310	23490	23300	23150	22840	22490	22310
19	23180	23180	22650	17710	15780	20420	24000	23280	23150	22840	22480	22340
20	23410	24870	22530	17550	15820	20480	23960	23270	23140	22820	22470	22340
21	24420	24110	22370	17390	15850	20570	23730	23270	23140	22930	22440	22270
22	23960	23690	22220	17220	15890	20650	23600	23260	23150	22920	22420	22220
23	23690	23420	22080	17060	15920	20680	23500	23270	23130	22900	22380	22250
24	24160	23260	21920	16920	15930	20740	23450	23280	23120	22870	22340	22230
25	24160	23130	21770	16760	15970	20860	23380	23290	23110	22870	22320	22270
26	23880	23040	21630	16740	16010	20990	23340	23290	23110	22860	22300	22270
27	23680	22890	21480	16680	16020	21040	23340	23380	23110	22820	22290	22300
28	23540	22740	21340	16530	16040	21050	23320	23340	23120	22800	22260	22310
29	23460	22570	21180	16450	---	21130	23320	23290	23110	22770	22240	22300
30	23420	22410	21040	16460	---	21160	23290	23300	23090	22750	22200	22300
31	23210	---	20850	16550	---	21210	---	23280	---	22790	22190	---
MAX	24420	24870	23570	20660	16880	21210	24000	25610	23310	23090	22810	22340
MIN	23040	21390	20850	16450	15640	16050	21250	23260	23090	22750	22190	21860
(+)	715.00	714.27	712.82	708.37	707.79	713.16	715.07	715.06	714.89	714.62	714.07	714.17
(@)	+110	-800	-1560	-4300	-510	+5170	+2080	-10	-190	-300	-600	+110

CAL YR 1994 MAX 25700 MIN 20850 (@) -2270
WTR YR 1995 MAX 25610 MIN 15640 (@) -800

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

07316000 RED RIVER NEAR GAINESVILLE, TX

LOCATION.--Lat 33°43'40", long 97°09'35", in SW 1/4 sec.36, T.9 S., R.1 E., Love County, OK, Hydrologic Unit 11130201, on downstream right bank at end of bridge on Interstate 35, 0.2 mi downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 5.0 mi downstream from Fish Creek, 4.5 mi southwest of Thackerville, OK, 7.0 mi north of Gainesville, and at mile 791.5.

DRAINAGE AREA.--30,782 mi² of which 5,936 mi² probably is noncontributing.

PERIOD OF RECORD.--May 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 627.91 ft above sea level. Prior to Jan. 17, 1939, and Feb. 13, 1965 to Nov. 14, 1966, nonrecording gage at same site and datum.

REMARKS.--Records poor. Flow slightly regulated by Lake Kemp (station 07312000 in Texas), since 1943 by Lake Altus (station 07302500 in Oklahoma), since 1946 by Lake Kickapoo (station 07314000 in Texas), since 1967 by Lake Arrowhead (station 07314800 in Texas) and Moss Lake (station 07315950 in Texas). U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 24,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 9	1700	52,600	22.46	June 13	1500	169,000	36.63
May 29	1600	27,600	18.29	Aug. 6	1230	99,800	29.65
June 9	0830	159,000	36.03	Sept. 22	1230	34,600	19.10

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	477	e1100	2170	1110	1430	740	e1320	3430	14900	12700	3820	4270
2	465	924	2000	1090	1260	746	e1300	2930	12800	12000	3390	4150
3	453	e850	1870	1090	1340	769	e1270	2820	12100	11100	4390	4070
4	449	e775	1770	1090	1310	786	3060	3300	10600	10500	55100	3940
5	448	e750	1680	1060	1240	815	e4000	2920	9980	9970	85000	3730
6	437	2690	1600	1050	1190	841	3100	2610	37100	9550	97700	3230
7	498	9440	1530	1050	1060	930	2030	5580	69500	9200	72500	2650
8	854	7280	1820	1020	1060	938	1630	28000	118000	8970	51300	2220
9	766	6850	3760	1010	1030	870	1330	47500	146000	9020	38000	1950
10	599	4970	5820	989	1020	873	1290	44500	80200	8750	31300	1780
11	806	3500	5400	973	951	833	1370	24200	61800	7980	26500	1640
12	1030	2680	3710	968	880	832	1790	15900	111000	7000	22500	1650
13	960	2140	2680	953	834	3310	1750	10100	159000	5080	19000	1660
14	842	3790	2260	930	826	5180	1250	8170	116000	3980	14600	1600
15	764	8890	1970	910	798	5420	1010	6860	61900	3460	12200	1670
16	712	6890	1740	902	734	5870	916	6120	40400	3180	12200	1720
17	652	3910	1600	900	722	7970	1510	5960	30500	2960	10100	2280
18	628	2450	1490	892	712	8640	2640	5660	23000	2750	8740	3840
19	630	1540	1450	950	713	e6000	4510	4840	18400	2810	7740	14000
20	721	3050	1390	979	708	4440	14300	4420	15700	2550	7090	24000
21	4140	7370	1310	957	690	3010	16700	4310	14400	3840	6600	27800
22	4640	9010	1240	946	713	2440	14700	4130	14000	3950	6280	33600
23	2860	14400	1200	980	802	2040	9820	3940	13300	3730	6150	26100
24	3780	11500	1160	1020	792	1800	6290	3920	12800	5540	5860	16600
25	3890	8730	1130	971	713	1630	7060	5300	12200	4840	5630	13500
26	e3100	5970	1100	1040	689	1560	10700	6510	11700	4160	5430	12100
27	e2650	4510	1080	1350	691	e1500	9130	9840	11600	5090	5170	9430
28	e2250	3520	1080	2190	728	e1450	5980	17400	11100	9080	4880	8140
29	e1500	2850	1100	2450	---	e1400	4700	24700	11000	6780	4650	8070
30	e1300	2410	1120	1940	---	e1370	4080	26200	12800	5040	4510	9650
31	e1200	---	1120	1650	---	e1350	---	21600	---	4560	4370	---
TOTAL	44501	144739	60350	35410	25636	76353	140536	363670	1273780	200120	642700	251040
MEAN	1436	4825	1947	1142	916	2463	4685	11730	42460	6455	20730	8368
MAX	4640	14400	5820	2450	1430	8640	16700	47500	159000	12700	97700	33600
MIN	437	750	1080	892	689	740	916	2610	9980	2550	3390	1600
AC-FT	88270	287100	119700	70240	50850	151400	278800	721300	2527000	396900	1275000	497900

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

MEAN	3883	1989	1595	1190	1677	2618	3425	8312	8652	2213	1611	2416
MAX	31080	14020	14990	7152	9984	14690	27400	47780	43510	9857	20730	12880
(WY)	1942	1942	1992	1985	1987	1987	1990	1957	1941	1950	1995	1986
MIN	119	137	125	82.4	151	90.5	153	204	640	166	163	108
(WY)	1953	1955	1940	1940	1953	1940	1971	1971	1966	1964	1970	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1937 - 1995	
ANNUAL TOTAL	865380		3258835			
ANNUAL MEAN	2371		8928		3302	
HIGHEST ANNUAL MEAN					11890	1987
LOWEST ANNUAL MEAN					651	1953
HIGHEST DAILY MEAN	20200	May 29	159000	Jun 13	232000	May 31 1987
LOWEST DAILY MEAN	437	Oct 6	437	Oct 6	48	Jan 18 1940
ANNUAL SEVEN-DAY MINIMUM	453	Sep 30	461	Oct 1	48	Jan 18 1940
INSTANTANEOUS PEAK FLOW			169000	Jun 13	265000	May 31 1987
INSTANTANEOUS PEAK STAGE			36.63	Jun 13	40.08	May 31 1987
INSTANTANEOUS LOW FLOW					48	Jan 18 1940
ANNUAL RUNOFF (AC-FT)	1716000		6464000		2392000	
10 PERCENT EXCEEDS	5890		17000		7250	
50 PERCENT EXCEEDS	1140		3060		816	
90 PERCENT EXCEEDS	600		811		213	

e Estimated

07335390 PAT MAYSE LAKE NEAR CHICOTA, TX

LOCATION.--Lat 33°51'09", long 95°32'40", Lamar County, Hydrologic Unit 11140101, on upstream side of dam on Sanders Creek, 2,800 ft to right of outlet channel, 2.0 mi southeast of Chicota, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--175 mi².

PERIOD OF RECORD.--October 1967 to current year. Prior to October 1970, published as Pat Mayse Reservoir.
Water-quality records.--Chemical analyses: October 1969 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 10, 1968, nonrecording gage at present site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam about 7,080 ft long, including a spillway 100 ft wide located near the right abutment of dam. The dam was completed and deliberate impoundment began Sept. 28, 1967. The flood-control outlet works consist of an uncontrolled morning-glory-type drop-inlet spillway that is connected to a 7.25 foot-diameter concrete conduit through the dam. Two low-flow pipes, with 24- and 12-inch diameters, provide for additional outlets. The lake was built for flood control, municipal, and industrial water supply, recreation, fish and wildlife conservation, and for channel improvement on Sanders Creek. Water is diverted from the lake for municipal and industrial uses by the city of Paris. Any resultant effluent is discharged into Pine Creek below Lake Crook (capacity, 11,010 acre-ft), which is located in another drainage basin. The capacity table is based on U.S. Geological Survey topographic maps dated 1949. Rain gage at station. Satellite telemeter at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	488.5	-
Crest of spillway	477.0	352,700
Top of flood-control pool	460.5	189,100
Crest of morning-glory drop-inlet spillway (top of conservation pool)	450.6	122,100
Streambed	393.0	0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 208,000 acre-ft Dec. 11, 12, 1971 (elevation, 462.87 ft); minimum since conservation pool was first reached on Apr. 20, 1968, 100,900 acre-ft Nov. 10, 1978 (elevation, 446.80 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 159,000 acre-ft May 10 at 0800 hours (elevation, 456.36 ft); minimum, 118,200 acre-ft Sept. 12 (elevation, 449.94 ft).

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

446.0	96,700	456.0	156,500	460.0	185,300
449.0	112,800	458.0	170,600	463.0	209,100
452.0	130,600				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123800	127500	133200	132000	136700	128300	131500	130400	150100	129000	124100	120300
2	123800	127500	132900	131500	136000	128300	131200	130800	149500	128900	124100	120100
3	123700	127600	132600	131200	135300	128200	131200	131200	148200	128600	124000	119900
4	123500	128100	132200	130900	134700	128100	134200	133400	148700	128400	123900	119600
5	123500	130700	131900	130700	134200	128100	137800	137900	147600	128700	123800	119500
6	123400	134200	131500	130400	133700	128000	138300	140400	146100	128800	123700	119300
7	123500	134900	131100	130300	133200	127900	137700	143600	144500	128600	123600	119200
8	123500	134500	132900	130100	132700	128000	137100	152000	143100	128400	123400	118900
9	123300	134800	136000	129900	132400	128000	136400	158300	141700	128300	123200	118700
10	123200	135700	140200	129800	132000	127800	135900	158500	140900	128000	123200	118600
11	123100	136400	141600	129700	131600	127800	135200	156800	140500	127800	123000	118400
12	122900	135900	140900	130100	131200	127700	134700	155200	140400	127500	122900	118600
13	122800	135400	140100	132000	130800	129100	134100	153800	139600	127200	122600	118500
14	122800	136400	139500	134300	130700	132000	133600	152200	138600	127000	122400	118500
15	122800	139000	138800	135300	130500	133700	133100	150600	137600	126700	122500	118500
16	122900	142600	138800	134900	130300	134200	132700	148900	136800	126500	122300	118500
17	123000	142200	138900	134700	130000	134300	132100	147400	136000	126100	122200	119200
18	123100	141300	138300	136000	129900	134000	132100	145600	135200	125900	122100	119100
19	123100	140600	137700	137700	129700	133700	132800	144000	134500	125800	121800	120000
20	124400	140400	137600	139200	129600	133100	133100	142700	133900	125800	121600	120000
21	126300	140000	137200	138500	129300	132700	133500	141400	133200	125700	121400	119800
22	127100	139300	136700	138100	129000	132400	133100	140200	132600	125600	121200	119600
23	127300	138600	136100	137600	128900	132000	132600	138900	132200	125500	121100	119600
24	127300	137700	135500	137100	128600	131400	132300	141800	131800	125400	120800	119400
25	127500	137000	135100	136500	128400	131300	131800	152000	131300	125300	120600	119300
26	128200	136400	134500	137000	128400	132300	131600	157300	130800	125100	120500	119300
27	128400	135800	134000	138300	128300	133100	131300	157200	130500	124900	120400	119300
28	128300	135000	133600	138900	128400	132800	130900	155600	130200	124700	120200	119300
29	128100	134300	133200	138400	---	132500	130700	153800	129700	124400	120000	119200
30	128000	133700	132700	137700	---	132100	130300	152200	129400	124300	120700	119000
31	127800	---	132400	137200	---	131800	---	150800	---	124000	120500	---
MAX	128400	142600	141600	139200	136700	134300	138300	158500	150100	129000	124100	120300
MIN	122800	127500	131100	129700	128300	127700	130300	130400	129400	124000	120000	118400
(+)	451.54	452.51	452.30	453.06	451.64	452.20	451.95	455.15	451.80	450.92	450.32	450.07
(@)	+3800	+5900	-1300	+4800	-8800	+3400	-1500	+20500	-21400	-5400	-3500	-1500

CAL YR 1994 MAX 146100 MIN 122800 (@) +2000
WTR YR 1995 MAX 158500 MIN 118400 (@) -5000

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

07335500 RED RIVER AT ARTHUR CITY, TX

LOCATION.--Lat 33°52'30", long 95°30'06", in NW 1/4 sec.11, T.8 S., R.17 E., Choctaw County, OK, Hydrologic Unit 11140101, on right downstream bank of bridge on U.S. Highway 271 at Arthur City, 10.6 mi downstream from Muddy Boggy River, 26.0 mi upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA.--44,531 mi², of which 5,936 mi² probably is noncontributing.

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at same site since 1891 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1241: Drainage area. WSP 1311: 1906-11.

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft above sea level. From 1905-11 nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated since October 1943 by Lake Texoma (station 07331500), 92.8 mi upstream from station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5200	2910	19800	10600	13100	3930	16300	15800	45200	48700	8440	6990
2	4740	3160	16500	7210	9410	6530	13600	25300	44200	46000	9110	6920
3	5250	2990	15700	8850	10100	4640	12100	29000	44500	45800	10400	6900
4	3710	2560	13100	7290	9880	3710	19900	31200	46600	45600	11600	6860
5	3070	11100	11200	7420	9590	3490	35400	43100	41600	46300	28500	6770
6	2980	23500	10800	7580	9280	3410	32100	36100	41200	45500	38100	6760
7	2360	23400	10300	6960	9100	2710	25400	38600	44600	40400	38300	6880
8	2250	18100	8800	5070	9090	6030	22700	61200	49800	33600	38000	7030
9	2260	12800	13700	3920	9280	13300	18400	71000	52100	28400	37700	6950
10	2430	11400	30800	3500	8600	13400	15900	56600	53700	24000	37600	6870
11	1820	19900	37100	3690	8000	6950	20200	50100	55300	21100	37700	6010
12	1310	23000	31100	4180	7640	4840	26600	42600	53100	15300	37700	6030
13	928	16300	25700	7160	6110	3970	25500	40900	51700	12900	37600	6590
14	729	14000	27200	7780	8450	32700	23900	51300	51600	12300	36500	6770
15	623	48500	25400	6500	8080	37900	23000	55400	53000	10300	29500	6600
16	592	49200	22500	5020	4890	34300	21600	55600	52300	9430	21500	6640
17	570	39800	25800	4530	3720	34100	17900	55700	51700	8260	17800	7100
18	550	35000	21200	5420	4160	34500	16900	53000	51500	7980	15800	6980
19	863	31800	15100	12000	3660	33700	17200	50600	51200	7950	15200	9480
20	1710	30300	14100	16600	3110	31700	17100	50400	51100	8300	15100	14100
21	4810	30900	14400	15000	2730	28600	23300	50100	51100	8240	14900	19400
22	15500	33200	15500	9330	2740	24900	27400	49900	51200	8810	14600	16100
23	16000	37800	14500	7530	2690	19700	23700	49600	51100	8330	12800	12800
24	8210	36600	13800	8970	2640	16700	22400	47600	50700	5930	12200	11700
25	4940	34000	13200	8740	2810	16000	21100	64000	50300	5130	10400	11500
26	7330	30900	12900	9700	3440	18800	18700	69200	49900	6130	9890	11500
27	8470	30200	12700	14300	3770	33900	17100	40100	49700	7070	8180	12200
28	5640	29700	12600	18500	4140	31400	16700	18700	49600	8930	7360	16200
29	3910	28600	11100	18000	---	23700	15300	22800	49000	8470	7200	17800
30	4160	23600	11000	16100	---	21000	14300	35100	49800	8450	7110	16700
31	3780	---	12200	16000	---	17700	---	39400	---	8060	7040	---
TOTAL	126695	735220	539800	283450	180210	568210	621700	1400000	1488400	601670	633830	291130
MEAN	4087	24510	17410	9144	6436	18330	20720	45160	49610	19410	20450	9704
MAX	16000	49200	37100	18500	13100	37900	35400	71000	55300	48700	38300	19400
MIN	550	2560	8800	3500	2640	2710	12100	15800	41200	5130	7040	6010
AC-FT	251300	1458000	1071000	562200	357400	1127000	1233000	2777000	2952000	1193000	1257000	577500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 1995, BY WATER YEAR (WY)

MEAN	7032	7376	7174	6536	8226	10420	11470	17650	19070	8050	4942	4771
MAX	40240	37170	32340	39930	24200	38610	55500	103900	83820	27700	34840	19010
(WY)	1982	1975	1992	1992	1946	1987	1990	1990	1957	1989	1950	1950
MIN	263	242	894	1126	1138	1118	1343	2837	2074	1586	1108	859
(WY)	1957	1957	1957	1964	1959	1967	1956	1980	1956	1956	1972	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1945 - 1995	
ANNUAL TOTAL	4230205		7470315			
ANNUAL MEAN	11590		20470		9388	
HIGHEST ANNUAL MEAN					23290	1990
LOWEST ANNUAL MEAN					2754	1964
HIGHEST DAILY MEAN	49200	Nov 16	71000	May 9	269000	May 4 1990
LOWEST DAILY MEAN	550	Oct 18	550	Oct 18	134	Dec 11 1956
ANNUAL SEVEN-DAY MINIMUM	694	Oct 13	694	Oct 13	134	Dec 11 1956
INSTANTANEOUS PEAK FLOW			75100	May 25	275000	May 4 1990
INSTANTANEOUS PEAK STAGE			18.10	May 25	34.21	May 4 1990
ANNUAL RUNOFF (AC-FT)	8391000		14820000		6802000	
10 PERCENT EXCEEDS	28100		49600		24600	
50 PERCENT EXCEEDS	6690		15000		4270	
90 PERCENT EXCEEDS	3190		3750		1340	

07336820 RED RIVER NEAR DE KALB, TX

LOCATION.--Lat 33°40'59", long 94°41'39", Bowie County, Hydrologic Unit 11140106, on right bank at downstream side of bridge on U.S. Highway 259, 4.8 mi upstream from North Mill Creek, 13 mi north of De Kalb, and at mile 556.9.

DRAINAGE AREA.--47,348 mi², of which 5,936 mi² probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. At times, flood peaks may be affected by Lake Texoma (station 07331500) located approximately 169 mi upstream, and low flows may be affected by releases for the generation of electric power. Storage and/or releases from Lake Hugo on the Kiamichi River, a tributary to the Red River about 45 mi upstream, may also affect flows. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1957, 205,000 ft³/s June 1957 (gage height, 32.2 ft), from rating curve extended above 186,500 ft³/s. The greatest flood since 1936 occurred in February 1938, stage unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3680	4050	25500	12200	23000	4600	22100	20200	43000	53700	8780	8290
2	4330	3590	22400	11800	18700	5290	19400	23800	47000	51200	8660	8200
3	4580	3280	20200	9060	13800	5940	17000	36000	46900	48200	9530	8050
4	4460	3770	18700	8980	12500	6090	17300	42600	47100	47300	10200	7970
5	4410	6730	15800	8540	12200	4700	31800	42100	48100	47600	11900	7900
6	3590	14000	12300	8140	11800	4080	44700	45000	44300	47500	24300	7860
7	3150	22300	11600	8730	10400	4510	42200	43800	43700	47000	35100	7820
8	3470	24000	11200	8430	9370	5580	34900	50700	46400	41700	37800	7870
9	2870	21300	13100	6860	9270	8250	29400	76000	51000	35200	38300	7940
10	2620	19400	20500	6170	9600	15600	24800	77800	52400	29500	38500	7850
11	2670	18000	34000	6210	9370	17600	23100	57800	54100	25200	38300	7750
12	2570	23100	37200	6330	8620	12200	26900	49900	55300	22300	38100	7180
13	2270	26100	34800	9310	8150	8660	34400	45600	53500	17300	38100	6920
14	1980	21100	32700	20300	6880	8950	33900	45800	52300	14500	37800	7090
15	1770	23400	33400	23400	8050	36800	29300	51700	53900	13500	36600	7320
16	1710	51600	33700	23600	8670	43500	25400	54100	55700	12000	30100	7140
17	1670	47500	33500	23300	7170	44100	23600	52100	55400	10700	23400	7270
18	1590	42200	34100	22000	5470	44100	20300	50900	54300	9520	19800	7610
19	1540	38400	30700	23500	4200	43700	19700	49800	54000	8720	17400	7610
20	1620	36200	25700	26400	4550	42900	25600	48200	53500	8620	16400	9330
21	2320	35200	24800	28700	3730	40600	32400	47000	53400	8890	16200	13100
22	5640	37500	24000	26200	3380	37300	41900	46400	53500	8910	16000	18200
23	11600	41100	22200	21300	3240	32400	47700	45900	53700	9280	15800	16900
24	14900	44900	17500	18300	3180	26200	45300	45700	54100	9180	14500	13800
25	10000	44200	14800	18700	3100	21200	39600	47700	54000	7310	13700	12100
26	6340	41300	13900	18100	3090	19600	33900	59200	54000	6230	12500	11600
27	5540	38800	13500	20500	3690	24200	28900	61900	54900	6220	11500	11300
28	7220	38800	15100	24300	4130	40200	25100	42600	56000	7200	10400	11400
29	6590	37500	17100	27000	---	40000	23700	31800	56100	8790	8980	13300
30	4580	31100	14400	27100	---	33200	21500	33900	55100	9110	8590	16900
31	3970	---	11700	24400	---	27500	---	41100	---	8950	8430	---
TOTAL	135250	840420	690100	527860	229310	709550	885800	1467100	1556700	681330	655670	293570
MEAN	4363	28010	22260	17030	8190	22890	29530	47330	51890	21980	21150	9786
MAX	14900	51600	37200	28700	23000	44100	47700	77800	56100	53700	38500	18200
MIN	1540	3280	11200	6170	3090	4080	17000	20200	43000	6220	8430	6920
AC-FT	268300	1667000	1369000	1047000	454800	1407000	1757000	2910000	3088000	1351000	1301000	582300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	9037	14290	14470	11590	14470	20180	18880	26150	27660	9913	5743	5718
MAX	39980	53170	45440	49500	31000	48590	62330	125500	67360	35030	21150	24010
(WY)	1982	1975	1972	1992	1969	1987	1990	1990	1987	1982	1995	1974
MIN	1783	2105	1608	1699	2876	2492	3005	4707	2909	2598	1418	1368
(WY)	1979	1980	1978	1981	1976	1980	1981	1972	1988	1972	1972	1988

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	5419190		8672660			
ANNUAL MEAN	14850		23760		14780	
HIGHEST ANNUAL MEAN					30100	1990
LOWEST ANNUAL MEAN					4690	1980
HIGHEST DAILY MEAN	51600	Nov 16	77800	May 10	278000	May 7 1990
LOWEST DAILY MEAN	1540	Oct 19	1540	Oct 19	254	Nov 29 1979
ANNUAL SEVEN-DAY MINIMUM	1700	Oct 14	1700	Oct 14	529	Aug 31 1972
INSTANTANEOUS PEAK FLOW			84200	May 9	279000	May 6 1990
INSTANTANEOUS PEAK STAGE			25.80	May 9	34.42	May 6 1990
ANNUAL RUNOFF (AC-FT)	10750000		17200000		10710000	
10 PERCENT EXCEEDS	38000		49800		41000	
50 PERCENT EXCEEDS	8390		19800		7100	
90 PERCENT EXCEEDS	3980		4530		2170	

07336820 RED RIVER NEAR DE KALB, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: October 1970 to July 1981. Sediment analyses: November 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1968 to September 1991.
WATER TEMPERATURE: January 1968 to September 1991.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 2,140 microsiemens July 13, 1980; minimum daily, 114 microsiemens Oct. 31, 1984.
WATER TEMPERATURE (1968-89): Maximum daily, 4.0°C on several days during July and August of 1969 and 1970; minimum daily, 0.0°C Jan. 11, 1977.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
13...	1200	2290	871	8.4	17.5	7.8	83	2.3	260	98	68
DEC											
06...	1230	12400	804	7.9	14.0	9.8	96	0.4	210	110	54
JAN											
24...	1130	18400	256	8.0	7.0	11.7	96	0.6	78	21	23
MAR											
15...	1402	40000	412	8.3	14.0	9.8	96	2.8	130	34	37
MAY											
11...	1128	58500	205	7.6	19.5	8.2	91	2.2	81	7	26
JUN											
22...	1027	51500	945	8.0	26.5	7.1	89	0.8	210	110	61

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT											
13...	22	84	2	4.3	160	110	120	0.2	6.5	512	--
DEC											
06...	18	78	2	3.6	100	120	120	0.20	7.2	463	0.180
JAN											
24...	4.9	17	0.8	2.2	57	26	23	0.1	6.9	138	0.100
MAR											
15...	8.8	31	1	3.1	95	46	41	0.2	5.8	232	0.330
MAY											
11...	3.8	7.9	0.4	2.8	74	12	8.2	0.1	6.2	113	0.160
JUN											
22...	15	96	3	4.6	110	120	140	0.2	6.7	510	0.330

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	SEDI-MENT, SUS-PENDED (MG/L)
OCT											
13...	--	0.0	--	<0.050	<0.015	--	0.3	<0.010	<0.010	--	25
DEC											
06...	0.180	0.0	0.190	0.19	0.0	0.28	0.3	0.0	0.0	0.06	263
JAN											
24...	--	<0.010	0.100	0.1	0.0	0.17	0.2	0.0	0.0	0.03	199
MAR											
15...	0.330	0.020	0.350	0.350	0.070	0.43	0.50	0.030	0.010	0.03	--
MAY											
11...	0.160	0.0	0.170	0.17	0.0	0.46	0.5	0.0	0.0	0.06	993
JUN											
22...	--	<0.010	0.330	0.33	0.0	0.26	0.3	0.1	0.1	0.18	--

07336820 RED RIVER NEAR DE KALB, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 13...	155	98	--	--	--	--	--	--	--	--	--
DEC 06...	8830	72	--	--	--	--	--	--	--	--	--
JAN 24...	9890	47	<1	42	<0.5	<1	<5	<3	<10	110	10
MAR 15...	--	--	--	--	--	--	--	--	--	--	--
MAY 11...	157000	73	1	51	<0.5	<1	<5	<3	<10	57	<10
JUN 22...	--	--	1	160	<0.5	<1	<5	<3	<10	9	<10

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 13...	--	--	--	--	--	--	--	--	--	--
DEC 06...	--	--	--	--	--	--	--	--	--	--
JAN 24...	<4	6	<0.1	<10	20	<1	<1	160	<6	5
MAR 15...	--	--	--	--	--	--	--	--	--	--
MAY 11...	<4	2	<0.1	<10	<10	<1	<1	170	<6	6
JUN 22...	10	3	0.2	10	<10	<1	<1	590	<6	12

07337000 RED RIVER AT INDEX

LOCATION.--Lat 33°33'07", long 94°02'28", in NW1/4, SW1/4 sec.7, T.14 S., R.28 W., Miller County, Hydrologic Unit 11140106, near right bank on downstream side of southbound bridge on U.S. Highway 71 at Index, 2.2 mi south of Ogden, 20.6 mi upstream from Little River, and at mile 485.3.

DRAINAGE AREA.--48,030 mi², of which 5,936 mi² probably is noncontributing.

PERIOD OF RECORD.--July 1936 to current year. Gage-height records collected at same site since 1917 are contained in reports of National Weather Service.
Water-quality records.--Chemical and biochemical analyses: Water years 1947-56, April 1980 to September 1994.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 246.87 ft above sea level. Prior to Dec. 12, 1939, nonrecording gage, and Dec. 12, 1939, to July 19, 1979, water-stage recorder, at site 500 ft downstream at present datum.

REMARKS.--Records good, except for estimated daily discharges which are fair. Some regulation since Oct. 31, 1943, by Lake Texoma, 241 mi upstream, capacity, 5,392,900 acre-ft, since Sept. 28, 1967, by Pat Mayse Lake, capacity, 352,700 acre-ft, and since Jan. 18, 1974, by Hugo Lake (Oklahoma) capacity, 966,700 acre-ft. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 297,000 ft³/s Feb 23, 1938 (gage height, 34.25 ft); minimum, 378 ft³/s Nov. 28, 1956. Prior to regulation, water years 1937-43, annual mean 11,970 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2390	4930	27900	14800	23700	6190	22900	18300	44500	59400	9580	8210
2	3120	4680	e25000	13700	22300	6410	19900	17100	47100	56800	9440	8100
3	4190	4690	e22000	13200	19500	6740	18100	20100	51400	53400	9220	8000
4	4710	e5200	e19000	10900	15900	7040	16900	30700	51700	50100	9810	7830
5	4800	e9400	e17000	10100	14500	7550	17600	36100	52500	49700	10500	7750
6	4830	e14000	15700	10200	14000	6940	29900	37000	52900	50000	12200	7710
7	4480	e18000	13900	10400	13500	6310	36700	40200	48900	49800	24000	7610
8	4500	e22000	12900	10700	12300	6780	33900	43800	48700	47900	34200	7590
9	4110	22200	12800	10300	11000	7510	29200	66100	51900	42500	36300	7600
10	3890	21700	16900	8830	10600	8440	e27000	88100	56900	36900	e38000	7650
11	3370	20400	25000	7540	10800	13500	e29000	84000	59400	31700	37800	7670
12	3170	19300	32000	7430	10800	16600	e31000	56900	61100	27700	37800	7630
13	3200	22500	31700	8910	10200	13000	e32000	42200	61700	24500	37600	7360
14	3030	24500	29700	16800	9650	9530	32400	34300	59200	19600	37800	6850
15	2740	20900	30700	26800	8810	10300	30900	35900	58800	16200	38200	6830
16	2550	30200	34800	26600	8740	30900	27600	46400	61100	14600	36700	7060
17	2540	46300	36500	24600	8940	35000	25600	49500	62600	13200	30600	7340
18	2530	40800	35100	24500	8160	36200	24800	46500	62500	11600	25100	7320
19	2340	38000	33900	25700	7480	37100	22700	43200	61800	10400	21500	7470
20	2250	34700	30300	26400	6160	37400	22400	41300	61600	9600	19100	7690
21	2460	33600	26800	27600	6050	36300	25200	37900	61000	9410	17500	8400
22	2770	33000	26200	28000	5480	34300	27100	36000	60600	9510	17000	12200
23	4060	35100	25600	25400	5170	31700	33300	e34000	59900	9580	16600	18000
24	8850	37800	24000	21600	4840	27700	35300	e32000	58800	9800	16200	17400
25	13500	39400	20600	19500	4830	23300	32600	e29000	58700	9840	15000	14200
26	11100	38000	17900	19900	4750	20100	28600	e25000	58500	8350	13800	12200
27	7950	36100	16700	21800	5020	19300	25900	e25000	58300	6950	12700	11400
28	6390	34600	16000	24600	5430	23600	23300	e28000	58700	e6700	11500	11100
29	6910	33900	18400	26600	---	32400	21100	e32000	60000	e7700	10600	11200
30	7430	32100	21800	26900	---	31300	19900	e37000	60300	8670	8970	13400
31	6150	---	19100	25800	---	26800	---	e40000	---	9680	8430	---
TOTAL	146310	778000	735900	576110	288610	616240	802800	1233600	1711100	771790	663750	280770
MEAN	4720	25930	23740	18580	10310	19880	26760	39790	57040	24900	21410	9359
MAX	13500	46300	36500	28000	23700	37400	36700	88100	62600	59400	38200	18000
MIN	2250	4680	12800	7430	4750	6190	16900	17100	44500	6700	8430	6830
AC-FT	290200	1543000	1460000	1143000	572500	1222000	1592000	2447000	3394000	1531000	1317000	556900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1995#, BY WATER YEAR (WY)

MEAN	8214	10580	11690	10580	13860	16550	17130	24780	23220	10070	5807	5876
MAX	41690	47140	47910	52290	38960	67730	61460	121000	94400	33990	39230	30340
(WY)	1946	1975	1992	1992	1946	1945	1990	1990	1957	1989	1950	1950
MIN	716	642	1206	1360	2127	2233	2096	4199	3098	1162	1025	909
(WY)	1957	1957	1957	1964	1964	1967	1956	1972	1988	1944	1944	1944

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1944 - 1995#	
ANNUAL TOTAL	5681630		8604980			
ANNUAL MEAN	15570		23580		13180	
HIGHEST ANNUAL MEAN					30420	1990
LOWEST ANNUAL MEAN					4383	1964
HIGHEST DAILY MEAN	48500	May 6	88100	May 10	268000	May 10 1990
LOWEST DAILY MEAN	2250	Oct 20	2250	Oct 20	384	Nov 28 1956
ANNUAL SEVEN-DAY MINIMUM	2490	Oct 15	2490	Oct 15	397	Oct 19 1956
INSTANTANEOUS PEAK FLOW			93500	May 10	270000	May 10 1990
INSTANTANEOUS PEAK STAGE			17.11	May 10	32.30	May 10 1990
INSTANTANEOUS LOW FLOW			2200	Oct 20	378	Nov 28 1956
ANNUAL RUNOFF (AC-FT)	11270000		17070000		9549000	
10 PERCENT EXCEEDS	38400		49700		35500	
50 PERCENT EXCEEDS	9200		20100		5880	
90 PERCENT EXCEEDS	4160		6160		2260	

e Estimated
Period of regulated streamflow.

07342465 SOUTH SULPHUR RIVER AT COMMERCE, TX

LOCATION.--Lat 33°12'42", long 95°54'30", Hunt County, Hydrologic Unit 11140301, on right bank at downstream side of bridge on south-bound State Highway 50, 13 mi. upstream from Dunbar Creek, and 2.8 mi. south of Commerce.

DRAINAGE AREA.--150 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 460.74 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,700 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0930	3,610	17.84	May 8	1115	5,580	22.84
May 6	0845	2,780	15.74				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	7.4	8.5	13	24	4.5	.62	743	1120	.37	.25	.00
2	.03	5.9	8.2	13	20	7.0	.36	591	79	.39	.38	.00
3	.04	23	20	15	17	10	.25	101	27	.50	.38	.00
4	.05	607	20	11	14	8.8	1010	427	14	.29	.36	.00
5	.03	2400	16	12	13	10	1740	251	8.9	5.8	.71	.00
6	.03	1940	14	31	11	11	1290	1640	5.9	2.5	.56	.00
7	.42	146	11	55	9.8	352	154	687	4.3	6.1	.30	.00
8	6.4	52	368	38	8.6	208	35	4000	3.3	4.0	.19	.00
9	2.7	514	1150	22	7.1	57	12	3520	2.6	2.1	.18	.00
10	3.4	818	1590	16	6.9	29	7.9	293	3.1	1.3	.11	.00
11	2.4	148	369	13	8.3	19	48	42	901	.83	.06	.00
12	1.5	62	103	17	21	14	19	17	670	.56	.02	.00
13	1.0	37	57	1170	26	1080	4.7	11	63	.34	.02	.12
14	.81	159	52	431	17	1870	1.4	7.5	22	.25	.09	.05
15	.85	2330	162	112	14	524	.63	5.3	12	.14	.22	.01
16	.98	1480	1150	53	17	331	.39	4.2	7.8	.07	.04	.00
17	1.6	154	303	130	25	112	.26	3.5	5.0	.05	.01	.05
18	9.1	78	108	280	21	33	.45	2.8	3.6	6.5	.01	32
19	318	74	59	757	15	12	126	2.7	3.4	30	.01	20
20	267	318	42	197	12	5.0	1430	3.6	2.9	5.0	.01	70
21	1270	387	30	79	9.4	2.1	706	2.3	2.2	2.0	.01	29
22	1190	103	26	54	9.0	1.2	43	1.6	2.0	.78	.01	9.4
23	149	49	22	198	7.5	.70	12	1.1	1.9	.36	.01	3.9
24	43	30	18	103	6.1	.40	6.0	.99	1.5	.31	.01	1.9
25	387	23	15	55	5.0	2.9	2.8	462	1.2	.29	.00	1.2
26	809	19	13	445	5.0	429	1.1	1640	.93	.17	.00	.75
27	153	17	11	1070	5.0	179	.48	323	.80	.10	.00	.48
28	52	15	11	221	4.7	28	.26	40	.78	.04	.00	.43
29	25	14	11	81	---	7.3	.15	16	.56	.15	.00	.39
30	15	11	11	46	---	2.6	.11	15	.51	.06	.00	.33
31	10	---	12	31	---	1.3	---	1500	---	.17	.00	---
TOTAL	4719.37	12021.3	5790.7	5769	359.4	5351.80	6652.86	16354.59	2971.18	71.52	3.95	170.01
MEAN	152	401	187	186	12.8	173	222	528	99.0	2.31	.13	5.67
MAX	1270	2400	1590	1170	26	1870	1740	4000	1120	30	.71	70
MIN	.03	5.9	8.2	11	4.7	.40	.11	.99	.51	.04	.00	.00
AC-FT	9360	23840	11490	11440	713	10620	13200	32440	5890	142	7.8	337
CFSM	1.01	2.67	1.25	1.24	.09	1.15	1.48	3.52	.66	.02	.00	.04
IN.	1.17	2.98	1.44	1.43	.09	1.33	1.65	4.06	.74	.02	.00	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

MEAN	257	170	374	126	198	241	175	429	136	123	8.31	24.3
MAX	451	401	804	224	477	346	391	734	433	333	32.0	91.5
(WY)	1994	1995	1992	1992	1993	1992	1993	1992	1992	1994	1992	1994
MIN	.008	19.6	187	21.7	12.8	173	30.7	57.4	3.76	.009	.005	.002
(WY)	1993	1993	1995	1994	1995	1995	1992	1993	1994	1993	1993	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1992 - 1995	
ANNUAL TOTAL	60009.59		60235.68			
ANNUAL MEAN	164		165		189	
HIGHEST ANNUAL MEAN					297	1992
LOWEST ANNUAL MEAN					120	1993
HIGHEST DAILY MEAN	6160	Jul 15	4000	May 8	8230	Oct 20 1993
LOWEST DAILY MEAN	.02	Aug 30	.00	Aug 25	.00	Oct 2 1991
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 30	.00	Aug 25	.00	Oct 7 1991
INSTANTANEOUS PEAK FLOW			5580	May 8	11400	Oct 20 1993
INSTANTANEOUS PEAK STAGE			22.84	May 8	27.60	Oct 20 1993
ANNUAL RUNOFF (AC-FT)	119000		119500		137000	
ANNUAL RUNOFF (CFSM)	1.10		1.10		1.26	
ANNUAL RUNOFF (INCHES)	14.88		14.94		17.13	
10 PERCENT EXCEEDS	354		452		385	
50 PERCENT EXCEEDS	6.6		9.8		6.5	
90 PERCENT EXCEEDS	.21		.04		.00	

07342470 SOUTH SULPHUR RIVER NEAR COMMERCE, TX

LOCATION.--Lat 33°13'11", long 95°51'45", Hunt County, Hydrologic Unit 11140301, at State Highway 11, 0.7 mi upstream from St. Louis Southwestern Railroad bridge, 1.8 mi downstream from Dunbar Creek, and 3.0 mi southeast of Commerce.

DRAINAGE AREA.--189 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
NOV												
01...	1436	12	419	7.6	17.5	55	16	9.3	98	3.6	140	0
DEC												
20...	1506	47	386	8.1	9.5	100	31	11.5	102	0.6	140	2
FEB												
08...	1432	12	737	8.2	10.0	23	9.0	12.0	107	1.5	250	17
JUN												
19...	1240	28	450	8.6	30.0	80	11	15.2	204	4.1	110	5

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
NOV												
01...	50	4.1	34	1	6.2	140	39	20	0.2	13	266	22
DEC												
20...	49	4.7	22	0.8	3.4	140	33	14	0.2	11	224	48
FEB												
08...	86	9.4	53	1	4.0	240	82	34	0.2	9.3	430	19
JUN												
19...	38	4.2	48	2	4.6	110	52	27	0.3	7.1	260	16

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
NOV											
01...	6	16	2.99	2.99	0.0	3.00	3.0	0.1	0.93	1	0.49
DEC											
20...	15	33	0.370	0.370	0.010	0.380	0.380	0.030	0.47	0.50	0.110
FEB											
08...	3	16	2.25	2.25	0.0	2.30	2.3	0.0	0.56	0.6	0.23
JUN											
19...	7	9	2.78	2.78	0.020	2.80	2.80	<0.015	--	0.60	0.210

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV											
01...	0.47	1.4	11	--	--	--	--	--	--	--	--
DEC											
20...	0.120	0.37	10	3	60	<0.5	<1	<5	<3	<10	110
FEB											
08...	0.23	0.71	9.6	--	--	--	--	--	--	--	--
JUN											
19...	0.210	0.64	11	53	45	<0.5	<1	<5	<3	<10	24

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
01...	--	--	--	--	--	--	--	--	--	--	--
DEC											
20...	20	<4	28	<0.1	<10	<10	<1	<1	440	<6	15
FEB											
08...	--	--	--	--	--	--	--	--	--	--	--
JUN											
19...	<10	<4	5	<0.1	20	<10	<1	<1	390	<6	6

07342480 MIDDLE SULPHUR RIVER AT COMMERCE, TX

LOCATION.--Lat 33°15'59", long 95°54'55", Hunt County, Hydrologic Unit 11140301, at right end of bridge on State Highway 11 at downstream side of highway embankment, 1.5 mi upstream from Willow Creek and 1.5 mi northwest of Post Office in Commerce.

DRAINAGE AREA.--44.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage not determined.

REMARKS.--Records good except those for daily discharges below 2 ft³/s, and those for estimated daily discharges which are poor. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 15	1200	1,900	14.35	May 31	1330	2,000	15.05
May 8	1915	2,870	15.72				

PEAK DISCHARGES FOR WATER YEARS 1992-94(Revised).--Peak discharges greater than base discharge of 1,800³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 29, 1991	0215	2,500	15.01	May 12, 1992	1100	4,990	16.08
Dec. 9, 1991	1315	3,940	15.75	May 24, 1992	0330	1,950	14.39
Dec. 21, 1991	0730	2,600	14.92	June 8, 1992	2015	2,910	15.12
Mar. 18, 1992	0800	2,240	14.64	July 28, 1992	1700	2,110	14.53
Feb. 25, 1993	1930	2,570	14.90	Apr. 14, 1993	2145	3,620	15.50
Mar. 16, 1993	1845	1,870	14.32	Apr. 29, 1993	2330	2,220	14.62
Oct. 19, 1993	1900	4,990	16.08	May 12, 1994	1630	1,910	14.36
Dec. 3, 1993	1500	2,680	14.98	July 15, 1994	1845	3,680	15.53

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.87	1.8	2.4	5.9	.95	1.7	471	299	.06	.27	.00
2	.01	.64	1.8	2.4	4.4	.96	1.4	358	26	.05	.09	.00
3	.01	16	5.1	2.4	3.1	1.2	1.1	81	9.8	.04	.04	.00
4	.01	194	6.3	2.4	2.5	1.2	417	261	5.5	.06	.03	.00
5	.01	1220	5.6	2.3	1.9	1.3	639	247	3.7	.06	.04	.00
6	.01	416	4.5	11	1.7	1.4	681	375	2.1	.05	.04	.00
7	.20	32	3.5	23	1.4	185	56	139	1.4	.04	.03	.00
8	.34	15	171	11	1.3	76	23	1660	.99	.04	.03	.00
9	.07	147	666	6.4	1.2	19	12	1030	.85	.04	.03	.00
10	.04	308	504	4.7	1.2	8.3	14	47	8.5	.03	.02	.00
11	.04	42	110	4.0	3.9	4.4	28	18	448	.03	.02	.00
12	.04	19	32	12	15	3.0	21	10	204	.02	.01	.25
13	.04	9.9	20	561	8.2	310	9.6	6.7	18	.01	.00	.15
14	.04	102	23	255	5.0	533	4.1	5.5	6.9	.01	.01	.03
15	.04	1350	55	40	4.1	159	2.7	4.0	3.2	.00	.02	.02
16	.04	322	347	22	7.0	104	2.0	3.0	1.7	.00	.01	.01
17	.06	40	108	48	8.8	37	1.7	3.9	1.0	.00	.01	80
18	.11	22	34	131	6.1	19	2.6	3.6	.60	.03	.01	73
19	.15	31	20	342	3.8	9.1	87	3.4	.49	.17	.00	56
20	72	47	12	57	2.6	5.2	835	2.1	e.40	.06	.01	118
21	356	77	9.1	25	1.8	2.9	99	1.4	e.35	.04	.01	13
22	203	28	7.4	21	1.5	2.4	22	1.0	e.30	.03	.01	2.0
23	28	12	5.7	68	1.2	2.1	12	.72	.26	.03	.00	.85
24	9.9	6.5	4.6	32	1.0	1.4	8.2	.58	.18	.02	.00	.42
25	35	4.3	3.5	17	.94	2.6	5.1	150	.19	.01	.00	.33
26	131	3.8	3.1	189	.93	179	3.2	219	.07	.01	.00	.56
27	32	3.2	2.8	415	.90	68	2.2	25	.06	.00	.00	.50
28	13	2.9	2.5	61	.88	18	1.7	10	.06	.00	.00	.41
29	6.2	2.8	2.4	25	---	8.0	1.3	4.9	.06	.00	.00	.24
30	3.2	2.3	2.3	14	---	4.6	1.2	65	.07	.00	.00	.22
31	1.6	---	2.4	8.4	---	2.8	---	1240	---	.07	.00	---
TOTAL	892.17	4477.21	2176.4	2415.4	98.25	1770.81	2995.8	6446.80	1043.73	1.01	0.74	345.99
MEAN	28.8	149	70.2	77.9	3.51	57.1	99.9	208	34.8	.033	.024	11.5
MAX	356	1350	666	561	15	533	835	1660	448	.17	.27	118
MIN	.01	.64	1.8	2.3	.88	.95	1.1	.58	.06	.00	.00	.00
AC-FT	1770	8880	4320	4790	195	3510	5940	12790	2070	2.0	1.5	686

07342480 MIDDLE SULPHUR RIVER AT COMMERCE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995, BY WATER YEAR (WY)

MEAN	78.0	60.2	134	49.8	69.5	89.1	73.9	148	41.1	51.7	8.22	5.13
MAX	179	149	257	81.1	165	130	171	247	126	119	31.6	11.5
(WY)	1994	1995	1992	1992	1993	1992	1993	1992	1992	1994	1992	1995
MIN	.001	.82	68.1	10.8	3.51	57.1	2.02	3.37	1.20	.000	.000	.000
(WY)	1993	1993	1993	1994	1995	1995	1992	1993	1994	1993	1993	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1992 - 1995	
ANNUAL TOTAL	20472.38		22664.31			
ANNUAL MEAN	56.1		62.1		67.6	
HIGHEST ANNUAL MEAN					99.8	1992
LOWEST ANNUAL MEAN					43.5	1993
HIGHEST DAILY MEAN	2300	Jul 15	1660	May 8	2670	Oct 20 1993
LOWEST DAILY MEAN	.01	Sep 26	.00	Jul 15	.00	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	.01	Sep 26	.00	Aug 23	.00	Oct 1 1991
INSTANTANEOUS PEAK FLOW			2870	May 8	4990	May 12 1992
INSTANTANEOUS PEAK STAGE			15.72	May 8	16.08	May 12 1992
ANNUAL RUNOFF (AC-FT)	40610		44950		48990	
10 PERCENT EXCEEDS	87		174		112	
50 PERCENT EXCEEDS	1.3		2.8		1.4	
90 PERCENT EXCEEDS	.14		.01		.00	

e Estimated

07342480 MIDDLE SULPHUR RIVER AT COMMERCE, TX--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
NOV												
02...	0959	0.61	313	7.6	14.0	110	49	8.5	84	2.8	130	11
DEC												
21...	1323	9.3	356	7.6	10.0	150	28	11.5	103	0.5	140	3
FEB												
09...	1023	1.3	580	8.1	7.0	55	15	12.1	101	0.7	250	6
JUN												
19...	1435	0.45	348	7.7	30.0	110	15	7.3	98	1.2	140	18

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
NOV												
02...	45	3.6	14	0.5	6.2	120	29	9.6	0.2	15	193	92
DEC												
21...	51	4.1	18	0.7	3.6	140	33	10	0.1	13	219	40
FEB												
09...	88	7.3	28	0.8	3.4	240	51	17	0.2	12	354	16
JUN												
19...	51	3.8	14	0.5	4.1	130	29	9.2	0.2	11	199	25

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
NOV											
02...	18	74	0.060	0.060	0.0	0.070	0.1	0.0	0.58	0.6	0.22
DEC											
21...	13	27	--	--	<0.010	--	<0.050	0.030	0.57	0.60	0.110
FEB											
09...	3	13	0.060	0.060	0.0	0.090	0.1	0.0	0.47	0.5	0.1
JUN											
19...	5	20	0.130	--	<0.010	0.130	0.130	0.020	0.58	0.60	0.100

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV											
02...	0.20	0.61	16	--	--	--	--	--	--	--	--
DEC											
21...	0.090	0.28	13	3	65	<0.5	<1	<5	<3	<10	130
FEB											
09...	0.1	0.18	11	--	--	--	--	--	--	--	--
JUN											
19...	0.080	0.25	11	4	65	<0.5	<1	<5	4	<10	110

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
02...	--	--	--	--	--	--	--	--	--	--	--
DEC											
21...	<10	<4	9	0.1	<10	<10	<1	1	400	<6	8
FEB											
09...	--	--	--	--	--	--	--	--	--	--	--
JUN											
19...	<10	<4	23	<0.1	<10	<10	<1	<1	390	<6	4

07342495 COOPER LAKE NEAR COOPER, TX

LOCATION.--Lat 33°20'00", long 95°37'30", Delta-Hopkins County line, Hydrologic Unit 11140301, in control room near center of dam on South Sulphur River, about 4.0 mi southeast of Cooper, and at river mile 23.2.

DRAINAGE AREA.--479.0 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--October 1991 to current year.

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

REMARKS.--The lake is formed by a rolled earthfill dam, 28,070 ft long, including the dike. Closure of dam and deliberate impoundment of water began Sept. 28, 1991. The spillway is a 700-foot wide vertical faced uncontrolled ogee weir located near the right abutment of the dam. The service spillway (outlet works) consists of both service and emergency gates and low-flow release facilities. The outlet works structures is 452 feet long, and consists of an approach channel, approach channel U-frame structure, intake structure and service bridge, over 10.5-foot diameter conduits, and a stilling basin and discharge channel. The emergency part of the outlet structure consists of five 40- x 20-foot tainter gates. The dam was built, and is owned by the U.S. Army Corps of Engineers in cooperation with the North Texas Municipal Water District, the Sulphur River Municipal Water District, and the city of Irving. The principal uses of the dam and lake are for flood control, water supply, and recreation. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	459.0	-
Top of Flood Control Pool	446.2	441,400
Top of Conservation Pool	440.0	310,000
Invert, lowest gated outlet	398.0	-

COOPERATION.--Area and capacity tables provided by the U.S. Army Corps of Engineers. Records of elevations and contents provided by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 441,900 acre-ft May 10, 1995 (elevation, 445.05 ft); minimum since first appreciable storage and after deliberate impoundment, 77 acre-ft Oct. 1-3, 1991 (elevation, 395.00 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 414,900 acre-ft May 10 (elevation, 445.05 ft); minimum, 295,500 acre-ft Sep. 10 (elevation, 439.22 ft).

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

395.0	77	425.0	102,500	435.0	222,800
405.0	5,970	430.0	155,100	440.0	310,300
413.0	26,210	444.0	392,000	448.0	482,500
419.0	57,050				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	306500	318100	330900	318300	338500	313600	320200	318700	345800	316100	310900	300600
2	306300	317300	328500	315500	335100	313600	316300	322200	345300	316100	310900	300200
3	306100	318300	326100	313800	331100	313400	313600	322400	344900	316100	310700	299800
4	305900	324000	323400	311900	327300	313600	323200	331900	341500	315700	310500	299000
5	305300	343500	321000	311500	323400	313600	336500	336100	337300	317500	310500	298500
6	305300	352900	318500	312100	319400	314600	348000	348200	333300	317300	310100	298300
7	307000	353100	316500	312100	315900	317500	348600	353500	329500	316900	309900	298300
8	307000	350600	322000	312100	312600	318700	346600	390500	325500	316700	309300	297700
9	306300	355600	333700	311900	311700	318100	342500	411400	323200	316300	309200	296200
10	305700	359700	346800	312100	311300	317500	340100	414000	325100	315700	308800	296600
11	305100	359500	350200	312200	311500	316700	335700	409400	331300	315300	308600	296400
12	305100	357600	350000	314400	310900	316100	332100	401900	332900	314800	308200	298500
13	304900	356200	347800	328900	310700	329700	328100	394800	330900	314200	307800	299400
14	304700	356800	345100	332300	310900	341100	324900	387500	328300	313600	307200	299200
15	304600	370700	344100	330900	311700	347400	322200	380700	326100	313200	306700	299200
16	304900	377900	358700	329100	311700	350000	319800	374300	324200	312800	306300	299400
17	305100	378500	361800	327500	311700	350400	317700	368200	322200	312400	306100	304700
18	305900	376000	362200	330300	311700	350000	315500	361800	320200	314800	305900	305100
19	306500	372600	360500	334700	311900	349600	314200	354900	318900	315000	305300	308200
20	309200	371400	357200	335700	311900	349800	317900	348200	317900	314800	305100	309000
21	316700	368400	353900	334700	311900	349800	320200	341700	316900	314600	304600	309500
22	321600	364500	350200	334500	311900	349200	318700	335100	315700	314200	304000	308600
23	322200	360900	346200	333700	311700	346200	316300	330500	317100	313600	303600	308000
24	321200	357200	342500	332100	311700	341700	314000	327900	316900	313200	303200	307800
25	323000	353500	338900	330100	311700	340100	312600	332900	316300	312800	302800	307800
26	324900	349800	334900	334100	311700	339900	312400	337700	315900	312400	302500	307200
27	324500	346600	331700	342500	312100	338500	311700	339300	315900	312100	302300	307000
28	323400	342300	327900	344100	313600	335100	310900	336100	315500	311900	301900	307000
29	322200	338500	325300	344700	---	331500	311300	332500	315200	311100	301700	307000
30	321000	334500	322800	343500	---	327300	311500	330900	316500	310500	301300	306800
31	319800	---	321000	341300	---	323800	---	341300	---	310500	300900	---
MAX	324900	378500	362200	344700	338500	350400	348600	414000	345800	317500	310900	309500
MIN	304600	317300	316500	311500	310700	313400	310900	318700	315200	310500	300900	296200
(+)	440.49	441.23	440.55	441.57	440.17	440.69	440.06	441.57	440.32	440.01	439.51	439.82
(@)	+13300	+14700	-13500	+20300	-27700	+10200	-12300	+29800	-24800	-6000	-9600	+5900

CAL YR 1994 MAX 378500 MIN 304600 (@) -5300
WTR YR 1995 MAX 414000 MIN 296200 (@) +300

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

07342495 COOPER LAKE NEAR COOPER, TX--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 33°20'00", long 95°37'30", Delta-Hopkins County line, Hydrologic Unit 11140301, in control room near center of dam on South Sulphur River, about 4.0 mi southeast of Cooper, and at river mile 23.2.

DRAINAGE AREA.--479.0 mi².

PERIOD OF RECORD.--Chemical and Biochemical analyses: September 1992 to current year.

331938095374701 - COOPER LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
MAR										
16...	1228	349000	1.00	198	7.8	11.5	0.91	9.5	89	K1
16...	1232	--	10.0	199	7.8	11.0	--	9.3	86	--
16...	1236	--	20.0	196	7.7	11.0	--	9.1	84	--
16...	1240	--	30.0	198	7.6	11.0	--	8.8	81	--
16...	1245	--	40.0	198	7.6	11.0	--	8.7	80	--
16...	1250	--	46.0	200	7.6	11.0	--	8.6	79	--
JUN										
14...	1436	329000	1.00	204	8.5	27.5	0.82	9.1	117	K6
14...	1441	--	10.0	203	8.4	27.0	--	8.7	110	--
14...	1447	--	20.0	203	8.2	26.5	--	8.1	102	--
14...	1452	--	30.0	205	7.3	25.5	--	4.4	54	--
14...	1458	--	44.0	221	7.0	23.0	--	0.3	4	--
AUG										
16...	1340	307000	1.00	218	8.2	31.0	0.98	6.7	92	K1
16...	1344	--	10.0	218	8.1	31.0	--	6.6	90	--
16...	1348	--	20.0	217	7.8	30.5	--	6.1	83	--
16...	1352	--	30.0	225	6.9	28.5	--	0.2	3	--
16...	1356	--	42.0	250	6.9	27.0	--	0.3	4	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)
MAR									
16...	K3	76	0	26	2.7	11	0.5	3.5	80
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	76	5	26	2.8	11	0.5	3.5	71
JUN									
14...	120	76	0	26	2.7	11	0.5	3.1	80
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	85	0	29	3.1	11	0.5	3.2	89
AUG									
16...	K1	79	0	27	2.7	11	0.5	3.3	84
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	85	0	29	3.1	11	0.5	3.4	110

07342495 COOPER LAKE NEAR COOPER, TX--Continued

331938095374701 - COOPER LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
MAR									
16...	14	6.2	0.20	1.7	114	0.170	--	<0.010	0.170
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	14	6.2	0.20	1.9	109	0.170	--	<0.010	0.170
JUN									
14...	12	5.8	0.20	0.30	109	--	--	<0.010	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	0.090	0.090	0.030	0.120
14...	12	6.4	0.20	4.7	126	0.100	0.100	0.020	0.120
AUG									
16...	11	6.2	0.20	2.0	114	--	--	<0.010	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	<0.010	--
16...	--	--	--	--	--	--	--	<0.010	--
16...	6.2	6.1	0.20	6.2	135	--	--	<0.010	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR									
16...	0.170	0.050	0.35	0.40	<0.010	<0.010	--	20	4
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--
16...	0.170	0.070	0.43	0.50	<0.010	<0.010	--	25	16
JUN									
14...	<0.050	0.020	0.38	0.40	0.030	0.020	0.06	<3	18
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	0.120	0.050	0.35	0.40	0.030	0.020	0.06	<10	130
14...	0.120	0.220	0.38	0.60	0.050	0.050	0.15	350	1300
AUG									
16...	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	6	19
16...	--	--	--	--	--	--	--	--	--
16...	<0.050	0.030	0.27	0.30	0.020	0.010	0.03	30	130
16...	<0.050	0.090	0.31	0.40	0.030	0.050	0.15	430	550
16...	<0.050	0.880	0.42	1.3	0.410	0.420	1.3	2000	1700

332110095422201 - COOPER LAKE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
MAR							
16...	1025	1.00	190	7.8	14.0	8.5	84
16...	1028	10.0	190	7.7	13.5	8.0	78
16...	1032	24.0	200	7.1	13.0	5.6	54
JUN							
14...	1229	1.00	205	8.1	27.0	8.2	104
14...	1232	10.0	204	7.2	25.5	5.6	69
14...	1236	23.0	209	6.5	24.0	0.3	4
AUG							
16...	1211	1.00	224	7.7	30.5	5.2	71
16...	1214	10.0	223	7.7	30.0	4.9	66
16...	1217	22.0	223	7.8	30.0	4.5	61

07342495 COOPER LAKE NEAR COOPER, TX--Continued

331818095422501 - COOPER LAKE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR												
16...	1145	1.00	201	8.2	13.0	0.73	10.1	97	K5	K5	79	0
16...	1150	10.0	205	8.0	12.5	--	9.4	90	--	--	--	--
16...	1155	20.0	222	7.1	10.5	--	5.6	51	--	--	--	--
16...	1200	30.0	219	7.1	10.5	--	5.4	49	--	--	--	--
16...	1204	38.0	224	7.1	10.5	--	5.5	50	--	--	86	0
JUN												
14...	1354	1.00	199	8.1	27.0	0.94	8.0	102	K1	K6	73	0
14...	1359	10.0	199	7.2	25.5	--	5.1	63	--	--	--	--
14...	1405	20.0	184	6.6	24.5	--	0.4	5	--	--	--	--
14...	1411	30.0	181	6.5	22.5	--	0.2	2	--	--	--	--
14...	1416	35.0	198	6.5	21.5	--	0.2	2	--	--	71	0
AUG												
16...	1306	1.00	221	7.5	30.0	0.73	5.9	79	K630	K1	79	0
16...	1311	10.0	222	7.1	29.5	--	4.1	55	--	--	--	--
16...	1316	20.0	222	6.9	29.0	--	3.1	41	--	--	--	--
16...	1321	33.0	302	6.5	26.0	--	0.3	4	--	--	100	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
MAR												
16...	27	2.7	12	0.6	3.4	82	15	6.4	0.20	2.3	119	0.070
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	30	2.8	13	0.6	3.3	89	18	7.8	0.20	5.2	134	--
JUN												
14...	25	2.6	10	0.5	3.1	79	11	5.5	0.20	0.70	106	--
14...	--	--	--	--	--	--	--	--	--	--	--	0.050
14...	--	--	--	--	--	--	--	--	--	--	--	0.060
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	25	2.0	6.9	0.4	3.6	87	3.2	3.9	0.20	9.2	113	--
AUG												
16...	27	2.7	11	0.5	3.3	86	11	6.0	0.20	2.2	115	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	36	3.2	11	0.5	4.0	130	2.4	7.1	0.20	9.3	165	--

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED UG/L AS MN)
MAR												
16...	--	<0.010	0.070	0.070	<0.015	--	0.40	<0.010	<0.010	--	27	3
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	<0.010	--	<0.050	0.070	0.43	0.50	0.020	0.020	0.06	100	46
JUN												
14...	--	<0.010	--	<0.050	<0.015	--	0.40	0.020	0.010	0.03	6	9
14...	0.050	0.010	0.060	0.060	0.040	0.36	0.40	0.030	0.020	0.06	40	<10
14...	--	<0.010	0.060	0.060	0.600	0.40	1.0	0.200	0.210	0.64	470	30
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	--	<0.050	1.50	0.40	1.9	0.800	0.840	2.6	2200	350
AUG												
16...	--	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	0.010	0.03	11	11
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	<0.010	--	<0.050	0.020	0.38	0.40	0.010	0.020	0.06	180	110
16...	--	<0.010	--	<0.050	2.60	0.90	3.5	1.30	0.890	2.7	4900	960

07342495 COOPER LAKE NEAR COOPER, TX--Continued

332019095441901 - COOPER LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR							
16...	1100	1.00	210	7.2	14.5	6.2	62
16...	1103	10.0	228	7.1	14.0	4.4	43
16...	1106	15.0	260	7.0	13.0	2.7	26
JUN							
14...	1318	1.00	180	8.5	28.0	9.7	125
14...	1321	5.00	180	8.2	27.5	8.9	114
14...	1324	13.0	260	6.9	23.5	2.0	24
AUG							
16...	1244	1.00	231	7.4	31.0	5.5	75
16...	1246	12.0	245	7.1	30.0	0.9	12

331630095462901 - COOPER LAKE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR												
16...	1515	1.00	218	7.4	15.0	0.12	7.9	80	K1900	K4600	86	0
JUN												
14...	1705	1.00	294	7.5	28.5	0.30	6.6	87	320	K8300	110	8
AUG												
16...	1520	1.00	583	8.5	31.5	0.40	8.0	111	K530	K17	120	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
MAR												
16...	29	3.2	13	0.6	2.8	86	17	6.5	0.10	9.5	134	0.290
JUN												
14...	39	3.3	16	0.7	4.0	100	20	11	0.20	10	176	2.23
AUG												
16...	39	4.5	74	3	5.2	160	61	42	0.40	7.0	338	2.24

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR												
16...	0.290	0.010	0.300	0.300	0.040	0.66	0.70	0.100	0.080	0.25	95	13
JUN												
14...	2.23	0.070	2.30	2.30	0.020	0.68	0.70	0.140	0.140	0.43	74	15
AUG												
16...	2.24	0.060	2.30	2.30	0.020	0.38	0.40	0.120	0.120	0.37	7	16

331718095480601 - COOPER LAKE SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR							
16...	1440	1.00	252	7.5	15.5	8.1	83
JUN							
14...	1646	1.00	284	7.5	29.5	6.3	84
AUG							
16...	1500	1.00	737	8.0	32.0	7.2	101

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site AC (331938095374701)

Phytoplankton Analyses October 1994 to September 1995

Date	3-16-95
Time	1228
TOTAL CELLS/mL	15,881
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft.)	0.20

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	981
Order Pennales	
Cymbella sp.	5
Gyrosigma sp.	5
Synedra ulna var. ulna	20
CHLOROPHYTA	
Ankistrodesmus falcatus	952
Chlamydomonas sp.	30
Scenedesmus opoliensis	59
Selenastrum Westii	238
Staurastrum sp.	89
CYANOPHYTA	
Aphanocapsa delicatissima	13,086
Chroococcus limneticus	238
EUGLENOPHYTA	
Trachelomonas sp.	119
CRYPTOPHYTA	
Cryptomonas erosa	59

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site FC (331630095462901)

Phytoplankton Analyses October 1994 to September 1995

Date	3-16-95
Time	1515
TOTAL CELLS/mL	**4,668**
NUMBER OF SPECIES	**8**
DEPTH COLLECTED (ft.)	**1.5**

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	30
Order Pennales	
Fragilaria crotonensis	69
Gyrosigma sp.	69
Synedra ulna var. ulna	69
CHLOROPHYTA	
Ankistrodesmus falcatus	59
CYANOPHYTA	
Aphanocapsa delicatissima	4,164
Chroococcus limneticus	119
EUGLENOPHYTA	
Trachelomonas sp.	89

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site AC (331938095374701)

Phytoplankton Analyses October 1994 to September 1995

Date	6-14-95
Time	1436
TOTAL CELLS/mL	10,110
NUMBER OF SPECIES	7
DEPTH COLLECTED (ft.)	1.35

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	59
Stephanodiscus astraea	297
CHLOROPHYTA	
Mougeotia sp.	416
Pediastrum duplex	59
CYANOPHYTA	
Anabaena spiroides	595
Aphanocapsa delicatissima	5,353
Merismopedia tenuissima	3,331

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site FC (331630095462901)

Phytoplankton Analyses October 1994 to September 1995

Date	6-14-95
Time	1705
TOTAL CELLS/mL	7,912
NUMBER OF SPECIES	6
DEPTH COLLECTED (ft.)	0.50

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	30
CHLOROPHYTA	
Chlamydomonas sp.	30
Scenedesmus opoliensis	119
CYANOPHYTA	
Anabaena spiroides	595
Aphanizomenon flos-aquae	4,164
Aphanocapsa delicatissima	2,974

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site AC (331938095374701)

Phytoplankton Analyses October 1994 to September 1995

Date	8-16-95
Time	1340
TOTAL CELLS/mL	45,203
NUMBER OF SPECIES	11
DEPTH COLLECTED (ft.)	1.6

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	212
Synedra ulna var. *ulna*	85
CHLOROPHYTA	
Chlamydomonas sp.	59
Pediastrum duplex	59
Staurastrum sp.	30
CYANOPHYTA	
Anabaena spiroides	3,271
Aphanocapsa delicatissima	23,792
Aphanocapsa elachista	595
Merismopedia tenuissima	1,903
Oscillatoria sp.	14,870
EUGLENOPHYTA	
Trachelomonas sp.	327

07342495 COOPER LAKE NEAR COOPER, TX--Continued

Cooper Lake Site FC (331630095462901)

Phytoplankton Analyses October 1994 to September 1995

Date	8-16-95
Time	1520
TOTAL CELLS/mL	10,438
NUMBER OF SPECIES	8
DEPTH COLLECTED (ft.)	0.65

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	79
Navicula sp.	40
CHLOROPHYTA	
Chlamydomonas sp.	178
Pediastrum duplex	30
CYANOPHYTA	
Anabaena spiroides	595
Aphanizomenon flos-aquae	4,461
Aphanocapsa delicatissima	4,758
PYRRHOPHYTA	
Peridinium pusillum	297

07342500 SOUTH SULPHUR RIVER NEAR COOPER, TX

LOCATION.--Lat 33°21'23", long 95°35'41", Delta County, Hydrologic Unit 11140301, on levee on left bank 110 ft downstream from bridge on State Highways 19 and 154, 1.0 mi downstream from Big Creek, 1.0 mi upstream from Brushy Creek, 4.5 mi downstream from Doctors Creek, and 5.6 mi southeast of Cooper.

DRAINAGE AREA.--527 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 371.91 ft above sea level. Prior to Feb. 15, 1985, at site 360 ft to right and 90 ft upstream at same datum. Oct. 1, 1970, at datum 3.00 ft higher. May 9, 1942, to Nov. 8, 1949, nonrecording gage, and Nov. 9, 1949, to May 13, 1955, water-stage recorder at site 1,060 ft to right of present gage. Satellite telemeter at station.

REMARKS.--Records good. Construction of Cooper Dam, 13.4 miles upstream from station, was begun during the 1988 water year. Deliberate impoundment began Sept. 28, 1991.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--49 years (water years 1943-91), 416 ft³/s (10.72 in/yr), 301,400 acre-ft/yr.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1943-1991).--Maximum discharge 47,200 ft³/s May 13, 1982 (gage height, 27.21 ft, from floodmark in gage well); no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	608	1670	1110	1390	141	1820	219	1960	8.3	4.2	3.1
2	3.5	612	1370	1110	1920	49	1820	695	1910	7.3	3.9	2.8
3	3.5	628	1240	1110	1920	39	1520	814	2010	7.4	3.6	2.7
4	4.0	969	1230	936	1900	33	1450	1570	1950	6.5	3.4	2.9
5	4.3	1300	1230	440	1900	28	998	303	1910	13	3.4	3.0
6	4.2	e530	1230	132	1880	90	573	778	1890	25	3.4	3.1
7	4.8	586	1060	138	1870	609	717	214	1870	57	3.5	3.1
8	5.0	1420	900	127	1610	352	1230	1870	1870	56	3.6	3.0
9	4.2	1820	990	125	744	370	1850	1130	1510	55	3.8	2.8
10	4.2	1620	743	124	244	463	1850	378	509	54	3.8	2.7
11	5.0	619	175	123	252	452	1850	1670	1150	54	3.7	2.9
12	5.3	713	180	125	241	446	1840	3220	1280	54	3.8	3.4
13	5.3	1040	983	927	86	1250	1840	3580	1220	54	3.6	3.5
14	5.2	1130	1830	502	22	1100	1680	3800	1210	54	3.6	23
15	5.1	1420	1910	847	21	729	1290	e3100	1100	54	3.7	5.1
16	5.3	587	3000	1160	24	703	1280	e2950	862	52	3.9	4.5
17	5.5	345	657	1330	27	524	1280	e2950	859	33	3.8	24
18	5.6	1170	112	1470	22	473	1290	3040	853	7.9	3.8	13
19	5.8	1810	535	1220	19	285	1300	3030	776	71	3.8	26
20	6.1	1830	1860	191	15	26	1340	3030	442	18	3.7	26
21	56	1820	1870	696	14	15	1310	3030	435	21	3.6	5.8
22	30	1790	1840	845	13	227	1300	3000	373	21	3.6	4.2
23	178	1780	1840	875	12	1270	1300	2900	162	21	2.5	3.9
24	625	1760	1820	972	12	1840	1230	1930	20	20	2.6	3.5
25	645	1750	1810	1150	11	1840	723	1790	12	20	3.1	3.5
26	656	1760	1800	1470	11	1860	240	205	9.7	20	3.3	3.3
27	611	1760	1800	1290	11	1880	235	464	8.4	18	3.5	3.3
28	608	1750	1670	130	195	1850	163	1440	7.8	18	3.6	3.5
29	605	1740	1430	68	---	1840	14	1870	7.1	18	3.1	3.6
30	606	1730	1320	436	---	1830	9.2	1890	7.6	17	3.0	3.6
31	607	---	1120	1190	---	1820	---	2100	---	15	2.9	---
TOTAL	5322.4	38397	41225	22369	16386	24434	35342.2	58960	28183.6	950.4	108.8	198.8
MEAN	172	1280	1330	722	585	788	1178	1902	939	30.7	3.51	6.63
MAX	656	1830	3000	1470	1920	1880	1850	3800	2010	71	4.2	26
MIN	3.5	345	112	68	11	15	9.2	205	7.1	6.5	2.5	2.7
AC-FT	10560	76160	81770	44370	32500	48460	70100	116900	55900	1890	216	394
CFSM	.33	2.43	2.52	1.37	1.11	1.50	2.24	3.61	1.78	.06	.01	.01
IN.	.38	2.71	2.91	1.58	1.16	1.72	2.49	4.16	1.99	.07	.01	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995#, BY WATER YEAR (WY)

MEAN	204	658	882	668	513	1483	816	1005	465	397	339	28.0
MAX	551	1280	1499	748	753	2768	1261	1902	939	839	1205	99.5
(WY)	1994	1995	1994	1993	1993	1992	1993	1995	1995	1992	1992	1994
MIN	4.20	57.8	227	539	236	788	14.1	62.6	5.95	4.58	3.07	.96
(WY)	1993	1992	1992	1994	1994	1995	1994	1992	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1992 - 1995#	
ANNUAL TOTAL	220597.98		271877.2			
ANNUAL MEAN	604		745		624	
HIGHEST ANNUAL MEAN					745	1995
LOWEST ANNUAL MEAN					484	1993
HIGHEST DAILY MEAN	3000	Dec 16	3800	May 14	4240	Mar 9 1992
LOWEST DAILY MEAN	.52	Aug 29	2.5	Aug 23	.00	Oct 1 1991
ANNUAL SEVEN-DAY MINIMUM	.55	Aug 25	2.9	Aug 30	.00	Oct 1 1991
INSTANTANEOUS PEAK FLOW			4710	May 14	5500	Mar 9 1992
INSTANTANEOUS PEAK STAGE			19.90	May 14	19.90	May 14 1995
ANNUAL RUNOFF (AC-FT)	437600		539300		451900	
ANNUAL RUNOFF (CFSM)	1.15		1.41		1.18	
ANNUAL RUNOFF (INCHES)	15.57		19.19		16.08	
10 PERCENT EXCEEDS	1710		1860		1710	
50 PERCENT EXCEEDS	356		442		244	
90 PERCENT EXCEEDS	3.1		3.6		2.1	

e Estimated
Period of regulated streamflow.

07342500 SOUTH SULPHUR RIVER NEAR COOPER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1958 to September 1966, October 1967 to current year. Chemical and biochemical analyses: December 1979 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1958 to September 1966, October 1967 to September 1989.
WATER TEMPERATURE: October 1958 to September 1966, October 1967 to September 1989.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,710 microsiemens Aug. 14, 1973; minimum daily, 82 microsiemens July 2, 1976, July 12, 1988.
WATER TEMPERATURE: Maximum daily, 36.0°C Aug. 6, 1960, Aug. 10, 1962; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLVED FLD. AS CACO3 (MG/L)
NOV												
01...	1033	604	217	7.5	17.5	14	13	9.4	99	2.0	79	0
MAR												
16...	1200	669	232	7.8	12.0	55	31	11.5	107	1.6	73	2
MAY												
12...	1724	6200	206	7.7	21.0	27	14	8.9	102	1.2	85	0
JUN												
14...	1536	1210	207	7.8	26.0	54	5.7	14.2	176	3.3	81	1
AUG												
16...	0730	3.8	261	7.7	28.0	42	4.5	6.9	89	1.3	95	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)
NOV												
01...	27	2.9	11	0.5	4.2	86	11	6.1	0.2	2.2	118	26
MAR												
16...	24	3.2	15	0.8	2.8	71	30	15	0.1	0.76	135	69
MAY												
12...	29	3.0	12	0.6	3.3	85	15	6.9	0.2	0.7	122	35
JUN												
14...	28	2.7	12	0.6	3.7	80	12	7.4	0.2	0.76	116	14
AUG												
16...	32	3.6	14	0.6	3.4	98	17	9.8	0.2	2.7	142	6

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L)	RESIDUE FIXED NON FILTERABLE (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)
NOV											
01...	9	17	0.400	--	<0.010	0.400	0.40	0.0	0.35	0.4	0.0
MAR											
16...	20	49	0.160	--	<0.010	0.160	0.160	0.040	0.46	0.50	0.020
MAY											
12...	9	26	0.150	--	<0.010	0.150	0.15	0.0	0.47	0.5	0.0
JUN											
14...	6	8	0.080	0.080	0.0	0.090	0.1	0.1	0.72	0.8	0.0
AUG											
16...	6	0	--	--	<0.010	--	<0.050	0.030	0.47	0.50	0.050

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV											
01...	0.0	0.12	8.0	--	--	--	--	--	--	--	--
MAR											
16...	0.010	0.03	12	<1	42	<0.5	<1	<5	<3	<10	130
MAY											
12...	0.0	0.09	8.1	--	--	--	--	--	--	--	--
JUN											
14...	0.0	0.03	11	2	41	<0.5	5	<5	<3	20	29
AUG											
16...	0.050	0.15	7.0	2	59	0.7	3	<5	<3	<10	17

07342500 SOUTH SULPHUR RIVER NEAR COOPER, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
01...	--	--	--	--	--	--	--	--	--	--	--
MAR											
16...	<10	8	2	<0.1	<10	<10	<1	3	200	<6	16
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	50	<4	73	<0.1	<10	<10	<1	1	220	<6	35
AUG											
16...	40	<4	9	<0.1	20	<10	<1	<1	270	<6	4

07343000 NORTH SULPHUR RIVER NEAR COOPER, TX

LOCATION.--Lat 33°28'29", long 95°35'15", Lamar County, Hydrologic Unit 11140301, on left bank at downstream side of highway embankment near left end of downstream bridge on State Highways 19 and 24, 2.3 mi upstream from Auds Creek, 5.5 mi upstream from Hickory Creek, 8.7 mi northeast of Cooper, and 15.6 mi upstream from mouth.

DRAINAGE AREA.--276 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 372.42 ft above sea level. Prior to Nov. 8, 1949, nonrecording gage, Nov. 8, 1949, to May 21, 1960, water-stage recorder at site 50 ft upstream at datum 9.00 ft higher, and from May 22, 1960, to Sept. 30, 1970, at datum 5.00 ft higher.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. In 1928-29, the channel was rectified for a distance of 28 mi upstream and 18 mi downstream from this station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 2, 1944, reached a stage of 35.6 ft, present datum, and flood in 1932 reached about same stage, from information by U.S. Army Corps of Engineers and local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 8	0745	23,400	19.76	May 8	1015	29,600	22.98

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	20	122	10	36	113	29	1570	335	9.8	1.3	.06
2	3.5	20	90	9.7	28	34	24	256	e103	6.2	1.7	.06
3	3.7	228	66	9.3	23	39	21	783	e41	5.7	3.0	.06
4	3.9	1950	50	8.9	19	35	5240	8560	e23	4.9	2.0	.08
5	4.2	2970	38	8.7	17	34	2010	720	e15	320	1.8	.10
6	4.5	1480	30	46	15	33	1400	4910	e13	88	1.3	.08
7	9.3	743	22	74	14	862	335	1400	e12	20	.74	.10
8	142	599	2570	24	12	205	150	14500	e11	11	.55	.11
9	16	2130	2800	19	12	52	86	1070	e10	7.1	.41	.09
10	5.6	2210	3000	17	13	27	61	256	e417	5.0	.30	.07
11	4.9	841	406	17	57	18	231	126	e2580	4.0	.21	.07
12	4.1	572	142	21	106	15	92	91	e230	3.3	.18	e47
13	4.8	1030	80	2560	33	3430	49	79	e63	2.9	.15	23
14	5.4	994	101	898	26	2410	36	62	33	2.3	.14	18
15	9.9	4320	471	194	40	1110	31	52	21	1.9	.35	18
16	40	1840	1900	85	57	1140	29	47	16	1.8	.22	17
17	29	910	536	61	38	366	30	47	13	1.7	.15	39
18	25	651	164	1080	22	169	49	52	12	1.9	.12	112
19	28	791	89	1940	17	101	1460	41	10	3.3	.09	106
20	18	2330	264	300	14	68	1930	32	10	4.4	.08	1060
21	464	1380	201	110	11	48	284	28	8.7	5.0	.08	e86
22	276	606	83	86	8.9	40	104	25	8.6	4.4	.07	24
23	82	429	45	295	8.3	34	445	22	10	3.6	.07	15
24	39	369	30	152	7.4	28	119	23	75	3.0	.06	9.9
25	908	346	22	79	6.3	25	54	1350	26	2.2	.06	7.2
26	533	345	19	974	7.7	1370	36	283	13	1.5	.06	5.8
27	96	378	18	1870	9.7	421	47	66	9.4	1.1	.06	6.0
28	27	303	15	375	350	108	35	57	7.8	.86	.06	7.4
29	21	222	14	127	---	70	27	59	6.5	.69	.05	5.1
30	20	164	13	69	---	49	24	211	6.5	.63	.06	3.9
31	20	---	11	48	---	37	---	4730	---	.61	.06	---
TOTAL	2850.9	31171	13412	11567.6	1008.3	12491	14468	41508	4139.5	528.79	15.48	1611.18
MEAN	92.0	1039	433	373	36.0	403	482	1339	138	17.1	.50	53.7
MAX	908	4320	3000	2560	350	3430	5240	14500	2580	320	3.0	1060
MIN	3.1	20	11	8.7	6.3	15	21	22	6.5	.61	.05	.06
AC-FT	5650	61830	26600	22940	2000	24780	28700	82330	8210	1050	31	3200
CFSM	.33	3.76	1.57	1.35	.13	1.46	1.75	4.85	.50	.06	.00	.19
IN.	.38	4.20	1.81	1.56	.14	1.68	1.95	5.59	.56	.07	.00	.22

07343000 NORTH SULPHUR RIVER NEAR COOPER, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1995, BY WATER YEAR (WY)

MEAN	232	244	280	204	356	341	405	502	321	105	19.5	118
MAX	1784	1406	1527	1172	1483	1223	3017	2461	1792	872	160	584
(WY)	1972	1958	1992	1950	1950	1968	1966	1982	1989	1976	1971	1973
MIN	.000	.000	.000	.16	.81	4.43	2.97	2.43	.28	.000	.000	.000
(WY)	1953	1956	1956	1964	1976	1954	1972	1972	1988	1954	1952	1952

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1950 - 1995	
ANNUAL TOTAL	141113.6		134771.75			
ANNUAL MEAN	387		369		260	
HIGHEST ANNUAL MEAN					541	1957
LOWEST ANNUAL MEAN					49.4	1978
HIGHEST DAILY MEAN	12300	Jul 15	14500	May 8	40900	Oct 19 1971
LOWEST DAILY MEAN	3.1	Sep 29	.05	Aug 29	.00	Oct 1 1949
ANNUAL SEVEN-DAY MINIMUM	3.2	Sep 25	.06	Aug 24	.00	Aug 2 1951
INSTANTANEOUS PEAK FLOW			29600	May 8	90600	Oct 19 1971
INSTANTANEOUS PEAK STAGE			22.98	May 8	36.16	Oct 19 1971
ANNUAL RUNOFF (AC-FT)	279900		267300		188200	
ANNUAL RUNOFF (CFSM)	1.40		1.34		.94	
ANNUAL RUNOFF (INCHES)	19.02		18.16		12.79	
10 PERCENT EXCEEDS	828		1060		292	
50 PERCENT EXCEEDS	29		30		11	
90 PERCENT EXCEEDS	5.4		.62		.00	

e Estimated

07343000 NORTH SULPHUR RIVER NEAR COOPER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: July 1950 to September 1958, January 1967 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1968 to September 1990.
WATER TEMPERATURES: October 1968 to September 1990.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,000 microsiemens July 2, 3, 1988; minimum daily, 191 microsiemens Oct. 12, Dec. 10, 1971.
WATER TEMPERATURES: Maximum daily, 39.0°C June 1, 1977; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
11...	1500	4.0	960	8.1	17.5	11.0	116	1.0	250	160	81
DEC											
08...	1200	19	763	8.1	12.5	10.0	95	0.4	250	72	85
JAN											
27...	1000	2020	320	7.9	12.0	10.6	100	0.9	130	11	46
MAR											
17...	1108	395	521	7.7	17.0	10.2	106	2.0	200	20	72
MAY											
12...	1427	93	597	8.1	25.0	11.2	138	2.1	250	36	88
JUN											
20...	1050	20	729	7.8	29.5	7.2	96	1.0	210	74	71

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
11...	12	110	3	4.3	89	290	71	0.4	2.7	625
DEC										
08...	8.5	58	2	2.5	170	150	30	0.30	6.2	445
JAN										
27...	3.3	15	0.6	2.3	120	31	6.9	0.3	8.8	186
MAR										
17...	5.0	29	0.9	2.7	180	60	14	0.3	9.7	305
MAY										
12...	6.7	35	1	2.8	210	84	17	0.3	9.0	371
JUN										
20...	7.6	68	2	3.3	140	160	38	0.4	5.3	436

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
11...	--	--	0.0	--	<0.050	0.0	0.56	0.6	0.0	0.0
DEC										
08...	--	--	0.0	--	<0.050	<0.015	--	0.4	<0.010	<0.010
JAN										
27...	0.150	--	<0.010	0.150	0.15	0.0	0.27	0.3	0.0	0.0
MAR										
17...	0.970	0.970	0.030	1.00	1.00	0.030	0.57	0.60	0.040	0.040
MAY										
12...	0.380	--	<0.010	0.380	0.38	0.0	0.37	0.4	0.0	0.0
JUN										
20...	--	--	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	<0.010

07343000 NORTH SULPHUR RIVER NEAR COOPER, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT										
11...	0.09	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
JAN										
27...	0.15	1	28	<0.5	<1	<5	3	<10	53	<10
MAR										
17...	0.12	--	--	--	--	--	--	--	--	--
MAY										
12...	0.06	--	--	--	--	--	--	--	--	--
JUN										
20...	--	<1	65	<0.5	<1	<5	<3	<10	<3	<10

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
11...	--	--	--	--	--	--	--	--	--	--
DEC										
08...	--	--	--	--	--	--	--	--	--	--
JAN										
27...	<4	6	0.1	<10	<10	<1	<1	550	<6	8
MAR										
17...	--	--	--	--	--	--	--	--	--	--
MAY										
12...	--	--	--	--	--	--	--	--	--	--
JUN										
20...	14	19	<0.1	<10	<10	<1	<1	1100	<6	11

07343200 SULPHUR RIVER NEAR TALCO, TX

LOCATION.--Lat 33°23'10", long 95°07'56", Franklin County, Hydrologic Unit 11140302, at downstream side of highway embankment near right end of bridge on U.S. Highway 271, 2.2 mi northwest of Talco, 3.2 mi downstream from Mustang Creek, and 162 mi upstream from mouth.

DRAINAGE AREA.--1,365 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1956 to current year.

REVISED RECORDS.--WDR TX-76-1(P).

GAGE.--Water-stage recorder. Datum of gage is 290.82 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. The River Crest Stream Electric Generating Plant diverts water (amount unknown) upstream from station. Deliberate impoundment of water upstream from station in Cooper Lake (station 07342500) began on Sept. 28, 1991. Flow may be slightly affected at times by discharge from the flood-detention pools of 14 floodwater-retarding structures with a combined detention capacity of 8,210 acre-ft. These structures control runoff from 23.4 mi² in the Auds and Depot Creek drainage basin. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--35 years (water years 1957-1991) prior to regulation by Cooper Lake, 1,408 ft³/s (14.01 in/yr), 1,020,000 acre-ft/yr.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1957-91).--Maximum discharge, 77,000 ft³/s Dec. 11, 1971 (gage height, 29.40 ft, from floodmark); no flow at times in 1957, 1964-65, 1970, and 1979-80.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods in 1908 and 1914 each reached a stage of 27.5 ft, and flood in 1945 reached a stage of 26.5 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	653	1980	1400	1640	3030	2050	355	6490	e27	24	e7.0
2	13	633	1930	1280	1770	1910	2020	2010	3050	e22	26	e6.7
3	13	642	1650	1260	2200	836	1990	1040	3230	e18	22	e6.3
4	13	1240	1440	1250	2180	652	2860	6800	4860	e18	18	e6.1
5	12	4750	1400	1050	2140	577	10700	17300	2590	e50	15	e6.0
6	12	9470	1390	725	2090	573	9070	12700	2110	470	13	e6.2
7	13	4970	1370	825	2070	1140	5700	13800	2000	216	11	e7.2
8	20	1870	1250	705	2050	3300	2320	12600	1960	116	10	e8.2
9	18	2140	6640	487	1770	1630	1920	25500	1930	85	9.3	e8.3
10	22	5430	9050	373	861	889	2390	16000	1490	83	8.7	e8.0
11	22	5390	8040	316	413	750	2480	7110	2250	79	7.9	e8.8
12	21	2430	3940	299	526	670	2390	4100	5910	74	7.1	e11
13	24	1260	1740	2100	509	631	2200	4490	2280	64	6.6	e12
14	26	1340	1740	7470	294	1460	2080	4760	1360	57	6.0	e13
15	26	4300	2770	4340	182	5640	1890	4680	1210	63	5.1	e12
16	26	7670	4320	2070	188	4890	1460	4560	1040	66	e4.8	e10
17	28	3530	8430	2040	225	3710	1420	4220	806	66	e4.4	e10
18	31	1170	5750	2560	212	1830	1510	3940	781	64	e4.3	31
19	32	1560	2700	5590	168	1080	1530	3770	773	194	e4.6	80
20	76	2410	1550	6940	143	673	4290	3710	681	196	e6.1	515
21	110	3170	2770	2990	118	317	4620	3680	424	96	e17	597
22	1590	2880	2860	1570	97	219	2380	3560	375	59	e61	140
23	785	2340	2550	2060	131	368	2950	3490	325	47	e53	78
24	291	2150	2280	2150	141	1350	3230	3340	167	43	e30	44
25	646	2080	2160	1570	89	1990	2160	3730	93	36	e21	28
26	1960	2060	2090	1930	70	2290	1120	7790	46	33	e16	25
27	1560	2060	2050	6610	71	3420	653	3240	e32	29	e12	22
28	822	2030	2030	6880	673	2980	613	1210	e28	27	e9.2	27
29	705	2010	2180	3450	---	2400	439	1710	e25	24	e8.1	26
30	667	1980	1920	1410	---	2180	202	2250	e30	22	e7.7	26
31	649	---	1710	1200	---	2070	---	4470	---	22	e7.1	---
TOTAL	10246	85618	93680	74900	23021	55455	80637	191915	48346	2466	456.0	1785.8
MEAN	331	2854	3022	2416	822	1789	2688	6191	1612	79.5	14.7	59.5
MAX	1960	9470	9050	7470	2200	5640	10700	25500	6490	470	61	597
MIN	12	633	1250	299	70	219	202	355	25	18	4.3	6.0
AC-FT	20320	169800	185800	148600	45660	110000	159900	380700	95890	4890	904	3540
CFSM	.24	2.09	2.21	1.77	.60	1.31	1.97	4.54	1.18	.06	.01	.04
IN.	.28	2.33	2.55	2.04	.63	1.51	2.20	5.23	1.32	.07	.01	.05

07343200 SULPHUR RIVER NEAR TALCO, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1995#, BY WATER YEAR (WY)

MEAN	1121	1828	3574	1772	1589	2834	1516	3028	1098	1201	524	122
MAX	2208	2854	5315	2416	2612	4213	2688	6191	1799	3164	1832	220
(WY)	1994	1995	1992	1995	1993	1992	1995	1995	1992	1992	1992	1994
MIN	24.8	1019	2257	1002	822	1789	123	1285	133	4.39	2.15	2.18
(WY)	1993	1993	1993	1994	1995	1995	1994	1992	1993	1993	1993	1993

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1992 - 1995#	
ANNUAL TOTAL	516399		668525.8			
ANNUAL MEAN	1415		1832		1691	
HIGHEST ANNUAL MEAN					2207	1992
LOWEST ANNUAL MEAN					1201	1993
HIGHEST DAILY MEAN	11100	Jul 16	25500	May 9	31200	Oct 30 1991
LOWEST DAILY MEAN	12	Oct 5	4.3	Aug 18	1.0	Aug 31 1993
ANNUAL SEVEN-DAY MINIMUM	13	Oct 1	5.0	Aug 14	1.1	Aug 27 1993
INSTANTANEOUS PEAK FLOW			32400	May 9	35800	Oct 30 1992
INSTANTANEOUS PEAK STAGE			25.83	May 9	26.42	Dec 4 1993
ANNUAL RUNOFF (AC-FT)	1024000		1326000		1225000	
ANNUAL RUNOFF (CFSM)	1.04		1.34		1.24	
ANNUAL RUNOFF (INCHES)	14.07		18.22		16.83	
10 PERCENT EXCEEDS	3510		4580		4300	
50 PERCENT EXCEEDS	688		1050		814	
90 PERCENT EXCEEDS	25		12		9.7	

e Estimated
Period of regulated streamflow.

07343200 SULPHUR RIVER NEAR TALCO, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: January 1965 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: January 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1966 to September 1991.
WATER TEMPERATURE: October 1966 to September 1991.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,800 microsiemens Feb. 17, 1976; minimum daily, 65 microsiemens Jan. 15, 1989.
WATER TEMPERATURE (1966-89): Maximum daily, 39.0°C Aug. 13, 1987; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT												
12...	0945	21	318	7.9	17.0	7.9	83	1.2	130	1	47	4.1
DEC												
07...	1430	1370	245	8.0	14.0	9.9	96	0.4	87	1	30	3.0
JAN												
23...	1600	2520	302	8.2	7.5	11.7	98	0.7	110	7	40	3.3
MAR												
16...	1530	4810	297	7.4	16.0	10.2	104	2.5	110	8	39	3.0
MAY												
09...	1639	28400	183	7.8	19.0	8.7	95	2.1	77	0	28	1.8
JUN												
20...	1441	644	236	7.7	27.0	7.0	89	0.7	89	1	31	2.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
OCT												
12...	17	0.6	3.6	130	25	10	0.2	3.2	190	--	--	0.0
DEC												
07...	12	0.6	3.6	86	16	7.1	0.20	2.4	127	0.310	--	<0.010
JAN												
23...	14	0.6	3.6	110	27	9.9	0.2	5.8	170	0.220	0.220	0.0
MAR												
16...	17	0.7	3.2	100	25	9.7	0.2	7.3	169	0.710	0.710	0.020
MAY												
09...	7.3	0.4	3.0	79	8.8	3.5	0.1	6.7	108	0.220	0.220	0.0
JUN												
20...	13	0.6	3.1	88	16	7.8	0.2	1.5	129	0.180	--	<0.010

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)
OCT											
12...	--	<0.050	0.0	0.48	0.5	<0.010	<0.010	--	--	--	--
DEC											
07...	0.310	0.31	<0.015	--	1	0.0	0.0	0.06	--	--	--
JAN											
23...	0.230	0.23	0.0	0.28	0.3	0.0	0.0	0.12	<1	43	<0.5
MAR											
16...	0.730	0.730	0.050	0.75	0.80	0.050	0.040	0.12	--	--	--
MAY											
09...	0.230	0.23	<0.015	--	0.6	0.1	0.1	0.28	--	--	--
JUN											
20...	0.180	0.180	0.030	0.27	0.30	<0.010	0.020	0.06	1	47	<0.5

07343200 SULPHUR RIVER NEAR TALCO, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)
OCT 12...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	<1	<5	<3	<10	73	<10	<4	8	<0.1	<10	10
MAR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	<1	<5	<3	<10	23	<10	<4	3	<0.1	<10	<10

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 12...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	<1	<1	360	<6	3	--	--	--	--	--	--
MAR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	<1	<1	260	<6	<3	<1	<1	<0.1	<1	1	4.3

DATE	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOT-TOM MA-TERIAL (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
OCT 12...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 23...	--	--	--	--	--	--	--	--	--	--	--
MAR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 09...	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	1.3	0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.8	<0.1	<1	<10

07343500 WHITE OAK CREEK NEAR TALCO, TX

LOCATION.--Lat 33°19'20", long 95°05'33", Titus County, Hydrologic Unit 11140300, near center of main channel at downstream side of bridge on U.S. Highway 271, 0.8 mi downstream from Lewis Creek, 2.4 mi upstream from Ripley Creek, 2.7 mi south of Talco, and 38.4 mi upstream from mouth.

DRAINAGE AREA.--494 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1711: Elevation of historical maximum.

GAGE.--Water-stage recorder. Datum of gage is 286.45 ft above sea level.

REMARKS.--Records good. There are several small diversions upstream from station for municipal supply. The cities of Sulphur Springs and Mount Vernon discharged sewage effluent into tributaries above this station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1870, 22.9 ft Mar. 31, 1945, from floodmarks and from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 9	2215	14,000	18.81				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	32	62	837	1520	214	114	148	62	20	8.2	3.1
2	1.6	20	58	557	671	269	93	163	53	18	8.5	3.1
3	1.5	13	58	323	311	447	81	354	49	17	8.2	2.8
4	1.3	11	55	241	221	457	329	1100	65	17	7.4	2.6
5	1.2	790	52	205	178	323	914	2030	182	21	6.8	2.5
6	1.1	1560	51	229	150	257	1310	3090	298	25	6.7	2.7
7	1.2	2020	59	473	131	346	1390	3440	154	38	7.6	3.1
8	21	2220	64	643	116	655	1430	4730	84	130	10	3.6
9	19	2300	110	624	105	797	1580	9670	64	123	9.3	3.6
10	6.9	2290	1020	470	95	751	1400	11000	54	61	7.6	3.3
11	14	1990	1820	282	95	660	1640	7170	56	38	6.4	3.1
12	34	1700	3480	204	122	348	1190	4540	53	27	5.4	3.6
13	22	1380	4130	658	164	220	735	3350	95	22	4.7	4.8
14	11	1320	3290	1300	202	668	432	2380	250	18	4.7	4.5
15	6.5	1060	2710	1650	175	1310	246	1290	158	15	5.0	4.2
16	5.9	468	2840	2030	157	2880	176	409	87	12	3.9	5.5
17	13	369	3560	2420	162	3570	146	212	63	9.8	3.6	e36
18	10	461	4600	2300	162	2770	193	165	50	9.5	3.5	e82
19	11	418	4130	2310	151	2060	385	135	44	52	3.5	146
20	17	264	3310	2410	131	1190	546	117	38	117	3.7	171
21	35	190	2480	2430	110	452	720	103	33	76	3.7	205
22	71	158	1740	2380	93	252	1000	88	29	43	13	250
23	52	141	881	1960	82	187	1200	79	26	61	68	248
24	171	126	397	1390	73	154	1550	72	24	44	32	107
25	200	111	263	839	67	135	1860	159	47	29	13	43
26	167	96	211	660	63	124	1670	208	161	18	7.3	23
27	122	84	180	1550	62	205	1210	199	103	13	5.3	14
28	267	75	157	2280	213	301	554	107	55	12	4.3	12
29	243	68	298	2820	---	375	245	79	34	9.6	3.7	9.1
30	111	63	657	2900	---	260	174	75	24	8.5	3.2	7.1
31	53	---	866	2250	---	162	---	81	---	8.2	2.9	---
TOTAL	1693.0	21798	43589	41625	5782	22799	24513	56743	2495	1112.6	281.1	1409.3
MEAN	54.6	727	1406	1343	206	735	817	1830	83.2	35.9	9.07	47.0
MAX	267	2300	4600	2900	1520	3570	1860	11000	298	130	68	250
MIN	1.1	11	51	204	62	124	81	72	24	8.2	2.9	2.5
AC-FT	3360	43240	86460	82560	11470	45220	48620	112500	4950	2210	558	2800
CFSM	.11	1.47	2.85	2.72	.42	1.49	1.65	3.71	.17	.07	.02	.10
IN.	.13	1.64	3.28	3.13	.44	1.72	1.85	4.27	.19	.08	.02	.11

07343500 WHITE OAK CREEK NEAR TALCO, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1995, BY WATER YEAR (WY)

MEAN	213	524	757	518	763	731	837	865	367	241	51.6	108
MAX	1744	2984	3986	3222	3593	3491	3784	3166	2620	3743	898	1064
(WY)	1982	1975	1972	1980	1950	1990	1957	1990	1981	1992	1992	1950
MIN	.000	.34	1.12	1.82	7.58	11.8	4.97	7.35	.83	.35	.000	.000
(WY)	1979	1976	1966	1964	1976	1956	1956	1988	1988	1956	1978	1969

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1950 - 1995	
ANNUAL TOTAL	179701.5		223840.0			
ANNUAL MEAN	492		613		489	
HIGHEST ANNUAL MEAN					1160	1992
LOWEST ANNUAL MEAN					68.6	1956
HIGHEST DAILY MEAN	5470	Jul 19	11000	May 10	38000	Dec 11 1971
LOWEST DAILY MEAN	1.1	Oct 6	1.1	Oct 6	.00	Aug 8 1954
ANNUAL SEVEN-DAY MINIMUM	1.4	Oct 1	1.4	Oct 1	.00	Aug 8 1954
INSTANTANEOUS PEAK FLOW			14000	May 9	48000	Dec 11 1971
INSTANTANEOUS PEAK STAGE			18.81	May 9	21.20	Dec 11 1971
ANNUAL RUNOFF (AC-FT)	356400		444000		354600	
ANNUAL RUNOFF (CFSM)	1.00		1.24		.99	
ANNUAL RUNOFF (INCHES)	13.53		16.86		13.46	
10 PERCENT EXCEEDS	1560		2040		1300	
50 PERCENT EXCEEDS	95		131		38	
90 PERCENT EXCEEDS	7.7		5.4		1.1	

e Estimated

07343500 WHITE OAK CREEK NEAR TALCO, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1967 to June 1989. Chemical and biochemical analyses: November 1982 to September 1985, and October 1991 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1989.
WATER TEMPERATURES: October 1967 to September 1989.

INSTRUMENTATION.--From October 1967 to September 1989 specific conductance and water temperature were recorded continuously at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,220 micromhos June 15, 1972; minimum daily 33 micromhos May 16, 1969.
WATER TEMPERATURE: Maximum daily, 37.0°C July 18, Aug. 3, 15, 1975, and Aug. 7, 1986; minimum daily, 0.0°C on several days during January 1968, 1970, 1978, and 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
12...	1230	36	411	7.6	16.5	58	42	7.5	78	0.7	85	8
DEC												
07...	1000	59	298	7.1	13.5	75	18	8.4	81	0.4	70	25
JAN												
25...	0900	847	164	6.9	6.5	110	36	10.7	87	0.7	42	17
MAR												
16...	1047	2340	125	6.8	15.0	180	49	8.2	82	1.6	29	5
MAY												
10...	1114	11400	82	7.1	20.0	150	24	7.2	80	1.7	25	0
JUN												
21...	1107	33	262	6.9	26.0	170	66	4.6	57	0.8	66	16

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
12...	20	8.6	47	2	9.1	77	63	40	0.4	2.3	238	69
DEC												
07...	17	6.6	24	1	6.9	45	42	26	0.20	12	168	16
JAN												
25...	10	4.0	9.3	0.6	4.8	25	23	12	<0.10	7.7	88	20
MAR												
16...	7.5	2.6	7.2	0.6	4.2	24	13	7.5	<0.10	5.0	63	54
MAY												
10...	6.3	2.2	4.6	0.4	5.6	26	6.9	5.3	<0.10	4.3	52	28
JUN												
21...	16	6.3	22	1	7.7	50	36	21	0.2	10	155	64

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N),	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
12...	15	54	0.350	0.350	0.0	0.360	0.36	0.0	0.47	0.5	0.1
DEC											
07...	10	6	1.28	1.28	0.0	1.30	1.3	0.0	0.56	0.6	0.14
JAN											
25...	<1	--	0.290	0.290	0.0	0.300	0.30	0.1	0.53	0.6	0.11
MAR											
16...	26	28	0.190	0.190	0.020	0.210	0.210	0.070	0.83	0.90	0.120
MAY											
10...	14	14	0.110	0.110	0.0	0.120	0.12	0.0	0.87	0.9	0.19
JUN											
21...	12	52	1.10	--	<0.010	1.10	1.10	0.050	0.65	0.70	0.130

07343500 WHITE OAK CREEK NEAR TALCO, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 12...	0.0	0.15	8.7	--	--	--	--	--	--	--	--
DEC 07...	0.14	0.43	10	--	--	--	--	--	--	--	--
JAN 25...	0.11	0.34	20	<1	41	<0.5	<1	<5	<3	<10	130
MAR 16...	0.100	0.31	19	--	--	--	--	--	--	--	--
MAY 10...	0.15	0.46	15	--	--	--	--	--	--	--	--
JUN 21...	0.120	0.37	13	1	54	<0.5	<1	<5	<3	<10	230

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 12...	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	--	--	--	--	--	--	--	--	--	--	--
JAN 25...	<10	<4	39	<0.1	<10	20	<1	<1	77	<6	<3
MAR 16...	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<10	<4	140	<0.1	<10	<10	<1	<1	130	<6	5

07343850 WHITE OAK CREEK NEAR OMAHA, TX

LOCATION.--Lat 33°16'30", long 94°44'30", Morris County, Hydrologic Unit 11140303, at bridge, on U.S Highway 259, 6.2 mi north of Omaha, and 10.5 mi upstream from mouth.

DRAINAGE AREA.--772 mi².

PERIOD OF RECORD.--Occasional discharge measurements: February 1965 to August 1967.
Water-quality records.--Chemical and biochemical analyses: October 1968 to September 1977, and October 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
13...	1515	31	389	7.7	17.0	58	36	7.4	77	0.5	88	26
DEC												
05...	1530	87	300	7.2	11.5	130	23	8.8	81	0.8	73	29
JAN												
24...	1500	3140	114	7.6	6.5	130	29	11.0	89	0.7	29	9
MAR												
14...	1518	1060	235	7.5	14.5	110	32	8.8	87	2.7	55	25
MAY												
11...	1615	10900	74	6.9	20.0	110	19	7.4	83	1.8	24	1
JUN												
21...	1345	57	281	7.0	26.5	180	64	5.1	64	1.1	71	23

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
13...	20	9.3	42	2	7.7	62	62	43	0.2	3.9	226	67
DEC												
05...	17	7.3	25	1	5.6	44	42	30	0.10	14	169	26
JAN												
24...	6.9	2.8	5.8	0.5	4.1	20	15	8.6	<0.10	6.5	62	<20
MAR												
14...	13	5.4	20	1	4.3	30	32	25	<0.10	6.4	125	30
MAY												
11...	6.0	2.2	5.3	0.5	3.4	23	7.0	5.0	<0.10	4.6	48	14
JUN												
21...	17	6.9	25	1	6.8	48	38	24	0.2	11	162	94

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
13...	16	51	0.090	0.090	0.0	0.100	0.10	0.1	0.34	0.4	0.0
DEC											
05...	22	4	0.340	0.340	0.0	0.350	0.35	0.0	0.56	0.6	0.0
JAN											
24...	14	--	0.060	--	<0.010	0.060	0.1	<0.015	--	0.6	0.1
MAR											
14...	28	2	0.210	--	<0.010	0.210	0.210	0.110	0.79	0.90	0.060
MAY											
11...	10	4	0.100	--	<0.010	0.100	0.10	0.0	0.87	0.9	0.13
JUN											
21...	16	78	0.870	0.870	0.010	0.880	0.880	0.050	0.65	0.70	0.070

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
13...	0.0	0.06	8.7	--	--	--	--	--	--	--	--
DEC											
05...	0.0	0.12	10	--	--	--	--	--	--	--	--
JAN											
24...	0.1	0.21	21	<1	31	<0.5	<1	<5	<3	<10	140
MAR											
14...	0.050	0.15	16	--	--	--	--	--	--	--	--
MAY											
11...	0.10	0.31	14	--	--	--	--	--	--	--	--
JUN											
21...	0.050	0.15	14	<1	61	<0.5	<1	<5	4	<10	190

07343850 WHITE OAK CREEK NEAR OMAHA, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
13...	--	--	--	--	--	--	--	--	--	--	--
DEC											
05...	--	--	--	--	--	--	--	--	--	--	--
JAN											
24...	<10	<4	6	<0.1	<10	10	<1	<1	59	<6	4
MAR											
14...	--	--	--	--	--	--	--	--	--	--	--
MAY											
11...	--	--	--	--	--	--	--	--	--	--	--
JUN											
21...	<10	<4	240	<0.1	10	<10	<1	<1	160	<6	8

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX

LOCATION.--Lat 33°18'16", long 94°09'38", Bowie-Cass County line, Hydrologic Unit 11140302, in intake structure of Wright Patman Dam on the Sulphur River, 0.5 mi upstream from U.S. Highway 59, 10 mi southwest of Texarkana, and 44.5 mi upstream from mouth.

DRAINAGE AREA.--3,443 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--July 1953 to current year. Published as Texarkana Reservoir prior to October 1970 and as Lake Texarkana from October 1970 to September 1972.

REVISED RECORDS.--WSP 1561: 1957(M). WSP 1711: 1959(M).

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). July 19 to Dec. 31, 1953, nonrecording gage at site about 125 ft upstream at datum 200 ft higher.

REMARKS.--The lake is formed by a rolled earthfill dam 18,500 ft long, including a 200-foot uncontrolled spillway and a 1-mile long dike. Temporary impoundment of water began July 2, 1953, and deliberate impoundment began June 27, 1956. The dam was completed in December 1957. The flood-control outlet works consist of two 20.0-foot-diameter conduits controlled by four 10.0- by 20.0-foot electrically driven broome-type gates. Flow is affected at times by discharge from the flood-detention pools of 25 floodwater-retarding structures with a combined detention capacity of 13,450 acre-ft. These structures control runoff from 40.0 mi² in the Sulphur River and Langford Creek drainage basins. Outflow discharging over the spillway passes into an outlet channel and then to the Sulphur River. The lake was built for flood control and for conservation. An unknown amount of water is diverted for industrial and municipal uses. The capacity table is based on a 1948 survey. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	286.0	-
Crest of spillway	259.5	2,654,300
Top of conservation pool	220.0	145,300
Lowest gated outlet (invert)	200.0	2,600

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,912,100 acre-ft May 9, 1966 (elevation, 252.64 ft); minimum since first appreciable storage and after deliberate impoundment began, 137,500 acre-ft Sept. 5, 1958.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 607,400 acre-ft May 18 (elevation, 233.99 ft); minimum, 176,500 acre-ft Nov. 4 (elevation, 221.45 ft).

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

220.0	145,300	226.0	298,500	232.0	518,400
222.0	189,300	232.0	518,400	234.0	607,900
224.0	240,200	228.0	364,100	235.0	655,900
226.0	298,500	230.0	437,200		

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	274300	182300	378100	389200	289000	199600	250400	354100	440000	330000	305700	271700
2	273100	180400	376300	381700	291700	203100	248200	340300	428400	328700	305000	270500
3	271100	178600	372100	371800	293900	206100	243500	339300	414800	328100	303500	269000
4	268700	181600	360600	364800	293600	210100	243800	337900	400400	327700	303500	267900
5	265200	208500	340900	353100	290200	214900	243200	335300	396400	331000	302200	267000
6	262100	227800	325100	345000	284200	217200	243200	334600	389500	331000	300700	266400
7	259200	248700	308800	331700	277300	218700	244000	335000	382000	330700	300700	265500
8	265200	265500	304400	320600	267900	217900	245100	346000	373900	330000	299100	264400
9	261200	284800	298800	310100	257500	218200	246500	354500	372800	329400	298200	261800
10	255500	298500	294800	294500	245700	219200	257500	375600	374600	328700	296600	262100
11	247100	314500	290500	283000	234000	221000	269300	410700	372100	327700	295700	261200
12	240500	332600	287800	268700	217700	222300	284500	456400	366500	326400	294500	260300
13	232900	347700	286000	263800	211800	222100	313200	507900	361000	325100	293300	259800
14	226300	355100	281200	255200	210100	221500	347000	551400	355800	323800	292700	258900
15	220800	362000	295700	249600	206500	220500	382700	585200	354100	322500	292000	258300
16	217700	357200	316100	246200	202800	219200	413300	596200	353400	321600	290500	258100
17	213600	354100	335900	245100	200600	219500	434500	603700	352400	320300	289600	263500
18	210100	348000	352700	254100	197500	220500	453200	602700	350000	319900	288400	262400
19	205100	340900	364800	253800	194500	222300	462800	594400	347300	319000	287200	265500
20	201800	337600	374600	258900	191200	225500	464400	586600	344600	317400	286300	264700
21	199400	335300	382000	265000	187400	231300	448500	577900	342300	317100	283600	263200
22	195800	335000	390600	271400	185300	239400	439600	567500	341900	316700	282400	262400
23	191000	341900	399300	273700	184400	244900	434200	556300	341300	315800	280600	262900
24	189100	348700	405200	275500	185300	253000	423900	543500	339900	315500	280600	263500
25	189500	354800	406700	275800	186000	258900	413300	528300	337900	313200	279400	263200
26	188100	361300	405200	282400	188800	262100	405900	512900	335900	312600	278200	263500
27	186500	368300	401200	288100	192600	260300	393200	500700	334300	312000	277600	263500
28	185300	372800	396400	291400	196200	258100	382700	485400	334000	310700	275200	262900
29	185100	376300	399300	292700	---	256100	373900	472000	333300	309100	275200	262600
30	185100	377800	399000	291400	---	252400	364800	460000	331000	306000	274000	262400
31	184400	---	395000	289300	---	251500	---	449300	---	305700	272800	---
MAX	274300	377800	406700	389200	293900	262100	464400	603700	440000	331000	305700	271700
MIN	184400	178600	281200	245100	184400	199600	243200	334600	331000	305700	272800	258100
(-)	221.79	228.39	228.87	225.70	222.29	224.41	228.02	230.31	227.02	226.23	225.15	224.79
(@)	-91100	+193400	+172000	-105700	-93100	+55300	+113300	+84500	-118300	-25300	-32900	-10400

CAL YR 1994 MAX 412600 MIN 166900 (@) +64300
WTR YR 1995 MAX 603700 MIN 178600 (@) -13100

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

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: March 1967 to September 1984 and February 1992 to current year.

REVISED RECORDS.--TX-93-1 Phytoplankton.

331838094095901 - WRIGHT PATMAN LAKE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
MAR												
14...	1111	222000	1.00	252	8.0	13.0	0.43	9.5	92	4	2	86
14...	1115	--	10.0	252	8.0	13.0	--	9.5	91	--	--	--
14...	1120	--	20.0	250	7.9	13.0	--	9.5	91	--	--	--
14...	1124	--	26.0	238	7.8	13.0	--	9.2	89	--	--	84
JUN												
13...	1252	184000	1.00	185	8.4	28.5	0.98	9.6	124	K1	24	71
13...	1258	--	10.0	186	8.4	27.0	--	9.6	121	--	--	--
13...	1304	--	20.0	192	7.4	26.5	--	6.1	76	--	--	--
13...	1309	--	30.0	195	7.4	26.0	--	5.8	72	--	--	74
AUG												
15...	1012	364000	1.00	226	7.5	31.0	0.52	2.2	30	21	<1	77
15...	1015	--	10.0	226	7.4	30.5	--	2.0	27	--	--	--
15...	1018	--	20.0	227	7.2	30.5	--	1.7	23	--	--	--
15...	1022	--	27.0	230	7.0	30.0	--	1.6	21	--	--	80

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAR												
14...	25	28	4.0	18	0.8	2.9	61	35	18	0.10	1.1	144
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	24	27	4.0	18	0.9	3.0	60	34	17	0.10	0.90	140
JUN												
13...	0	24	2.6	9.1	0.5	2.9	71	11	6.7	0.20	4.0	103
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	0	25	2.7	9.1	0.5	3.1	77	11	6.5	0.20	4.6	109
AUG												
15...	0	26	3.0	11	0.5	3.4	90	9.5	8.4	0.20	9.8	125
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	0	27	3.0	12	0.6	3.4	86	9.5	8.3	0.20	9.8	125

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR												
14...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	150	1
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	150	2
JUN												
13...	--	<0.010	--	<0.050	0.020	0.38	0.40	0.020	0.020	0.06	16	4
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	0.050	<0.010	0.050	0.050	0.030	0.37	0.40	0.030	0.020	0.06	45	39
AUG												
15...	--	<0.010	--	<0.050	0.030	0.37	0.40	0.040	0.040	0.12	12	13
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<0.010	--	<0.050	0.110	0.39	0.50	0.030	0.040	0.12	40	140

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

332142094115001 - WRIGHT PATMAN LAKE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)
MAR									
14...	1146	1.00	131	7.6	14.0	9.3	91	<0.010	<0.050
14...	1150	8.00	132	7.5	14.0	9.1	89	<0.010	<0.050
JUN									
13...	1036	1.00	170	7.5	27.0	6.3	79	<0.010	<0.050
13...	1041	5.00	169	7.3	26.5	5.8	72	--	--
13...	1046	13.0	175	6.9	26.0	3.9	48	<0.010	<0.050
AUG									
15...	1110	1.00	209	8.7	32.0	5.5	76	<0.010	<0.050
15...	1116	11.0	209	8.4	31.5	4.3	59	<0.010	<0.050

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR								
14...	<0.015	--	0.30	<0.010	<0.010	--	130	<10
14...	<0.015	--	0.30	<0.010	<0.010	--	160	<10
JUN								
13...	0.090	0.41	0.50	0.020	<0.010	--	70	20
13...	--	--	--	--	--	--	--	--
13...	0.170	0.53	0.70	0.030	0.020	0.06	100	70
AUG								
15...	0.030	0.57	0.60	0.020	<0.010	--	10	<10
15...	0.020	0.38	0.40	<0.010	<0.010	--	20	10

331935094112901 - WRIGHT PATMAN LAKE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
MAR									
14...	1209	1.00	125	7.3	13.0	0.39	9.2	88	<0.010
14...	1213	10.0	128	7.3	13.0	--	9.0	86	--
14...	1217	17.0	128	7.2	12.5	--	8.8	83	<0.010
JUN									
13...	1104	1.00	171	8.2	27.5	1.00	8.4	107	<0.010
13...	1110	10.0	175	7.2	26.5	--	5.3	66	--
13...	1116	22.0	174	6.8	26.5	--	1.6	20	<0.010
AUG									
15...	1134	1.00	213	8.4	31.0	--	4.6	63	<0.010
15...	1138	10.0	216	8.0	30.5	--	2.8	38	--
15...	1142	20.0	234	7.7	30.5	--	0.4	5	<0.010

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
MAR									
14...	<0.050	<0.015	--	0.30	<0.010	<0.010	--	70	10
14...	--	--	--	--	--	--	--	--	--
14...	<0.050	<0.015	--	0.30	<0.010	<0.010	--	100	10
JUN									
13...	<0.050	0.020	0.48	0.50	0.040	<0.010	--	80	<10
13...	--	--	--	--	--	--	--	--	--
13...	<0.050	0.120	0.38	0.50	0.040	0.010	0.03	180	130
AUG									
15...	<0.050	<0.015	--	0.40	0.030	0.030	0.09	10	40
15...	--	--	--	--	--	--	--	--	--
15...	<0.050	0.680	0.52	1.2	0.120	0.120	0.37	80	900

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

331706094130501 - WRIGHT PATMAN LAKE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
MAR							
14...	1241	1.00	266	8.3	14.0	9.9	97
14...	1244	10.0	268	8.2	14.0	9.5	93
14...	1247	20.0	268	7.8	13.5	8.7	84
14...	1250	27.0	265	7.4	13.5	8.0	78
JUN							
13...	1139	1.00	207	8.2	27.0	8.9	112
13...	1143	10.0	215	7.2	26.0	5.0	62
13...	1147	20.0	223	7.1	26.0	3.7	46
13...	1151	30.0	232	6.8	25.5	0.8	10
AUG							
15...	1158	1.00	237	7.9	30.0	4.8	64
15...	1201	10.0	238	7.7	29.5	3.0	40
15...	1204	20.0	238	7.7	29.5	2.8	37
15...	1207	27.0	240	7.8	29.5	3.0	40

331519094141101 - WRIGHT PATMAN LAKE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR												
14...	1350	1.00	267	8.0	15.0	0.24	9.7	97	K49	K20	89	21
14...	1355	10.0	267	7.9	15.0	--	9.4	94	--	--	--	--
14...	1400	20.0	274	7.7	14.5	--	8.8	87	--	--	91	20
JUN												
13...	1218	1.00	240	8.7	26.5	0.82	12.8	160	K1	42	95	0
13...	1224	10.0	246	7.6	25.5	--	7.0	86	--	--	--	--
13...	1230	20.0	245	7.2	25.5	--	5.5	67	--	--	95	5
AUG												
15...	1227	1.00	244	8.2	30.5	0.52	5.9	80	<1	<1	88	0
15...	1234	10.0	247	7.5	30.0	--	2.6	35	--	--	--	--
15...	1241	15.0	248	7.5	30.0	--	2.1	28	--	--	88	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
MAR												
14...	29	4.0	20	0.9	2.9	68	37	19	0.10	5.3	159	0.110
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	30	4.0	20	0.9	2.9	71	38	18	0.10	5.6	162	0.150
JUN												
13...	33	3.0	12	0.5	3.3	98	17	8.0	0.20	4.4	140	--
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	33	3.1	12	0.5	3.4	90	16	7.6	0.20	5.3	136	0.090
AUG												
15...	30	3.2	13	0.6	3.5	95	11	9.8	0.30	8.7	137	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	30	3.2	13	0.6	3.5	97	11	9.5	0.20	9.3	138	--

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

331519094141101 - WRIGHT PATMAN LAKE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR												
14...	--	<0.010	0.110	0.110	<0.015	--	0.40	<0.010	0.010	0.03	29	85
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	0.150	0.150	0.040	0.36	0.40	<0.010	0.010	0.03	64	54
JUN												
13...	--	<0.010	--	<0.050	<0.015	--	0.40	0.030	0.020	0.06	26	6
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	0.090	0.010	0.100	0.100	0.080	0.42	0.50	0.060	0.040	0.12	120	170
AUG												
15...	--	<0.010	--	<0.050	0.040	0.36	0.40	0.080	0.050	0.15	8	8
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<0.010	--	<0.050	0.040	0.46	0.50	0.040	0.050	0.15	14	130

331533094210901 - WRIGHT PATMAN LAKE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR												
14...	1545	1.00	254	7.3	14.0	0.18	8.2	80	K160	K96	86	22
14...	1549	10.0	246	7.3	14.0	--	8.2	80	--	--	--	--
14...	1553	15.0	252	7.3	14.0	--	8.3	81	--	--	86	21
JUN												
13...	1435	1.00	249	7.1	25.5	0.20	3.7	45	26	120	96	7
13...	1441	10.0	249	7.1	25.0	--	3.3	40	--	--	--	--
13...	1446	20.0	251	7.1	25.5	--	3.5	43	--	--	96	2
AUG												
15...	1451	1.00	314	7.3	30.5	0.52	4.7	63	>240	K490	100	1
15...	1457	10.0	320	7.2	30.0	--	1.5	20	--	--	--	--
15...	1502	18.0	329	7.2	30.0	--	0.5	7	--	--	110	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
MAR												
14...	28	3.9	19	0.9	3.1	64	35	16	0.10	6.1	151	0.190
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	28	4.0	19	0.9	3.1	65	35	16	0.10	5.9	151	0.180
JUN												
13...	33	3.2	13	0.6	3.5	89	17	8.5	0.20	4.4	138	0.250
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	33	3.2	13	0.6	3.1	94	18	9.0	0.20	4.4	142	0.260
AUG												
15...	35	3.9	20	0.9	3.4	100	22	17	0.20	8.6	172	--
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	36	4.1	21	0.9	3.5	110	24	18	0.20	9.2	181	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR												
14...	--	<0.010	0.190	0.190	0.020	0.48	0.50	0.020	0.020	0.06	43	12
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	0.180	0.180	0.020	0.38	0.40	0.020	0.020	0.06	31	9
JUN												
13...	0.250	0.010	0.260	0.260	0.030	0.47	0.50	0.050	0.040	0.12	6	53
13...	--	--	--	--	--	--	--	--	--	--	--	--
13...	0.260	0.010	0.270	0.270	0.040	0.36	0.40	0.050	0.040	0.12	10	58
AUG												
15...	--	<0.010	--	<0.050	0.020	0.28	0.30	0.030	0.030	0.09	8	140
15...	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	<0.010	--	<0.050	0.090	0.31	0.40	0.090	0.070	0.21	15	480

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site AC (331838094095901)

Phytoplankton Analyses October 1994 to September 1995

Date	3-14-95
Time	1111
TOTAL CELLS/mL	20,163
NUMBER OF SPECIES	12
DEPTH COLLECTED (ft.)	0.7

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	6,626
Stephanodiscus astraea	2,891
Order Pennales	
Fragilaria crotonensis	297
Synedra ulna var. ulna	297
CHLOROPHYTA	
Ankistrodesmus falcatus	416
Chlamydomonas sp.	89
Selenastrum Westii	30
Staurastrum sp.	30
CYANOPHYTA	
Aphanocapsa delicatissima	7,732
Chroococcus limneticus	1,428
EUGLENOPHYTA	
Trachelomonas sp.	268
CRYPTOPHYTA	
Cryptomonas erosa	59

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site GC (331533094210901)

Phytoplankton Analyses October 1994 to September 1995

Date	3-14-95
Time	1545
TOTAL CELLS/mL	6,188
NUMBER OF SPECIES	14
DEPTH COLLECTED (ft.)	0.3

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	2,231
Order Pennales	
Diatoma hiemale	38
Gyrosigma sp.	114
Navicula lanceolata var. lanceolata	114
Pinnularia brevicostata	38
Synedra ulna var. ulna	114
CHLOROPHYTA	
Ankistrodesmus falcatus	59
Chlamydomonas sp.	30
Scenedesmus opoliensis	30
Selenastrum Westii	30
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
Chroococcus limneticus	119
EUGLENOPHYTA	
Trachelomonas sp.	178
CRYPTOPHYTA	
Cryptomonas erosa	119

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site AC (331838094095901)

Phytoplankton Analyses October 1994 to September 1995

Date	6-13-95
Time	1252
TOTAL CELLS/mL	28,076
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	1.60

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	491
Stephanodiscus astraea	164
CHLOROPHYTA	
Mougeotia sp.	2,052
Staurastrum sp.	30
CYANOPHYTA	
Anabaena spiroides	11,896
Aphanocapsa delicatissima	13,086
EUGLENOPHYTA	
Trachelomonas sp.	297
PYRRHOPHYTA	
Peridinium pusillum	30
CRYPTOPHYTA	
Cryptomonas erosa	30

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site GC (331533094210901)

Phytoplankton Analyses October 1994 to September 1995

Date	6-13-95
Time	1435
TOTAL CELLS/mL	5,413
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	0.33

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	27
Stephanodiscus astraea	62
CHLOROPHYTA	
Ankistrodesmus falcatus	178
Chlamydomonas sp.	506
Pediastrum duplex	30
Selenastrum Westii	59
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
Merismopedia tenuissima	1,428
EUGLENOPHYTA	
Trachelomonas sp.	149

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site AC (331838094095901)

Phytoplankton Analyses October 1994 to September 1995

Date	8-15-95
Time	1012
TOTAL CELLS/mL	120,239
NUMBER OF SPECIES	11
DEPTH COLLECTED (ft.)	0.85

Organisms	Cells/mL
BACILLARIOPHYTA	
OrderPennales	
Fragilaria crotonensis var. *crotonensis*	208
CHLOROPHYTA	
Chlamydomonas sp.	476
Cosmarium sp.	89
Scenedesmus opoliensis	30
Staurastrum sp.	30
CYANOPHYTA	
Anabaena spiroides	1,784
Aphanocapsa delicatissima	23,792
Aphanocapsa elachista	3,569
Merismopedia tenuissima	42,350
Oscillatoria sp.	47,584
EUGLENOPHYTA	
Trachelomonas sp.	327

07344200 WRIGHT PATMAN LAKE NEAR TEXARKANA, TX--Continued

Wright Patman Lake Site GC (331533094210901)

Phytoplankton Analyses October 1994 to September 1995

Date	8-15-95
Time	1451
TOTAL CELLS/mL	20,908
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	0.8

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	317
Nitzschia denticula	159
CHLOROPHYTA	
Chlamydomonas sp.	149
CYANOPHYTA	
Anabaena spiroides	595
Aphanocapsa delicatissima	8,922
Merismopedia tenuissima	1,428
Oscillatoria sp.	8,922
EUGLENOPHYTA	
Trachelomonas sp.	238
PYRRHOPHYTA	
Peridinium pusillum	178

07344210 SULPHUR RIVER NEAR TEXARKANA, TX

LOCATION.--Lat 33°18'20", long 94°09'03", Bowie County, Hydrologic Unit 11140302, on downstream side of highway embankment near left end of downstream (northbound) bridge on U.S. Highway 59, 0.4 mi downstream from Texarkana Dam, 1.4 mi upstream from Elliott Creek, 11.7 mi southwest of Texarkana, and at mile 44.1.

DRAINAGE AREA.--3,443 mi².

WATER-ELEVATION RECORDS

PERIOD OF RECORD.--October 1985 to current year (midnight elevations). August 1937 to July 1953 and October 1953 to September 1979 (daily gage heights); January to December 1933, January 1937 to December 1942, and January 1945 to September 1979 (discharge measurements); January to December 1939 and January 1945 to September 1979 (daily discharges) published by U.S. Army Corps of Engineers; October 1979 to September 1985 (daily discharges).

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

REMARKS.--Elevation records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,100 ft³/s June 16 to July 5, 1981; maximum gage height, 32.57 ft June 15, 1981; no flow June 25, 1980.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 94,000 ft³/s Apr. 4, 1945; maximum stage, 47.23 ft Apr. 14, 1945; no flow on various occasions.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 212.13 ft at 1000 hours May 16; minimum, 188.99 ft Sept. 25.

(@ 2400 HRS)
ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	191.39	198.21	198.30	211.70	211.71	193.75	205.56	211.69	211.90	191.73	190.06	189.68
2	191.40	198.23	200.88	211.69	211.70	193.74	205.53	211.66	211.83	191.72	189.95	189.70
3	193.24	198.19	204.73	211.69	211.67	195.81	205.46	210.39	211.84	191.69	189.93	189.69
4	196.09	198.64	208.41	211.59	211.66	195.80	205.49	210.01	211.80	191.68	189.93	189.70
5	196.34	202.33	211.07	211.57	211.63	195.96	205.51	209.84	210.77	191.70	189.90	189.71
6	196.40	202.47	211.55	211.62	211.63	197.89	205.53	209.70	210.40	191.64	189.89	189.70
7	198.38	203.13	211.60	211.57	211.55	200.14	205.53	209.65	210.29	191.63	189.88	189.68
8	198.66	205.29	210.13	211.56	211.52	201.28	205.52	211.15	210.22	191.62	189.86	189.67
9	198.69	206.10	209.84	211.51	211.52	201.45	205.54	211.55	209.20	191.59	189.84	189.66
10	201.16	205.35	209.80	211.77	211.46	201.44	205.81	211.57	208.69	191.57	189.84	189.66
11	203.78	202.56	209.66	211.80	211.45	201.43	207.60	211.62	208.31	191.55	189.84	189.65
12	204.23	202.19	209.56	211.75	211.23	201.41	206.63	211.78	208.10	191.52	189.82	189.65
13	204.32	204.88	209.46	211.72	211.23	204.69	204.73	211.91	207.91	191.49	189.81	189.30
14	202.63	207.99	209.46	211.62	211.22	205.43	201.93	212.00	207.75	191.47	189.81	189.21
15	201.97	208.91	209.46	211.65	207.80	205.61	198.01	212.11	206.38	191.45	189.78	189.17
16	201.77	211.00	211.80	211.61	207.09	205.67	195.32	212.11	204.70	191.42	189.78	189.27
17	201.67	211.50	211.79	211.61	204.89	205.72	195.77	212.10	203.74	191.39	189.78	189.17
18	201.59	211.76	211.86	211.67	203.73	205.71	199.62	212.08	203.17	191.40	189.80	189.14
19	201.50	211.80	211.80	211.71	202.83	205.67	202.17	212.09	202.76	191.38	189.76	189.17
20	201.66	211.83	211.66	211.68	202.07	205.64	207.12	212.11	200.46	191.35	189.78	189.05
21	201.83	210.64	211.67	211.66	201.48	205.59	210.83	212.10	197.72	191.33	189.77	189.02
22	201.65	209.28	211.71	211.66	199.65	205.60	211.58	212.10	196.65	191.30	189.77	189.00
23	201.48	207.63	211.74	211.68	196.63	205.61	211.82	212.07	196.46	191.28	189.77	189.00
24	199.30	204.81	211.73	211.70	192.99	205.58	211.85	212.04	196.37	191.27	189.77	189.01
25	198.59	201.47	211.77	211.65	191.13	205.65	211.83	212.03	196.29	191.25	189.74	189.03
26	198.40	197.55	211.79	211.65	190.88	205.66	211.81	212.01	194.44	190.54	189.73	189.01
27	198.36	194.41	211.77	211.80	192.61	205.72	211.80	211.98	193.42	190.25	189.73	189.07
28	198.32	192.13	211.77	211.72	192.61	205.67	211.76	211.99	191.94	190.20	189.72	189.02
29	198.28	193.04	211.79	211.66	---	205.64	211.77	211.92	191.61	190.17	189.71	189.02
30	198.25	196.02	211.79	211.69	---	205.60	211.71	211.90	191.76	190.13	189.70	189.02
31	198.24	---	211.74	211.70	---	205.56	---	211.93	---	190.08	189.71	---
MAX	204.32	211.83	211.86	211.80	211.71	205.72	211.85	212.11	211.90	191.73	190.06	189.71
MIN	191.39	192.13	198.30	211.51	190.88	193.74	195.32	209.65	191.61	190.08	189.70	189.00

CAL YR 1994 MAX 211.86 MIN 189.35
WTR YR 1995 MAX 212.11 MIN 189.00

07344210 SULPHUR RIVER NEAR TEXARKANA, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1983 to September 1985, and October 1991 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
MAR												
14...	1745	3910	238	7.9	13.0	40	12	11.6	110	2.1	78	21
JUN												
13...	1530	5100	192	7.9	26.0	55	4.2	9.3	115	2.0	76	2
AUG												
15...	1100	206	225	7.4	30.0	40	70	5.9	78	3.6	80	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAR											
14...	27	2.5	13	0.6	3.2	57	16	7.8	0.2	3.4	108
JUN											
13...	26	2.6	9.9	0.5	3.7	74	11	7.6	0.2	4.3	111
AUG											
15...	27	3.0	12	0.6	3.5	87	9.7	8.7	0.2	9.4	126

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
MAR											
14...	26	18	8	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010
JUN											
13...	12	5	7	0.060	<0.010	0.060	0.1	0.1	0.63	0.7	0.0
AUG											
15...	224	20	204	--	0.020	--	<0.050	0.060	0.44	0.50	0.040

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
MAR											
14...	<0.010	--	13	<1	41	<0.5	<1	<5	<3	<10	63
JUN											
13...	0.0	0.09	12	2	38	<0.5	2	<5	<3	10	100
AUG											
15...	0.040	0.12	11	4	18	<0.5	2	<5	4	<10	17

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR											
14...	<10	7	4	<0.1	<10	<10	<1	1	220	<6	12
JUN											
13...	30	<4	10	<0.1	10	<10	<1	<1	210	<6	62
AUG											
15...	<10	<4	<1	<0.1	20	10	<1	2	240	<6	5

07344486 BRUSHY CREEK AT SCROGGINS, TX

LOCATION.--Lat 32°58'32", long 95°11'03", Franklin County, Hydrologic Unit 11140305, at downstream side of highway embankment near left end of bridge on Farm Road 115, 0.1 mi north of Scroggins, 0.3 mi downstream from Briary Creek, 2.5 mi upstream from South Brushy Creek, and 9.5 mi upstream from mouth.

DRAINAGE AREA.--23.4 mi².

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

REVISED RECORDS.--WDR TX-89-1 1983-88 (M).

GAGE.--Water-stage recorder. Datum of gage is 343.90 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1645	10,700	14.96				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	8.5	20	e23	e24	e18	16	20	13	4.7	2.4	1.0
2	3.1	8.0	21	e22	e23	e18	15	19	11	5.1	4.1	1.1
3	3.4	7.3	26	e21	e21	e17	14	24	10	5.2	3.3	1.0
4	3.4	8.2	25	e20	e20	e17	135	69	9.8	4.6	2.6	.95
5	3.6	2800	23	e19	e19	e17	76	32	8.6	74	1.9	.91
6	3.9	405	23	e19	e19	e17	32	62	8.1	55	1.4	.92
7	5.4	86	23	e19	e18	e64	27	31	7.4	13	1.1	.98
8	118	42	24	e19	e18	e35	24	346	7.1	9.3	.93	.94
9	28	36	68	e19	e17	e24	21	182	6.8	7.5	.90	2.5
10	8.0	186	176	e24	e17	e21	67	39	18	6.3	.85	2.6
11	5.6	143	50	e19	e21	e19	250	27	104	5.4	.85	1.8
12	4.7	46	35	e21	e23	e17	49	25	29	4.8	.84	1.8
13	4.9	36	32	e200	e20	e136	29	25	14	4.2	.80	1.5
14	4.5	33	195	e78	e19	149	25	21	10	4.1	4.4	2.8
15	4.6	32	365	e30	e19	42	22	19	8.8	3.8	22	2.9
16	5.5	32	269	e25	e18	31	21	18	7.5	3.6	4.2	2.8
17	36	33	149	e24	e18	26	22	18	6.8	3.4	2.3	2.4
18	16	30	59	e43	e18	24	32	18	6.3	3.4	2.3	19
19	14	29	36	e91	e17	22	26	16	6.6	3.6	3.0	12
20	11	29	31	e36	e17	21	42	14	5.4	3.7	3.0	13
21	30	e29	31	e30	e17	19	35	14	5.3	3.9	2.7	12
22	80	e28	28	e28	e17	18	34	13	5.6	3.5	2.1	4.9
23	20	e27	25	e38	e17	17	95	12	5.6	2.9	1.9	3.3
24	10	e26	24	32	e17	16	33	11	5.5	3.8	1.8	2.4
25	15	e25	23	29	e17	16	24	14	5.6	3.9	1.5	1.9
26	130	e24	23	99	e20	17	21	13	5.5	3.0	1.4	1.6
27	25	e23	22	224	e21	20	18	12	4.2	2.7	1.3	1.9
28	15	22	22	71	e19	18	17	11	3.7	1.5	1.2	2.0
29	12	21	e54	e36	---	20	17	11	4.1	.91	1.2	2.0
30	10	21	e65	e29	---	20	16	18	4.4	.90	1.0	1.9
31	8.9	---	e27	e26	---	17	---	14	---	1.0	1.1	---
TOTAL	642.3	4276.0	1994	1414	531	933	1255	1168	347.7	252.71	80.37	106.80
MEAN	20.7	143	64.3	45.6	19.0	30.1	41.8	37.7	11.6	8.15	2.59	3.56
MAX	130	2800	365	224	24	149	250	346	104	74	22	19
MIN	2.8	7.3	20	19	17	16	14	11	3.7	.90	.80	.91
AC-FT	1270	8480	3960	2800	1050	1850	2490	2320	690	501	159	212
CFSM	.89	6.09	2.75	1.95	.81	1.29	1.79	1.61	.50	.35	.11	.15
IN.	1.02	6.80	3.17	2.25	.84	1.48	2.00	1.86	.55	.40	.13	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1995, BY WATER YEAR (WY)

MEAN	14.9	21.3	32.6	21.2	26.9	28.2	20.7	27.1	15.9	8.01	2.85	4.14
MAX	80.5	143	103	62.7	47.5	66.1	54.9	68.2	70.0	32.2	17.4	41.7
(WY)	1992	1995	1983	1993	1991	1990	1990	1991	1981	1981	1992	1979
MIN	.68	2.51	2.99	6.33	10.0	8.15	3.64	1.64	.26	.007	.003	.14
(WY)	1979	1990	1979	1981	1978	1986	1978	1988	1984	1978	1985	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1978 - 1995	
ANNUAL TOTAL	11596.89		13000.88			
ANNUAL MEAN	31.8		35.6		19.2	
HIGHEST ANNUAL MEAN					35.6	1995
LOWEST ANNUAL MEAN					5.53	1984
HIGHEST DAILY MEAN	2800	Nov 5	2800	Nov 5	2800	Nov 5 1994
LOWEST DAILY MEAN	.88	Sep 19	.80	Aug 13	.00	Jun 28 1978
ANNUAL SEVEN-DAY MINIMUM	.97	Sep 16	.90	Aug 7	.00	Jun 28 1978
INSTANTANEOUS PEAK FLOW					7520	Dec 2 1982
INSTANTANEOUS PEAK STAGE					14.39	Dec 2 1982
ANNUAL RUNOFF (AC-FT)	23000		25790		13880	
ANNUAL RUNOFF (CFSM)	1.36		1.52		.82	
ANNUAL RUNOFF (INCHES)	18.44		20.67		11.12	
10 PERCENT EXCEEDS	44		57		30	
50 PERCENT EXCEEDS	12		18		7.1	
90 PERCENT EXCEEDS	2.5		1.9		.43	

e Estimated

07344489 LAKE BOB SANDLIN NEAR MOUNT PLEASANT, TX

LOCATION.--Lat 33°04'48", long 95°00'07", Titus County, Hydrologic Unit 11140305, in control room in left abutment of service spillway at left end of Fort Sherman Dam on Big Cypress Creek, 1.7 mi upstream from Tankersley Creek, 3.5 mi upstream from bridge on U.S. Highway 271, 5.7 mi southwest of the county courthouse in Mount Pleasant, and 129.2 mi upstream from mouth.

DRAINAGE AREA.--239 mi².

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

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Apr. 12, 1978, a nonrecording gage was located at same site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam 10,800 ft long, including spillways. Deliberate impoundment began Aug. 8, 1977, and dam was completed by April 1978. The spillway is an excavated channel cut through natural ground. The spillway is 4,500 ft wide, located to the left of the left end of the dam. The service spillway is 289.5 ft wide with 160 ft of net flow width controlled by four 40- by 22.5-foot tainter gates. The dam was built, and is owned, maintained, and operated by the Titus County Fresh Water Supply District No. 1 to provide water for municipal use. Flow from 75.0 mi² above this station is controlled by Lake Cypress Springs on Big Cypress Creek and 36.0 mi² is controlled by Montecello Reservoir on Blundell Creek, a tributary to Big Cypress Creek. Rain gage at station. Satellite telemeter and rain gage at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-ft)
Top of dam	349.0	-
Crest of uncontrolled spillway	341.3	251,000
Crest of gated spillway	316.5	64,790
Lowest gated outlet (invert)	294.5	3,300

COOPERATION.-Area and capacity tables were compiled by Forest and Cotton, Inc., Consulting Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 224,400 acre-ft Nov. 5, 1994 (elevation, 338.65 ft); minimum, 516 acre-ft Aug. 8-17, 1977 (elevation, 290.00 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 224,400 acre-ft Nov. 5 at 0700 hours (elevation, 338.65 ft); minimum, 198,500 acre-ft Sept. 12 (elevation, 335.90 ft).

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

290.0	516	310.0	37,850	330.0	148,700
300.0	11,000	320.0	82,680	339.0	227,800

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200500	206900	213400	213300	213900	213300	213600	213600	213400	211100	209200	202200
2	200300	206900	213500	213300	213800	213300	213600	213300	213300	211000	209200	201800
3	200100	206900	213600	213500	213700	213300	213600	213500	213300	210600	209100	201400
4	200000	217600	213600	213700	213600	213300	214000	213900	213300	210200	209000	201100
5	199800	215500	213500	213500	213500	213300	213500	214100	213300	213400	208800	200700
6	199500	213900	213300	213400	213500	213300	213400	213700	213200	213900	208600	200300
7	201300	214700	213300	213400	213600	213700	213500	214000	213000	213900	208400	200100
8	203900	214900	213500	213700	213200	213600	213600	214100	213000	213900	208200	199800
9	203900	214700	214500	213700	213300	213500	213600	213700	212900	213900	208100	199300
10	203500	214100	213600	214000	213500	213400	217800	213500	213800	213900	207900	199000
11	203200	214100	213400	213500	213700	213300	213500	213600	214100	213700	207700	198900
12	203200	213700	213300	214100	213300	213300	213500	213600	213600	213500	207600	198600
13	203200	213700	213400	213700	213300	213500	213500	213300	213600	213400	207300	198700
14	203100	213700	215400	213700	213600	213600	213400	213300	213500	213000	207300	198600
15	203000	213800	214000	213900	213500	213600	213400	213300	213400	213000	207000	199200
16	204300	213300	213500	213400	213200	213700	213500	213300	213300	212400	206800	199300
17	204400	213500	214000	213600	213200	213900	213600	213000	213300	212000	206500	201200
18	204700	213600	213500	213300	213300	213300	213500	212900	213200	212200	206400	201100
19	204700	213600	214200	213600	213400	213300	213300	212600	213000	212100	205800	202700
20	204800	213500	213700	213500	213600	213300	213500	212700	212800	211600	205700	202700
21	205800	213200	213600	213500	213700	213500	213300	212800	212500	211300	205400	202700
22	206000	212900	213600	214100	213700	213600	214200	212800	212300	210900	204900	202200
23	205900	213100	213500	213600	213700	213700	214100	212900	213000	210900	204600	202000
24	205900	213200	213400	213300	213500	213300	213700	212900	213000	210500	204400	201800
25	207000	213300	213300	213200	213300	213100	213700	213200	212800	210200	203900	201700
26	207100	213400	213400	214800	214100	213300	213700	213300	212400	209800	203800	201500
27	207100	213500	213400	213500	213600	213200	213600	213300	212100	209600	203600	201300
28	207100	213400	213700	213300	213500	213300	213500	213300	211800	209500	203400	201200
29	207000	213400	213600	213500	---	213400	213600	213300	211600	209200	203000	201100
30	207000	213400	213400	213300	---	213400	213500	213300	211400	209200	202700	201100
31	207000	---	213400	213600	---	213500	---	213500	---	208800	202700	---
MAX	207100	217600	215400	214800	214100	213900	217800	214100	214100	213900	209200	202700
MIN	199500	206900	213300	213200	213200	213100	213300	212600	211400	208800	202700	198600
(+)	336.83	337.51	337.51	337.53	337.52	337.52	337.52	337.52	337.29	337.02	336.36	336.19
(@)	+6700	+6400	0	+200	-100	0	0	0	-2100	-2600	-6100	-1600

CAL YR 1994 MAX 217600 MIN 199500 (@) 0
WTR YR 1995 MAX 217800 MIN 198600 (@) +800

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

07344500 BIG CYPRESS CREEK NEAR PITTSBURG, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 33°01'15", long 94°52'55", Camp-Titus County line, Hydrologic Unit 11140305, near center of stream at downstream side of bridge on State Highway 11, 0.5 mi upstream from Louisiana & Arkansas Railway Co. bridge, 1.4 mi upstream from Williamson Creek, 5.2 mi east of Pittsburg, 19.2 mi downstream from Lake Bob Sandlin, and 110.0 mi upstream from mouth.

DRAINAGE AREA.--366 mi².

PERIOD OF RECORD.--March 1943 to January 1963 (published as Cypress Creek near Pittsburg), October 1967 to September 1989. October 1989 to current year, (peaks above base discharge). Gage-height records collected at this site from September 1963 to December 1967, are published in reports by the U.S. Army Corps of Engineers.
Water-quality records.--Chemical analyses: March 1965 to August 1989. Chemical and biochemical analyses: January 1983 to September 1985.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 247.49 ft above sea level. Prior to Nov. 12, 1954, water-stage recorder at site 1,900 ft downstream at present datum.

REMARKS.--Records fair. Daily values and peak discharges less than 2,500 ft³/s are not published. Flow partly regulated by Lake Cypress Springs (station 07344484) since July 1970, and by Monticello Reservoir (on Blundell Creek) since August 1972. Flow largely regulated by Lake Bob Sandlin (station 07344489) since August 1977. Sewage effluent was returned to a tributary above this station by the city of Mount Pleasant, and sewage effluent was returned to a tributary below this station by the city of Pittsburg. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE.--24 years (water years 1944-62, 1968-72), prior to combined regulation by Lake Cypress Springs and Monticello Reservoir, 327 ft³/s (12.13 in/yr), 236,900 acre-ft/yr; 17 years (water years 1973-89) regulated, 255 ft³/s (184,700 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,500 ft³/s Mar. 30, 1945 (gage height, 28.3 ft, from floodmark, and adjusted to present site on basis of record for flood of Apr. 27, 1958), from rating curve extended above 20,000 ft³/s; no flow Aug. 20 to Oct 3, 1954, July 19 to Nov. 4, 1956. Maximum stage since at least 1895, that of Mar. 30, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in January 1938 reached a stage of about 25 ft, present site, adjusted as explained above, from information by local resident.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1815	25,300	22.41	Jan. 19	0830	4,020	14.34
Nov. 10	1430	3,850	14.23	Jan. 27	1545	6,230	15.60
Dec. 15	2230	9,510	17.20	Apr. 11	1500	13,100	18.62
Jan. 14	0930	3,310	13.89	May 9	0130	9,650	17.26

07345900 LAKE O' THE PINES NEAR JEFFERSON, TX

LOCATION.--Lat 32°45'90", long 94°29'57", Marion County, Hydrologic Unit 11140305, on left bank 1,500 ft upstream from left end of Ferrell's Bridge Dam on Big Cypress Creek, on Farm Road 726, 9.0 mi west of Jefferson, and 80.1 mi upstream from mouth.

DRAINAGE AREA.--850 mi².

PERIOD OF RECORD.--August 1957 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1969 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Nov. 12, 1957, non-recording gage at same site and datum.

REMARKS.--The lake is formed by a rolled earthfill dam 10,600 ft long, including a 200-foot-wide concrete spillway. Impoundment of water began Aug. 21, 1957, and the dam was completed June 25, 1958. Official operation began Dec. 11, 1959. The flood-control outlet works consist of two 10.0-foot-diameter conduits that are controlled by two 8.0- by 12.5-foot electrically driven broome-type gates. The low-flow outlet works consist of a controlled 14-inch pipe. Flow over the spillway is discharged into a 2,000-foot-long rectified channel and then into Cypress Creek. The capacity table is based on a survey made in 1950. The lake was built for conservation, flood control, and water supply. During the current year, an unknown amount of water was diverted from the lake for municipal and industrial uses. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	277.0	-
Crest of spillway	249.5	842,100
Top of conservation pool	228.5	254,900
Crest of intake to wet well (14 in)	202.5	5,760
Lowest gated outlet (invert)	200.0	2,860

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 694,360 acre-ft May 5, 1966 (elevation, 245.41 ft); minimum since December 1959, 210,100 acre-ft Oct. 6, 1984 (elevation, 225.98 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 400,900 acre-ft Jan. 30 (elevation, 235.34 ft); minimum, 254,800 acre-ft Apr. 4 (elevation, 228.50 ft).

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

227.0	227,600	231.0	303,800	234.0	369,100
228.0	245,600	232.0	324,800	235.0	392,700
229.0	264,300	233.0	346,500	236.0	417,100
230.0	283,700				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	262000	260700	276600	388600	394100	263500	256500	275200	286500	282900	277800	265800
2	261600	259200	274900	387700	392400	261200	255600	270400	286100	282900	279200	264800
3	260500	258600	273100	384300	388400	260700	257300	268300	285900	282700	278800	264100
4	258400	262400	270800	381500	382900	261100	258800	266800	285500	282900	278800	262800
5	256000	269800	268100	378400	378000	261100	260700	267100	285100	283300	278400	262400
6	254800	314200	266400	374500	372400	262000	262200	268300	284700	284300	277000	262200
7	272500	340800	265400	370100	367100	260500	262000	272900	284300	285500	277000	261600
8	280100	347000	265200	365700	360900	259000	265000	280900	284100	286500	276000	261200
9	280100	348500	265200	362300	356600	258600	265200	295700	283900	287100	275600	260700
10	279900	347800	270000	357500	351000	258600	271900	312500	286300	287100	275100	260100
11	278600	346700	271200	352500	344300	258600	279000	320100	287700	286300	274500	259500
12	277000	346700	273100	351900	337700	258200	294100	321400	287500	285900	274100	258800
13	275400	347200	276400	352100	331200	260700	306100	320500	287100	285500	273700	260100
14	274300	347800	284900	350100	326900	263100	309400	318200	286700	285100	273700	260500
15	273100	348300	297300	350500	325200	264700	310000	314200	286700	284900	273300	259900
16	276200	347400	318400	353900	323300	266000	309200	310000	286300	284500	272700	259700
17	278200	344300	342100	359800	318400	267700	307300	306500	285900	284100	272500	263900
18	278000	340800	364500	362300	313600	268500	304700	302400	285500	284700	272100	263300
19	277200	336200	376100	362700	309200	268500	301200	297900	285300	284300	271400	264300
20	276200	329100	382200	364500	304900	267900	300400	295300	285300	283900	271400	264300
21	278800	324800	385300	368900	299100	266800	294300	292300	285300	283700	270600	264800
22	280100	319900	388600	372100	293300	265000	294100	289600	285100	283100	270000	263100
23	279000	314400	392200	372100	289200	262200	292700	288300	284900	282900	269400	262400
24	277600	310500	393400	370500	284500	259400	291700	287900	284900	281900	269200	262000
25	277600	304500	393400	368200	279500	258600	290700	287100	284900	281300	268700	261800
26	275100	298500	392700	371700	275400	259000	291100	285700	283700	280700	268100	261400
27	271200	293300	389100	372400	271600	258600	290500	285500	283700	280700	267700	260900
28	267700	287500	389300	386000	267700	258400	287100	285500	283500	280100	267100	260700
29	265200	283100	390300	395800	---	258400	283500	285500	283100	279500	266800	260100
30	263100	279200	390000	400900	---	258000	279300	285700	283300	278600	266600	260300
31	262000	---	389300	397500	---	257300	---	286100	---	277800	266200	---
MAX	280100	348500	393400	400900	394100	268500	310000	321400	287700	287100	279200	265800
MIN	254800	258600	265200	350100	267700	257300	255600	266800	283100	277800	266200	258800
(+)	228.88	229.77	234.86	235.20	229.18	228.63	229.78	230.12	229.98	229.70	229.10	228.79
(@)	+200	+17200	+110100	+8200	-129800	-10400	+22000	+6800	-2800	-5500	-11600	-5900

CAL YR 1994 MAX 393400 MIN 254800 (@) +132800
WTR YR 1995 MAX 400900 MIN 254800 (@) -1500

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

07346000 BIG CYPRESS CREEK NEAR JEFFERSON, TX

LOCATION.--Lat 32°44'58", long 94°29'55", Marion County, Hydrologic Unit 11140306, on left bank 950 ft downstream from Ferrell's Bridge Dam, 7.6 mi upstream from French Creek, and 8.5 mi west of Jefferson.

DRAINAGE AREA.--850 mi².

PERIOD OF RECORD.--July 1924 to September 1959 (published as Cypress Creek), October 1979 to current year. Records of stage and discharge for the period October 1959 to September 1979 published by the U.S. Army Corps of Engineers, New Orleans District.

GAGE.--Water-stage recorder. Datum of gage is 180.00 ft above sea level (U.S. Army Corps of Engineers benchmark). Prior to Nov. 2, 1933, staff gage, and Nov. 2, 1933, to Dec. 8, 1955, water-stage recorder, at site about 950 ft upstream at datum 3.70 ft higher. After Dec. 9, 1955, at site about 550 ft downstream or at present site at datum 180.00 ft lower.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Lake O' the Pines (station 07345900), 950 ft upstream, since August 1957. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--33 years (water years 1925-57), prior to completion of Ferrell's Bridge Dam, 660 ft³/s (478,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION, (WATER YEARS, 1925-57).--Maximum discharge, 57,100 ft³/s Apr. 1, 1945 (gage height, 28.78. ft, site and datum then in use), from rating curve extended above 29,000 ft³/s; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	593	1520	2540	2820	2470	580	2330	153	60	54	55
2	44	547	1240	2540	2830	2270	452	2320	152	60	54	55
3	424	423	1180	2520	2820	1440	190	1910	152	59	55	55
4	883	292	1160	2510	2790	1110	41	1560	152	59	55	55
5	782	342	1150	2500	2790	1040	33	1700	152	78	54	53
6	353	584	1150	2520	2780	1020	132	2230	152	69	54	53
7	24	1530	1080	2500	2760	1020	304	2280	95	62	54	54
8	553	2660	762	2500	2750	1010	430	2390	33	60	54	54
9	433	2820	701	2500	2740	850	750	2380	31	59	54	53
10	267	2850	782	2530	2750	640	964	1980	31	57	53	53
11	424	2850	738	2580	2720	610	1230	1790	170	57	54	53
12	610	2860	697	2580	2710	606	1910	2390	285	58	55	52
13	620	2570	684	2600	2680	612	2430	2450	286	58	55	52
14	604	1610	706	2600	2690	631	2250	2450	286	57	55	52
15	551	1320	996	2580	2720	619	1690	2450	235	58	56	52
16	560	1380	1430	2590	2680	732	1650	2440	182	57	71	52
17	624	1990	1640	2600	2660	990	1960	2430	181	57	67	56
18	608	2690	1440	2740	2650	1010	2380	2420	180	59	56	54
19	577	2750	905	2280	2650	1020	2390	2060	119	59	56	53
20	566	2760	364	1790	2640	1210	2400	1620	61	58	56	52
21	574	2760	64	1730	2620	1520	2390	1580	64	57	56	52
22	615	2730	163	1720	2590	1560	2410	1350	64	57	56	49
23	597	2710	562	2250	2580	1560	2450	903	56	57	56	49
24	577	2700	950	2750	2570	1410	1970	625	44	56	56	49
25	979	2680	1190	2780	2550	942	1530	573	43	56	55	47
26	1740	2680	1490	2840	2530	651	1490	483	42	55	55	44
27	2200	2680	2140	2400	2530	597	1840	226	45	56	55	44
28	2240	2650	2500	1590	2510	586	2310	160	59	55	55	62
29	1550	2360	2610	1510	---	584	2350	157	59	54	55	63
30	1130	1790	2570	2160	---	584	2340	156	60	54	55	62
31	869	---	2550	2770	---	584	---	155	---	54	55	---
TOTAL	22579.1	61161	37114	74600	75110	31488	45246	49948	3624	1812	1731	1589
MEAN	728	2039	1197	2406	2682	1016	1508	1611	121	58.5	55.8	53.0
MAX	2240	2860	2610	2840	2830	2470	2450	2450	286	78	71	63
MIN	1.1	292	64	1510	2510	584	33	155	31	54	53	44
AC-FT	44790	121300	73620	148000	149000	62460	89750	99070	7190	3590	3430	3150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1995#, BY WATER YEAR (WY)

MEAN	242	476	713	940	1352	1293	1064	862	905	452	215	111
MAX	728	2690	1946	2685	2687	2645	2669	2979	3209	3057	2349	482
(WY)	1995	1958	1958	1993	1993	1988	1990	1958	1958	1958	1958	1958
MIN	3.35	4.82	4.13	4.16	127	290	137	32.4	32.5	19.9	16.2	8.70
(WY)	1981	1989	1982	1981	1981	1981	1981	1992	1987	1980	1982	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1958 - 1995#	
ANNUAL TOTAL	272113.9		406002.1			
ANNUAL MEAN	746		1112		718	
HIGHEST ANNUAL MEAN					1859	1958
LOWEST ANNUAL MEAN					108	1984
HIGHEST DAILY MEAN	2860	Nov 12	2860	Nov 12	4500	May 20 1958
LOWEST DAILY MEAN	1.1	Oct 1	1.1	Oct 1	.00	Jul 26 1987
ANNUAL SEVEN-DAY MINIMUM	28	Sep 26	48	Sep 21	1.4	Oct 18 1979
INSTANTANEOUS PEAK FLOW			2980	Jan 26	3220	Dec 29 1991
INSTANTANEOUS PEAK STAGE			19.71	Jan 26	19.97	Dec 29 1991
ANNUAL RUNOFF (AC-FT)	539700		805300		520300	
10 PERCENT EXCEEDS	2550		2660		2550	
50 PERCENT EXCEEDS	349		684		202	
90 PERCENT EXCEEDS	59		54		24	

Period of regulated streamflow.

07346045 BLACK CYPRESS BAYOU AT JEFFERSON, TX

LOCATION.--Lat 32°46'40", long 94°21'26", Marion County, Hydrologic Unit 11140306 near center of channel at downstream side of bridge on U.S. Highway 59, 1.1 mi north of Jefferson, 2.0 mi upstream from Texas and Pacific Railway Co. bridge, and 5.2 mi upstream from mouth.

DRAINAGE AREA.--365 mi².

PERIOD OF RECORD.--September 1968 to current year. May 1938 to September 1955 (daily gage heights) and November 1956 to August 1968 (daily gage heights and discharge measurements) published by U.S. Army Corps of Engineers as "Black Cypress Creek at Jefferson". September 1964 to August 1968 operated as low-flow partial-record station only.
Water-quality records.--Chemical analyses: October 1967 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 171.47 ft above sea level (U.S. Army Corps of Engineers benchmark).

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversion in vicinity of the gage. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1938, 22.42 ft Apr. 29, 1958, from records by U.S. Army Corps of Engineers.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 19	0530	4,390	16.45				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	499	229	1630	1770	542	299	618	162	33	9.0	.78
2	1.5	449	220	1960	1440	522	311	497	166	29	11	1.2
3	1.5	394	217	1900	1150	573	317	424	163	28	12	1.4
4	1.6	343	215	1590	944	686	347	419	154	25	11	1.5
5	1.5	508	210	1270	799	803	426	511	154	92	9.0	1.7
6	1.2	841	204	1030	704	804	441	656	155	127	7.1	1.7
7	3.4	792	198	882	630	761	421	933	144	96	6.7	1.8
8	1060	1010	201	767	566	732	466	1690	127	81	6.4	1.9
9	1070	2530	222	690	514	689	496	2370	111	92	5.8	2.2
10	627	2570	514	640	480	644	519	2490	128	119	5.5	2.2
11	397	1980	618	603	460	610	841	2720	253	150	5.3	2.3
12	380	1460	585	568	450	584	1020	2630	259	175	5.0	2.5
13	365	1140	673	636	439	573	1150	2140	192	168	4.6	2.9
14	308	955	915	743	447	566	1550	1680	152	133	4.1	3.7
15	270	842	1510	885	492	558	1670	1310	152	97	3.6	3.7
16	288	785	2230	1370	517	553	1560	1010	159	72	3.1	4.3
17	461	744	2760	1660	524	598	1290	788	161	54	2.8	33
18	541	676	3700	2040	539	637	1030	625	156	43	2.5	22
19	475	582	4170	2110	548	651	825	490	136	44	2.2	18
20	453	481	3240	1970	532	653	695	400	110	40	1.9	17
21	532	417	2350	2020	506	628	593	339	89	33	1.6	12
22	692	374	1800	1870	477	572	620	294	73	28	1.3	14
23	663	337	1450	1770	448	505	791	254	61	27	.92	19
24	576	307	1170	1570	429	447	748	222	55	28	.59	19
25	513	290	972	1320	424	394	741	197	51	26	.46	17
26	537	280	826	1210	436	355	838	177	49	24	.39	15
27	537	273	727	1500	497	321	942	160	41	20	.31	14
28	495	266	657	1510	572	297	912	144	39	17	.29	12
29	484	252	774	1870	---	289	833	133	38	14	.34	10
30	538	240	933	2060	---	294	737	160	36	11	.44	8.5
31	542	---	1110	2060	---	296	---	177	---	9.7	.60	---
TOTAL	12816.3	22617	35600	43704	17734	17137	23429	26658	3726	1935.7	125.84	266.28
MEAN	413	754	1148	1410	633	553	781	860	124	62.4	4.06	8.88
MAX	1070	2570	4170	2110	1770	804	1670	2720	259	175	12	33
MIN	1.2	240	198	568	424	289	299	133	36	9.7	.29	.78
AC-FT	25420	44860	70610	86690	35180	33990	46470	52880	7390	3840	250	528
CFSM	1.13	2.07	3.15	3.86	1.74	1.51	2.14	2.36	.34	.17	.01	.02
IN.	1.31	2.31	3.63	4.45	1.81	1.75	2.39	2.72	.38	.20	.01	.03

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995, BY WATER YEAR (WY)

MEAN	81.8	271	562	528	638	721	604	487	298	96.2	45.2	51.0
MAX	415	1344	2157	1508	1612	1606	2006	1934	1321	576	623	581
(WY)	1974	1975	1988	1991	1975	1990	1973	1991	1974	1992	1979	1974
MIN	.009	13.6	62.1	99.0	156	159	109	50.8	4.68	.97	.060	.000
(WY)	1979	1984	1990	1971	1981	1986	1971	1984	1984	1978	1969	1969

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1969 - 1995	
ANNUAL TOTAL	172121.3		205749.12			
ANNUAL MEAN	472		564		364	
HIGHEST ANNUAL MEAN					647	1991
LOWEST ANNUAL MEAN					78.3	1971
HIGHEST DAILY MEAN	4170	Dec 19	4170	Dec 19	10700	Dec 28 1987
LOWEST DAILY MEAN	1.2	Oct 6	.29	Aug 28	.00	Aug 10 1969
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 30	.40	Aug 24	.00	Aug 10 1969
INSTANTANEOUS PEAK FLOW			4390	Dec 19	11600	Dec 28 1987
INSTANTANEOUS PEAK STAGE			16.45	Dec 19	19.34	Dec 28 1987
ANNUAL RUNOFF (AC-FT)	341400		408100		263500	
ANNUAL RUNOFF (CFSM)	1.29		1.54		1.00	
ANNUAL RUNOFF (INCHES)	17.54		20.97		13.54	
10 PERCENT EXCEEDS	1120		1530		892	
50 PERCENT EXCEEDS	283		424		171	
90 PERCENT EXCEEDS	13		3.5		1.7	

07346050 LITTLE CYPRESS CREEK NEAR ORE CITY, TX

LOCATION.--Lat 32°40'21", long 94°45'03", Upshur County, Hydrologic Unit 11140307, on right bank at downstream side of bridge on U.S. Highway 259, 4 mi downstream from Clear Creek, 9 mi south of Ore City, and 12 mi north of Longview.

DRAINAGE AREA.--383 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 232.67 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges and those below 3 ft³/s, which are poor. No known diversions above station. During the year, the city of Gilmer discharged a small amount of sewage effluent into a tributary above this station. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1902 occurred in March 1945; maximum stage since 1945, that of Apr. 24, 1966. The flood in April 1958 reached a stage of 19.4 ft, or 1.3 ft lower than the flood of March 1945 at a point 6 mi upstream, from information by local resident.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 8	0900	4,420	12.50	Apr. 14	0200	2,680	11.53
Dec. 18	0030	6,520	13.43	May 11	0930	3,560	12.02
Apr. 11	1400	3,330	11.95				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	147	134	1200	1170	246	e191	355	115	43	19	.00
2	1.9	112	128	1280	962	277	177	243	138	43	19	.00
3	2.1	90	125	1080	796	318	160	196	164	46	23	.00
4	2.0	81	125	933	661	e336	182	202	174	42	31	.00
5	1.8	246	126	791	543	335	283	212	123	46	35	.00
6	1.3	556	127	679	447	323	274	275	89	59	31	.00
7	3.2	988	132	581	379	313	274	382	78	88	26	.00
8	744	4060	135	474	323	295	325	651	72	130	24	.00
9	931	2940	160	386	276	264	370	1510	66	169	23	.00
10	593	2060	546	343	245	238	423	2530	67	165	21	.00
11	270	1600	731	334	230	215	2620	3410	384	138	18	.00
12	137	1320	711	343	237	195	1900	2600	475	97	16	.00
13	76	1170	779	763	232	226	2240	1830	376	66	13	.00
14	62	945	1150	1100	255	e311	2490	1380	307	51	10	.00
15	57	758	1760	969	e306	e299	1820	1040	252	43	7.6	.00
16	59	634	3100	836	e312	e286	1310	779	163	36	5.3	.00
17	297	552	5710	837	305	e278	1010	566	100	31	2.9	.00
18	521	e477	6010	1110	294	e273	818	377	79	28	1.9	2.8
19	458	e412	3970	1490	283	e269	675	258	69	25	.90	45
20	344	e354	2420	1200	266	e266	595	195	62	26	.55	54
21	307	e307	1660	1060	240	e275	576	157	55	30	.68	48
22	403	e266	1250	1150	212	e282	680	133	54	33	2.3	32
23	399	e233	1010	1220	191	e280	934	117	56	34	6.6	26
24	315	e205	837	1090	177	e270	946	106	151	33	6.1	22
25	297	191	711	921	172	e253	901	100	125	31	4.3	15
26	350	176	598	888	172	e242	981	97	91	29	2.8	6.4
27	340	161	494	e1240	228	e235	975	93	63	27	1.4	4.8
28	260	149	406	e867	249	e229	820	90	53	25	.64	3.9
29	204	141	767	e727	---	e222	656	92	48	22	.24	5.4
30	185	137	1200	e691	---	e214	509	96	44	20	.07	7.5
31	171	---	1030	e821	---	e204	---	100	---	20	.02	---
TOTAL	7793.3	21468	38042	27404	10163	8269	26115	20172	4093	1676	353.30	272.80
MEAN	251	716	1227	884	363	267	870	651	136	54.1	11.4	9.09
MAX	931	4060	6010	1490	1170	336	2620	3410	475	169	35	54
MIN	1.0	81	125	334	172	195	160	90	44	20	.02	.00
AC-FT	15460	42580	75460	54360	20160	16400	51800	40010	8120	3320	701	541
CFSM	.66	1.87	3.20	2.31	.95	.70	2.27	1.70	.36	.14	.03	.02
IN.	.76	2.09	3.69	2.66	.99	.80	2.54	1.96	.40	.16	.03	.03

07346050 LITTLE CYPRESS CREEK NEAR ORE CITY, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

MEAN	56.3	195	386	363	471	564	575	475	208	68.9	24.6	57.2
MAX	412	1508	1965	1275	1321	1478	3007	1834	905	426	392	614
(WY)	1994	1975	1988	1991	1975	1987	1966	1968	1974	1992	1979	1974
MIN	.000	1.10	3.70	25.6	55.8	40.9	54.3	23.9	2.09	.005	.000	.000
(WY)	1964	1966	1990	1964	1964	1966	1971	1984	1971	1984	1984	1963

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1963 - 1995	
ANNUAL TOTAL	141368.9		165821.40			
ANNUAL MEAN	387		454		290	
HIGHEST ANNUAL MEAN					599	1975
LOWEST ANNUAL MEAN					35.7	1964
HIGHEST DAILY MEAN	6010	Dec 18	6010	Dec 18	21000	Apr 24 1966
LOWEST DAILY MEAN	1.0	Sep 30	.00	Sep 1	.00	Aug 16 1963
ANNUAL SEVEN-DAY MINIMUM	1.6	Sep 30	.00	Sep 1	.00	Aug 16 1963
INSTANTANEOUS PEAK FLOW			6500	Dec 17	23500	Apr 24 1966
INSTANTANEOUS PEAK STAGE			13.42	Dec 17	20.20	Apr 24 1966
ANNUAL RUNOFF (AC-FT)	280400		328900		210400	
ANNUAL RUNOFF (CFSM)	1.01		1.19		.76	
ANNUAL RUNOFF (INCHES)	13.73		16.11		10.30	
10 PERCENT EXCEEDS	985		1130		775	
50 PERCENT EXCEEDS	121		228		74	
90 PERCENT EXCEEDS	3.9		3.1		.20	

e Estimated

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TX

LOCATION (REVISED).--Lat 32°42'46", long 94°20'45", Marion County, Hydrologic Unit 11140307, at downstream side of upstream bridge on U.S. Highway 59, 0.3 mi downstream from Texas and Pacific Railway Co. bridge, 3.3 mi downstream from Grays Creek, 3.5 mi south of Jefferson, and 6.8 mi upstream from mouth.

DRAINAGE AREA.--675 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 174.60 ft above sea level. Prior to Sept. 19, 1947, nonrecording gage at upstream side of bridge at same datum.

REMARKS.--No estimated daily discharges. Records good. There are no known diversions above station. Sewage effluent is discharged into tributaries that enter Little Cypress Creek above this station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1944 reached a stage of 21.1 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	508	273	2140	2520	836	415	986	229	86	8.3	3.3
2	5.7	432	258	1900	2720	790	404	928	229	70	8.2	3.1
3	5.7	358	250	1720	2500	747	409	844	200	61	8.8	2.8
4	5.5	308	244	1580	2120	703	412	771	185	55	8.7	2.6
5	5.5	321	239	1510	1750	674	460	683	186	81	8.3	2.7
6	5.5	359	235	1570	1430	661	469	614	195	153	7.8	2.8
7	6.0	443	232	1570	1220	692	491	580	204	232	7.1	2.6
8	492	572	238	1410	1050	849	502	733	186	185	6.9	2.7
9	803	699	271	1250	939	829	509	1300	140	121	7.5	2.7
10	909	777	617	1110	849	776	516	1530	132	113	7.6	2.5
11	1310	920	881	995	768	731	763	1580	407	134	7.8	2.3
12	1460	2080	874	905	707	682	995	1540	293	155	7.6	2.4
13	1340	2770	861	901	652	657	1320	1780	258	164	6.8	3.1
14	1110	2460	933	932	638	905	2160	2600	319	170	6.3	4.1
15	877	2000	1240	899	718	982	2660	2860	372	203	6.3	4.6
16	647	1580	2080	928	728	952	2460	2450	400	116	6.3	4.9
17	631	1300	3130	1160	717	984	2490	1980	388	73	6.5	10
18	696	1110	3830	1810	702	992	2460	1530	331	54	6.2	16
19	707	977	4560	2700	693	953	2150	1180	262	42	5.6	10
20	713	889	5510	2830	678	891	1820	940	183	34	5.0	26
21	726	828	5430	2700	647	844	1490	772	130	30	4.5	27
22	876	774	4470	2440	611	840	1400	614	104	24	4.4	21
23	903	732	3620	2270	585	840	2920	437	88	21	4.3	35
24	855	676	3020	2040	560	821	3240	330	76	18	4.1	42
25	824	607	2470	1790	542	772	2580	273	71	16	4.1	37
26	826	519	2000	1790	598	706	2090	227	105	13	4.0	29
27	806	434	1530	2630	753	623	1660	198	170	12	3.9	24
28	763	368	1180	2970	803	532	1330	177	195	10	3.9	21
29	708	324	1370	2630	---	466	1140	163	166	9.5	3.7	17
30	638	295	1800	2400	---	441	1030	181	116	8.6	3.4	16
31	574	---	2140	2330	---	424	---	207	---	8.3	3.4	---
TOTAL	20234.1	26420	55786	55810	29198	23595	42745	30988	6320	2472.4	187.3	380.2
MEAN	653	881	1800	1800	1043	761	1425	1000	211	79.8	6.04	12.7
MAX	1460	2770	5510	2970	2720	992	3240	2860	407	232	8.8	42
MIN	5.5	295	232	899	542	424	404	163	71	8.3	3.4	2.3
AC-FT	40130	52400	110700	110700	57910	46800	84780	61460	12540	4900	372	754
CFSM	.97	1.30	2.67	2.67	1.54	1.13	2.11	1.48	.31	.12	.01	.02
IN.	1.12	1.46	3.07	3.08	1.61	1.30	2.36	1.71	.35	.14	.01	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1995, BY WATER YEAR (WY)

MEAN	113	316	659	735	911	996	1034	1024	460	132	47.3	97.8
MAX	927	2709	3391	2664	2853	2367	4584	4212	2525	689	667	941
(WY)	1950	1958	1961	1991	1950	1969	1966	1958	1946	1992	1979	1979
MIN	.000	.017	.53	8.33	91.5	100	117	61.6	4.67	.24	.000	.000
(WY)	1953	1957	1957	1957	1964	1966	1972	1971	1971	1964	1956	1952

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1946 - 1995	
ANNUAL TOTAL	239687.5		294136.0			
ANNUAL MEAN	657		806		538	
HIGHEST ANNUAL MEAN					1260	1958
LOWEST ANNUAL MEAN					67.3	1964
HIGHEST DAILY MEAN	5510	Dec 20	5510	Dec 20	32700	Apr 26 1966
LOWEST DAILY MEAN	5.5	Oct 4	2.3	Sep 11	.00	Sep 20 1948
ANNUAL SEVEN-DAY MINIMUM	5.7	Oct 1	2.6	Sep 6	.00	Sep 20 1948
INSTANTANEOUS PEAK FLOW			5720	Dec 20	35500	Apr 26 1966
INSTANTANEOUS PEAK STAGE			13.80	Dec 20	22.28	Apr 26 1966
ANNUAL RUNOFF (AC-FT)	475400		583400		390100	
ANNUAL RUNOFF (CFSM)	.97		1.19		.80	
ANNUAL RUNOFF (INCHES)	13.21		16.21		10.84	
10 PERCENT EXCEEDS	1660		2140		1370	
50 PERCENT EXCEEDS	371		611		182	
90 PERCENT EXCEEDS	15		6.2		1.4	

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: June 1964 to current year. Pesticide analyses: January 1968 to June 1981.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1990.
WATER TEMPERATURE: October 1967 to September 1990.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,350 microsiemens Nov. 9, 1969; minimum, 20 microsiemens Mar. 29, 30, 1989.
WATER TEMPERATURE (water years 1967-87, 1989-90): Maximum, 32.5°C on several days during July and August 1987; minimum, 0.0°C on several days during winter months of 1983, 1985.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
13...	1520	1290	83	6.2	17.0	8.1	84	1.0	15	10	3.6
DEC											
01...	1510	280	152	6.8	10.5	9.4	84	0.5	27	14	6.2
FEB											
02...	1245	2860	83	6.1	11.0	10.4	95	0.5	16	9	3.8
APR											
05...	1555	462	139	6.8	17.0	9.8	102	1.0	26	9	5.8
MAY											
25...	1340	268	177	6.7	25.0	6.8	83	1.3	29	7	6.8
JUL											
12...	1115	159	138	7.2	28.5	6.0	78	0.4	25	4	5.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
13...	1.5	5.9	0.7	4.5	5.4	13	10	<0.10	8.1	50
DEC										
01...	2.9	14	1	3.3	13	14	23	<0.10	22	94
FEB										
02...	1.6	6.6	0.7	4.0	7.0	10	9.5	<0.10	8.8	49
APR										
05...	2.8	13	1	2.6	17	12	19	<0.10	15	81
MAY										
25...	2.9	19	2	3.0	22	9.2	31	0.1	20	107
JUL										
12...	2.6	15	1	3.2	21	9.6	19	0.10	21	91

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
13...	--	--	0.0	--	<0.050	<0.015	--	0.5	0.1	0.0
DEC										
01...	0.060	--	<0.010	0.060	0.1	0.0	0.48	0.5	0.0	0.0
FEB										
02...	--	--	<0.010	--	<0.050	<0.015	--	0.4	0.0	0.0
APR										
05...	0.140	--	<0.010	0.140	0.14	0.0	0.36	0.4	0.0	0.0
MAY										
25...	0.330	0.330	0.010	0.340	0.340	0.060	0.34	0.40	0.120	0.090
JUL										
12...	0.310	--	<0.010	0.310	0.310	0.040	0.26	0.30	0.050	0.020

07346070 LITTLE CYPRESS CREEK NEAR JEFFERSON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT 13...	0.12	--	--	--	--	--	--	--	--	--
DEC 01...	0.15	--	--	--	--	--	--	--	--	--
FEB 02...	0.06	<1	46	<0.5	<1	<5	<3	<10	780	<10
APR 05...	0.06	--	--	--	--	--	--	--	--	--
MAY 25...	0.28	--	--	--	--	--	--	--	--	--
JUL 12...	0.06	<1	62	<0.5	<1.0	<5	<3	<10	200	<10

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT 13...	--	--	--	--	--	--	--	--	--	--
DEC 01...	--	--	--	--	--	--	--	--	--	--
FEB 02...	5	22	<0.1	10	<10	<1	<1	59	<6	14
APR 05...	--	--	--	--	--	--	--	--	--	--
MAY 25...	--	--	--	--	--	--	--	--	--	--
JUL 12...	10	94	<0.1	<10	<10	<1	<1.0	130	<6	<3

08017200 COWLEECH FORK SABINE RIVER AT GREENVILLE, TX

LOCATION.--Lat 33°07'58", long 96°04'36", Hunt County, Hydrologic Unit 12010001, on left bank 103 ft downstream from centerline of downstream bridge on Interstate Highway 30 (U.S. Highway 67), 0.3 mi downstream from Horse Creek, 0.9 mi downstream from Louisiana and Arkansas Railroad Co. bridge, 1.8 mi east of Greenville, and at mile 558.3.

DRAINAGE AREA.--77.7 mi².

PERIOD OF RECORD.--February 1959 to current year. Prior to October 1963, published as Sabine River at Greenville.

REVISED RECORDS.--WSP 1732: Drainage area. WSP 2122: 1960, 1963-65.

GAGE.--Water-stage recorder. Datum of gage is 485.07 ft above sea level.

REMARKS.--Records poor. The city of Greenville diverted water from city lakes upstream from gage and from Lake Tawakoni for municipal use. Sewage effluent was returned to a tributary downstream from gage. Extreme low flows are largely sustained by return water from a water treatment plant upstream. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1895, 22 ft in May 1935, from information by local resident and city engineer of Greenville. Flood of July 3, 1913, reached a stage of 20 ft, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1515	3,880	16.36	May 8	1930	6,930	16.87
Nov. 15	1115	3,490	16.24	May 31	1230	3,130	15.82
Apr. 20	1345	3,010	15.78	June 11	1515	3,270	15.87
May 6	1700	6,140	16.69				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	1.7	7.9	6.8	2.7	3.3	1.8	e8.2	377	e.43	.60	.01
2	.05	1.2	11	7.8	3.0	3.9	1.6	e5.1	28	e.40	.32	.00
3	.05	71	30	6.5	2.8	4.6	1.3	e4.0	9.5	e.37	.19	.00
4	.06	1010	17	6.0	2.5	6.5	1180	e6.1	4.5	e.37	.16	.00
5	.09	2590	13	5.5	2.6	6.4	1120	e4.2	2.7	e1.0	.15	.00
6	.08	686	11	37	2.7	6.2	1360	e4240	1.9	e.54	.13	.00
7	11	59	9.9	35	2.8	524	78	e1310	1.6	.38	.10	.00
8	22	27	481	14	2.9	e107	23	e4060	1.4	.34	.09	.00
9	3.7	551	824	8.4	2.9	17	9.6	2710	1.2	.27	.08	.00
10	.58	902	1230	7.6	3.5	7.8	33	100	4.8	.23	.05	.00
11	.34	71	137	7.6	6.6	5.0	65	40	1800	.21	.04	.00
12	.18	32	44	26	17	3.9	11	19	205	.20	.03	1.1
13	.12	19	25	1200	11	1000	3.8	13	14	.19	.01	2.5
14	.11	277	25	148	7.4	1800	2.0	9.6	4.0	.17	.01	.22
15	.15	2860	62	28	6.9	237	1.6	6.5	2.1	.16	.00	.08
16	1.1	374	588	12	8.6	166	1.4	5.0	1.3	.14	.01	.04
17	39	72	153	110	11	38	1.2	4.0	.91	.14	.08	4.0
18	62	36	48	344	10	15	2.3	3.4	.67	.13	.13	.22
19	190	73	28	688	6.9	8.2	257	3.0	.54	.12	.11	4.8
20	252	245	19	61	5.5	5.2	2260	2.6	.47	.12	.09	.35
21	1500	221	15	17	4.9	3.9	195	2.4	.52	.11	.07	.05
22	835	42	10	13	4.5	3.2	31	2.1	.43	.10	.05	.02
23	37	20	8.1	94	4.4	2.8	14	2.1	.34	.10	.02	.01
24	12	14	6.4	18	3.9	2.6	8.9	2.5	e.30	.10	.02	.01
25	733	13	5.5	5.8	3.5	20	6.3	520	e.28	.09	.01	.01
26	621	12	5.0	286	3.2	593	4.7	1060	e.28	.08	.00	.03
27	52	12	4.7	1090	3.4	57	4.0	31	e.33	.07	.00	.02
28	16	11	5.6	80	3.3	8.8	e3.5	8.5	e.78	.06	.00	.01
29	7.0	9.9	5.7	17	---	5.2	e3.3	4.5	e.58	.05	.00	.00
30	4.1	8.5	5.9	5.8	---	3.1	e2.9	15	e.48	.03	.01	.00
31	2.6	---	6.4	3.0	---	2.3	---	2150	---	.44	.03	---
TOTAL	4402.36	10321.3	3842.1	4388.8	150.4	4666.9	6687.2	16351.8	2465.91	7.14	2.59	13.48
MEAN	142	344	124	142	5.37	151	223	527	82.2	.23	.084	.45
MAX	1500	2860	1230	1200	17	1800	2260	4240	1800	1.0	.60	4.8
MIN	.05	1.2	4.7	3.0	2.5	2.3	1.2	2.1	.28	.03	.00	.00
AC-FT	8730	20470	7620	8710	298	9260	13260	32430	4890	14	5.1	27
CFSM	1.83	4.43	1.60	1.82	.07	1.94	2.87	6.79	1.06	.00	.00	.01
IN.	2.11	4.94	1.84	2.10	.07	2.23	3.20	7.83	1.18	.00	.00	.01

SABINE RIVER MAIN STEM

08017200 COWLEECH FORK SABINE RIVER AT GREENVILLE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1995, BY WATER YEAR (WY)

MEAN	57.4	50.9	94.5	57.6	82.4	96.9	98.1	148	62.2	24.7	6.03	30.9
MAX	354	344	573	193	273	390	431	540	353	264	95.2	258
(WY)	1972	1995	1972	1969	1970	1984	1966	1982	1981	1989	1977	1974
MIN	.003	.17	.11	.24	.67	.57	.85	.33	.032	.023	.000	.012
(WY)	1979	1980	1990	1986	1981	1986	1971	1988	1988	1991	1985	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1959 - 1995	
ANNUAL TOTAL	42018.16		53299.98			
ANNUAL MEAN	115		146		68.4	
HIGHEST ANNUAL MEAN					146	1995
LOWEST ANNUAL MEAN					15.9	1971
HIGHEST DAILY MEAN	3330	Jul 15	4240	May 6	9730	May 13 1982
LOWEST DAILY MEAN	.03	Sep 21	.00	Aug 15	.00	Aug 4 1964
ANNUAL SEVEN-DAY MINIMUM	.04	Sep 19	.00	Sep 2	.00	Aug 4 1972
INSTANTANEOUS PEAK FLOW			6930	May 8	15300	May 13 1982
INSTANTANEOUS PEAK STAGE			16.87	May 8	18.47	May 13 1982
ANNUAL RUNOFF (AC-FT)	83340		105700		49540	
ANNUAL RUNOFF (CFSM)	1.48		1.88		.88	
ANNUAL RUNOFF (INCHES)	20.12		25.52		11.96	
10 PERCENT EXCEEDS	225		309		57	
50 PERCENT EXCEEDS	2.5		4.5		1.5	
90 PERCENT EXCEEDS	.20		.04		.06	

e Estimated

08017300 SOUTH FORK SABINE RIVER NEAR QUINLAN, TX

LOCATION.--Lat 32°53'52", long 96°15'11", Hunt County, Hydrologic Unit 12010001, on right bank at downstream side of bridge on Farm Road 1565, 2.4 mi upstream from Dry Creek, 6.2 mi upstream from Bearpen Creek, 7 mi southwest of Quinlan, and 25 mi upstream from mouth.

DRAINAGE AREA.--78.7 mi².

PERIOD OF RECORD.--February 1959 to current year.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 461.40 ft above sea level.

REMARKS.--Records fair. Sewage effluent was discharged by Royse City into the river above this station during the water year. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1890, 21 ft July 29, 1902, from information by local resident. Flood of Apr. 27, 1957, reached a stage of 17.76 ft, from floodmarks.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	2315	10,000	17.05	Mar. 13	1530	5,130	16.56
Nov. 5	1115	7,190	16.93	Apr. 20	1030	3,310	16.42
Nov. 10	0015	3,260	16.22	May 6	0915	4,990	16.71
Nov. 15	1030	8,600	17.13	May 8	1330	11,200	17.64

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	9.9	1.5	64	11	24	2.3	.04	.00	.00	.10	.07
2	.46	9.5	2.8	26	6.5	14	1.3	.03	.02	.00	.31	.07
3	.39	46	64	16	4.6	19	.98	.21	.01	.00	e.27	.05
4	.32	1270	33	21	3.0	17	1280	2.5	.00	.00	.16	.03
5	.45	5010	18	12	2.2	14	1070	11	.00	25	.13	.02
6	.41	1520	11	115	1.8	14	539	3270	.00	15	.36	.01
7	9.3	82	7.1	e62	1.6	580	48	657	.00	.24	.18	.03
8	307	40	477	26	1.3	107	14	6140	.00	.02	.07	.14
9	37	949	1070	15	.94	25	5.0	1430	.00	.07	.09	.21
10	11	1980	2090	10	.83	13	196	75	2.3	.02	.10	.17
11	3.7	e117	e219	8.7	1.1	7.3	949	12	603	.00	.11	.12
12	2.0	48	e41	88	3.1	5.3	67	4.0	149	.00	.06	.10
13	1.6	37	23	1240	2.6	2380	10	1.1	13	.00	.03	.60
14	1.4	273	287	e95	2.4	1380	2.6	.30	.65	.00	.02	3.7
15	1.5	6460	351	34	2.7	177	.96	.09	.05	.00	.01	.23
16	2.5	1170	1240	18	3.1	194	.57	.05	.00	.00	.00	.06
17	191	e75	e408	198	5.6	49	.41	3.4	.00	.00	.01	.07
18	308	34	e48	387	3.8	24	16	.32	.00	.01	.02	9.1
19	1350	75	26	747	2.7	13	178	.04	.00	21	.02	3.9
20	197	183	16	69	1.8	8.4	2070	.01	.00	2.1	.02	42
21	3400	177	11	28	1.4	5.9	277	.00	.00	.20	.02	8.1
22	4230	32	7.5	58	2.0	4.2	28	.00	.00	.05	.02	2.2
23	197	15	5.5	e94	1.5	4.3	75	.00	.00	.03	.06	.65
24	34	9.3	4.0	29	1.2	3.8	11	.00	.00	.35	.03	.29
25	188	7.1	3.1	18	.88	13	1.3	.00	.00	.11	.02	.19
26	437	6.8	2.4	422	.82	1000	.37	.00	.00	.03	.02	.17
27	48	7.1	2.1	e1300	.98	147	.15	.00	.00	.01	.01	.15
28	18	5.9	5.6	e81	51	21	.08	.00	.01	.00	.03	.21
29	12	3.7	85	31	---	11	.05	.00	.00	.00	.04	e.48
30	8.7	1.9	56	19	---	7.1	.05	.00	.00	.00	.03	e.19
31	7.2	---	33	16	---	4.3	---	.00	---	.01	.05	---
TOTAL	11005.49	19654.2	6648.6	5347.7	122.45	6286.6	6844.12	11607.09	768.04	64.25	2.40	73.31
MEAN	355	655	214	173	4.37	203	228	374	25.6	2.07	.077	2.44
MAX	4230	6460	2090	1300	51	2380	2070	6140	603	25	.36	42
MIN	.32	1.9	1.5	8.7	.82	3.8	.05	.00	.00	.00	.00	.01
AC-FT	21830	38980	13190	10610	243	12470	13580	23020	1520	127	4.8	145
CFSM	4.51	8.32	2.73	2.19	.06	2.58	2.90	4.76	.33	.03	.00	.03
IN.	5.20	9.29	3.14	2.53	.06	2.97	3.24	5.49	.36	.03	.00	.03

08017300 SOUTH FORK SABINE RIVER NEAR QUINLAN, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1995, BY WATER YEAR (WY)

MEAN	105	60.1	99.3	63.1	110	110	126	156	93.1	30.8	5.29	27.5
MAX	656	655	459	277	556	572	693	674	1128	490	96.8	353
(WY)	1982	1995	1972	1974	1983	1977	1966	1979	1981	1981	1974	1974
MIN	.000	.000	.000	.000	.000	.11	.062	.038	.000	.000	.000	.000
(WY)	1964	1964	1964	1976	1976	1972	1971	1988	1977	1964	1965	1963

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1959 - 1995	
ANNUAL TOTAL	59307.27		68424.25			
ANNUAL MEAN	162		187		83.1	
HIGHEST ANNUAL MEAN					187	1995
LOWEST ANNUAL MEAN					13.9	1964
HIGHEST DAILY MEAN	6460	Nov 15	6460	Nov 15	13300	Jun 16 1981
LOWEST DAILY MEAN	.00	Jul 7	.00	May 21	.00	Mar 3 1959
ANNUAL SEVEN-DAY MINIMUM	.02	Jul 4	.00	May 21	.00	Apr 5 1959
INSTANTANEOUS PEAK FLOW			11200	May 8	23000	Jun 16 1981
INSTANTANEOUS PEAK STAGE			17.64	May 8	18.77	Apr 5 1986
ANNUAL RUNOFF (AC-FT)	117600		135700		60170	
ANNUAL RUNOFF (CFSM)	2.06		2.38		1.06	
ANNUAL RUNOFF (INCHES)	28.03		32.34		14.34	
10 PERCENT EXCEEDS	287		325		58	
50 PERCENT EXCEEDS	3.7		3.1		.35	
90 PERCENT EXCEEDS	.23		.00		.00	

e Estimated

08017400 LAKE TAWAKONI NEAR WILLS POINT, TX

LOCATION.--Lat 32°48'31", long 95°55'10", Van-Zandt County, Hydrologic Unit 12010001, in stairwell at left end of spillway of Iron Bridge Dam on Sabine River, 750 ft upstream from bridge on Farm Road 47, 3.8 mi upstream from McBee Creek, 9.0 mi northeast of Wills Point, and at mile 514.5.

DRAINAGE AREA.--756 mi².

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

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

REMARKS.--The lake is formed by a rolled earthfill dam 29,500 ft long, including a 480-foot uncontrolled concrete ogee spillway. Outlet works consist of two 4- by 6-foot sluice gates and two 20-inch steel pipes controlled by service valves. Closure of earthen dam began July 1, 1960, and deliberate impoundment of water began Oct. 7, 1960. Capacity table is based on a 1956 survey. Diversions are made for municipal use by the city of Dallas and various other users in the Sabine River basin. The lake was built for water conservation. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	454.0	-
Design flood	446.2	1,290,000
Crest of spillway	437.5	936,200
Lowest intake to wet well (invert)	416.5	342,700
Lowest gated outlet (invert)	378.0	0

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,130,000 acre-ft May 1, 1966 (elevation, 442.58 ft); minimum since lake first filled in May 1965, 802,700 acre-ft Oct. 21, 1972 (elevation, 433.65 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,065,000 acre-ft May 10 at 0800 hours (elevation, 440.94 ft); minimum contents, 868,600 acre-ft Sept. 30 (elevation, 435.59 ft).

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

433.0	781,200	437.0	918,200	441.0	1,067,400
435.0	848,200	439.0	991,200	443.0	1,146,900

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	908300	958700	958700	958400	976500	946000	959900	961700	959100	941300	921400	892300
2	907900	957600	960200	955800	973500	944600	957600	959100	958400	940600	920300	890900
3	909300	959900	960200	956900	972400	943800	956900	959900	956200	938000	920000	889900
4	908300	978300	960200	956900	967600	943100	969800	958700	954700	938000	919200	887700
5	906800	988700	959100	953600	965000	944200	980500	957600	953600	941700	918500	886700
6	905400	1003000	957600	957600	963200	943500	986400	981600	951800	941700	917800	882400
7	911100	1001000	957300	955100	962400	946000	986400	994300	950000	940600	916400	882400
8	912200	994600	962400	955100	959100	946700	982800	1040000	948500	939500	915000	882100
9	911400	998400	976800	954000	958000	946400	979800	1065000	947800	938800	914600	880400
10	909300	1000000	992400	953600	957300	946000	983100	1056000	947800	938000	913600	878600
11	907600	998400	993900	952900	956500	944900	977600	1039000	954300	937000	912100	877900
12	907200	992000	992000	962400	955100	944600	977200	1026000	956900	936200	911400	877900
13	906500	987900	987200	984200	954000	962400	973900	1016000	955400	934400	909700	878300
14	905100	986400	989000	989000	952900	983500	969500	1008000	954000	933700	908300	877600
15	904000	994300	992800	984600	953600	990900	968000	999500	952100	933300	907900	877600
16	905400	1004000	1001000	980500	953600	989800	965800	992800	950700	931500	907200	876900
17	905400	1002000	1005000	980900	951400	986400	969500	987900	949300	931500	906100	878300
18	910400	995800	999500	988300	950700	982800	964300	982400	948200	932600	905400	877200
19	912900	990900	993100	990500	950000	977600	968000	977200	947100	931200	904000	879000
20	916400	989400	989000	989800	949300	976500	982400	973500	946400	931500	903300	879000
21	933700	986400	985300	985300	948900	972800	990500	969800	945300	930500	901900	880000
22	957600	982400	980500	984600	948200	970900	992400	966500	944600	929000	900800	876600
23	964700	979100	976500	981300	948500	968700	987600	963900	943800	929400	899800	874500
24	963900	974300	973200	978300	947400	966500	982400	962400	942700	928600	898400	873800
25	966100	973200	969500	976100	947100	962100	978000	960200	940200	927200	897300	873100
26	969500	969500	966500	980500	946700	969100	975400	959100	939900	926500	896600	872400
27	969500	969500	966500	988700	947100	969500	971300	958700	940600	925000	895500	871400
28	967600	966100	964700	992800	948200	968000	967600	957600	943800	924300	894500	870700
29	965400	964300	962400	988700	---	966500	966100	955800	943100	922900	893800	870000
30	963500	961300	961000	982800	---	964700	962100	956500	942000	921400	893800	868900
31	962100	---	961300	979100	---	962100	---	958700	---	920000	893000	---
MAX	969500	1004000	1005000	992800	976500	990900	992400	1065000	959100	941700	921400	892300
MIN	904000	957600	957300	952900	946700	943100	956900	955800	939900	920000	893000	868900
(+)	438.21	438.19	438.19	438.67	437.83	438.21	438.21	438.12	437.66	437.05	436.29	435.60
(@)	+54200	-800	0	+17800	-30900	+13900	0	-3400	-16700	-22000	-27000	-24100

CAL YR 1994 MAX 1005000 MIN 904000 (@) +16700
WTR YR 1995 MAX 1065000 MIN 868900 (@) -39000

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

08017410 SABINE RIVER NEAR WILLS POINT, TX

LOCATION.--Lat 32°48'22", long 95°55'09", Van Zandt County, Hydrologic Unit 12010001, on right bank at downstream side of bridge on Farm Road 47, 750 ft downstream from Iron Bridge Dam that forms Lake Tawakoni, 3.6 mi upstream from McBee Creek, 9.0 mi northeast of Wills Point, and at mile 514.3.

DRAINAGE AREA.--756 mi².

PERIOD OF RECORD.--October 1970 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 370.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Tawakoni (see station 08017400) 750 ft upstream. Several observations of water temperature were obtained during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since construction of Iron Bridge Dam in 1960, about 21,000 ft³/s May 1, 1966, from theoretical rating curve of flow over dam 750 ft upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	608	659	1030	1650	301	662	1010	651	124	12	13
2	4.7	472	575	732	1440	188	575	804	672	34	12	14
3	4.7	455	652	659	1450	83	496	682	588	13	12	13
4	4.8	576	652	697	1190	56	870	713	515	13	16	13
5	5.0	1860	614	466	1010	61	1480	655	451	72	13	15
6	4.9	2930	553	523	818	57	2010	1670	375	39	13	13
7	5.1	3380	602	623	770	654	2380	2700	320	31	13	12
8	52	3070	660	429	673	379	2250	5060	278	24	13	12
9	22	3000	1430	410	503	147	1980	8290	237	29	13	12
10	6.4	3270	2780	373	464	114	1890	8640	237	20	13	12
11	6.7	3500	3230	357	489	105	1980	7170	505	12	14	12
12	4.8	3270	3150	418	410	96	1720	5820	577	12	14	13
13	4.2	2880	2880	2020	353	695	1550	5000	550	12	14	13
14	4.2	2590	2820	2780	328	1570	1330	4280	465	12	14	12
15	4.2	2790	3100	2500	352	2320	1170	3620	390	12	14	13
16	4.3	3520	3560	2170	424	2460	1060	3060	335	12	14	13
17	4.2	3760	3900	2040	345	2310	946	2590	284	13	14	15
18	5.0	3440	3820	2400	254	2060	998	2380	235	15	14	13
19	4.9	3090	3410	2630	236	1800	972	1980	193	13	14	14
20	5.2	2800	3040	2660	225	1580	1650	1620	163	12	14	13
21	41	2600	2710	2460	211	1390	2350	1380	136	12	14	22
22	156	2330	2470	2250	173	1250	2630	1220	107	12	14	13
23	568	2050	2140	2150	163	1140	2820	1060	78	12	14	2.9
24	761	1760	1840	1880	166	1010	2270	933	60	13	13	3.0
25	799	1520	1590	1670	132	863	1930	842	197	12	14	3.1
26	964	1350	1370	1700	119	833	1610	744	54	12	14	2.8
27	1100	1310	1220	2280	119	1120	1480	691	16	12	14	2.8
28	1040	1140	1130	2740	360	1120	1230	647	75	12	14	2.9
29	914	1010	1130	2610	---	1010	1080	603	58	12	14	2.0
30	792	838	968	2240	---	910	981	505	86	13	14	1.9
31	805	---	872	1880	---	795	---	558	---	13	13	---
TOTAL	8102.1	67169	59527	49777	14827	28477	46350	76927	8888	659	422	316.4
MEAN	261	2239	1920	1606	530	919	1545	2482	296	21.3	13.6	10.5
MAX	1100	3760	3900	2780	1650	2460	2820	8640	672	124	16	22
MIN	4.2	455	553	357	119	56	496	505	16	12	12	1.9
AC-FT	16070	133200	118100	98730	29410	56480	91940	152600	17630	1310	837	628

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1995#, BY WATER YEAR (WY)

MEAN	223	430	538	325	537	685	718	1008	645	199	37.7	54.9
MAX	1726	2539	3377	1606	2482	1911	2090	3888	2825	1229	332	868
(WY)	1974	1975	1992	1995	1975	1990	1986	1990	1989	1981	1979	1974
MIN	.21	.76	.16	3.43	1.87	2.84	1.31	6.83	.81	.56	.12	.25
(WY)	1991	1979	1991	1976	1976	1976	1971	1987	1972	1972	1986	1987

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1971 - 1995#	
ANNUAL TOTAL	245109.38		361441.5			
ANNUAL MEAN	672		990		449	
HIGHEST ANNUAL MEAN					1064	1992
LOWEST ANNUAL MEAN					107	1988
HIGHEST DAILY MEAN	3900	Dec 17	8640	May 10	20000	May 4 1990
LOWEST DAILY MEAN	.08	Apr 10	1.9	Sep 30	.00	Oct 1 1971
ANNUAL SEVEN-DAY MINIMUM	.81	Apr 21	2.6	Sep 24	.00	Oct 6 1971
INSTANTANEOUS PEAK FLOW			9010	May 9	20600	May 4 1990
INSTANTANEOUS PEAK STAGE			16.55	May 9	19.11	May 4 1990
ANNUAL RUNOFF (AC-FT)	486200		716900		325400	
10 PERCENT EXCEEDS	2320		2760		1400	
50 PERCENT EXCEEDS	179		553		27	
90 PERCENT EXCEEDS	4.7		12		.22	

Period of regulated streamflow.

08018500 SABINE RIVER NEAR MINEOLA, TX

LOCATION.--Lat 32°36'49", long 95°29'08", Wood County, Hydrologic Unit 12010001, on left bank at downstream side of highway embankment 3 ft downstream from left end of bridge on U.S. Highway 69, 3.5 mi south of Mineola, 4.5 mi upstream from Missouri Pacific Railway Lines bridge, 16.2 mi upstream from Lake Fork Creek, and at mile 461.1.

DRAINAGE AREA.--1,357 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1959, October 1967 to current year. Gage-height records collected at this site since July 1946 are contained in reports published by the National Weather Service.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 304.16 ft above sea level. May 12, 1939, to Dec. 11, 1955, at site 55 ft upstream from downstream side of bridge; Dec. 12, 1955, to Dec. 12, 1959, at downstream side of bridge; Oct. 1, 1967, to Sept. 12, 1968, nonrecording gage at downstream side of bridge; Sept. 13, 1968, to Oct. 23, 1974, water-stage recorder at downstream side of bridge; Oct. 24, 1974, to Oct. 16, 1975, at site on right bank 75 ft downstream from bridge. All gages at present datum.

REMARKS.--No estimated daily discharges. Records good. Since October 1960, flow partly regulated by Lake Tawakoni (see station 08017400), capacity 936,200 acre-ft, 53 mi upstream, and since September 1962, by Lake Holbrook (capacity, 7,990 acre-ft), located on Keys Creek, a tributary to the Sabine River 8.0 mi upstream. Flow may also be slightly affected at times by discharge from one floodwater-retarding structure with a detention capacity of 3,570 acre-ft. This structure controls runoff from a 9.70 mi² area in the Mill Creek drainage basin.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--20 years (water years 1940-59) prior to regulation by Lake Tawakoni, (station 08017400) 1,054 ft³/s (763,600 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1940-59).--Maximum discharge 76,000 ft³/s Apr. 1, 1945 (gage height, 24.00 ft); maximum gage height, 24.37 ft June 8, 1943; no flow at times.
Maximum stage since at least 1890, that of June 8, 1943.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	1130	1420	1790	4240	487	1300	2140	3210	82	18	27
2	16	1060	1220	1600	3580	1050	1190	1760	2710	88	21	19
3	14	971	1040	1410	3170	1490	1060	1470	1780	151	27	14
4	13	890	871	1260	2650	1400	996	1350	1220	112	21	12
5	13	2550	820	1120	2360	998	1230	1260	976	75	19	11
6	13	4640	824	1030	2120	625	1630	1580	807	101	17	13
7	14	5410	789	951	1860	482	1960	2310	682	103	16	14
8	101	5000	730	957	1560	614	2150	4820	566	145	14	13
9	117	4890	717	1010	1280	910	2190	10500	461	97	14	11
10	65	4480	1400	912	1120	964	2230	13700	393	64	13	10
11	59	4590	2120	760	951	633	2410	14400	913	50	12	9.8
12	59	4440	2480	658	834	374	2470	12700	1420	44	11	9.8
13	39	4060	3080	978	786	487	2540	11800	1320	41	11	12
14	28	3800	3800	1910	730	1910	2590	10500	1160	35	9.0	15
15	22	3740	5270	2830	642	3530	2550	8770	973	30	8.4	13
16	26	3620	9490	4900	601	8130	2380	7480	779	27	8.5	11
17	67	3390	14500	5910	612	7700	2130	6500	614	24	8.8	22
18	63	3130	14600	5470	654	5810	1870	5730	497	23	8.9	60
19	49	2940	11700	5070	598	4450	1630	4980	400	23	9.1	41
20	38	2940	8280	5210	477	3580	1680	4220	325	21	9.6	69
21	90	3190	6640	5580	415	3130	2170	3590	269	29	9.3	39
22	354	3320	5720	5650	387	2720	2620	3160	226	55	9.5	32
23	505	3250	5000	5080	361	2430	3130	2700	195	48	11	30
24	564	3080	4260	4260	327	2190	3680	2370	162	35	11	24
25	669	2860	3620	3660	328	1930	4260	2050	126	25	9.7	23
26	800	2630	3210	3550	322	1650	4580	1690	98	21	9.3	25
27	924	2450	2810	4370	322	1400	4580	1360	147	19	9.3	20
28	1060	2240	2450	4830	359	1210	3890	1140	150	19	9.2	16
29	1140	1970	2250	5110	---	1170	3150	1000	75	18	8.5	13
30	1170	1680	2060	5530	---	1270	2510	969	56	16	8.3	11
31	1170	---	1930	5040	---	1340	---	1490	---	16	8.9	---
TOTAL	9281	94341	125101	98396	33646	66064	72756	149489	22710	1637	380.3	639.6
MEAN	299	3145	4036	3174	1202	2131	2425	4822	757	52.8	12.3	21.3
MAX	1170	5410	14600	5910	4240	8130	4580	14400	3210	151	27	69
MIN	13	890	717	658	322	374	996	969	56	16	8.3	9.8
AC-FT	18410	187100	248100	195200	66740	131000	144300	296500	45050	3250	754	1270

08018500 SABINE RIVER NEAR MINEOLA, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995#, BY WATER YEAR (WY)

MEAN	312	867	1240	871	1301	1626	1389	2209	1074	295	61.7	66.5
MAX	2158	5296	5873	3174	4334	4175	4086	6934	4083	1626	419	616
(WY)	1974	1975	1992	1995	1975	1969	1990	1968	1973	1992	1979	1974
MIN	3.42	9.88	10.9	28.8	53.4	110	31.8	29.6	5.72	4.87	.071	.048
(WY)	1988	1990	1990	1981	1976	1981	1971	1988	1971	1969	1987	1987

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995#	
ANNUAL TOTAL	504369		674440.9			
ANNUAL MEAN	1382		1848		941	
HIGHEST ANNUAL MEAN					1904	1968
LOWEST ANNUAL MEAN					222	1971
HIGHEST DAILY MEAN	14600	Dec 18	14600	Dec 18	36200	Dec 11 1971
LOWEST DAILY MEAN	13	Oct 4	8.3	Aug 30	.00	Aug 13 1970
ANNUAL SEVEN-DAY MINIMUM	15	Oct 1	8.9	Aug 14	.00	Sep 15 1971
INSTANTANEOUS PEAK FLOW			15600	Dec 17	37700	Dec 11 1971
INSTANTANEOUS PEAK STAGE			19.06	Dec 17	21.53	Dec 11 1971
ANNUAL RUNOFF (AC-FT)	1000000		1338000		681800	
10 PERCENT EXCEEDS	3760		4890		2850	
50 PERCENT EXCEEDS	501		976		161	
90 PERCENT EXCEEDS	24		13		7.6	

Period of regulated streamflow.

08018500 SABINE RIVER NEAR MINEOLA, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1967 to current year. Biochemical analyses: October 1973 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1991.
WATER TEMPERATURE: October 1967 to September 1991.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 11,400 microsiemens June 3, 1971; minimum daily, 64 microsiemens May 5, 1990.
WATER TEMPERATURE: Maximum daily, 36.0°C Aug. 21, 1984; minimum daily, 0.0°C Jan. 15, Feb. 1, 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
14...	1411	27	514	7.7	17.5	8.4	89	2.0	110	39	32
DEC											
01...	1122	993	213	7.3	12.0	7.4	68	0.9	73	2	24
JAN											
27...	1541	4410	181	7.4	12.5	9.9	94	1.4	56	6	17
APR											
19...	1600	1580	228	7.7	19.5	8.2	91	1.7	74	7	24
MAY											
26...	1140	1660	216	7.6	24.0	7.6	91	1.6	75	3	25
JUL											
13...	1350	41	424	7.3	29.0	6.3	82	1.3	87	31	26

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT											
14...	6.3	55	2	5.0	67	52	77	0.2	10	278	0.040
DEC											
01...	3.1	12	0.6	3.7	71	16	12	0.20	5.3	122	0.760
JAN											
27...	3.3	12	0.7	3.8	50	19	14	0.1	5.4	106	0.200
APR											
19...	3.4	13	0.7	3.3	67	17	14	0.2	2.4	120	0.190
MAY											
26...	3.0	12	0.6	3.2	72	13	11	0.2	2.5	114	0.230
JUL											
13...	5.3	46	2	4.3	56	36	70	0.20	9.4	232	0.200

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
OCT										
14...	0.040	0.0	0.060	0.1	0.0	0.36	0.4	<0.010	0.0	0.03
DEC										
01...	0.760	0.0	0.770	0.77	0.1	0.53	0.6	0.0	0.0	0.06
JAN										
27...	--	<0.010	0.200	0.20	0.0	0.76	0.8	0.0	0.0	0.03
APR										
19...	0.190	0.0	0.210	0.21	0.19	1.4	1.6	0.43	0.35	1.1
MAY										
26...	0.230	0.010	0.240	0.240	0.050	0.35	0.40	0.030	0.030	0.09
JUL										
13...	--	<0.010	0.200	0.200	0.040	0.46	0.50	0.030	0.020	0.06

08018800 LAKE FORK RESERVOIR NEAR QUITMAN, TX

LOCATION.--Lat 32°48'48", long 95°31'40", Wood County, Hydrologic Unit 12010003, in room at left end of gated concrete spillway structure of Lake Fork Dam on Lake Fork Creek, 2,000 ft upstream from bridge on State Highway 182, 2.3 mi upstream from Alum Branch, and 4.4 mi west-northwest of the county courthouse in Quitman.

DRAINAGE AREA.--490 mi².

PERIOD OF RECORD.--October 1979 to current year.
Water-quality records.--Chemical analyses: October 1980 to September 1984.

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

REMARKS.--The lake is formed by a rolled earthfill dam 12,660 ft long, including a 260-foot gated concrete spillway. The outlet works consist of two 5- by 8-foot low flow sluice gates, five 40- by 20-foot taintor gates, and two 5- by 6-foot sluice gates that open into a wet well where there are two 36-inch and one 10-inch valve-controlled and metered-outlet pipes. Deliberate impoundment began June 29, 1979, and closure of the dam was completed in January 1980. The lake was built for water conservation and is owned by the Sabine River Authority. No known diversions were made from the lake this year. Flow is affected at times by discharge from the flood-detention pools of 21 floodwater-retarding structures with a combined detention capacity of 20,270 acre-ft. These structures control runoff 60 mi² above the lake. Figures given herein represent total contents. Graphic recorder at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	419.5	1,270,000
Top of tainter gates	405.0	732,900
Crest of gated spillway	385.0	291,900
Invert of upper sluice gate	383.0	260,400
Invert of lower sluice gate	360.5	43,120
Invert of sluice gate in two center pieces	360.0	40,620

COOPERATION.--Area and capacity tables were prepared and provided by URS/Forest and Cotton, Inc., Consulting Engineers for the Sabine River Authority. Observed elevations for the period Oct. 31, 1979, to Jan. 31, 1980, were provided by the Sabine River Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 737,300 acre-ft May 4, 1990 (elevation, 405.15 ft); minimum observed, 46,140 acre-ft Dec. 11-14, 1979 (elevation, 361.10 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 709,700 acre-ft May 9 at 0600 hours (elevation 404.20 ft); minimum daily, 635,800 acre-ft Sept. 17 (elevation, 401.52).

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

361.0	45,600	391.0	396,900	404.0	703,900
371.0	114,700	401.0	622,100	405.0	732,900
381.0	230,700	402.0	648,500	406.0	762,700

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	648300	657800	662500	676400	669300	667600	677500	673100	682600	673400	661100	644000
2	648300	657800	662500	676700	667400	668700	678300	672500	681200	673400	661400	643000
3	647200	658100	662700	677500	666000	668700	677200	674700	678900	672500	661100	642500
4	646700	670600	663500	676100	663500	669300	687100	674700	676900	672500	660300	640600
5	645900	688700	663500	675000	662200	669800	688200	676100	675500	672500	659700	640900
6	645400	687600	663800	677500	660500	670100	686200	686500	675500	672000	659500	640100
7	648000	683700	663800	677500	660500	677500	681700	687100	675000	671200	658900	639800
8	649400	678900	666300	677500	659200	678300	678100	709100	675500	670400	658400	639300
9	649100	679800	675000	677800	658600	678600	675300	702500	675800	673900	657800	638500
10	649100	677800	685700	678600	658900	678600	679500	689900	675500	672500	657300	637400
11	648000	675300	685100	678300	659700	678600	676900	681200	675300	672300	656500	636600
12	646200	669300	683700	682300	659200	678300	676400	676100	676400	672000	655600	637200
13	645900	665700	682000	692700	658900	690200	676400	674500	679500	672300	654500	637200
14	645400	663800	688500	690700	658900	694100	675800	675000	679500	669300	654000	636600
15	645100	663800	699700	686500	661100	692700	675800	675500	678900	669300	653500	636400
16	647500	663000	704500	682800	661400	688500	676400	676100	678900	667900	652900	636100
17	647200	662200	699700	684000	660800	684200	676700	676100	678100	668700	652400	640100
18	648800	662200	691300	691300	661100	681400	676700	676100	677500	667900	651500	639800
19	648800	662500	682800	689000	661100	676400	678900	676700	677500	667600	650700	642200
20	650700	663000	677800	684000	661400	677200	680300	676100	676900	666500	650500	641900
21	655900	662700	675300	679800	661100	676400	680600	675300	676700	665700	649900	642500
22	659500	662500	674200	678100	661400	676700	686200	674500	676100	664900	649100	640100
23	657800	662700	674200	675300	663500	677200	689000	673600	675500	664900	648300	639300
24	658100	661900	674200	672800	661400	676700	683400	674200	675300	665700	647500	638700
25	658900	661900	673900	670600	661600	675800	675800	673600	675800	664900	646700	638500
26	659200	661900	673900	674200	662700	676900	676100	673100	676100	663300	646400	637400
27	658900	662500	673900	680000	663300	676900	673900	672500	675500	662700	645600	637200
28	658600	661900	675300	677200	666800	676700	672300	673400	675300	661600	645100	636600
29	658600	663800	675300	673400	---	676100	672800	673100	674700	661400	644600	636100
30	658600	663300	675300	672800	---	676700	672500	673900	673600	660500	645100	636100
31	658600	---	676400	670600	---	677200	---	681200	---	660800	644800	---
MAX	659500	688700	704500	692700	669300	694100	689000	709100	682600	673900	661400	644000
MIN	645100	657800	662500	670600	658600	667600	672300	672500	673600	660500	644600	636100
(+)	402.37	402.54	403.02	402.81	402.67	403.05	402.88	403.19	402.92	402.45	401.86	401.53
(@)	+10300	+4700	+13100	-5800	-3800	+10400	-4700	+8700	-7600	-12800	-16000	-8700

CAL YR 1994 MAX 721600 MIN 645100 (@) +28400
WTR YR 1995 MAX 709100 MIN 636100 (@) -12200

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

08019000 LAKE FORK CREEK NEAR QUITMAN, TX

LOCATION.--Lat 32°45'47", long 95°27'46", Wood County, Hydrologic Unit 12010003, at downstream side of highway embankment near left end of bridge on State Highway 37, 0.3 mi downstream from Dry Creek, 2.4 mi south of Quitman, and 23.4 mi upstream from mouth.

DRAINAGE AREA.--585 mi².

PERIOD OF RECORD.--June 1924 to April 1926, February 1939 to current year. Discharge from some high-water periods in 1925-26 published in WSP 1342. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1961, published as Lake Fork Sabine River near Quitman.
Water-quality records.--Chemical analyses: December 1961 to August 1989. Specific Conductance: November 1967 to September 1989. Water Temperature: December 1967 to September 1989.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 317.42 ft above sea level. From June 27, 1924, to Apr. 30, 1926, a nonrecording gage was located at site 1,000 ft downstream at same datum. Prior to Sept. 5, 1978, nonrecording gage at present site and datum.

REMARKS.--Records good. Since May 1962, flow from 31.0 mi² above this station has been controlled by Lake Quitman (capacity, 7,440 acre-ft) on Dry Creek, a tributary above this station and below Lake Fork Reservoir. Construction of Lake Fork Dam and Reservoir (capacity, 675,800 acre-ft), located about 5 mi upstream from this station, began in 1975. Deliberate impoundment began June 29, 1979, and the dam was completed in January 1980. Lake Fork Reservoir controls runoff from 490 mi² above this station. The city of Quitman discharges sewage effluent into a tributary above this station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--41 years (water years 1925, 1940-79), prior to regulation by Lake Fork Reservoir, 432 ft³/s (313,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925, 1940-79).--Maximum discharge, 75,600 ft³/s Mar. 30, 1945 (gage height, 29.85 ft, from floodmark), from rating curve extended above 49,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1895 reached a stage of about 25.9 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	4.0	e19	81	1370	258	49	82	994	70	73	90
2	11	5.2	e18	69	1200	220	46	73	1290	69	78	89
3	3.9	6.8	e17	61	1140	149	45	78	1370	69	74	89
4	1.9	27	e16	64	1120	130	299	124	1350	70	73	88
5	1.5	2740	e15	225	1090	109	1730	120	576	120	71	88
6	1.2	2880	e15	198	926	98	2600	631	97	212	70	88
7	1.6	2610	e15	142	757	199	2600	1550	69	99	69	86
8	5.7	2430	e15	98	473	301	2600	7000	74	79	77	81
9	5.3	2350	e23	75	326	155	2580	12100	76	75	71	76
10	4.0	2460	369	67	109	99	1800	10700	78	72	70	76
11	2.1	2430	1130	75	61	89	1540	7740	260	72	70	76
12	1.7	2300	1730	293	66	86	1460	4360	231	71	71	76
13	1.5	2040	1750	650	58	86	573	2980	117	71	71	76
14	1.1	1930	1780	2920	59	2190	161	2290	104	71	72	76
15	2.0	1340	3720	3330	64	3560	105	1050	105	86	82	76
16	5.2	835	7440	2250	66	3520	87	242	84	73	88	76
17	16	e650	9290	2060	63	3490	82	104	79	72	88	100
18	9.8	e250	5730	2190	56	2570	111	80	76	73	88	154
19	4.6	e65	4430	3410	52	2180	117	68	75	70	89	94
20	4.3	e41	4140	3510	49	2130	587	56	74	69	89	90
21	17	e35	3250	3240	46	1450	1240	49	73	68	89	83
22	54	e33	1650	2230	44	934	1420	45	72	68	90	75
23	15	e33	967	2090	44	292	1680	43	72	67	90	72
24	6.6	e32	352	2070	49	87	3480	39	71	67	90	72
25	4.3	e31	98	1680	47	66	3780	38	71	67	90	72
26	5.8	e29	65	1190	45	57	3510	39	71	67	89	72
27	7.1	e27	56	2170	186	58	2000	38	70	67	90	72
28	4.3	e25	54	2890	184	56	1460	37	71	67	89	72
29	3.5	23	97	2710	---	59	594	36	70	66	89	72
30	3.0	e21	131	2150	---	59	134	38	71	66	89	72
31	2.9	---	94	1690	---	53	---	315	---	66	89	---
TOTAL	231.9	27683.0	48476	45878	9750	24790	38470	52145	7891	2399	2518	2479
MEAN	7.48	923	1564	1480	348	800	1282	1682	263	77.4	81.2	82.6
MAX	54	2880	9290	3510	1370	3560	3780	12100	1370	212	90	154
MIN	1.1	4.0	15	61	44	53	45	36	69	66	69	72
AC-FT	460	54910	96150	91000	19340	49170	76310	103400	15650	4760	4990	4920

08019000 LAKE FORK CREEK NEAR QUITMAN, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1995#, BY WATER YEAR (WY)

MEAN	74.0	320	627	475	789	784	532	747	338	285	79.4	28.0
MAX	603	1551	2853	1480	2326	2938	1991	2807	1280	1795	940	167
(WY)	1994	1989	1992	1995	1986	1990	1990	1990	1986	1994	1992	1992
MIN	1.23	2.92	9.31	4.43	14.1	31.6	4.29	13.1	8.51	1.43	.13	.76
(WY)	1983	1981	1982	1981	1981	1981	1981	1988	1984	1985	1980	1982

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1980 - 1995#	
ANNUAL TOTAL	205240.9		262710.9			
ANNUAL MEAN	562		720		422	
HIGHEST ANNUAL MEAN					1006	1992
LOWEST ANNUAL MEAN					43.2	1984
HIGHEST DAILY MEAN	17600	Jul 16	12100	May 9	23600	May 18 1989
LOWEST DAILY MEAN	1.1	Oct 14	1.1	Oct 14	.00	Aug 23 1980
ANNUAL SEVEN-DAY MINIMUM	2.5	Oct 10	2.5	Oct 10	.00	Aug 23 1980
INSTANTANEOUS PEAK FLOW			12400	May 9	24200	May 18 1989
INSTANTANEOUS PEAK STAGE			19.04	May 9	21.75	May 18 1989
ANNUAL RUNOFF (AC-FT)	407100		521100		305500	
10 PERCENT EXCEEDS	1720		2430		1210	
50 PERCENT EXCEEDS	33		81		35	
90 PERCENT EXCEEDS	17		17		3.7	

e Estimated
Period of regulated streamflow.

08019500 BIG SANDY CREEK NEAR BIG SANDY, TX

LOCATION.--Lat 32°36'14", long 95°05'29", Upshur County, Hydrologic Unit 12010002, on downstream side of highway embankment near left end of bridge on State Highway 155, 0.5 mi upstream from St. Louis Southwestern Railway Lines bridge, 1.6 mi northeast of Big Sandy, and 6.5 mi upstream from mouth.

DRAINAGE AREA.--231 mi².

PERIOD OF RECORD.--February 1939 to current year.
Water-quality records.--Chemical analyses: March 1961 to September 1986. Chemical and biochemical analyses: October 1984 to September 1986.

REVISED RECORDS.--WSP 1732: 1941(M), 1945-46, 1956, drainage area. WSP 1922: 1944(M), 1945-46.

GAGE.--Water-stage recorder. Datum of gage is 278.38 ft above sea level. Prior to Oct. 5, 1940, nonrecording gage, and Oct. 5, 1940, to Nov. 26, 1951, water-stage recorder at site 1.3 mi upstream at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since June 1962, streamflow has been affected by Lake Winnsboro, about 27 miles upstream (capacity 8,100 acre-ft, drainage area 27.1 mi²) and by several other smaller lakes. Several observations of water temperature were made during the year.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 7	1200	6,040	17.89	May 11	0500	2,280	14.31
Dec. 18	0230	3,760	16.07				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	89	108	491	688	211	159	205	117	40	100	18
2	21	77	107	502	522	249	150	175	108	39	136	18
3	21	73	109	435	420	314	140	157	104	39	161	18
4	21	101	109	341	343	326	151	158	94	45	146	19
5	21	339	109	289	297	314	175	157	81	58	107	19
6	22	717	112	258	260	292	201	260	75	92	72	19
7	23	5320	116	246	234	271	232	277	76	106	53	19
8	127	3170	123	237	212	248	326	501	71	127	43	24
9	e154	1530	137	233	197	229	381	1150	64	158	38	35
10	e123	1080	286	250	189	225	339	1660	61	166	36	33
11	e108	810	346	264	190	270	667	2110	127	104	32	27
12	e97	686	365	250	192	299	728	1460	128	68	29	24
13	79	706	525	314	188	285	960	1030	142	57	26	29
14	57	734	795	402	197	368	1090	762	140	54	25	30
15	45	568	930	457	215	409	885	563	158	48	24	30
16	57	425	1320	669	220	564	594	432	135	45	25	30
17	141	323	2760	824	212	824	398	334	95	44	24	31
18	142	253	3490	739	206	707	334	268	74	43	23	65
19	151	216	2230	697	201	509	313	214	67	42	23	74
20	136	197	1400	717	196	397	278	178	61	56	25	88
21	146	182	1010	999	185	325	295	148	55	82	25	93
22	186	164	768	1100	175	275	286	126	49	98	25	99
23	177	148	590	849	167	240	412	109	46	81	23	92
24	179	138	474	638	163	208	609	96	44	59	22	76
25	190	134	389	506	158	182	570	88	43	44	21	59
26	216	127	331	503	154	167	482	87	43	41	19	47
27	190	122	288	962	193	168	470	90	41	40	18	42
28	142	117	256	912	195	165	415	84	39	35	18	39
29	118	113	572	1130	---	163	328	85	40	32	18	37
30	119	110	675	1260	---	169	257	93	42	29	18	35
31	109	---	520	947	---	166	---	118	---	34	18	---
TOTAL	3338	18769	21350	18421	6769	9539	12625	13175	2420	2006	1373	1269
MEAN	108	626	689	594	242	308	421	425	80.7	64.7	44.3	42.3
MAX	216	5320	3490	1260	688	824	1090	2110	158	166	161	99
MIN	20	73	107	233	154	163	140	84	39	29	18	18
AC-FT	6620	37230	42350	36540	13430	18920	25040	26130	4800	3980	2720	2520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1995, BY WATER YEAR (WY)

MEAN	67.1	141	232	244	285	318	323	317	167	79.1	33.3	49.9
MAX	469	884	884	798	915	1746	1068	977	704	416	150	441
(WY)	1994	1975	1988	1993	1950	1945	1973	1953	1946	1994	1979	1974
MIN	8.38	19.2	24.6	32.3	59.7	47.5	42.2	35.1	9.61	6.99	4.65	8.51
(WY)	1957	1956	1957	1957	1967	1966	1956	1984	1984	1984	1984	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1939 - 1995	
ANNUAL TOTAL	102535		111054			
ANNUAL MEAN	281		304		189	
HIGHEST ANNUAL MEAN					415	1945
LOWEST ANNUAL MEAN					40.6	1956
HIGHEST DAILY MEAN	5320	Nov 7	5320	Nov 7	17900	Mar 31 1945
LOWEST DAILY MEAN	14	Jul 9	18	Aug 27	3.5	Jul 24 1984
ANNUAL SEVEN-DAY MINIMUM	18	Jul 5	18	Aug 27	4.0	Aug 16 1984
INSTANTANEOUS PEAK FLOW			6040	Nov 7	24000	Mar 31 1945
INSTANTANEOUS PEAK STAGE			17.89	Nov 7	24.10	Mar 31 1945
ANNUAL RUNOFF (AC-FT)	203400		220300		136700	
10 PERCENT EXCEEDS	670		721		423	
50 PERCENT EXCEEDS	123		158		81	
90 PERCENT EXCEEDS	27		28		17	

e Estimated

08020000 SABINE RIVER NEAR GLADEWATER, TX

LOCATION.--Lat 32°31'37", long 94°57'36", Gregg County, Hydrologic Unit 12010002, on right bank 46 ft downstream from bridge on U.S. Highway 271, 0.4 mi downstream from Glade Creek, 1.2 mi southwest of Gladewater, and at mile 397.5.

DRAINAGE AREA.--2,791 mi².

PERIOD OF RECORD.--October 1932 to current year.

REVISED RECORDS.--WSP 1732: Drainage area. WDR TX-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 243.85 ft above sea level. Prior to Oct. 13, 1933, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow partially regulated by Lake Tawakoni (station 08017400), capacity 936,200 acre-ft, by Lake Fork Creek Reservoir (station 08018800), capacity 675,800 acre-ft, and by five tributary reservoirs with a total combined capacity of 42,370 acre-ft. There are many diversions above station for oil field operations and municipal supply. Several observations of water temperature were obtained during the year. Rain gage at station. Telephone telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--28 years (water years 1933-60) prior to regulation by Lake Tawakoni, 2,012 ft³/s (1,458,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1933-60).--Maximum discharge, 138,000 ft³/s Apr. 2, 1945 (gage height, 44.16 ft, from floodmark), from rating curve extended above 91,000 ft³/s; minimum, 5.6 ft³/s Aug. 16, 1939. Maximum stage since at least 1892, that of Apr. 2, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1914 reached a stage of about 41.7 ft (discharge, 85,900 ft³/s), from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	1540	e3530	7710	e9460	1450	2580	6070	e1240	e374	251	101
2	109	1540	e3090	6860	e8660	1630	2200	6220	e1470	e348	322	100
3	102	1520	e2620	6170	e7890	1790	2040	6220	e2240	e340	362	98
4	96	1470	e2200	5460	e7180	2090	2080	5950	e2870	e341	376	105
5	89	2280	e1870	4640	e6620	2380	2260	5390	e3260	e393	351	113
6	82	3400	e1600	3800	e6120	2560	2320	4810	e3370	e542	305	107
7	101	4050	e1510	3070	e5640	2510	2500	4360	e3210	e681	242	102
8	731	5260	e1500	2590	e5190	2140	2780	4660	e2550	e735	197	103
9	1050	5980	e1510	2260	e4740	1730	3170	5510	e1700	e709	172	107
10	991	6430	e2060	2060	e4320	1610	3670	5940	e1080	e645	158	117
11	818	6730	e2740	1990	e3920	1740	5350	6430	e1130	e565	147	116
12	555	7150	e3120	1940	e3540	1830	6020	8230	e1550	e483	137	104
13	383	7690	e3370	2510	e3160	1710	6340	15600	e1970	e407	128	100
14	310	8240	e3690	3120	e2780	2100	6480	22400	e2230	e341	121	111
15	254	8750	e4580	3420	e2430	2660	6520	23900	e2280	e284	113	114
16	285	9050	e5870	3590	e2100	3180	6440	23000	e2180	e250	113	107
17	996	9130	e6900	3890	e1800	3620	6210	21100	e1950	e227	119	118
18	1170	9030	e8310	4640	e1620	4210	5850	18800	e1650	e208	130	133
19	1110	8800	e13500	5510	e1540	5000	5420	16400	e1400	e192	125	220
20	925	8430	e21500	6090	e1490	5790	4940	14400	e1190	e183	123	361
21	793	7980	e23700	6630	e1410	6570	4410	12600	e1020	e182	121	434
22	1180	7530	e23300	7320	e1270	7390	3950	11200	e863	e206	118	465
23	1380	7010	e21400	8280	e1170	7960	3980	9670	e725	e287	113	432
24	1520	6510	18600	9250	1150	8110	4200	8540	e625	e335	109	355
25	1440	e6030	16100	9970	1100	7880	4460	7530	e563	e319	107	287
26	1420	e5560	14300	10600	1060	7460	4690	6740	e505	e286	106	240
27	1440	e5140	12800	11000	1240	6850	4890	6000	e429	e261	104	201
28	1440	e4730	11500	11000	1330	6170	5150	5160	e364	e239	101	180
29	1430	e4340	11000	e11200	---	5320	5470	4150	e359	e227	100	169
30	1470	e3950	9900	e11200	---	4300	5790	3010	e432	e224	98	160
31	1520	---	8780	e10600	---	3300	---	e1780	---	e220	98	---
TOTAL	25309	175250	266450	188370	99930	123040	132160	301770	46405	11034	5167	5460
MEAN	816	5842	8595	6076	3569	3969	4405	9735	1547	356	167	182
MAX	1520	9130	23700	11200	9460	8110	6520	23900	3370	735	376	465
MIN	82	1470	1500	1940	1060	1450	2040	1780	359	182	98	98
AC-FT	50200	347600	528500	373600	198200	244000	262100	598600	92040	21890	10250	10830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995#, BY WATER YEAR (WY)

MEAN	472	1349	2550	2065	2603	3341	2887	4239	1924	704	199	285
MAX	3361	7839	10580	6693	9664	9717	9644	17100	6745	4261	1291	2566
(WY)	1974	1975	1972	1992	1975	1992	1990	1966	1973	1994	1992	1974
MIN	29.4	86.9	101	199	319	316	241	188	49.0	17.9	18.1	27.0
(WY)	1964	1964	1966	1964	1981	1967	1971	1988	1971	1964	1964	1985

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995#	
ANNUAL TOTAL	1127961		1380345			
ANNUAL MEAN	3090		3782		1882	
HIGHEST ANNUAL MEAN					3831	1992
LOWEST ANNUAL MEAN					232	1964
HIGHEST DAILY MEAN	23700	Dec 21	23900	May 15	51000	May 22 1989
LOWEST DAILY MEAN	82	Oct 6	82	Oct 6	7.4	Jul 20 1971
ANNUAL SEVEN-DAY MINIMUM	100	Oct 1	99	Aug 28	9.5	Jul 16 1971
INSTANTANEOUS PEAK FLOW			24100	May 15	52300	May 22 1989
INSTANTANEOUS PEAK STAGE			35.82	May 15	38.98	Apr 30 1966
ANNUAL RUNOFF (AC-FT)	2237000		2738000		1364000	
10 PERCENT EXCEEDS	8360		8790		5420	
50 PERCENT EXCEEDS	1380		2100		569	
90 PERCENT EXCEEDS	142		119		57	

e Estimated
Period of regulated streamflow.

08020450 SABINE RIVER ABOVE LONGVIEW, TX

LOCATION.--Lat 32°28'47", long 94°48'15", Gregg County, Hydrologic Unit 12010002, on left bank at city of Longview pumping station at the end of Swinging Bridge Road, 1.4 mi southwest of the intersection of Swinging Bridge Road and Farm Road 2206 in Longview, 2.5 mi downstream from Hawkins Creek, 2.6 mi upstream from U.S. Highway 259, and at mile 357.4.

DRAINAGE AREA.--2,943 mi².

PERIOD OF RECORD.--August 1983 to current year (operated as a low-flow station only).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 230.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Daily discharges below 500 ft³/s are published. Flow partially regulated by Lake Tawakoni (station 08017400), capacity 936,200 acre-ft, by Lake Fork Reservoir (station 08018800), capacity 675,800 acre-ft, and by five tributary reservoirs with a combined capacity of 42,370 acre-ft. There are many diversions above station for municipal and industrial supply, and for oil field operations.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 31.64 ft May 10, 1990; minimum daily discharge, 0.50 ft³/s Sept. 4, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 29.73 ft May 17 at 0130 hours; minimum daily discharge, 34 ft³/s Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	---	---	---	---	---	---	---	---	---	251	90
2	69	---	---	---	---	---	---	---	---	439	347	90
3	70	---	---	---	---	---	---	---	---	418	394	85
4	76	---	---	---	---	---	---	---	---	405	392	86
5	60	---	---	---	---	---	---	---	---	412	374	95
6	50	---	---	---	---	---	---	---	---	443	343	95
7	34	---	---	---	---	---	---	---	---	---	288	106
8	---	---	---	---	---	---	---	---	---	---	201	110
9	---	---	---	---	---	---	---	---	---	---	196	122
10	---	---	---	---	---	---	---	---	---	---	206	188
11	---	---	---	---	---	---	---	---	---	---	190	172
12	---	---	---	---	---	---	---	---	---	---	129	191
13	---	---	---	---	---	---	---	---	---	418	147	203
14	456	---	---	---	---	---	---	---	---	356	161	203
15	378	---	---	---	---	---	---	---	---	315	187	199
16	348	---	---	---	---	---	---	---	---	298	94	199
17	---	---	---	---	---	---	---	---	---	291	77	80
18	---	---	---	---	---	---	---	---	---	281	82	114
19	---	---	---	---	---	---	---	---	---	292	96	125
20	---	---	---	---	---	---	---	---	---	294	124	205
21	---	---	---	---	---	---	---	---	---	279	134	338
22	---	---	---	---	---	---	---	---	---	290	125	362
23	---	---	---	---	---	---	---	---	---	316	133	365
24	---	---	---	---	---	---	---	---	---	342	131	314
25	---	---	---	---	---	---	---	---	---	340	99	238
26	---	---	---	---	---	---	---	---	---	316	111	152
27	---	---	---	---	---	---	---	---	475	279	123	109
28	---	---	---	---	---	---	---	---	432	241	86	56
29	---	---	---	---	---	---	---	---	418	184	94	174
30	---	---	---	---	---	---	---	---	459	170	91	155
31	---	---	---	---	---	---	---	---	---	223	92	---
TOTAL	---	---	---	---	---	---	---	---	---	---	5498	5021
MEAN	---	---	---	---	---	---	---	---	---	---	177	167
MAX	---	---	---	---	---	---	---	---	---	---	394	365
MIN	---	---	---	---	---	---	---	---	---	---	77	56
AC-FT	---	---	---	---	---	---	---	---	---	---	10910	9960

08022040 SABINE RIVER NEAR BECKVILLE, TX

LOCATION.--Lat 32°19'38", long 94°21'12", Panola County, Hydrologic Unit 12010002, on downstream side of highway embankment near right end of downstream bridge on U.S. Highway 59, 0.9 mi upstream from Eightmile Creek, 6.0 mi upstream from Farm Road 1794, 8.4 mi northeast of Beckville, 12.4 mi downstream from State Highway 43 and at mile 327.0.

DRAINAGE AREA.--3,589 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to current year. Prior to October 1978, published as "near Tatum" (station 08022000).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 190.00 ft above sea level. Prior to Oct. 1, 1978, at site 12.4 mi upstream at datum 14.18 ft higher. Prior to Sept. 21, 1945, nonrecording gage.

REMARKS.--No estimated daily discharges. Records good. Eight major upstream reservoirs, with a combined capacity of 1,701,000 acre-ft, largely regulate the flow. There are several diversions above this station and below Lake Tawakoni for municipal, industrial and for oil field operations. Low flows are sustained by sewage effluents that are returned to the river above the station. For statement regarding regulation by Natural Resource Conservation Service floodwater-retarding structures, see station 08018500. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--22 years (water years 1939-60) prior to regulation by Lake Tawakoni, 2,663 ft³/s (1,929,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD PRIOR TO REGULATION (WATER YEARS 1939-60).--Maximum discharge, 123,000 ft³/s Apr. 4, 1945 (gage height, 33.80 ft), site and datum then in use, from graph based on gage readings, from rating curve extended above 66,000 ft³/s on basis of partly estimated discharge measurement of 88,900 ft³/s; minimum observed, 2.4 ft³/s Aug. 11, 1964. Maximum stage since at least 1884, that of Apr. 4, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1884 reached a stage of about 2 ft lower than flood of Apr. 4, 1945. These dates and gage heights are based on information for stations near Tatum (08022000, discontinued) and at Logansport, La. (08022500).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	1810	5580	17300	11100	5100	6350	5820	5510	484	236	136
2	101	1780	4940	16000	10900	4670	5090	5710	3210	562	397	159
3	119	1750	4260	14800	10800	4000	3390	5760	2200	512	497	156
4	107	1710	3610	13900	10500	3620	2560	5970	2090	445	461	126
5	97	1900	3010	13100	10300	3310	2990	6240	2330	433	439	124
6	96	3090	2530	12200	10000	3260	3200	6470	2630	522	411	128
7	100	3670	2170	11200	9770	4050	2950	6810	2810	561	386	125
8	423	3830	2000	9460	9480	5910	2770	7620	2820	563	346	135
9	3720	4170	1960	6910	9200	5920	2740	9160	2590	596	314	123
10	4420	4730	3790	4710	8920	4210	2850	10000	2100	632	273	129
11	3420	5270	6310	3600	8570	3020	4470	9800	1760	652	237	124
12	2220	5610	6590	3150	8200	2630	6850	9230	1750	619	226	130
13	1590	5900	5490	3490	7690	2810	8130	8660	1570	544	198	142
14	1190	6180	4850	5010	7180	5370	8490	8020	1600	501	174	149
15	903	6480	5720	5630	6550	6980	8340	7710	1790	460	186	171
16	859	6770	8970	5300	5290	6700	7900	7990	1870	409	228	154
17	2270	7070	12200	4960	3800	5780	7470	8830	1800	362	201	149
18	3850	7370	12800	6980	2850	5080	7140	9940	1630	389	182	195
19	3910	7660	12400	10900	2370	4770	6960	11200	1430	402	156	298
20	2930	7870	11700	11400	2120	4820	6780	12200	1220	396	165	271
21	2270	8030	11000	10400	1980	5030	6650	13100	1040	364	156	318
22	2420	8160	10600	9240	1860	5370	7000	13700	921	344	192	443
23	2960	8180	10900	8730	1730	5680	12300	14000	841	318	190	484
24	2620	8120	11600	8550	1720	6010	15800	14000	786	307	178	471
25	2270	8000	12400	8480	1930	6350	15100	13800	797	338	173	444
26	2740	7850	13100	8530	1800	6690	13300	13300	758	337	165	411
27	2880	7570	13600	9920	3250	6990	11100	12700	688	336	150	359
28	2430	7190	14400	11600	5030	7180	8780	11700	589	303	147	311
29	2140	6730	15900	11700	---	7290	7090	10400	530	266	141	258
30	2020	6160	17400	11500	---	7330	6190	9080	470	238	138	242
31	1890	---	18100	11200	---	7070	---	7570	---	220	138	---
TOTAL	59062	170610	269880	289850	174890	163000	210730	296490	52130	13415	7481	6865
MEAN	1905	5687	8706	9350	6246	5258	7024	9564	1738	433	241	229
MAX	4420	8180	18100	17300	11100	7330	15800	14000	5510	652	497	484
MIN	96	1710	1960	3150	1720	2630	2560	5710	470	220	138	123
AC-FT	117100	338400	535300	574900	346900	323300	418000	588100	103400	26610	14840	13620

08022040 SABINE RIVER NEAR BECKVILLE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995#, BY WATER YEAR (WY)

MEAN	614	1703	3291	3206	3940	4401	3995	4983	2900	967	316	425
MAX	4325	8221	9866	10960	11930	12240	11330	21010	11580	3834	1725	3434
(WY)	1974	1975	1975	1992	1975	1992	1990	1966	1989	1992	1979	1974
MIN	42.5	82.1	144	239	448	445	355	317	77.5	32.1	36.7	33.8
(WY)	1964	1964	1966	1964	1964	1967	1971	1972	1971	1964	1969	1985

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995#	
ANNUAL TOTAL	1338494		1714403			
ANNUAL MEAN	3667		4697		2555	
HIGHEST ANNUAL MEAN					4857	1992
LOWEST ANNUAL MEAN					311	1964
HIGHEST DAILY MEAN	18100	Dec 31	18100	Dec 31	48100	May 2 1966
LOWEST DAILY MEAN	96	Oct 6	96	Oct 6	2.4	Aug 11 1964
ANNUAL SEVEN-DAY MINIMUM	102	Oct 1	102	Oct 1	3.8	Aug 7 1964
INSTANTANEOUS PEAK FLOW			18300	Dec 31	49400	May 2 1966
INSTANTANEOUS PEAK STAGE			28.39	Dec 31	38.87	Mar 30 1989
ANNUAL RUNOFF (AC-FT)	2655000		3401000		1851000	
10 PERCENT EXCEEDS	9600		11200		7420	
50 PERCENT EXCEEDS	2230		3420		906	
90 PERCENT EXCEEDS	212		180		87	

Period of regulated streamflow.

08022040 SABINE RIVER NEAR BECKVILLE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: February 1952 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: March 1968 to June 1981.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1952 to current year.
WATER TEMPERATURE: February 1952 to current year.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request. Formerly published as 08022000 Sabine River near Tatum.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,040 microsiemens Jan. 13, 1966; minimum daily, 53 microsiemens Mar. 31, 1979, Mar. 30, 1989.
WATER TEMPERATURE: Maximum daily, 38.0°C July 8, 1969; minimum daily, 0.0°C on several days during December 1983.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 739 microsiemens Sept. 19; minimum daily, 103 microsiemens Nov. 10.
WATER TEMPERATURE: Maximum daily, 34.0°C July 11, Aug. 11 and 27; minimum daily, 7.0°C Jan. 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
14...	1510	1160	225	7.1	19.0	8.0	87	1.1	37	11	10
DEC											
02...	1110	5080	220	7.0	12.0	8.7	81	0.9	61	1	19
FEB											
02...	1810	11200	163	7.1	11.0	10.6	96	0.7	40	12	11
APR											
06...	0842	3230	239	7.3	16.5	8.7	89	1.8	55	18	16
MAY											
25...	1045	14000	164	7.2	24.0	6.4	76	1.2	52	0	15
JUL											
12...	0810	621	290	7.6	30.0	6.8	90	--	53	2	15

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
14...	2.9	24	2	4.5	26	23	32	<0.1	11	125
DEC										
02...	3.4	15	0.8	3.7	61	15	17	0.20	8.4	119
FEB										
02...	3.0	12	0.8	3.5	28	16	16	0.1	7.1	87
APR										
06...	3.7	21	1	3.2	37	20	30	0.1	8.1	125
MAY										
25...	3.5	11	0.7	3.9	52	11	12	0.1	4.2	92
JUL										
12...	3.8	35	2	3.5	51	28	32	0.20	9.7	160

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
14...	0.280	0.280	0.0	0.290	0.29	0.1	0.43	0.5	0.0	0.0
DEC										
02...	0.150	0.150	0.0	0.160	0.16	0.0	0.35	0.4	0.0	0.0
FEB										
02...	0.090	--	<0.010	0.090	0.1	<0.015	--	0.3	0.0	0.0
APR										
06...	0.140	0.140	0.0	0.150	0.15	0.0	0.25	0.3	0.0	0.0
MAY										
25...	0.070	--	<0.010	0.070	0.070	0.060	0.44	0.50	0.030	0.030
JUL										
12...	0.310	--	<0.010	0.310	0.310	0.020	0.28	0.30	0.050	0.050

08022040 SABINE RIVER NEAR BECKVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT										
14...	0.15	--	--	--	--	--	--	--	--	--
DEC										
02...	0.09	--	--	--	--	--	--	--	--	--
FEB										
02...	0.06	<1	51	<0.5	<1	<5	<3	<10	370	<10
APR										
06...	0.03	--	--	--	--	--	--	--	--	--
MAY										
25...	0.09	--	--	--	--	--	--	--	--	--
JUL										
12...	0.15	<1	58	<0.5	<1.0	<5	<3	<10	260	20

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT										
14...	--	--	--	--	--	--	--	--	--	--
DEC										
02...	--	--	--	--	--	--	--	--	--	--
FEB										
02...	<4	17	0.1	<10	<10	<1	<1	120	<6	11
APR										
06...	--	--	--	--	--	--	--	--	--	--
MAY										
25...	--	--	--	--	--	--	--	--	--	--
JUL										
12...	7	8	<0.1	<10	<10	<1	<1.0	190	<6	5

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	59062	218	124	19700	29	4610	24	3760	45
NOV.	1994	170610	165	94	43400	21	9610	19	8610	37
DEC.	1994	269880	140	80	58600	18	12800	16	11800	32
JAN.	1995	289850	146	84	65500	18	14300	17	13200	33
FEB.	1995	174890	171	97	46000	22	10200	19	9120	38
MAR.	1995	163000	192	109	48100	25	10900	21	9420	41
APR.	1995	210730	162	92	52600	20	11600	18	10400	36
MAY	1995	296490	160	91	73200	20	16100	18	14600	36
JUNE	1995	52130	243	137	19300	33	4580	26	3670	50
JULY	1995	13415	374	207	7510	54	1960	36	1310	66
AUG.	1995	7481	409	225	4550	60	1220	38	775	68
SEPT	1995	6865	525	284	5260	83	1550	44	814	73
TOTAL		1714403	**	**	444000	**	99500	**	87400	**
WTD.AVG.		4697	168	96	**	21	**	19	**	37

08022040 SABINE RIVER NEAR BECKVILLE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	216	201	118	148	197	204	177	224	356	383	460
2	558	280	205	123	148	182	214	176	233	440	402	510
3	494	236	210	127	148	177	221	176	252	362	451	550
4	503	232	213	133	151	187	236	179	265	347	397	583
5	544	229	219	142	152	219	232	182	246	342	290	643
6	568	195	e226	160	152	266	225	188	186	365	380	688
7	604	207	232	168	152	289	203	187	196	391	388	716
8	560	150	241	171	155	188	209	179	207	361	358	643
9	210	136	249	183	160	204	218	150	212	347	330	567
10	132	103	179	195	163	218	286	144	222	342	312	609
11	155	118	182	e205	167	224	229	130	243	300	328	614
12	169	127	194	207	173	246	147	130	215	277	337	587
13	192	128	199	e215	176	267	137	133	289	298	355	596
14	208	131	175	222	182	233	132	135	230	298	387	601
15	229	132	185	197	191	172	131	133	e229	327	391	668
16	254	136	181	169	200	181	139	139	227	333	435	727
17	203	141	132	172	213	184	150	143	204	363	467	706
18	190	149	120	167	218	209	167	132	281	360	512	626
19	260	153	117	141	228	201	176	130	259	409	486	739
20	164	160	117	131	228	186	187	131	264	452	477	595
21	256	166	118	136	238	169	188	137	265	369	450	607
22	249	168	120	131	252	159	188	143	267	452	492	399
23	196	172	118	127	266	154	133	149	283	516	513	463
24	215	176	121	131	258	157	104	162	304	488	584	412
25	189	183	119	135	224	160	119	169	317	458	541	369
26	202	185	119	138	237	167	149	180	327	e455	492	403
27	193	186	118	138	200	176	156	186	510	460	450	516
28	263	189	117	132	159	180	158	192	351	460	461	443
29	352	195	116	137	---	185	171	200	340	416	436	427
30	301	200	118	136	---	192	178	202	346	396	406	407
31	242	---	121	136	---	199	---	213	---	394	411	---
MEAN	305	173	164	156	191	198	180	162	266	385	423	562
MAX	608	280	249	222	266	289	286	213	510	516	584	739
MIN	132	103	116	118	148	154	104	130	186	277	290	369

WTR YR 1995 MEAN 264 MAX 739 MIN 103

e Estimated

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27.5	17.0	14.0	10.5	11.0	15.0	18.0	20.0	26.0	28.0	29.0	29.0
2	24.0	18.0	13.0	10.0	12.0	9.0	19.0	18.5	25.0	28.0	29.5	29.0
3	24.0	19.0	13.0	9.0	12.0	12.0	16.0	19.0	26.5	30.0	30.0	28.0
4	24.0	19.0	14.0	8.0	11.0	11.5	18.0	19.5	27.5	30.0	30.0	30.0
5	24.5	19.0	13.0	7.0	11.0	12.0	17.0	20.0	26.5	28.5	30.0	28.0
6	26.0	20.0	---	7.5	12.0	13.0	17.5	20.5	28.0	27.0	31.0	31.0
7	26.0	19.0	14.5	8.5	11.0	12.0	18.0	21.0	27.0	27.0	31.0	26.5
8	25.0	19.0	16.5	9.5	11.0	10.5	20.0	20.0	29.0	32.5	31.5	27.0
9	24.0	20.0	15.0	10.0	10.0	11.5	19.0	23.0	28.0	30.0	30.0	27.0
10	21.0	18.0	13.0	10.0	11.0	11.0	20.0	22.0	29.5	30.0	30.5	26.5
11	19.5	17.0	11.5	---	10.0	11.5	18.5	21.5	26.0	34.0	34.0	26.5
12	20.0	16.0	10.5	12.0	10.0	13.0	20.0	21.0	27.0	33.5	31.0	27.0
13	19.5	18.0	11.0	---	9.0	14.0	18.5	23.5	27.0	33.0	31.0	26.0
14	19.5	18.0	10.5	12.0	9.0	14.5	20.0	22.0	27.0	30.0	30.0	30.0
15	19.0	17.0	10.0	12.5	10.0	15.0	19.0	23.0	---	31.5	30.0	31.0
16	20.0	17.0	11.0	12.5	10.0	16.0	19.5	24.5	27.0	29.5	30.0	28.0
17	20.0	16.5	11.5	11.5	10.0	17.0	20.0	24.0	25.5	30.0	31.0	29.0
18	21.0	17.0	12.0	13.0	11.0	17.0	20.0	25.5	26.0	31.0	30.0	27.0
19	21.0	16.0	12.0	12.0	11.0	19.0	20.0	23.5	25.5	31.0	31.0	27.5
20	22.0	17.0	11.0	11.5	12.0	18.0	19.5	23.0	28.0	30.0	30.5	28.0
21	22.0	17.0	11.0	10.5	13.0	19.5	19.0	23.0	29.0	30.0	30.5	26.5
22	21.0	16.0	10.5	10.0	12.0	20.0	20.5	24.0	27.5	33.0	31.0	23.0
23	23.0	15.0	11.5	10.0	14.5	21.5	18.5	23.5	27.5	31.0	30.0	22.0
24	23.0	14.5	11.0	10.0	14.5	20.5	17.0	25.0	27.0	31.0	30.0	21.0
25	21.0	14.5	10.0	10.0	15.0	21.0	18.0	25.0	30.0	32.0	30.0	22.5
26	19.5	14.5	10.0	10.0	15.0	21.5	19.0	25.5	30.0	---	33.0	22.0
27	19.0	16.0	10.0	10.5	12.0	21.5	18.5	25.0	28.5	30.0	34.0	23.0
28	18.0	15.0	10.0	11.0	17.0	20.0	19.0	25.0	30.5	32.5	30.0	24.0
29	16.5	14.5	10.0	10.0	---	19.0	19.0	26.0	28.5	33.0	32.5	27.0
30	18.0	14.0	10.5	10.0	---	19.0	20.0	25.0	28.0	30.0	32.0	25.0
31	17.0	---	11.0	10.0	---	18.0	---	25.0	---	30.0	29.0	---
MEAN	21.5	16.9	11.7	10.3	11.7	15.9	18.9	22.8	27.5	30.6	30.7	26.6
MAX	27.5	20.0	16.5	13.0	17.0	21.5	20.5	26.0	30.5	34.0	34.0	31.0
MIN	16.5	14.0	10.0	7.0	9.0	9.0	16.0	18.5	25.0	27.0	29.0	21.0

WTR YR 1995 MEAN 20.5 MAX 34.0 MIN 7.0

08022060 MARTIN LAKE NEAR TATUM, TX

LOCATION.--Lat 32°15'42", long 94°34'23", Rusk County, Hydrologic Unit 12010002, on retaining wall, 30 ft to right of intake to generating plant No. 1, 1.9 mi upstream from Martin Dam on Martin Creek, 5.8 mi southwest of Tatum and 21.9 mi upstream from mouth.

DRAINAGE AREA.--130 mi².

PERIOD OF RECORD.--April 1974 to current year.
Water-quality records.--Chemical analyses: October 1974 to September 1984.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 15, 1976, non-recording gage near left end of dam 1.9 mi downstream at same datum.

REMARKS.--The lake is formed by a rolled earthfill dam 8,675 ft long, including a 1,000-foot uncontrolled spillway. Deliberate impoundment began in April 1974. The uncontrolled spillway is an excavated channel cut through natural ground and located at the left end of the dam. The controlled spillway is a concrete ogee design with four 14.0- by 40.0-foot-wide tainter gates located near the left end of the dam. The low-flow outlet works consist of a 3.0- by 5.0-foot conduit with a sluice gate located in one of the gate piers. There is an 8-inch pipe with sluice gate. The area and capacity tables are based on an aerial survey made in October 1971. There are no known diversions. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	321.5	-
Crest of uncontrolled spillway	312.0	111,500
Top of gates	308.0	87,960
Top of conservation pool	306.0	77,500
Crest of gated spillway	294.0	31,040
Lowest gated outlet (invert)	284.0	10,320

COOPERATION.--Area and capacity tables provided by Forrest and Cotton, Consulting Engineers, for Texas Utilities Services, Inc.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 118,000 acre-ft Mar. 29, 1989 (elevation, 313.00 ft); minimum since first appreciable storage, 54,380 acre-ft Oct. 25, 1988 (elevation, 300.87 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 81,010 acre-ft Dec. 29 at 1500 hours (elevation, 306.69 ft); minimum, 62,700 acre-ft Sept. 30 (elevation, 302.85 ft).

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

300.0	50,960	306.0	77,500	312.0	111,500
302.0	59,040	308.0	87,960	313.0	118,000
304.0	67,880	310.0	99,300		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66320	77100	75560	77700	76800	76400	76950	76950	75900	73550	70300	65960
2	66230	77150	75560	78050	77000	76800	77050	77000	75850	73600	70250	65780
3	66140	77200	75510	76650	77100	77200	77050	76750	75710	73310	70250	65600
4	66050	77250	75610	76500	77250	77000	76750	77100	75560	73210	70020	65420
5	65920	77550	75560	76750	77200	77300	77100	76350	75560	73070	69920	65370
6	65830	77000	75610	77350	77350	77100	76850	76250	75360	73020	69780	65240
7	66460	77050	75610	77150	77350	77000	77050	76750	75160	73020	69640	65190
8	68060	77150	76000	77350	77450	77150	77150	77900	75060	72870	69410	65010
9	68480	77300	76650	77550	77550	76900	77150	77400	74870	72730	69220	64790
10	68430	77350	78000	77900	77650	77200	77500	75850	74820	72730	69130	64650
11	68430	77350	76650	78150	76500	77450	77100	75950	74870	72630	68940	64470
12	68430	77350	76500	78660	76650	76900	76950	76300	74820	72390	68750	64430
13	68380	77350	76650	76550	77100	78000	77100	76550	74720	72390	68620	64250
14	68340	77300	76950	77450	76800	76750	77200	76650	74670	72200	68620	64200
15	68430	77300	76350	77900	77350	76650	77200	76800	74480	72200	68520	64110
16	70870	77300	77950	76950	77650	77150	77100	76900	74380	72100	68340	63980
17	74280	77250	76850	77650	77900	77500	77100	76900	74180	72010	68200	64070
18	75610	77250	77350	78050	78150	77800	77100	76800	73990	71910	68060	64030
19	75760	77250	77750	77700	78360	76950	77200	76750	73940	71820	67870	63940
20	75900	77250	76650	78460	78410	76550	77400	76700	73790	71670	67740	63710
21	76450	77150	77000	78810	78510	76750	76800	76700	73650	71630	67460	63710
22	77100	76950	77050	76750	78710	76900	79070	76650	73600	71390	67320	63490
23	77350	76950	77200	76850	78760	76950	77850	76550	74330	71150	67090	63400
24	77400	76850	77300	77100	78860	77100	77300	76500	74380	71010	66910	63320
25	76750	76800	77400	77350	79010	77200	77750	76350	74280	70820	66870	63180
26	77050	77050	77500	77250	77650	77250	78100	76350	74130	70680	66690	63100
27	77100	76950	77600	77200	77750	77200	77250	76250	73940	70540	66460	63010
28	77100	75950	77700	77400	75950	77150	77350	76200	73790	70350	66280	62960
29	77150	75610	78960	77800	---	77400	76950	76100	73700	70200	66410	62830
30	77150	75610	76650	76450	---	76850	77050	76100	73790	70020	66230	62740
31	77050	---	77400	76650	---	76900	---	76050	---	70060	66140	---
MAX	77400	77550	78960	78810	79010	78000	79070	77900	75900	73600	70300	65960
MIN	65830	75610	75510	76450	75950	76400	76750	75850	73600	70020	66140	62740
(+)	305.91	305.62	305.98	305.83	305.69	305.88	305.91	305.71	305.25	304.47	303.62	302.86
(@)	+10730	-1440	+1790	-750	-700	+950	+150	-1000	-2260	-3730	-3920	-3400

CAL YR 1994 MAX 78960 MIN 65830 (@) +3950
WTR YR 1995 MAX 79070 MIN 62740 (@) -3580

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

08022070 MARTIN CREEK NEAR TATUM, TX

LOCATION.--Lat 32°17'44", long 94°29'29", Panola County, Hydrologic Unit 1201002, on right bank, 35 ft downstream from right abutment, 360 ft to right of bridge on State Highway 149, 50 ft upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 1.7 mi upstream from Hogan Creek, 2.0 mi southeast of Tatum, 5.0 mi downstream from Martin Lake and 15.0 mi upstream from mouth.

DRAINAGE AREA.--148 mi².

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR TX-76-1: 1975; WDR TX-91-1: 1989 & 1990; WDR TX-93-1: 1988 - 1992.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 240.26 ft above sea level. Prior to Mar. 31, 1978, at site 50 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow is largely regulated by Martin Lake, located 5 mi upstream. Several observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--The third highest stage since 1948 occurred in April 1969 and reached a stage of 18.15 ft. A flood in April 1957 reached a stage of 13.95 ft, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	6.2	19	90	42	787	53	63	9.2	15	6.0	4.4
2	4.7	6.1	14	36	27	80	24	19	8.7	11	6.1	4.7
3	4.6	5.8	12	31	22	63	20	35	8.4	8.7	3.8	4.6
4	4.9	5.6	12	1120	19	100	216	484	8.1	7.8	3.5	4.7
5	7.3	28	11	122	18	402	873	100	7.9	7.6	3.2	5.5
6	9.3	202	11	118	17	370	570	1050	7.6	5.7	3.0	5.5
7	8.6	207	11	590	17	1000	156	357	7.9	7.3	2.9	5.4
8	100	18	28	180	16	1490	33	432	7.5	4.7	3.0	5.3
9	34	12	30	35	15	537	25	2610	7.4	3.9	2.9	5.4
10	7.4	23	941	26	17	322	25	1310	7.7	3.7	2.7	5.4
11	5.9	13	2020	22	319	53	617	1020	11	3.9	2.5	5.2
12	5.3	9.3	1440	19	922	74	650	126	11	4.3	2.6	5.7
13	4.8	8.7	162	1080	610	765	417	33	9.1	4.6	2.6	5.6
14	4.5	8.3	42	1060	309	2300	48	21	8.4	5.3	2.8	5.5
15	4.3	8.1	729	94	805	1000	21	18	8.1	4.5	3.0	5.5
16	90	8.2	5740	37	79	636	36	16	8.0	4.0	3.1	5.2
17	332	8.1	3510	799	28	105	141	16	7.7	4.1	3.4	7.5
18	81	8.1	1370	2420	21	46	29	15	7.4	4.1	3.3	7.1
19	17	7.8	133	2660	18	36	22	14	7.6	6.6	3.2	5.8
20	11	7.4	583	353	17	876	30	13	7.6	7.9	3.3	5.6
21	13	7.3	488	53	16	137	132	12	7.2	5.2	3.4	15
22	44	7.2	58	82	14	35	724	12	7.1	4.6	3.7	12
23	18	6.7	29	1480	14	28	6980	11	7.2	4.2	3.9	6.9
24	8.7	6.5	23	109	20	25	2240	11	10	3.4	3.9	5.6
25	32	7.0	21	32	16	23	536	11	9.1	2.8	3.9	4.6
26	714	7.7	20	229	86	22	60	11	7.3	2.5	4.0	3.7
27	89	11	19	2040	2650	22	71	11	6.8	2.7	4.1	3.5
28	14	18	34	1320	1750	20	572	11	6.8	2.8	4.4	4.0
29	10	705	4540	160	---	27	54	9.6	6.8	2.9	4.3	4.2
30	7.5	115	3460	734	---	44	275	9.4	6.6	3.1	4.1	4.3
31	6.1	---	891	320	---	372	---	9.8	---	4.0	4.2	---
TOTAL	1697.6	1492.1	26401	17451	7904	11797	15650	7870.8	241.2	162.9	110.8	173.4
MEAN	54.8	49.7	852	563	282	381	522	254	8.04	5.25	3.57	5.78
MAX	714	705	5740	2660	2650	2300	6980	2610	11	15	6.1	15
MIN	4.3	5.6	11	19	14	20	20	9.4	6.6	2.5	2.5	3.5
AC-FT	3370	2960	52370	34610	15680	23400	31040	15610	478	323	220	344

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995#, BY WATER YEAR (WY)

MEAN	20.0	42.1	181	187	306	233	178	161	179	21.5	11.3	7.59
MAX	151	323	852	713	880	1045	1098	617	1360	198	119	37.4
(WY)	1992	1991	1995	1991	1983	1989	1991	1990	1993	1976	1977	1979
MIN	1.40	2.15	3.72	3.07	12.2	5.46	4.12	5.84	3.51	1.85	1.65	1.37
(WY)	1981	1978	1981	1981	1981	1986	1981	1977	1978	1977	1982	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995#	
ANNUAL TOTAL	65051.2		90951.8			
ANNUAL MEAN	178		249		126	
HIGHEST ANNUAL MEAN					280	1991
LOWEST ANNUAL MEAN					21.6	1981
HIGHEST DAILY MEAN	5740	Dec 16	6980	Apr 23	22900	Jun 21 1993
LOWEST DAILY MEAN	2.0	Sep 9	2.5	Jul 26	.42	Aug 27 1986
ANNUAL SEVEN-DAY MINIMUM	4.3	Sep 3	2.7	Aug 8	.91	Sep 24 1982
INSTANTANEOUS PEAK FLOW			9130	Apr 23	31900	Jun 21 1993
INSTANTANEOUS PEAK STAGE			15.35	Apr 23	20.09	Jun 21 1993
ANNUAL RUNOFF (AC-FT)	129000		180400		91430	
10 PERCENT EXCEEDS	499		746		300	
50 PERCENT EXCEEDS	12		14		10	
90 PERCENT EXCEEDS	5.2		4.0		2.9	

Period of regulated streamflow.

08022500 SABINE RIVER AT LOGANSPORT, LA

LOCATION.--Lat 31°58'20", long 94°00'22", De Soto Parish, Louisiana-Shelby County, Texas State line at Logansport, Hydrologic Unit 12010004, on left bank just upstream from bridge on U.S. Highway 84, 3 mi upstream from Bayou Castor, 111 mi upstream from Toledo Bend Dam and at mile 267.1.

DRAINAGE AREA.--4,842 mi².

PERIOD OF RECORD.--Gage-height record March 1968 to current year. Daily discharge record July 1903 to February 1968.

REVISED RECORDS.--WSP 1312: 1903-6 (monthly and annual means). WSP 1732: 1929(M), 1933(M).

GAGE.--Water-stage recorder. Datum of gage is 147.72 ft above sea level. July 1, 1903, to Sept. 30, 1956, nonrecording gage. Oct. 1, 1956, to Jan. 16, 1964, water-stage recorder 4,600 ft upstream. Jan. 16, 1964, to Dec. 10, 1968, water-stage recorder 4,700 ft upstream. All gages to present datum except prior to Dec. 31, 1906 when datum was 2.00 ft lower.

REMARKS.--Records good. Station discontinued as a daily streamflow station on Mar. 1, 1968, due to backwater from storage in Toledo Bend Reservoir (station 08025350). Ten major reservoirs, with a combined capacity of 1,824,000 acre-ft, largely regulate the flow. For statement regarding regulation by Natural Resource Conservation Service floodwater-retarding structures, see station 08018500. Numerous diversions above station for oil field operations, municipal and industrial uses. Satellite telemeter at station.

AVERAGE DISCHARGE.--64 years (water years 1904-67), 3,208 ft³/s (2,324,000 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height (1968-91), 34.78 ft Apr. 16. 1991; minimum since initial filling of Toledo Bend Reservoir in June 1968, 16.85 ft Nov. 9, 1987. Maximum discharge (1903-67), 92,000 ft³/s Apr. 8, 1945 (gage height, 44.07 ft, from floodmark); minimum, 16 ft³/s Sept. 26-28, Oct. 3, 4, 1939. Maximum stage since at least 1884, that of Apr. 8, 1945.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1884 reached a stage of 39.4 ft, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 29.96 ft Apr. 26 at 1230 hours; minimum, 18.37 ft at 2130 on Sept. 30.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.30	22.95	21.62	27.19	26.94	24.80	24.74	26.67	26.10	23.47	22.28	20.30
2	20.34	22.81	21.39	27.96	26.79	25.09	24.71	26.16	25.86	23.55	22.05	20.25
3	20.34	22.74	21.03	28.28	26.46	25.25	24.57	25.95	25.28	23.74	21.98	20.32
4	20.31	22.70	20.75	27.98	26.44	25.09	24.19	25.55	24.63	23.86	21.96	20.32
5	20.34	22.45	20.55	27.67	26.30	24.80	23.93	25.46	24.36	23.62	21.96	20.18
6	20.45	22.41	20.46	27.31	26.23	24.62	23.83	25.39	24.34	23.45	22.00	20.22
7	20.59	22.50	20.40	26.97	26.06	26.44	23.86	25.49	24.31	23.41	21.79	20.01
8	20.02	22.57	20.46	26.68	25.96	26.49	23.86	25.57	24.30	23.37	21.77	19.96
9	20.40	22.28	20.38	26.35	26.08	26.19	23.82	25.65	24.26	23.37	21.62	19.82
10	20.70	22.39	21.24	25.99	25.86	26.16	24.04	25.70	23.97	23.31	21.61	19.86
11	20.71	22.47	22.16	25.47	25.65	26.13	24.92	25.89	23.78	23.23	21.53	19.88
12	20.66	22.56	22.70	24.81	25.65	25.82	25.62	26.23	24.02	23.22	21.41	19.79
13	20.53	22.45	23.00	24.37	25.56	25.78	26.03	26.42	24.05	23.41	21.49	19.66
14	20.53	22.37	23.25	24.32	25.61	25.80	26.03	26.30	24.06	23.16	21.41	19.66
15	20.65	22.28	23.70	24.42	25.59	25.96	25.92	26.16	24.05	23.05	21.28	19.33
16	21.42	22.32	24.44	24.53	25.47	26.12	25.70	25.96	24.03	23.10	21.17	19.08
17	23.97	22.38	25.26	24.72	25.56	26.33	25.59	25.80	24.01	22.98	21.09	18.99
18	24.65	22.31	26.18	25.72	25.36	26.28	25.17	25.41	24.04	22.86	21.15	19.00
19	24.95	22.31	27.03	26.54	25.02	26.10	25.14	25.36	23.93	22.85	20.98	18.93
20	24.91	22.32	27.39	26.96	24.60	25.77	24.92	25.43	23.89	22.88	20.81	18.95
21	24.82	22.23	27.12	27.39	24.33	25.57	24.87	25.46	23.85	22.77	20.78	18.81
22	24.42	22.16	26.68	27.59	24.27	25.38	26.50	25.60	23.86	22.78	20.99	18.84
23	24.18	22.12	26.11	27.49	24.04	25.18	28.34	25.73	23.64	22.69	20.77	18.73
24	24.09	22.22	25.56	27.16	23.87	25.11	29.19	25.75	23.84	22.61	20.76	18.72
25	23.81	22.18	25.15	26.72	23.77	25.16	29.76	25.79	23.65	22.58	20.74	18.61
26	23.73	22.28	24.93	26.68	23.83	24.99	29.91	25.95	23.79	22.47	20.66	18.61
27	23.66	22.19	24.78	26.86	24.07	24.85	29.47	26.11	23.67	22.37	20.65	18.59
28	23.51	22.16	24.83	26.82	24.33	24.78	28.79	26.23	23.85	22.28	20.61	18.55
29	23.33	21.99	25.30	26.79	---	24.79	28.12	26.28	23.63	22.33	20.53	18.46
30	23.13	21.83	25.76	26.90	---	24.81	27.47	26.33	23.55	22.31	20.45	18.37
31	22.63	---	26.31	26.95	---	24.77	---	26.23	---	22.36	20.30	---
MAX	24.95	22.95	27.39	28.28	26.94	26.49	29.91	26.67	26.10	23.86	22.28	20.32
MIN	20.02	21.83	20.38	24.32	23.77	24.62	23.82	25.36	23.55	22.28	20.30	18.37

CAL YR 1994 MAX 27.39 MIN 17.79
WTR YR 1995 MAX 29.91 MIN 18.37

08025350 TOLEDO BEND RESERVOIR NEAR BURKEVILLE, TX

LOCATION.--Lat 31°10'25", long 93°33'57", Newton County, Hydrologic Unit 12010004, in powerhouse at right end of Toledo Bend Dam on Sabine River, 15 mi northeast of Burkeville and at mile 156.5.

DRAINAGE AREA.--7,178 mi².

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Sabine River Authority). Prior to July 20, 1967, nonrecording gage at same site and datum. July 20, 1967, to June 30, 1973, recording gage at right end of spillway 1.6 mi north of present site and at same datum.

REMARKS.--The reservoir is formed by a rolled earthfill dam. Closure of embankment completed and deliberate impoundment began Oct. 3, 1966. The reservoir is operated for hydro-electric power generation and water conservation. Releases during high inflow periods are controlled by eleven 40 x 28-foot tainter gates. An 8.33 x 12-foot gated conduit through the dam is used for low-flow releases. Two additional 20-inch-diameter conduits, that bypass the larger conduit, may also be used for low-flow releases. Water for turbines is admitted through four 16.75 x 29-foot penstocks and controlled by vertically operated caterpillar-type gates. The capacity table is based on U.S. Geological Survey topographic maps. For statement regarding regulation by upstream reservoirs, see station 08020000. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	185.0	-
Design flood	175.3	5,102,000
Top of gates	173.0	4,660,000
Top of power drawdown storage	172.0	4,476,000
Top of power head storage	162.2	2,922,000
Crest of spillway (controlled)	145.0	1,162,000
Lowest gated outlet (invert)	100.0	4,090

COOPERATION.--Capacity table furnished by the Sabine River Authority.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 4,840,000 acre-ft May 18, 1989 (elevation, 173.95 ft); minimum since initial filling of reservoir in June 1968, 3,290,000 acre-ft Nov. 14, 15, 1987 and Oct. 20, 1994 (elevation, 164.78 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 4,688,000 acre-ft Apr. 27 at 1500 hours (elevation, 173.15 ft); minimum, 3,461,000 acre-ft Sept. 30 (elevation, 165.92 ft).

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

164.0	3,175,000	170.0	4,123,000	173.0	4,660,000
166.0	3,473,000	172.0	4,476,000	174.0	4,849,000
168.0	3,788,00				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3791000	4163000	3782000	4170000	4533000	4313000	4378000	4616000	4494000	4329000	4089000	3745000
2	3788000	4144000	3774000	4179000	4533000	4311000	4352000	4568000	4476000	4320000	4080000	3727000
3	3786000	4108000	3775000	4213000	4586000	4315000	4349000	4557000	4474000	4283000	4069000	3721000
4	3786000	4080000	3759000	4227000	4535000	4317000	4344000	4566000	4460000	4280000	4055000	3714000
5	3774000	4098000	3756000	4213000	4539000	4326000	4333000	4539000	4428000	4318000	4045000	3708000
6	3761000	4079000	3742000	4259000	4529000	4338000	4313000	4515000	4395000	4329000	4038000	3692000
7	3758000	4072000	3751000	4264000	4533000	4498000	4283000	4474000	4390000	4315000	4026000	3686000
8	3847000	4070000	3756000	4269000	4511000	4522000	4243000	4516000	4392000	4311000	4011000	3674000
9	3819000	4106000	3764000	4283000	4491000	4550000	4226000	4513000	4385000	4308000	4001000	3660000
10	3809000	4075000	3801000	4267000	4502000	4553000	4276000	4526000	4404000	4297000	3985000	3657000
11	3805000	4057000	3766000	4269000	4518000	4550000	4318000	4513000	4438000	4281000	3968000	3638000
12	3806000	4028000	3788000	4285000	4491000	4550000	4347000	4498000	4408000	4269000	3955000	3623000
13	3806000	4019000	3803000	4340000	4482000	4568000	4354000	4487000	4404000	4243000	3953000	3623000
14	3803000	4001000	3806000	4351000	4476000	4583000	4349000	4498000	4403000	4245000	3941000	3608000
15	3819000	4004000	3836000	4317000	4489000	4586000	4351000	4493000	4404000	4241000	3935000	3594000
16	3851000	3967000	3920000	4304000	4494000	4579000	4345000	4467000	4403000	4240000	3923000	3582000
17	4004000	3936000	3968000	4333000	4480000	4570000	4317000	4463000	4404000	4226000	3913000	3599000
18	4163000	3923000	3992000	4471000	4467000	4559000	4344000	4520000	4404000	4226000	3902000	3580000
19	4227000	3904000	4007000	4515000	4467000	4542000	4315000	4463000	4401000	4210000	3887000	3568000
20	4278000	3887000	4053000	4562000	4458000	4537000	4363000	4444000	4397000	4193000	3884000	3578000
21	4315000	3877000	4080000	4586000	4429000	4515000	4367000	4431000	4388000	4182000	3874000	3591000
22	4340000	3870000	4089000	4636000	4408000	4516000	4458000	4415000	4383000	4156000	3856000	3568000
23	4345000	3841000	4101000	4577000	4403000	4511000	4607000	4392000	4386000	4168000	3852000	3549000
24	4345000	3828000	4109000	4568000	4365000	4491000	4677000	4395000	4372000	4146000	3837000	3540000
25	4352000	3837000	4106000	4557000	4329000	4471000	4668000	4397000	4383000	4140000	3819000	3533000
26	4317000	3819000	4101000	4544000	4297000	4460000	4669000	4386000	4361000	4128000	3808000	3516000
27	4297000	3869000	4099000	4572000	4308000	4458000	4658000	4413000	4347000	4120000	3798000	3501000
28	4274000	3837000	4091000	4594000	4326000	4451000	4623000	4467000	4324000	4106000	3788000	3496000
29	4247000	3829000	4109000	4577000	---	4440000	4623000	4487000	4331000	4123000	3775000	3473000
30	4229000	3803000	4123000	4548000	---	4415000	4588000	4502000	4336000	4109000	3767000	3461000
31	4241000	---	4137000	4531000	---	4395000	---	4491000	---	4091000	3756000	---
MAX	4352000	4163000	4137000	4636000	4586000	4586000	4677000	4616000	4494000	4329000	4089000	3745000
MIN	3758000	3803000	3742000	4170000	4297000	4311000	4226000	4386000	4324000	4091000	3756000	3461000
(+)	170.68	168.09	170.08	172.30	171.16	171.55	172.61	172.08	171.22	169.81	167.80	165.92
(@)	+441000	-438000	+334000	+394000	-205000	+69000	+193000	-97000	-155000	-245000	-335000	-295000

CAL YR 1994 MAX 4494000 MIN 3390000 (@) +723000
WTR YR 1995 MAX 4677000 MIN 3461000 (@) -339000

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

08025360 SABINE RIVER AT TOLEDO BEND RESERVOIR NEAR BURKEVILLE, TX

LOCATION.--Lat 31°10'25", long 93°33'57", Newton County, Hydrologic Unit 12010005, in powerhouse at right end of Toledo Bend Dam, 10 mi upstream from Sabine River near Burkeville gage and at mile 156.5.

DRAINAGE AREA.--7,178 mi².

PERIOD OF RECORD.--October 1971 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1967 to September 1986.

GAGE.--Water-stage recorders. Datum of gage is at sea level (levels by Sabine River Authority).

REMARKS.--No estimated daily discharges. Records poor. Daily discharges are a combination of releases from various outlets at the dam. Discharges for releases through the turbines are computed using scroll case differential relationships and operation logs. Tainter gate releases, low-flow sluiceway releases, bypass gate releases, and turbine leakages are based on discharge measurements and operation logs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	15300	15800	15600	17000	13400	14500	24900	14700	3390	5670	4710
2	174	15200	15100	7560	14800	13800	14600	22700	14300	204	5490	4620
3	174	15200	11900	15600	14200	14100	14600	19900	14400	4760	5520	204
4	161	15400	11500	15600	13900	14200	14600	18100	14500	204	5770	204
5	174	15400	5910	15600	14000	14100	14600	14500	14600	4770	5820	4580
6	174	15000	5510	15600	14000	14100	14600	14500	11900	5020	204	4810
7	174	9740	5410	15400	14100	14100	14300	14500	5470	4820	6340	4790
8	174	7460	5150	15400	14100	14300	14500	14600	5500	3660	5460	4810
9	174	7240	5360	15600	14100	14500	14700	14600	5650	204	5960	4580
10	1120	7210	5450	15600	13900	14300	14700	14500	204	4850	6010	258
11	804	9960	5380	15600	14000	14400	14900	14500	204	4550	5520	4610
12	931	15600	5410	15600	13900	14200	15000	14400	161	4750	5980	4540
13	963	15700	5180	15200	13900	16400	14700	14400	159	4760	204	3270
14	836	15700	4900	15300	14000	18700	14500	14400	1570	4780	6160	4260
15	836	15800	5860	15500	14400	19500	14600	14300	1780	3800	4650	4820
16	174	15800	7870	15500	14300	19800	14600	14700	1750	204	4870	4720
17	836	15600	15500	15600	14100	19600	14700	14800	204	4580	4710	204
18	174	15600	15600	13400	14200	19700	14600	14700	204	4730	4780	4700
19	174	15700	15500	14000	13900	16400	14600	14600	3160	4850	4720	5000
20	174	15700	15600	14000	14100	14500	14600	14600	3050	4940	2460	4830
21	3990	15700	15300	14000	14300	14500	14700	14600	2920	4360	4760	4880
22	6990	15700	15500	18000	14400	14500	14600	14600	3180	3720	4820	4960
23	5160	15700	15200	23900	14100	14400	10200	14600	3130	204	4800	4600
24	9690	11900	15500	24800	14600	14500	17000	14500	250	4530	4760	204
25	9930	8070	15600	25100	15000	14500	30000	14600	204	4520	4540	4780
26	12600	8070	15300	25500	15100	14500	32900	11100	3160	4430	4640	4810
27	15100	8070	15500	25200	14400	14600	32100	204	3180	4400	2790	4800
28	15000	11400	15600	25400	13900	14600	32600	312	3090	4390	4750	4810
29	15100	15500	15600	25600	---	14600	28200	364	3450	3260	4780	4990
30	15000	15800	15400	25900	---	14600	24900	8740	3450	204	4510	4700
31	14800	---	15400	22700	---	14700	---	14900	---	4380	4660	---
TOTAL	131935	400220	353790	553360	400700	474100	529700	426720	139480	112224	146108	118054
MEAN	4256	13340	11410	17850	14310	15290	17660	13770	4649	3620	4713	3935
MAX	15100	15800	15800	25900	17000	19800	32900	24900	14700	5020	6340	5000
MIN	161	7210	4900	7560	13900	13400	10200	204	159	204	204	204
AC-FT	261700	793800	701700	1098000	794800	940400	1051000	846400	276700	222600	289800	234200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1995, BY WATER YEAR (WY)

MEAN	1242	2347	5798	9381	9988	10200	8417	8338	6491	4899	3703	3111
MAX	6809	13340	17720	27680	20510	21450	19270	22170	24960	18790	6732	7323
(WY)	1992	1995	1975	1974	1975	1992	1991	1991	1989	1989	1976	1991
MIN	59.0	50.7	74.5	90.0	339	231	247	311	1999	1004	764	424
(WY)	1976	1976	1976	1978	1981	1972	1978	1984	1982	1988	1984	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1972 - 1995	
ANNUAL TOTAL	2306934		3786391			
ANNUAL MEAN	6320		10370		6142	
HIGHEST ANNUAL MEAN					10370	1995
LOWEST ANNUAL MEAN					1588	1981
HIGHEST DAILY MEAN	16000	Apr 2	32900	Apr 26	114000	May 19 1989
LOWEST DAILY MEAN	161	Oct 4	159	Jun 13	30	Oct 1 1972
ANNUAL SEVEN-DAY MINIMUM	172	Oct 1	172	Oct 1	34	Nov 21 1975
ANNUAL RUNOFF (AC-FT)	4576000		7510000		4450000	
10 PERCENT EXCEEDS	15400		15700		14900	
50 PERCENT EXCEEDS	4450		13900		4110	
90 PERCENT EXCEEDS	204		343		130	

08026000 SABINE RIVER NEAR BURKEVILLE, TX

LOCATION.--Lat 31°03'50", long 93°31'10", Newton County, Texas-Vernon Parish, Louisiana State line, Hydrologic Unit 12010005, near left edge of low-water channel on downstream side of bridge on State Highway 63, about 200 ft downstream from Pearl Creek, 10 mi northeast of Burkeville, 16 mi downstream from Bayou Toro and at mile 139.7.

DRAINAGE AREA.--7,482 mi².

PERIOD OF RECORD.--September 1955 to current year. Published as "below Toledo Bend near Burkeville" for period 1955-75.
Water-quality records.--Chemical and biochemical analyses: May 1968 to September 1986. Pesticide analyses: October 1972 to September 1981.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 60.59 ft above sea level. Prior to Aug. 23, 1958, nonrecording gage at current site. Prior to Jan. 1, 1989, at datum 10.00 ft higher.

REMARKS.--Records fair. Flow regulated by Toledo Bend Reservoir (station 08025350) 16.8 mi upstream. Rain gage at station. Telephone telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--11 years (water years 1956-66) prior to completion of Toledo Bend Reservoir, 4,653 ft³/s (3,371,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1956-66).--Maximum discharge, 52,900 ft³/s May 15, 1957 (gage height, 32.43 ft); minimum, 60 ft³/s Sept. 26-30, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1860: Flood in May 1884 reached a stage of 45.9 ft, current datum, from information by local resident. Flood of Apr. 15, 1945, reached a stage of 45.8 ft, current datum. Flood of May 23, 1953, reached a stage of 45.3 ft, current datum, from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2290	14400	e15800	15200	22500	15000	15300	26800	16000	e4250	6300	5230
2	340	14400	e15100	8840	16900	14900	15300	25600	15500	e2800	6870	5080
3	290	14300	12400	13700	16200	14900	15300	21900	14900	e3000	6700	2830
4	260	14600	12800	14500	15200	15700	15500	20400	14800	e3300	6730	452
5	204	14800	10200	14600	15000	16100	15600	16500	14800	e4000	e6730	2750
6	195	14700	3910	14700	15100	16400	15500	15600	14600	e6510	e3920	5210
7	195	12100	5060	14900	15300	17100	15400	15300	6650	e6320	e4700	5230
8	257	7500	4760	14800	15200	18200	15400	15200	6780	e5200	e7010	5150
9	292	7380	4810	14800	15300	17500	15600	15300	6650	e2860	e7380	5160
10	314	7150	4990	14600	15100	16300	15700	15200	3750	e3220	e7360	2800
11	1030	7820	6980	14600	15400	15300	21200	15000	665	e5000	e7180	2730
12	841	13600	6980	14700	15200	15100	20600	15000	550	e5900	e6840	5070
13	926	14800	6530	16300	15300	15800	18000	15100	435	e5750	e3000	3850
14	987	14900	5290	16500	15400	20800	16300	15000	998	e5850	e3650	4970
15	969	15000	5330	15500	15500	22400	15900	14700	2020	e4890	e5200	5200
16	878	15000	6450	14900	15500	22400	15600	14900	2080	e2250	e5260	5150
17	3750	14800	15500	14900	15500	21800	15400	15100	1420	e3240	5300	3010
18	7290	14700	16200	18500	15500	21300	15500	15200	844	e5120	5130	2790
19	4240	14700	15400	23400	15300	19300	15300	15100	2490	e5210	5130	5230
20	2730	14600	15100	20200	15500	16000	18200	15100	4300	e5200	4420	5370
21	4140	14800	15000	17300	15600	15700	19600	15100	3980	e5100	3840	5540
22	7470	14800	15100	16600	15500	15700	17800	15000	3930	4610	5370	5570
23	5740	14800	15000	24000	15300	15600	18400	15000	4080	2370	5340	5080
24	8250	13400	14900	26600	15400	15200	15500	15000	e2380	2800	5180	3030
25	9450	7840	14800	27100	15900	15200	26800	15000	e1400	5260	5240	2930
26	10200	e8050	14700	27500	16400	15100	31000	14400	e2700	5240	5150	5430
27	13900	e8060	14800	29800	16200	16000	32200	3380	e3820	5200	3920	5370
28	14400	e11900	14900	31200	15700	15700	32800	776	e3890	5310	4130	5130
29	14300	e15700	15600	30400	---	15400	32500	828	e4010	4850	5370	5460
30	14200	e15800	15900	29300	---	15500	28500	4920	e4160	2540	5180	5440
31	14300	---	15400	27400	---	15400	---	14700	---	2870	5340	---
TOTAL	144628	386400	355690	597340	441900	522800	581700	452104	164582	136020	168870	132242
MEAN	4665	12880	11470	19270	15780	16860	19390	14580	5486	4388	5447	4408
MAX	14400	15800	16200	31200	22500	22400	32800	26800	16000	6510	7380	5570
MIN	195	7150	3910	8840	15000	14900	15300	776	435	2250	3000	452
AC-FT	286900	766400	705500	1185000	876500	1037000	1154000	896700	326400	269800	335000	262300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995#, BY WATER YEAR (WY)

MEAN	1275	2195	5670	8721	9243	10170	8788	8428	6372	4704	3386	2962
MAX	6846	12880	17940	28510	21470	22180	26530	23660	25310	23750	6662	7099
(WY)	1992	1995	1975	1974	1975	1969	1969	1991	1989	1989	1976	1991
MIN	82.5	86.2	247	484	266	485	231	471	400	292	91.7	77.6
(WY)	1968	1968	1968	1968	1968	1968	1971	1967	1970	1967	1967	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995#	
ANNUAL TOTAL	2395304		4084276			
ANNUAL MEAN	6562		11190		5979	
HIGHEST ANNUAL MEAN					11190	1995
LOWEST ANNUAL MEAN					548	1967
HIGHEST DAILY MEAN	19700	Mar 10	32800	Apr 28	111000	May 20 1989
LOWEST DAILY MEAN	195	Oct 6	195	Oct 6	38	Sep 14 1967
ANNUAL SEVEN-DAY MINIMUM	242	Oct 3	242	Oct 3	41	Sep 9 1967
INSTANTANEOUS PEAK FLOW			33400	Apr 29	116000	May 20 1989
INSTANTANEOUS PEAK STAGE			35.78	Apr 29	47.45	May 20 1989
ANNUAL RUNOFF (AC-FT)	4751000		8101000		4331000	
10 PERCENT EXCEEDS	15000		17900		15400	
50 PERCENT EXCEEDS	4420		14500		3170	
90 PERCENT EXCEEDS	1160		2740		256	

e Estimated
Period of regulated streaamflow.

08028500 SABINE RIVER NEAR BON WIER,TX

LOCATION.--Lat 30°44'49", long 93°36'30", Beauregard Parish, Louisiana-Newton County, Texas State line, Hydrologic Unit 12010005, near left bank on downstream side of bridge on U.S. Highway 190, 0.7 mi upstream from Quicksand Creek, 0.8 mi upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 2.0 mi east of Bon Wier, 2.4 mi upstream from Caney Creek and at mile 97.7.

DRAINAGE AREA.--8,229 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1923 to current year. Monthly discharge only for some periods, published in WSP 1312. Gage-height records collected in this vicinity since 1913 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1342: 1953. WSP 1442: 1924, 1926-27(M), 1929(M), 1939. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 33.42 ft above sea level. Prior to July 8, 1931, nonrecording gage at site 0.8 mi downstream at datum 13.00 ft higher. July 8, 1931, to Oct. 15, 1958, nonrecording gage at present site at datum 13.00 ft higher. Oct. 16, 1958, to Sept. 30, 1975, water-stage recorder at present site at datum 13.00 ft higher. Oct. 1, 1975, to Dec. 31, 1988, at present site at datum 10.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since October 1966, flow regulated by Toledo Bend Reservoir (station 08025350) 58.8 mi upstream. Telephone telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--43 years (water years 1924-66) prior to completion of Toledo Bend Reservoir, 6,846 ft³/s (4,960,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1924-66).--Maximum discharge, 115,000 ft³/s May 19, 1953 (gage height, 38.70 ft, current datum); minimum, 160 ft³/s Sept. 29, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1833, 43.5 ft Apr. 23 or 24, 1913, from information by Gulf, Colorado, and Santa Fe Railway Co. and local residents. Flood in May 1884 reached a stage of 39 ft. Floods occurring about 1844 and 1860 were higher than flood in May 1884, from information by local residents. All flood data referenced to current datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5290	14800	15700	17100	30200	e16200	16800	29500	17200	4470	4260	5520
2	2500	14900	15700	15300	24400	e15500	16400	27600	19300	4390	6840	5430
3	1110	14900	15100	10900	19600	e15400	16200	25900	18800	2530	7110	5310
4	939	14800	13500	14800	17700	e15400	16100	23000	17300	4010	6910	2740
5	869	15100	12500	15400	16600	e16200	16600	20800	16500	3020	6940	1250
6	783	15500	8040	15600	16300	e16600	17200	17900	16200	5530	6870	3560
7	740	15300	5990	16000	16200	e17600	17200	16800	13200	7240	3460	5270
8	828	10900	6170	16200	16200	23100	16800	16500	7860	6530	5160	5310
9	1050	8150	6010	16000	16100	22900	16500	16900	7110	5360	6740	5360
10	1060	7980	6000	15800	16100	22500	16600	16800	7150	2780	6910	5190
11	1010	7800	6160	15700	16000	20800	24400	16300	3770	4200	7030	2680
12	1510	9610	6240	15700	16300	17800	29900	16200	1910	5630	6600	3560
13	1440	14300	6260	17500	16200	17000	27700	16600	1660	5670	6760	5110
14	1490	15300	6090	21300	16200	20400	25100	16400	1450	5820	3360	4110
15	1490	15600	6230	20300	16200	24400	22400	16100	1910	5970	4910	5220
16	1700	15800	6970	18700	16300	25700	19100	15700	2690	5300	5940	5750
17	3800	15800	11900	17400	16300	25200	17500	15800	2680	2840	5600	5680
18	14900	15600	18200	18300	16400	23900	17000	16100	1940	4120	5650	3120
19	15300	15500	18100	27800	16400	22600	16700	17200	1330	5850	5480	3960
20	10900	15500	17000	29400	16600	20100	17000	16800	2740	5970	5520	5920
21	8300	15500	16600	26800	16600	17700	21500	16100	3900	5980	4260	6710
22	10700	15600	16500	25100	16500	17000	21800	15900	3910	5370	4860	6680
23	11800	15600	16500	26400	16200	16800	22800	15800	4020	4790	5790	6570
24	9000	15600	16100	29200	16000	16400	23600	15700	4170	2510	5630	5830
25	10500	12400	16000	29900	16100	16200	23000	15600	2580	3830	5580	3250
26	10400	8340	15800	29900	e16600	16100	29000	15600	1380	5420	5490	4230
27	12300	7810	15600	38100	e17000	16300	32200	12400	2770	5340	5400	5750
28	14500	7860	15700	49100	e16700	17800	32900	4020	4010	5330	3990	5660
29	14700	10800	16300	42700	---	18000	32200	2460	4100	5400	4760	5610
30	14700	14900	17600	37800	---	17900	31600	3620	4290	4770	5560	5830
31	14600	---	17700	34200	---	17300	---	10300	---	2500	5470	---
TOTAL	200209	397550	388260	724400	484000	586800	653800	502400	197830	148470	174840	146170
MEAN	6458	13250	12520	23370	17290	18930	21790	16210	6594	4789	5640	4872
MAX	15300	15800	18200	49100	30200	25700	32900	29500	19300	7240	7110	6710
MIN	740	7800	5990	10900	16000	15400	16100	2460	1330	2500	3360	1250
AC-FT	397100	788500	770100	1437000	960000	1164000	1297000	996500	392400	294500	346800	289900

08028500 SABINE RIVER NEAR BON WIER,TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995#, BY WATER YEAR (WY)

MEAN	1833	2917	6977	10400	11080	11840	10400	9660	7381	5580	3902	3461
MAX	7315	13250	21420	30930	23200	24470	27370	28150	26340	31490	7288	8247
(WY)	1992	1995	1983	1974	1975	1992	1969	1991	1989	1989	1976	1991
MIN	188	217	822	1000	746	1288	634	1186	663	621	211	206
(WY)	1968	1968	1981	1981	1968	1981	1971	1971	1970	1967	1967	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995#	
ANNUAL TOTAL	2900819		4604729			
ANNUAL MEAN	7947		12620		7101	
HIGHEST ANNUAL MEAN					12670	1975
LOWEST ANNUAL MEAN					1172	1967
HIGHEST DAILY MEAN	25600	Mar 11	49100	Jan 28	98000	Jul 4 1989
LOWEST DAILY MEAN	740	Oct 7	740	Oct 7	134	Nov 9 1966
ANNUAL SEVEN-DAY MINIMUM	896	Oct 4	896	Oct 4	142	Nov 3 1966
INSTANTANEOUS PEAK FLOW			50600	Jan 28	98200	Jul 4 1989
INSTANTANEOUS PEAK STAGE			34.29	Jan 28	37.90	Jul 4 1989
ANNUAL RUNOFF (AC-FT)	5754000		9133000		5145000	
10 PERCENT EXCEEDS	16700		22800		17100	
50 PERCENT EXCEEDS	6000		14900		4140	
90 PERCENT EXCEEDS	2220		2950		750	

e Estimated
Period of regulated streamflow.

08028500 SABINE RIVER NEAR BON WIER,TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1969 to current year. Chemical and biochemical analyses: October 1969 to May 1973. Sediment analyses: April 1957 to September 1962.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1969 to June 1983.
WATER TEMPERATURE: November 1969 to June 1983.
COLOR: November 1969 to June 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 407 microsiemens Aug. 31, 1978; minimum daily, 34 microsiemens Feb. 3, 1983.
WATER TEMPERATURE: Maximum daily, 33.0°C July 17, 1978, and July 14, 26, 1980; minimum daily, 4.0°C Feb. 2, 1980.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT							
09...	1820	1050	159	23.0	40	17	15
16...	1240	1370	157	25.0	20	17	16
23...	1312	12000	109	23.0	60	13	12
NOV							
03...	1450	14800	146	23.0	20	15	17
06...	1525	15600	146	21.0	20	15	16
12...	1525	10300	145	20.0	20	15	16
20...	1330	15500	149	20.0	40	15	17
26...	1250	7900	146	20.0	30	15	16
DEC							
04...	1300	13800	157	18.0	40	17	17
11...	1430	6460	158	16.0	30	17	18
19...	1200	18400	151	17.0	30	15	17
29...	1120	16000	151	18.0	30	15	17
JAN							
07...	1330	15900	104	16.0	200	10	11
11...	1345	15400	130	15.0	60	13	14
15...	1400	20200	128	15.0	50	13	14
22...	1310	24400	105	16.0	70	10	12
29...	1130	41800	128	17.0	50	13	14
FEB							
05...	1255	16500	142	17.0	40	14	16
15...	1440	15900	142	15.0	30	14	16
19...	1325	16100	142	15.0	30	--	--
26...	1210	16100	144	15.0	30	14	16
MAR							
08...	1425	23500	107	14.0	60	12	11
12...	1225	17300	131	14.0	50	14	14
23...	1720	16500	134	19.0	50	15	14
26...	1230	15900	134	18.0	50	15	14
30...	1215	17700	121	18.0	60	14	13
APR							
02...	1700	16000	125	19.0	45	15	14
09...	1210	16300	126	20.0	50	15	13
16...	1240	18800	117	20.0	50	14	12
23...	1450	23400	97	20.0	70	11	10
30...	1945	30700	118	22.0	50	14	12
MAY							
07...	1850	16500	105	22.0	30	12	11
14...	1500	16200	123	23.0	40	15	13
22...	1410	15600	126	25.0	40	15	13
29...	1815	2580	132	25.0	70	15	12
JUN							
05...	1905	16000	127	26.0	40	16	13
11...	1300	3190	141	26.0	50	18	14
21...	1145	3980	133	27.0	50	16	13
27...	2000	4180	127	29.0	50	13	12
JUL							
07...	1825	7300	137	30.0	40	17	14
09...	1800	5320	136	30.0	30	16	14
24...	1900	1590	144	32.0	30	17	14
30...	1305	4940	133	30.0	20	15	13
AUG							
06...	1415	7200	122	29.0	30	14	13
13...	1440	7440	121	29.0	20	13	13
21...	1420	4340	131	30.0	20	15	14
27...	1520	5840	129	31.0	30	15	14
SEP							
09...	1920	5730	130	29.0	20	13	14
16...	1915	6020	153	29.0	30	19	16
27...	1400	6270	148	30.0	30	17	15

08029500 BIG COW CREEK NEAR NEWTON, TX

LOCATION.--Lat 30°49'08", long 93°47'07", Newton County, Hydrologic Unit 12010005, near center of span on downstream side of bridge on State Highway 87, 2.6 mi southwest of Newton, 5.0 mi downstream from Melhomes Creek, and 8.0 mi upstream from White Oak Creek.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--April 1952 to current year.

GAGE.--Water-stage recorder. Datum of gage is 134.69 ft above sea level. Prior to Dec. 19, 1957, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No known diversion above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1907, 27.5 ft in April 1922, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 18	1600	3,620	16.01	Apr. 11	1100	8,040	17.42
Jan. 19	0300	5,740	16.76	Apr. 21	0700	1,540	14.87
Jan. 27	2000	3,750	16.06				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	77	66	117	194	213	120	97	214	80	96	48
2	36	74	64	108	176	138	106	93	271	78	88	48
3	36	73	138	98	162	e165	96	91	131	62	67	45
4	36	73	332	95	149	e190	102	112	89	59	59	43
5	36	86	165	92	140	e220	214	109	78	86	55	42
6	35	106	108	102	134	243	324	94	71	163	61	42
7	35	102	95	155	131	294	218	87	67	169	89	45
8	54	78	90	123	130	808	126	120	64	79	63	43
9	117	74	88	101	126	319	104	165	62	63	59	42
10	131	80	93	96	128	179	195	123	59	57	54	42
11	65	74	126	95	140	148	4510	91	63	54	51	41
12	51	71	113	94	147	135	2040	96	83	53	50	40
13	49	69	91	439	137	179	623	113	86	52	49	41
14	48	68	85	522	135	893	252	97	62	67	51	42
15	48	69	84	200	138	614	186	83	57	160	57	43
16	107	75	206	132	135	606	160	77	54	91	62	45
17	717	72	594	113	133	354	143	74	52	75	53	44
18	2870	69	300	887	135	200	128	187	51	74	49	47
19	1870	67	143	3750	133	148	118	328	49	72	49	67
20	695	66	115	1110	167	126	494	114	49	64	73	56
21	245	65	141	319	139	116	1210	85	48	59	60	98
22	247	64	192	232	119	111	344	76	47	56	53	78
23	249	62	132	311	113	105	549	72	49	54	51	107
24	154	61	109	243	111	101	608	69	55	52	65	66
25	120	60	100	182	106	100	269	68	56	51	67	53
26	105	62	95	238	104	98	153	66	51	50	54	49
27	96	66	91	2260	112	189	126	65	48	49	50	47
28	90	95	92	1980	184	483	116	84	47	49	53	46
29	85	124	187	600	---	183	110	94	51	52	52	44
30	82	76	235	286	---	216	103	173	66	82	48	43
31	79	---	142	223	---	166	---	163	---	99	47	---
TOTAL	8623	2258	4612	15303	3858	8040	13847	3366	2230	2311	1835	1537
MEAN	278	75.3	149	494	138	259	462	109	74.3	74.5	59.2	51.2
MAX	2870	124	594	3750	194	893	4510	328	271	169	96	107
MIN	35	60	64	92	104	98	96	65	47	49	47	40
AC-FT	17100	4480	9150	30350	7650	15950	27470	6680	4420	4580	3640	3050
CFSM	2.17	.59	1.16	3.86	1.08	2.03	3.61	.85	.58	.58	.46	.40
IN.	2.51	.66	1.34	4.45	1.12	2.34	4.02	.98	.65	.67	.53	.45

08029500 BIG COW CREEK NEAR NEWTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1995, BY WATER YEAR (WY)

MEAN	68.2	104	158	188	211	172	167	157	113	71.9	55.0	62.1
MAX	278	440	489	645	743	345	533	817	414	426	221	353
(WY)	1995	1987	1983	1974	1984	1990	1953	1953	1993	1989	1973	1961
MIN	17.4	27.3	39.3	42.2	58.6	57.5	29.4	31.7	16.6	14.2	14.5	17.3
(WY)	1957	1968	1982	1982	1968	1955	1971	1971	1971	1971	1956	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1952 - 1995	
ANNUAL TOTAL	61419		67820			
ANNUAL MEAN	168		186		127	
HIGHEST ANNUAL MEAN					246	1973
LOWEST ANNUAL MEAN					46.1	1965
HIGHEST DAILY MEAN	5790	Jan 28	4510	Apr 11	9720	Feb 12 1984
LOWEST DAILY MEAN	35	Sep 29	35	Oct 1	10	Jul 7 1971
ANNUAL SEVEN-DAY MINIMUM	36	Sep 25	36	Oct 1	11	Jul 17 1971
INSTANTANEOUS PEAK FLOW			8040	Apr 11	20200	Apr 29 1953
INSTANTANEOUS PEAK STAGE			17.42	Apr 11	19.45	Apr 29 1953
ANNUAL RUNOFF (AC-FT)	121800		134500		91970	
ANNUAL RUNOFF (CFSM)	1.31		1.45		.99	
ANNUAL RUNOFF (INCHES)	17.85		19.71		13.47	
10 PERCENT EXCEEDS	256		277		223	
50 PERCENT EXCEEDS	90		94		63	
90 PERCENT EXCEEDS	46		48		27	

e Estimated

08030500 SABINE RIVER NEAR RULIFF, TX
(National stream-quality accounting network)

LOCATION.--Lat 30°18'13", long 93°44'37", Calcasieu Parish, Louisiana-Newton County, Texas State line, Hydrologic Unit 12010005, on downstream side of bridge on State Highway 12, 2.4 mi north of Ruliff, 4.2 mi upstream from the Kansas City Southern Railway Co. bridge, 4.5 mi downstream from Cypress Creek and at mile 40.2.

DRAINAGE AREA.--9,329 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1282: 1941(M), 1942. WSP 1442: 1925-29, 1937-39, 1943. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 5.92 ft below sea level. Prior to Mar. 1, 1941, nonrecording gage at Kansas City Southern Railway Co. bridge, 4.2 mi downstream and at datum 7.98 ft higher than current datum. Mar. 1, 1941, to Dec. 8, 1948, nonrecording gage at present site and at datum 10.00 ft higher than current datum. Dec. 9, 1948, to Dec. 31, 1989, recording gage at present site and at datum 10.00 ft higher than current datum.

REMARKS.--Records good. Flow is partly regulated by Toledo Bend Reservoir (station 08025350) 116.3 mi upstream. Telephone telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--42 years (water years 1925-66) prior to completion of Toledo Bend Reservoir, 8,422 ft³/s (6,102,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1925-66).--Maximum discharge, 121,000 ft³/s May 22, 1953, (gage-height, 29.98 ft, current datum); minimum, 270 ft³/s Sept. 27-30, Oct. 1-3, 17-20, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1835, 32.2 ft in May or June 1884 (adjusted to present site and datum on basis of slope of flood of June 8, 9, 1950); flood of Apr. 26-29, 1913, reached a stage of 29.5 ft, present site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5400	14800	11300	16800	46100	18400	18800	30300	12600	4300	5460	5860
2	5530	15200	12200	17000	38400	18500	18500	29900	14200	4510	4870	6040
3	4690	15400	15300	17300	32800	18300	17900	28500	16000	4680	6020	6080
4	2460	15500	16800	17000	26900	18300	17200	26800	17300	4370	6820	6030
5	e1980	15800	17100	15300	23200	18100	17000	24900	18200	3410	7280	5330
6	e1800	16000	17000	15500	20400	17700	17200	22800	18000	4290	7460	3080
7	e1650	15900	16500	15300	18700	18200	17400	20800	17000	4560	7530	2320
8	e1500	16100	15000	15400	17600	18700	17600	20000	16400	6110	7200	4050
9	e1400	16400	12400	15700	17100	19100	17700	18600	15500	6990	5920	5170
10	e1300	16100	10100	16000	16800	20900	19300	17500	13700	7170	6070	5590
11	e1400	14600	8780	16400	16500	22800	28200	17000	11700	6430	6610	5750
12	1490	12600	8120	16600	16300	22800	31700	16800	9700	4510	6980	5080
13	1460	11300	7870	18000	15900	22100	38400	17100	6770	4830	7170	3430
14	1530	11100	7830	18600	16300	21100	45700	17300	e4020	5680	7210	4260
15	1530	12000	7790	19100	16400	19900	39800	17000	e2490	6160	6870	4840
16	1890	13100	7910	20000	16500	20100	31800	16500	2040	6520	5530	4950
17	2980	14300	8660	21000	16700	22500	26200	16300	e2440	6990	5740	5520
18	7830	15200	9970	21500	16700	24800	22000	16300	e2810	6640	6120	5650
19	18500	15700	12000	20700	16600	25100	19400	16200	2670	5070	6200	5560
20	26600	16100	14000	19700	16800	24000	18100	16100	e1910	5290	6160	4090
21	31200	16300	15500	21300	17000	22400	17800	16300	1880	6110	6210	4840
22	29300	16200	16300	27700	17000	20500	17700	16600	3060	6460	6340	5900
23	23600	16200	16600	29900	17000	18700	19200	16700	3750	6510	6010	6600
24	19400	16200	16700	27700	16800	17400	20400	16400	4010	6180	6040	6930
25	17200	16400	16500	26400	16500	16700	21600	16000	4180	5040	6320	6830
26	15500	16600	16400	27600	16400	16200	22300	15700	3950	3440	6400	6010
27	14100	16500	16200	35900	16700	16000	22200	15500	2540	4320	6380	4260
28	13300	15200	16300	45700	17800	15800	23600	15600	1930	5210	6310	4520
29	13100	13100	16600	58000	---	16400	27100	16800	3020	5610	5990	5040
30	13500	11500	16400	62200	---	17400	29800	15700	3890	5830	5340	5260
31	14200	---	16600	55600	---	18300	---	13100	---	5940	5490	---
TOTAL	297320	447400	416730	770900	557900	607200	701600	581100	237660	169160	196050	154870
MEAN	9591	14910	13440	24870	19920	19590	23390	18750	7922	5457	6324	5162
MAX	31200	16600	17100	62200	46100	25100	45700	30300	18200	7170	7530	6930
MIN	1300	11100	7790	15300	15900	15800	17000	13100	1880	3410	4870	2320
AC-FT	589700	887400	826600	1529000	1107000	1204000	1392000	1153000	471400	335500	388900	307200

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
(National stream-quality accounting network)

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1995#, BY WATER YEAR (WY)

MEAN	2615	3707	8506	12300	12860	13560	12360	10880	8834	6690	4492	3989
MAX	9591	14910	22070	32800	27990	27480	33240	29510	26240	42320	7982	10530
(WY)	1995	1995	1983	1974	1974	1969	1969	1991	1989	1989	1975	1973
MIN	292	327	1366	1422	1559	2287	1030	1505	1428	805	382	333
(WY)	1968	1968	1981	1981	1968	1981	1971	1971	1970	1967	1967	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1967 - 1995#	
ANNUAL TOTAL	3260190		5137890			
ANNUAL MEAN	8932		14080		8378	
HIGHEST ANNUAL MEAN					14210	1975
LOWEST ANNUAL MEAN					1959	1967
HIGHEST DAILY MEAN	31200	Oct 21	62200	Jan 30	108000	Jul 6 1989
LOWEST DAILY MEAN	1300	Oct 10	1300	Oct 10	278	Oct 28 1967
ANNUAL SEVEN-DAY MINIMUM	1440	Oct 8	1440	Oct 8	282	Oct 9 1967
INSTANTANEOUS PEAK FLOW			63100	Jan 30	109000	Jul 6 1989
INSTANTANEOUS PEAK STAGE			26.70	Jan 30	29.15	Jul 6 1989
ANNUAL RUNOFF (AC-FT)	6467000		10190000		6069000	
10 PERCENT EXCEEDS	16500		23400		18900	
50 PERCENT EXCEEDS	7210		15700		5240	
90 PERCENT EXCEEDS	3390		4070		1230	

e Estimated
Period of regulated streamflow.

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
(National stream-quality accounting network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: September 1945 to September 1946, October 1947 to current year. Chemical and biochemical analyses: February 1968 to current year. Pesticide analyses: January 1968 to May 1982. Radiochemical analyses: October 1969 to current year. Sediment analyses: October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1945 to September 1946, October 1947 to current year.
WATER TEMPERATURE: October 1947 to current year.
pH: July 1968 to May 1975
COLOR: November 1969 to December 1975.
DISSOLVED OXYGEN: July 1968 to May 1975.
CHLORIDE: July 1968 to September 1968.

INSTRUMENTATION.--From October 31, 1992 to current year, a water-quality monitor continuously recorded specific conductance and water temperature at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 779 microsiemens Aug. 31, 1966; minimum, 27 microsiemens Feb. 16, 1984.
WATER TEMPERATURE: Maximum, 36.0°C Aug. 14, 1962; minimum, 1.0°C Jan. 28, 1948.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 286 microsiemens Oct. 27; minimum daily, 74 microsiemens Oct. 20.
WATER TEMPERATURE: Maximum daily, 33.5°C July 13,14, Aug.27 and 30; minimum daily, 7.5°C Jan. 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
FEB												
13...	1510	16500	138	6.7	10.0	10	10.4	92	1.0	K6	23	30
MAY												
09...	1100	19200	120	6.6	21.5	17	6.8	77	1.4	84	160	26
JUN												
28...	1050	1750	130	6.8	29.0	18	6.5	85	1.4	32	24	29
AUG												
15...	1535	6610	126	7.0	29.5	8.2	6.5	85	1.3	34	330	27

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
FEB												
13...	7	7.4	2.7	13	1	2.9	0	28	22	12	18	0.10
MAY												
09...	8	6.5	2.3	9.9	0.8	2.6	0	22	18	13	13	<0.10
JUN												
28...	5	7.3	2.7	11	0.9	2.6	0	30	24	12	13	<0.10
AUG												
15...	10	6.6	2.5	11	0.9	2.5	0	20	16	15	14	<0.10

DATE	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
FEB											
13...	7.6	98	78	0.090	<0.010	0.090	0.090	<0.015	0.49	0.40	0.40
MAY											
09...	6.2	83	65	0.070	<0.010	0.070	0.070	0.020	0.57	0.48	0.50
JUN											
28...	9.2	97	73	0.060	<0.010	0.060	0.060	<0.015	0.36	0.30	0.30
AUG											
15...	4.9	73	67	--	<0.010	--	<0.050	<0.015	0.30	0.30	0.30

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)
FEB											
13...	0.030	0.020	<0.010	14	624	95	120	44	<3	120	<4
MAY											
09...	0.040	0.020	<0.010	25	1300	97	220	48	<3	390	<4
JUN											
28...	0.030	<0.010	<0.010	66	312	56	80	46	<3	370	<4
AUG											
15...	0.040	0.010	<0.010	181	3230	27	20	41	<3	88	<4

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
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WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	URANIUM NATURAL 2 SIGMA WATER, DISS, (UG/L)	RA-226 2 SIGMA WATER, DISS, (PCI/L)
FEB											
13...	33	<10	<1	<1	<1.0	93	<6	0.18	0.03	0.0	0.030
MAY											
09...	58	<10	<1	<1	<1.0	81	<6	--	--	--	--
JUN											
28...	90	<10	2	<1	<1.0	94	<6	--	--	--	--
AUG											
15...	29	<10	2	<1	<1.0	85	<6	0.03	0.04	0.0	0.010

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	144	128	136	148	120	135	144	141	143
2	---	---	---	161	128	145	139	125	132	142	140	141
3	142	138	139	166	146	155	144	136	141	142	141	142
4	150	134	140	160	146	152	148	141	144	142	138	140
5	169	143	155	178	129	155	156	136	143	144	138	141
6	179	162	171	162	125	143	151	136	144	148	144	146
7	189	174	181	138	121	130	156	143	148	148	146	147
8	190	178	186	135	118	125	161	148	152	149	146	147
9	178	155	169	132	120	128	153	144	149	148	146	147
10	155	128	145	125	119	122	146	129	137	148	146	147
11	130	118	124	135	118	122	134	119	126	148	147	148
12	125	114	118	143	125	132	139	117	127	149	147	148
13	125	114	118	143	121	131	137	124	131	147	143	145
14	142	115	128	146	130	136	137	125	131	143	133	139
15	134	118	122	152	137	142	139	127	133	133	127	130
16	134	121	127	145	140	143	141	132	135	127	124	126
17	128	110	120	150	133	139	137	127	133	128	124	126
18	114	89	105	145	129	137	148	122	133	130	127	129
19	89	75	80	151	128	136	139	113	123	132	129	131
20	84	74	77	150	136	142	137	115	124	131	123	128
21	100	83	90	157	133	145	156	122	132	123	113	118
22	121	100	109	150	133	140	155	131	137	113	107	110
23	148	117	131	142	127	133	136	134	135	107	105	106
24	194	147	166	148	125	130	136	135	136	109	105	107
25	193	170	178	142	128	132	138	135	137	118	109	114
26	218	172	193	148	130	138	143	134	139	124	118	122
27	286	195	242	147	137	141	145	142	143	124	112	120
28	274	205	238	148	133	140	145	144	144	112	108	110
29	213	189	200	146	133	140	145	144	145	108	89	99
30	226	179	204	155	103	123	146	145	145	89	83	84
31	180	141	165	---	---	---	146	144	145	93	83	88
MONTH	286	74	149	178	103	137	161	113	137	149	83	128

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
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SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	104	93	99	122	116	118	136	118	125	138	128	132
2	116	104	110	116	114	115	139	117	127	143	124	134
3	123	116	120	115	113	114	141	121	130	139	127	132
4	126	122	124	116	113	115	134	129	131	139	128	133
5	131	126	128	119	116	117	139	131	135	140	128	134
6	133	130	132	120	118	119	146	131	137	141	131	135
7	136	133	134	119	115	117	145	129	137	141	133	136
8	138	135	137	115	113	114	143	129	136	138	125	132
9	140	137	138	113	110	112	144	130	137	130	124	128
10	141	139	140	145	107	119	140	125	135	134	129	132
11	141	140	141	141	130	134	125	93	108	132	129	131
12	141	140	140	130	118	123	100	86	93	132	128	130
13	141	138	140	124	110	117	103	88	96	130	125	128
14	139	137	139	117	110	114	103	88	95	125	121	124
15	137	133	134	112	98	105	106	91	97	125	120	122
16	133	128	130	118	88	98	111	97	104	128	98	110
17	128	127	127	103	100	102	118	104	110	103	97	100
18	128	127	127	108	99	105	127	113	120	103	97	100
19	127	125	126	117	105	110	133	124	129	98	95	97
20	126	124	125	115	108	112	138	127	132	97	94	95
21	126	123	125	135	114	124	143	126	134	122	92	108
22	125	122	124	132	121	126	148	139	142	117	91	98
23	124	123	123	137	124	128	139	120	130	117	91	103
24	125	123	124	140	126	132	136	115	123	119	93	97
25	125	123	124	146	131	137	132	115	123	118	93	100
26	126	123	124	149	137	142	129	114	121	123	94	100
27	125	124	124	148	134	141	128	113	120	123	94	106
28	124	121	123	140	130	136	135	119	127	118	92	101
29	---	---	---	131	126	128	131	123	126	113	92	106
30	---	---	---	135	125	128	135	122	129	109	96	101
31	---	---	---	134	120	126	---	---	---	96	91	94
MONTH	141	93	128	149	88	120	148	86	123	143	91	115

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	102	91	95	132	108	122	130	112	123	---	---	---
2	110	83	97	155	109	128	112	96	103	---	---	---
3	96	87	90	164	107	139	143	112	131	---	---	---
4	123	91	104	123	81	103	147	136	140	---	---	---
5	130	96	115	148	81	97	145	134	139	---	---	---
6	139	102	120	149	139	145	144	137	140	---	---	---
7	145	106	131	139	130	134	142	134	139	---	---	---
8	138	103	116	130	107	117	141	134	136	---	---	---
9	136	101	104	138	107	120	138	128	131	---	---	---
10	102	99	100	139	133	135	140	123	132	---	---	---
11	134	99	103	137	130	135	136	128	133	---	---	---
12	138	98	107	142	128	133	136	130	134	---	---	---
13	135	91	116	153	136	142	135	128	133	---	---	---
14	129	90	115	140	135	137	135	130	133	---	---	---
15	128	90	103	139	135	136	134	128	131	---	---	---
16	128	93	113	138	133	135	128	118	122	---	---	---
17	133	89	112	133	123	126	124	117	119	---	---	---
18	139	102	108	123	102	113	117	108	114	---	---	---
19	139	107	115	123	99	108	108	106	106	---	---	---
20	145	108	122	130	123	126	106	99	103	---	---	---
21	151	107	130	133	117	124	104	96	99	---	---	---
22	139	102	112	133	120	126	113	102	109	---	---	---
23	131	98	106	134	125	130	124	102	110	---	---	---
24	131	98	108	134	130	133	119	104	109	---	---	---
25	132	99	110	135	117	129	140	110	123	---	---	---
26	136	100	120	138	117	129	145	121	127	---	---	---
27	133	130	132	144	134	137	149	131	140	---	---	---
28	137	130	133	136	134	135	167	148	154	---	---	---
29	158	106	138	135	130	133	---	---	---	---	---	---
30	122	103	112	134	128	131	---	---	---	---	---	---
31	---	---	---	133	125	128	---	---	---	---	---	---
MONTH	158	83	113	164	81	128	167	96	125	---	---	---
YEAR	286	74	128									

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
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WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08030500 SABINE RIVER NEAR RULIFF, TX--Continued
(National stream-quality accounting network)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	22.0	23.5	---	---	---	30.5	30.0	30.0	33.0	32.5	32.5
2	26.0	26.0	26.0	---	---	---	30.5	29.5	30.0	33.0	32.5	32.5
3	26.0	25.0	25.5	---	---	---	31.0	30.5	30.5	33.0	32.5	32.5
4	26.5	24.5	26.0	30.0	29.5	29.5	31.0	30.5	30.5	32.5	32.5	32.5
5	27.5	27.5	27.5	30.0	29.5	29.5	31.0	30.5	31.0	32.5	31.0	32.0
6	---	---	---	30.0	29.0	29.5	32.0	31.0	31.5	31.5	30.5	31.0
7	---	---	---	29.5	29.0	29.5	32.0	31.5	32.0	31.5	30.5	31.0
8	---	---	---	29.0	27.5	27.5	31.5	31.0	31.5	31.5	30.5	31.0
9	---	---	---	---	---	---	32.0	31.0	31.5	31.5	31.0	31.0
10	---	---	---	---	---	---	32.0	32.0	32.0	31.0	31.0	31.0
11	---	---	---	32.0	31.5	32.0	32.5	32.0	32.0	31.0	31.0	31.0
12	---	---	---	33.0	31.0	32.0	32.0	32.0	32.0	31.0	30.5	31.0
13	---	---	---	33.5	32.5	33.0	32.0	32.0	32.0	31.5	30.0	30.5
14	---	---	---	33.5	32.5	33.0	32.0	31.5	32.0	31.5	31.0	31.5
15	---	---	---	32.5	31.5	32.5	31.5	31.0	31.0	32.0	31.5	31.5
16	---	---	---	32.0	30.5	31.5	31.5	30.5	31.0	32.0	31.5	31.5
17	---	---	---	30.5	30.5	30.5	32.0	31.5	31.5	32.0	31.5	31.5
18	---	---	---	30.5	30.0	30.5	32.5	32.0	32.0	31.5	31.5	31.5
19	---	---	---	31.0	29.5	30.5	32.0	30.5	31.5	31.5	31.0	31.5
20	29.5	29.5	29.5	32.0	31.0	31.5	33.0	33.0	33.0	31.5	30.5	31.0
21	31.5	31.0	31.0	32.0	31.5	31.5	33.0	32.5	33.0	31.5	31.0	31.0
22	31.5	30.0	30.5	32.5	32.0	32.5	33.0	32.5	32.5	31.0	28.5	30.0
23	31.0	30.0	30.5	33.0	32.5	33.0	32.5	32.0	32.5	28.5	27.0	27.5
24	29.5	29.5	29.5	32.5	31.5	32.5	32.5	32.5	32.5	27.0	26.5	26.5
25	31.5	30.0	31.0	33.0	28.0	31.0	33.0	32.5	32.5	27.0	26.0	26.5
26	31.5	31.0	31.5	33.0	32.0	32.5	33.0	32.5	33.0	27.0	26.5	27.0
27	31.5	30.0	31.0	33.0	31.5	32.5	33.5	33.0	33.0	28.0	26.5	27.5
28	31.0	28.5	30.5	---	---	---	33.0	33.0	33.0	28.5	28.0	28.5
29	---	---	---	33.0	31.5	32.5	33.0	32.5	33.0	28.5	28.5	28.5
30	---	---	---	---	---	---	33.5	32.5	33.0	28.5	28.5	28.5
31	---	---	---	31.0	30.0	31.0	33.0	32.5	33.0	---	---	---
MONTH	31.5	22.0	29.0	33.5	27.5	31.5	33.5	29.5	32.0	33.0	26.0	30.5
YEAR	33.5	7.5	23.5									

08032000 NECHES RIVER NEAR NECHES, TX

LOCATION.--Lat 31°53'32", long 95°25'50", Anderson-Cherokee County line, Hydrologic Unit 12020001, on left bank just downstream from bridge on U.S. Highway 79, 1.0 mi downstream from Missouri Pacific Railroad Co. bridge, 1.4 mi downstream from Walnut Creek, 4.4 mi northeast of Neches and at mile 333.2.

DRAINAGE AREA.--1,145 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 264.06 ft above sea level. Prior to Oct. 27, 1945, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Some regulation by Lake Palestine (station 08031400) 11 mi upstream and by Lake Athens 50 mi upstream (combined capacity 454,600 acre-ft). There are no large diversions above station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--22 years (water years 1940-61) unregulated, 804 ft³/s (502,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1940-61).--Maximum discharge, 45,500 ft³/s Apr. 2, 1945 (gage height, 22.07 ft); no flow Oct. 3-5, 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1908 (stage 24.3 ft) was the highest since flood in May 1884, which was probably higher.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	1570	668	2470	2690	2080	1060	1450	640	213	204	184
2	164	1460	604	2300	2470	1950	994	1330	657	225	230	181
3	164	1280	587	2180	2260	1800	920	1260	605	206	279	177
4	164	1120	598	2050	2110	1700	902	1260	541	196	267	174
5	163	1130	588	1920	1990	1610	1020	1270	509	200	237	171
6	163	1300	565	1800	1810	1520	1110	1330	467	236	219	171
7	166	1480	555	1640	1640	1450	1160	1660	407	290	208	171
8	1160	1850	587	1530	1490	1440	1160	2480	367	244	201	171
9	1940	2280	605	1420	1390	1470	1130	3760	337	224	198	171
10	1380	2750	836	1310	1250	1310	1100	5510	329	209	196	170
11	918	3110	1020	1210	1130	1120	1560	7020	904	202	196	170
12	583	3070	1050	1140	1120	1000	2100	7580	1220	196	198	168
13	425	2830	1030	1460	1100	980	2550	7010	1190	193	196	171
14	350	2560	1040	1900	1100	1260	2530	5920	1030	196	192	173
15	306	2300	1410	2200	1190	1540	2390	4960	795	199	192	173
16	325	2140	3080	2190	1230	1740	2180	4170	625	201	194	175
17	883	2010	6040	2090	1220	1870	2000	3440	549	209	201	185
18	1160	1850	8370	2720	1190	2080	1860	2810	500	211	196	316
19	1110	1680	9850	3420	1110	2250	1740	2390	450	225	190	311
20	949	1510	9240	3230	1040	2240	1650	2140	410	241	186	389
21	992	1370	7910	2880	990	2130	1570	1880	375	245	184	380
22	1120	1250	6560	2630	945	2010	1550	1620	343	228	184	314
23	1370	1150	5490	2530	894	1860	1930	1390	314	222	181	287
24	1450	1060	4560	2540	863	1710	2610	1190	286	209	179	258
25	1440	966	3800	2450	849	1590	2860	1020	263	201	178	236
26	1570	879	3170	2370	848	1460	2420	911	273	195	176	223
27	1800	821	2690	2770	1400	1330	2090	818	231	190	176	213
28	1940	785	2390	2850	1950	1260	1890	704	212	187	175	206
29	1950	755	2430	2920	---	1220	1760	642	204	184	174	200
30	1840	713	2550	2920	---	1180	1600	601	200	182	174	195
31	1710	---	2690	2860	---	1120	---	614	---	193	176	---
TOTAL	29819	49029	92563	69900	39269	49280	51396	80140	15233	6552	6137	6484
MEAN	962	1634	2986	2255	1402	1590	1713	2585	508	211	198	216
MAX	1950	3110	9850	3420	2690	2250	2860	7580	1220	290	279	389
MIN	163	713	555	1140	848	980	902	601	200	182	174	168
AC-FT	59150	97250	183600	138600	77890	97750	101900	159000	30210	13000	12170	12860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995#, BY WATER YEAR (WY)

MEAN	230	428	806	832	1075	1266	1275	1322	805	219	121	204
MAX	2064	2559	3344	3097	3097	2879	4162	5289	4129	1076	617	1313
(WY)	1974	1975	1992	1991	1992	1987	1966	1968	1973	1976	1979	1973
MIN	12.8	16.0	82.1	102	180	92.0	60.1	43.3	23.7	12.5	9.70	8.37
(WY)	1964	1964	1990	1981	1981	1972	1972	1972	1971	1964	1964	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995#	
ANNUAL TOTAL	401107		495802			
ANNUAL MEAN	1099		1358		713	
HIGHEST ANNUAL MEAN					1358	1995
LOWEST ANNUAL MEAN					106	1972
HIGHEST DAILY MEAN	9850	Dec 19	9850	Dec 19	26200	May 13 1968
LOWEST DAILY MEAN	163	Oct 5	163	Oct 5	3.3	Nov 1 1963
ANNUAL SEVEN-DAY MINIMUM	164	Sep 30	164	Oct 1	3.4	Oct 29 1963
INSTANTANEOUS PEAK FLOW			10400	Dec 19	26900	May 13 1968
INSTANTANEOUS PEAK STAGE			17.06	Dec 19	19.46	May 13 1968
ANNUAL RUNOFF (AC-FT)	795600		983400		516500	
10 PERCENT EXCEEDS	2410		2690		1760	
50 PERCENT EXCEEDS	605		1110		276	
90 PERCENT EXCEEDS	175		185		53	

Period of regulated streamflow.

08032000 NECHES RIVER NEAR NECHES, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: December 1969 to current year. Biochemical analyses: October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1969 to September 1991.
WATER TEMPERATURES: December 1983 to September 1991.

INSTRUMENTATION.--Specific conductance was recorded from December 1969 to September 1991. Water temperature was recorded continuously from December 1983 to September 1991.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (1974-88): Maximum, 1,190 microsiemens Aug. 29, 1976; minimum 65 microsiemens June 1, 1990.
WATER TEMPERATURE: Maximum, 36.0°C July 16, 1985; minimum, 0.0°C Dec. 24, 25, 1989.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DISSOLVED (MG/L AS CA)
MAR 23...	1550	1840	135	6.8	19.5	8.8	96	1.2	33	14	7.9
APR 27...	1305	2070	138	6.6	19.5	6.5	71	1.0	33	13	7.9
JUN 01...	1345	643	158	6.0	24.5	7.0	84	3.0	36	13	8.7
JUL 06...	1325	225	170	6.9	27.5	6.7	85	1.7	39	14	9.3
AUG 10...	1225	196	155	7.4	28.0	6.4	83	1.4	39	11	9.4
SEP 05...	1250	171	159	7.2	28.5	6.5	84	1.9	39	13	9.5

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
MAR 23...	3.3	11	0.8	3.6	19	14	18	<0.10	7.6	77	0.070
APR 27...	3.2	11	0.8	3.2	20	14	16	<0.10	4.0	72	0.110
JUN 01...	3.5	12	0.9	3.7	23	16	17	0.10	4.6	80	0.120
JUL 06...	3.8	13	0.9	3.8	25	14	20	0.10	7.9	88	0.190
AUG 10...	3.8	12	0.8	3.7	28	13	17	0.10	8.5	85	0.210
SEP 05...	3.6	12	0.8	3.9	26	15	18	0.10	7.5	86	0.150

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)
MAR 23...	--	<0.010	0.070	0.070	<0.015	--	0.40	0.010	<0.010	--
APR 27...	--	<0.010	0.110	0.110	0.040	0.36	0.40	0.020	<0.010	--
JUN 01...	--	<0.010	0.120	0.120	0.140	0.46	0.60	<0.010	<0.010	--
JUL 06...	0.190	0.020	0.210	0.210	0.170	0.33	0.50	<0.010	0.010	0.03
AUG 10...	0.210	0.030	0.240	0.240	<0.015	--	0.30	<0.010	<0.010	--
SEP 05...	--	<0.010	0.150	0.150	0.020	0.38	0.40	<0.010	<0.010	--

08033000 NECHES RIVER NEAR DIBOLL, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°07'58", long 94°48'35", Angelina-Polk County line, Hydrologic Unit 12020002, near center of main span of downstream bridge on U.S. Highway 59, 700 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.9 mi downstream from Alabama Creek, 3.8 mi south of Diboll and at mile 203.5

DRAINAGE AREA.--2,724 mi².

PERIOD OF RECORD.--October 1923 to September 1925, March 1939 to September 1985. Monthly discharge only for some periods, published in WSP 1312. October 1985 to September 1989 (annual maximum), October 1989 to present (peaks above base discharge and maximum).
Water-quality records: Chemical and biochemical analyses: October 1969 to September 1981.

REVISED RECORDS.--WSP 1242: 1950. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 136.46 ft above sea level. Prior to July 10, 1925, nonrecording gage at site 630 ft upstream; July 10 to Aug. 31, 1925, and Mar. 30, 1939, to Sept. 24, 1943, nonrecording gage at site 500 ft upstream; Sept. 25, 1943, to Aug. 16, 1973, nonrecording gage at site 70 ft upstream; all at present datum.

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

AVERAGE DISCHARGE.--24 years (water years 1923-25, 1939-61) unregulated, 1,807 ft³/s (1,309,000 acre-ft/yr); 24 years (water years 1962-85) regulated, 1,353 ft³/s (980,200 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,900 ft³/s May 4, 1944 (gage height, 18.70 ft); no flow Aug. 15-22, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1874, 21 ft in May 1884 (discharge, about 110,000 ft³/s) from rating curve extended above 40,000 ft³/s; flood in 1900 reached a stage of 19.9 ft (discharge, about 80,000 ft³/s), from information by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base of 6,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	1900	44,900	18.16	Mar. 8	0600	13,400	15.26
Dec. 20	1400	13,600	15.29	Mar. 14	1000	12,200	15.05
Jan. 19	1600	16,600	15.73	Apr. 12	0100	14,200	15.38
Jan. 28	0100	10,800	14.79	May 21	1100	6,560	13.73

08033500 NECHES RIVER NEAR ROCKLAND,

(Hydrologic index station)

LOCATION.--Lat 31°01'29", long 94°23'55", Tyler County, Hydrologic Unit 12020003, on downstream side of bridge at U.S. Highway 69, 2,200 ft upstream from abandoned ferry crossing, 0.8 mi upstream from Texas and New Orleans Railway Co. bridge, 1.2 mi north of Rockland, 3.2 mi downstream from Billiams Creek and 32.4 mi upstream from Angelina River.

DRAINAGE AREA.--3,636 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1903 to current year.

REVISED RECORDS.--WSP 878: 1926-27. WSP 1342: 1922(M), 1935. WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 88.41 ft above sea level. Prior to May 23, 1973, nonrecording gage located 2,200 ft downstream at datum 3.00 ft higher. May 23, 1973, to Sept. 30, 1975, recording gage at present site at datum 3.00 ft higher.

REMARKS.--Records good. At times, low flow may be affected by regulation from Lake Athens, by Lake Palestine (station 08031400), and by Lake Jacksonville, with a combined capacity of 130,700 acre-ft. Between October and September of the current year, the Upper Neches Municipal Water Authority diverted 3,170 acre-ft from the Neches River at a diversion point about 10 mi downstream from station Neches River near Neches (08032000). This water is used for municipal and industrial purposes in the Palestine area. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--58 years (water years 1904-61) 2,362 (1,711,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1904-61).--Maximum discharge, 49,800 ft³/s May 6, 1944 (gage height, 35.04 ft), present site; minimum observed during period of daily records, 1.6 ft³/s Sept. 28-30, and Oct. 1, 2, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Historical flood information begins with flood in May 1884, which reached a stage of 38.0 ft, present site, from information by local resident (discharge, about 62,000 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	272	5070	2790	13200	14300	3650	3730	3560	5610	712	902	269
2	267	4280	2690	12900	13100	4140	3700	3390	5280	624	1250	290
3	261	3810	2680	12500	11800	4370	3600	3240	4820	559	942	307
4	256	3510	2580	12100	10700	4700	3580	3160	4420	513	863	295
5	251	3370	2330	11500	9650	4880	4000	3140	3770	591	843	271
6	246	3630	2090	10800	8610	4640	4610	3140	3120	588	954	269
7	241	3620	1860	10200	7600	4880	4980	3170	2590	484	1070	265
8	279	3310	1950	9520	6760	5810	4930	3440	1960	468	1150	264
9	301	3230	2740	8790	6110	7040	4690	4310	1440	464	939	265
10	607	3190	3230	8050	5620	9270	4480	5190	1170	468	796	251
11	850	3120	3990	7370	5260	11200	5340	5510	1180	472	668	234
12	905	3040	4120	6760	4970	11400	5830	5390	1730	485	565	220
13	999	2930	3830	7350	4720	11000	7860	4880	1760	506	490	212
14	1050	2820	3520	7680	4600	11600	11600	4140	1750	515	433	205
15	1150	2710	3290	8150	4490	13700	13100	3540	1670	531	419	202
16	1560	2620	6640	8310	4380	17300	12700	3140	1640	537	415	211
17	7670	2540	10400	8090	4290	18300	11400	2940	1680	495	390	223
18	16300	2460	14800	10400	4240	17700	9740	2920	1720	420	372	244
19	33700	2410	17900	14100	4140	16100	7930	3000	1720	391	371	274
20	41500	2380	18600	17800	4020	14000	6420	3150	1700	856	391	299
21	40600	2380	18600	20700	3860	11800	5850	3560	1660	558	391	367
22	36100	2430	18300	21300	3700	9770	5700	4110	1580	541	372	517
23	30600	2500	17900	20300	3520	7950	6120	4690	1460	528	364	1070
24	24700	2590	17100	18600	3340	6420	6100	5160	1260	483	350	1510
25	20500	2690	16100	16900	3170	5240	5570	5400	1060	462	385	1370
26	17500	2790	14800	15300	3010	4520	5030	5400	941	452	342	1090
27	14800	2860	13400	15900	2870	4140	4550	5210	887	430	306	887
28	12100	2930	12200	16100	3010	3890	4190	4900	822	403	296	747
29	9730	2900	12300	16400	---	3730	3920	4630	751	389	278	642
30	7700	2860	12600	16000	---	3730	3730	4570	710	390	265	e600
31	6200	---	13100	15300	---	3740	---	5020	---	412	258	---
TOTAL	329195	90980	278430	398370	165840	260610	184980	127000	61861	15727	17830	13870
MEAN	10620	3033	8982	12850	5923	8407	6166	4097	2062	507	575	462
MAX	41500	5070	18600	21300	14300	18300	13100	5510	5610	856	1250	1510
MIN	241	2380	1860	6760	2870	3650	3580	2920	710	389	258	202
AC-FT	653000	180500	552300	790200	328900	516900	366900	251900	122700	31190	35370	27510

08033500 NECHES RIVER NEAR ROCKLAND.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995#, BY WATER YEAR (WY)

MEAN	832	1167	2460	3586	3789	3948	3802	4068	2730	1200	391	467
MAX	10620	6142	8982	12850	13930	13750	11990	12730	10360	11260	2673	3042
(WY)	1995	1974	1995	1995	1992	1992	1979	1969	1990	1989	1991	1979
MIN	36.6	65.8	213	263	368	475	282	469	102	42.9	34.2	43.1
(WY)	1964	1965	1981	1981	1971	1967	1971	1971	1971	1971	1964	1964

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995#	
ANNUAL TOTAL	1465637		1944693			
ANNUAL MEAN	4015		5328		2363	
HIGHEST ANNUAL MEAN					5328	1995
LOWEST ANNUAL MEAN					352	1971
HIGHEST DAILY MEAN	41500	Oct 20	41500	Oct 20	41600	Jul 2 1989
LOWEST DAILY MEAN	234	Aug 7	202	Sep 15	18	Aug 30 1970
ANNUAL SEVEN-DAY MINIMUM	246	Aug 1	215	Sep 11	23	Jul 21 1971
INSTANTANEOUS PEAK FLOW			42300	Oct 20	42300	Oct 20 1994
INSTANTANEOUS PEAK STAGE			33.29	Oct 20	33.29	Oct 20 1994
ANNUAL RUNOFF (AC-FT)	2907000		3857000		1712000	
10 PERCENT EXCEEDS	9780		14200		6210	
50 PERCENT EXCEEDS	2500		3370		941	
90 PERCENT EXCEEDS	387		358		106	

e Estimated
Period of regulated streamflow.

08033500 NECHES RIVER NEAR ROCKLAND,

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: April 1941 to September 1942, September 1945 to September 1947. Chemical and biochemical analyses: December 1967 to current year. Sediment analyses: 1961 to 1963.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1941 to September 1942, and September 1945 to September 1947.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB											
15...	1550	4480	160	6.8	12.0	6.9	65	1.8	36	17	8.6
MAR											
22...	0920	9980	130	6.8	20.5	6.2	70	1.4	32	13	7.8
MAY											
10...	1545	5320	142	6.6	22.0	6.6	76	2.2	30	7	7.5
JUN											
29...	1435	725	185	6.8	27.0	6.4	81	1.0	38	13	9.0
JUL											
27...	1054	433	208	7.2	31.0	6.4	87	0.8	37	4	8.7
AUG											
30...	0955	266	188	7.3	30.0	6.5	86	1.2	37	3	8.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
FEB										
15...	3.5	14	1	2.8	19	20	19	0.10	10	90
MAR										
22...	3.0	12	0.9	2.4	19	17	16	<0.10	9.5	79
MAY										
10...	2.8	13	1	2.7	23	19	15	<0.10	7.7	82
JUN										
29...	3.8	17	1	3.8	25	19	22	0.10	12	103
JUL										
27...	3.8	23	2	3.5	33	19	25	0.20	13	117
AUG										
30...	3.7	20	1	3.4	34	15	23	0.10	14	110

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
FEB										
15...	0.060	--	<0.010	0.060	0.060	0.020	0.28	0.30	0.020	0.010
MAR										
22...	--	--	0.010	--	<0.050	<0.015	--	0.60	0.050	0.040
MAY										
10...	0.120	0.120	0.010	0.130	0.130	0.040	0.46	0.50	0.030	0.020
JUN										
29...	0.340	--	<0.010	0.340	0.340	0.020	0.38	0.40	0.030	0.020
JUL										
27...	0.230	--	<0.010	0.230	0.230	<0.015	--	0.20	<0.010	<0.010
AUG										
30...	0.120	--	<0.010	0.120	0.120	<0.015	--	0.30	0.030	0.010

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
FEB										
15...	0.03	1	43	<0.5	<1.0	<5	4	<10	370	<10
MAR										
22...	0.12	--	--	--	--	--	--	--	--	--
MAY										
10...	0.06	--	--	--	--	--	--	--	--	--
JUN										
29...	0.06	--	--	--	--	--	--	--	--	--
JUL										
27...	--	--	--	--	--	--	--	--	--	--
AUG										
30...	0.03	1	48	<0.5	<1.0	<5	<3	<10	390	<10

08033500 NECHES RIVER NEAR ROCKLAND,

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB										
15...	13	62	<0.1	<10	<10	<1	2.0	88	<6	5
MAR										
22...	--	--	--	--	--	--	--	--	--	--
MAY										
10...	--	--	--	--	--	--	--	--	--	--
JUN										
29...	--	--	--	--	--	--	--	--	--	--
JUL										
27...	--	--	--	--	--	--	--	--	--	--
AUG										
30...	10	90	<0.1	10	<10	<1	<1.0	98	<6	<3

08036500 ANGELINA RIVER NEAR ALTO, TX

LOCATION.--Lat 31°40'10", long 94°57'24", Nacogdoches-Cherokee County line, Hydrologic Unit 12020004, near center of rectified channel on downstream side of bridge on State Highway 21, 0.4 mi upstream from Allen Creek, 1.5 mi upstream from Bingham Creek, 7.5 mi east of Alto, and 149.3 mi upstream from mouth.

DRAINAGE AREA.--1,276 mi².

PERIOD OF RECORD.--May to August 1940 (discharge measurements only), September 1940 to March 1949 (fragmentary for 1941-42, 1944-49), February 1959 to current year.
Water-quality records.--Chemical analyses: November 1961 to September 1963.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 204.30 ft above sea level. May 9, 1940, to Mar.31, 1949, nonrecording gage on bridge at natural channel 1,400 ft to right at same datum. Feb. 18 to Sept. 15, 1959, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. No large diversions above station. Flow partly regulated since May 1957 by Lake Striker, 35.5 mi upstream and by Lake Tyler, 69.9 mi upstream since January 1949 (combined capacity, 110,700 acre-ft). Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1905, that of Mar. 31, 1989. A flood in May 1908 reached a stage of about 22 ft, from information by local residents. Flood in 1932 reached a stage of 21.5 ft, from floodmarks and from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	1830	431	5110	4800	2790	1060	3560	556	161	166	43
2	54	1420	430	5560	4400	3910	1070	2860	602	167	195	59
3	51	1130	472	5220	3820	5230	1020	2270	496	172	224	60
4	50	927	516	4640	3270	5700	1110	1810	431	177	269	54
5	49	867	528	4050	2830	5490	1290	1560	400	168	257	49
6	47	851	533	3610	2450	4920	1520	1640	362	177	209	44
7	43	898	537	3080	2110	4190	1630	1820	327	185	175	43
8	116	1000	566	2650	1760	3690	1730	2310	301	212	149	80
9	198	1070	599	2300	1480	3240	1780	2990	281	262	126	86
10	392	1080	1160	2050	1300	2930	1760	4100	262	321	113	64
11	924	1020	1420	1870	1210	2750	2280	6150	331	260	106	49
12	1680	1010	1580	1730	1170	2710	2150	7080	636	189	95	43
13	2130	1060	1920	1890	1140	3050	2410	6880	1020	155	85	49
14	2460	1080	2400	1900	1230	3580	3040	6170	1280	147	78	48
15	2490	995	3050	1880	1310	3880	3350	5330	1270	142	75	71
16	2380	889	5260	2040	1390	5140	3550	4320	979	138	72	107
17	3790	847	6880	2330	1520	6010	3620	3540	653	143	83	152
18	3040	840	11100	3200	1690	5970	3390	2970	503	153	113	213
19	2820	824	11800	3930	1830	5630	2970	2470	402	154	107	244
20	3330	781	10000	5360	1880	4990	2490	1980	306	206	99	260
21	3690	735	8310	6780	1820	4120	2070	1540	260	342	86	272
22	3760	696	6850	6560	1680	3500	1760	1190	236	397	74	256
23	3580	635	5780	6070	1530	2990	2380	890	217	342	66	247
24	3440	554	4730	5540	1390	2580	2360	724	205	243	59	243
25	3420	509	3840	4870	1250	2200	4290	634	192	187	57	236
26	3370	487	3210	4140	1190	1840	7240	565	180	149	56	221
27	3230	470	2750	4040	2010	1570	7400	526	197	124	56	202
28	3060	460	2340	3710	2040	1400	6430	493	217	108	51	184
29	2830	452	3310	3650	---	1300	5500	462	190	109	48	169
30	2550	439	3150	4060	---	1220	4450	450	168	129	46	158
31	2230	---	3730	4630	---	1090	---	480	---	133	44	---
TOTAL	61261	25856	109182	118450	55500	109610	87100	79764	13460	5952	3439	4006
MEAN	1976	862	3522	3821	1982	3536	2903	2573	449	192	111	134
MAX	3790	1830	11800	6780	4800	6010	7400	7080	1280	397	269	272
MIN	43	439	430	1730	1140	1090	1020	450	168	108	44	43
AC-FT	121500	51290	216600	234900	110100	217400	172800	158200	26700	11810	6820	7950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 1995, BY WATER YEAR (WY)

MEAN	282	512	1195	1401	1581	1623	1512	1360	860	288	132	190
MAX	2350	2081	4836	4874	4642	4622	4301	4484	4316	1718	519	950
(WY)	1974	1986	1961	1991	1983	1969	1969	1966	1993	1976	1979	1973
MIN	5.56	18.0	67.8	150	158	183	172	119	34.2	18.0	22.4	16.2
(WY)	1968	1968	1965	1981	1967	1967	1972	1972	1971	1971	1972	1972

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1960 - 1995	
ANNUAL TOTAL	424023		673580			
ANNUAL MEAN	1162		1845		908	
HIGHEST ANNUAL MEAN					1917	1991
LOWEST ANNUAL MEAN					154	1964
HIGHEST DAILY MEAN	11800	Dec 19	11800	Dec 19	41600	Mar 31 1989
LOWEST DAILY MEAN	43	Oct 7	43	Oct 7	2.1	Aug 14 1964
ANNUAL SEVEN-DAY MINIMUM	50	Oct 1	49	Aug 26	3.5	Aug 8 1964
INSTANTANEOUS PEAK FLOW			12300	Dec 19	42500	Mar 31 1989
INSTANTANEOUS PEAK STAGE			19.18	Dec 19	23.20	Mar 31 1989
ANNUAL RUNOFF (AC-FT)	841000		1336000		657600	
10 PERCENT EXCEEDS	3100		4760		2310	
50 PERCENT EXCEEDS	607		1140		338	
90 PERCENT EXCEEDS	104		86		49	

08036700 LAKE NACOGDOCHES NEAR NACOGDOCHES, TX

LOCATION.--Lat 31°35'19", long 94°49'31", Nacogdoches County, Hydrologic Unit 12020004, at upstream side of dam on Bayou Loco near service outlet tower and 10 mi west of Nacogdoches.

DRAINAGE AREA.--87.9 mi².

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

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

REMARKS.--The lake is formed by a rolled earthfill dam. Deliberate impoundment began July 14, 1976. Water is used for industrial and municipal supply by the city of Nacogdoches. The spillway is an uncontrolled 500-foot-wide cut through natural ground located near the right end of dam. There is an uncontrolled drop inlet with a 20.5-foot-diameter top opening that is connected to an 8 x 7-foot conduit that extends through the dam. A separate multi-gated inlet tower is connected to a valve by a 30-inch conduit through the dam. The valve box directs water to a purification plant. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	303.0	-
Top of design flood	298.5	102,900
Crest of spillway	286.0	59,570
Crest of drop inlet (top of conservation pool)	279.0	42,320
Lowest gated outlet (invert of 30 in. conduit)	238.25	254

COOPERATION.--The capacity table, furnished by the city of Nacogdoches, is based on U.S. Geological Survey topographic maps dated 1952.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 54,640 acre-ft Oct. 17, 1994 (elevation, 284.18 ft); minimum since first appreciable storage, 20,540 acre-ft Nov. 26, 1977 (elevation, 266.62 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 54,640 acre-ft Oct. 17 at 2100 hours (elevation, 284.18 ft); minimum, 38,490 acre-ft Sept. 29 (elevation, 277.17 ft).

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

266.0	19,680	274.0	32,360	282.0	49,140
268.0	22,520	276.0	34,140	284.0	54,160
270.0	25,560	278.0	40,200	285.0	56,820
272.0	28,820	280.0	44,500		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40180	42210	41680	44060	43340	42950	42280	42780	41770	40840	39990	38940
2	40160	42130	41730	43720	43080	42890	42190	42630	41680	40810	39950	38900
3	40120	42040	41730	43450	42950	42890	42210	42540	41640	40730	39910	38780
4	40100	42020	41730	43210	42820	42860	42690	42470	41620	40690	39910	38760
5	40040	42650	41770	43040	42760	42800	42970	42390	41560	40790	39830	39130
6	39990	42730	41770	42950	42630	42800	43300	42360	41540	40750	39790	39070
7	39990	42560	41900	42910	42540	43760	43240	42320	41510	40690	39750	39090
8	41370	42450	41960	42890	42450	44000	43080	42950	41450	40650	39660	39030
9	41510	42450	42040	42800	42410	43690	42860	43170	41410	40600	39640	39010
10	41470	42430	42840	42710	42340	43450	44330	43080	41410	40540	39580	38960
11	41410	42300	42970	42580	42340	43280	49900	42890	41470	40500	39520	38820
12	41320	42240	42860	42710	42390	43100	48350	42820	41410	40430	39460	38820
13	41280	42150	42780	43670	42390	45840	46890	42690	41320	40540	39440	38800
14	41260	42170	42690	43800	42580	46950	45280	42580	41280	40500	39640	38760
15	41280	42110	43560	43610	42690	45910	44330	42450	41260	40480	39600	38700
16	42950	42090	50590	43370	42800	45020	43820	42320	41220	40430	39560	38630
17	54640	42020	49360	44000	42840	44350	43480	42260	41220	40410	39480	38720
18	52160	41980	48070	48060	42780	43930	43240	42260	41130	40410	39440	38650
19	49040	41980	46530	47120	42690	43610	42970	42190	41110	40370	39440	38820
20	47810	41940	45250	45640	42650	43320	42930	42040	41050	40310	39360	38860
21	46270	41920	44410	44700	42520	43100	42780	41960	41010	40260	39310	38680
22	45450	41940	43930	44170	42450	42970	43560	41940	40980	40200	39270	38860
23	44480	41870	43580	43870	42390	42820	47960	41870	40920	40160	39270	38780
24	43930	41870	43320	43560	42360	42780	46630	41830	40860	40080	39210	38740
25	43520	41870	43100	43340	42320	42630	45220	41830	40880	40040	39170	38680
26	43240	41810	42910	43480	42320	42520	44300	41730	40770	39950	39130	38610
27	42930	41830	42800	44860	42840	42490	43870	41680	40770	39930	39070	38550
28	42710	41810	43040	44630	42930	42390	43430	41810	40960	39870	39050	38530
29	42540	41810	45550	44190	---	42410	43170	41750	40960	39890	39010	38490
30	42450	41770	45150	43760	---	42410	42910	41790	40900	39970	39030	38510
31	42320	---	44500	43450	---	42360	---	41750	---	39950	39010	---
MAX	54640	42730	50590	48060	43340	46950	49900	43170	41770	40840	39990	39130
MIN	39990	41770	41680	42580	42320	42360	42190	41680	40770	39870	39010	38490
(+)	279.00	278.74	280.00	279.52	279.28	279.02	279.27	278.73	278.33	277.88	277.42	277.18
(@)	+2100	-550	+2730	-1050	-520	-570	+550	-1160	-850	-950	-940	-500
(++)	254	151	158	149	142	133	171	196	306	391	343	333

CAL YR 1994 MAX 54640 MIN 28070 (@) +16130 (++) 3014
WTR YR 1995 MAX 54640 MIN 38490 (@) -1710 (++) 2727

(+) Elevation, in feet, at end of month.
(@) Change in contents, in acre-feet.
(++) Diversions, in acre-feet, by the city of Nacogdoches.

08037000 ANGELINA RIVER NEAR LUFKIN, TX

LOCATION.--Lat 31°27'26", long 94°43'34", Angelina-Nacogdoches County line, Hydrologic Unit 12020004, near right bank on downstream side of bridge on U.S. Highway 59, 100 ft upstream from Procella Creed, 1.5 mi downstream from Bayou Loco, 1.5 mi upstream from Southern Pacific Transportation Co. (formerly Southern Pacific Lines) bridge, 8 mi north of Lufkin and 109.5 mi upstream from mouth.

DRAINAGE AREA.--1,600 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1954 to September 1978, January 1994 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1954 to September 1978.
WATER TEMPERATURES: October 1954 to September 1978.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE : Maximum, 1,090 microsiemens Nov. 10,11, 1963; minimum 38 microsiemens Sept. 21, 1958, May 2, 1962.
WATER TEMPERATURE : Maximum, 32.0°C on several day during Jul. 1966; minimum, 0.0°C Jan. 11,12, 1962, Jan. 19, 1977.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
09...	1645	2200	137	6.8	9.5	110	18	10.4	91	1.9	32	17
APR												
20...	1340	2550	134	5.9	21.0	120	20	6.3	72	1.3	31	12
MAY												
30...	1315	599	138	7.0	23.0	190	36	5.5	64	1.0	35	9
JUN												
30...	0930	220	145	6.8	24.0	120	38	6.2	74	0.6	32	4
AUG												
31...	0930	80	154	5.7	27.5	160	33	6.5	83	1.2	31	0
SEP												
27...	1250	242	166	7.1	21.0	88	24	7.2	81	0.9	29	9

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
FEB												
09...	6.6	3.7	11	0.8	2.4	15	20	16	0.10	12	82	10
APR												
20...	6.4	3.5	10	0.8	2.6	19	16	15	<0.10	11	78	19
MAY												
30...	7.4	3.9	11	0.8	2.2	26	13	14	0.10	17	86	38
JUN												
30...	6.8	3.6	13	1	2.4	28	12	14	0.10	19	89	14
AUG												
31...	6.9	3.4	17	1	3.0	34	12	16	0.10	16	97	23
SEP												
27...	6.5	3.2	17	1	3.6	20	24	18	<0.10	18	103	29

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
FEB											
09...	6	4	0.110	0.110	0.010	0.120	0.120	0.020	0.28	0.30	0.020
APR											
20...	6	13	0.140	--	<0.010	0.140	0.140	0.040	0.36	0.40	0.020
MAY											
30...	8	30	0.270	--	<0.010	0.270	0.270	0.060	0.24	0.30	0.050
JUN											
30...	5	9	0.360	--	<0.010	0.360	0.360	0.030	0.27	0.30	<0.010
AUG											
31...	3	20	0.240	--	<0.010	0.240	0.240	0.020	0.18	0.20	0.020
SEP											
27...	<1	--	0.210	--	<0.010	0.210	0.210	<0.015	--	0.30	0.040

08037000 ANGELINA RIVER NEAR LUFKIN, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FEB											
09...	0.010	0.03	7.9	<1	47	<0.5	<1.0	<5	<3	<10	720
APR											
20...	0.040	0.12	10	2	50	<0.5	<1.0	<5	6	<10	1300
MAY											
30...	0.050	0.15	7.7	--	--	--	--	--	--	--	--
JUN											
30...	<0.010	--	6.2	--	--	--	--	--	--	--	--
AUG											
31...	<0.010	--	6.9	1	44	<0.5	4.0	<5	<3	<10	440
SEP											
27...	0.020	0.06	7.5	--	--	--	--	--	--	--	--

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB											
09...	<10	7	44	<0.1	<10	<10	<1	<1.0	94	<6	7
APR											
20...	10	7	120	<0.1	<10	<10	<1	<1.0	100	<6	9
MAY											
30...	--	--	--	--	--	--	--	--	--	--	--
JUN											
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
31...	20	10	65	<0.1	10	10	<1	<1.0	88	<6	<3
SEP											
27...	--	--	--	--	--	--	--	--	--	--	--

08038000 ATTOYAC BAYOU NEAR CHIRENO, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°30'15", long 94°18'15", Nacogdoches-San Augustine County Line, Hydrologic Unit 12020005, near right bank on downstream side of bridge on State Highway 21, 2.2 mi upstream from Amaladeros Creek, 2.8 mi east of Chireno, 5.4 mi downstream from Arenoso Creek and 41 mi upstream from mouth.

DRAINAGE AREA.--503 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1924 to September 1925, July 1939 to November 1954, and October 1955 to Sept. 30, 1985. Monthly discharge only for some periods, published in WSP 1312 and 1732. October 1985 to September 1989 (annual maximum). October 1989 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 169.58 ft above sea level. Jan. 24, 1924, to Aug. 29, 1925, and Sept. 6, 1957, to Oct. 27, 1958, nonrecording gage at same site and datum.

REMARKS.--Flow is affected at times by discharge from the flood-detention pools of twelve floodwater-retarding structures with a combined detention capacity of 15,870 acre-ft. These structures control runoff from 46.7 mi² above this station. Satellite telemeter at station.

AVERAGE DISCHARGE.--45 years (water years 1940-54, 1956-1985) 479 ft³/s (12.93 in/yr), 347,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,900 ft³/s Nov. 24, 1940 (gage height, 25.97 ft); minimum, 0.8 ft³/s Aug. 26, 27, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1865, 29.9 ft June 29, 1902, from information by local residents. Flood in July 1933 reached a stage of 25.2 ft from information by local residents.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 18	1100	21,500	23.41	Mar. 9	0300	4,530	17.77
Dec. 18	0400	8,830	19.59	Mar. 16	1100	4,530	17.78
Jan. 20	0200	5,850	18.38	Apr. 12	1900	8,140	19.34
Mar. 7	1000	4,620	17.82	Apr. 24	2000	8,290	19.40

08038000 ATTOYAC BAYOU NEAR CHIRENO, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
09...	1201	470	140	7.0	9.0	80	19	11.6	100	1.5	37	19
APR												
20...	0935	1270	107	5.9	21.0	110	27	6.4	73	1.4	28	9
MAY												
31...	0840	416	114	6.5	22.0	110	44	7.0	81	1.0	31	15
JUN												
29...	1652	109	92	6.8	24.0	140	28	7.0	83	1.3	25	3
AUG												
29...	1345	71	84	6.7	28.0	120	27	7.0	90	1.0	22	1
SEP												
27...	1450	88	85	7.2	20.0	86	19	8.0	88	1.1	20	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
FEB												
09...	7.0	4.6	9.6	0.7	2.0	18	23	11	<0.10	15	86	25
APR												
20...	5.4	3.5	6.9	0.6	2.0	19	14	8.2	<0.10	11	64	16
MAY												
31...	6.3	3.8	7.3	0.6	1.6	16	16	9.4	<0.10	13	69	70
JUN												
29...	4.7	3.1	7.6	0.7	1.6	22	6.2	7.7	<0.10	15	62	19
AUG												
29...	4.5	2.7	6.4	0.6	1.8	21	4.4	8.0	<0.10	14	58	6
SEP												
27...	3.9	2.5	5.9	0.6	1.9	18	6.3	7.4	<0.10	16	57	8

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
FEB											
09...	10	15	0.460	0.460	0.010	0.470	0.470	0.030	--	<0.20	<0.010
APR											
20...	6	10	0.240	--	<0.010	0.240	0.240	0.050	0.35	0.40	0.020
MAY											
31...	6	64	0.440	--	<0.010	0.440	0.440	0.050	0.15	0.20	<0.010
JUN											
29...	6	13	0.690	--	<0.010	0.690	0.690	0.020	0.28	0.30	0.040
AUG											
29...	<1	--	0.580	0.580	0.010	0.590	0.590	0.030	0.27	0.30	0.030
SEP											
27...	<1	--	0.450	--	<0.010	0.450	0.450	<0.015	--	0.20	0.030

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FEB											
09...	0.020	0.06	5.3	<1	46	<0.5	1.0	<5	<3	<10	670
APR											
20...	0.020	0.06	9.9	<1	47	<0.5	2.0	<5	<3	<10	580
MAY											
31...	0.020	0.06	6.5	--	--	--	--	--	--	--	--
JUN											
29...	0.020	0.06	4.9	--	--	--	--	--	--	--	--
AUG											
29...	0.010	0.03	--	<1	39	<0.5	<1.0	<5	<3	<10	640
SEP											
27...	0.020	0.06	5.6	--	--	--	--	--	--	--	--

08038000 ATTOYAC BAYOU NEAR CHIRENO, TX--Continued--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB											
09...	<10	5	63	<0.1	<10	<10	<1	<1.0	95	<6	7
APR											
20...	<10	<4	58	<0.1	<10	<10	<1	<1.0	84	<6	11
MAY											
31...	--	--	--	--	--	--	--	--	--	--	--
JUN											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
29...	<10	5	72	<0.1	20	30	<1	2.0	61	<6	<3
SEP											
27...	--	--	--	--	--	--	--	--	--	--	--

08039100 AYISH BAYOU NEAR SAN AUGUSTINE, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°23'46", Long 94°09'03", San Augustine County, Hydrologic Unit 12020005, near center of span on downstream side of bridge on State Highway 103, 3.0 mi upstream from Turkey Creek and 9.5 mi south of San Augustine.

DRAINAGE AREA.--89.0 mi².

PERIOD OF RECORD.--February 1959 to September 1985. October 1985 to September 1989 (annual maximum), October 1989 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WSP 1922: 1959(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 190.22 ft above sea level. Prior to June 2, 1959, nonrecording gage at same site and datum.

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

AVERAGE DISCHARGE.--26 years (water years 1960-85), 83.7 ft³/s, 12.77 in/yr, 60,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,200 ft³/s Sept. 14, 1978 (gage height, 18.02 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since October 1957, 15,900 ft³/s on Sept. 21 or 22, 1958 (gage height, 17.5 ft, from floodmarks).

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	1900	7,220	14.96	Mar. 7	1800	10,400	16.04
Dec. 16	2400	3,100	13.24	Apr. 23	1700	2,140	12.78
Jan. 8	2100	4,170	13.65				

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX

LOCATION.--Lat 31°03'38", long 94°06'21", Jasper County, Hydrologic Unit 12020005, in the powerhouse-intake structure of Sam Rayburn Dam on the Angelina River, 10 mi northwest of Jasper and 25.2 mi upstream from mouth.

DRAINAGE AREA.--3,449 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--January 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Apr. 20, 1965, nonrecording gage at same site and datum.

REMARKS.--The reservoir is formed by a rolled earthfill dam 19,430 ft long, including spillway and dikes. The dam was completed and deliberate impoundment began Mar. 29, 1965. The spillway is an uncontrolled broad-crested weir 2,200 ft wide, on right bank 7,000 ft to right of outlet works and is designed to discharge 125,300 ft³/s at maximum flood design. The flood-control outlet works consists of two 10.0 x 20.0-foot rectangular concrete-lined conduits controlled by two 10.0 x 20.0-foot tractor-type service gates and one 10.0 x 20.0-foot tractor-type emergency gate. Water for turbines is admitted through four 18.0 x 26.0-foot penstocks and controlled by two wheeled-leaf-type headgates. The reservoir is operated for flood control and power generation. The area-capacity tables are based on topographic maps prepared by the U.S. Army Corps of Engineers and detailed sedimentation ranges established in 1961 and dated February 1965. For statement regarding regulation by Natural Resource Conservation Service flood-water-retarding structures, see station 08038000. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	190.0	-
Design flood	183.0	5,610,000
Crest of spillway	176.0	4,442,400
Top of flood-control pool	173.0	3,997,600
Top of conservation pool (power pool)	164.0	2,852,600
Top of power head and sediment pool	149.0	1,452,000
Lowest gated outlet (invert)	105.0	21,940

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 3,881,000 acre-ft Feb. 7, 1974 (elevation, 172.17 ft); minimum since conservation storage was reached in 1968, 1,797,000 acre-ft Nov. 15, 1977 (elevation, 153.35 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 3,853,000 acre-ft Feb. 3 (elevation, 171.97 ft); minimum, 2,307,000 acre-ft Oct. 15 (elevation, 158.88 ft).

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

155.0	1,941,200	166.0	3,085,000	171.0	3,720,000
158.0	2,221,000	168.0	3,329,000	172.0	3,857,000
162.0	2,631,000	170.0	3,586,000	173.0	3,998,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2392000	2927000	2854000	3370000	3844000	3402000	3527000	3432000	2985000	2823000	2650000	2502000
2	2383000	2922000	2849000	3362000	3840000	3385000	3501000	3411000	2979000	2812000	2651000	2495000
3	2376000	2920000	2857000	3372000	3853000	3372000	3482000	3401000	2973000	2803000	2650000	2488000
4	2368000	2919000	2855000	3371000	3840000	3357000	3464000	3383000	2967000	2792000	2645000	2478000
5	2358000	2938000	2853000	3359000	3843000	3347000	3443000	3362000	2957000	2807000	2641000	2478000
6	2343000	2936000	2850000	3383000	3829000	3334000	3431000	3338000	2947000	2802000	2637000	2471000
7	2337000	2933000	2850000	3382000	3829000	3436000	3414000	3324000	2935000	2795000	2638000	2466000
8	2355000	2927000	2850000	3382000	3808000	3461000	3395000	3336000	2927000	2787000	2632000	2461000
9	2345000	2938000	2857000	3377000	3788000	3469000	3380000	3319000	2919000	2781000	2630000	2452000
10	2336000	2923000	2873000	3365000	3771000	3469000	3377000	3307000	2919000	2775000	2625000	2442000
11	2325000	2914000	2866000	3347000	3756000	3461000	3420000	3282000	2933000	2768000	2619000	2432000
12	2321000	2903000	2867000	3334000	3726000	3463000	3446000	3262000	2925000	2760000	2615000	2427000
13	2315000	2903000	2871000	3380000	3711000	3514000	3457000	3245000	2919000	2765000	2607000	2418000
14	2311000	2900000	2872000	3380000	3689000	3557000	3457000	3228000	2913000	2758000	2607000	2410000
15	2315000	2896000	2884000	3365000	3671000	3591000	3457000	3215000	2907000	2752000	2601000	2401000
16	2347000	2891000	2984000	3354000	3658000	3615000	3461000	3201000	2904000	2747000	2595000	2396000
17	2493000	2882000	3028000	3352000	3632000	3632000	3463000	3190000	2902000	2741000	2588000	2396000
18	2616000	2878000	3061000	3495000	3611000	3644000	3468000	3193000	2898000	2741000	2581000	2388000
19	2696000	2878000	3090000	3534000	3594000	3655000	3468000	3164000	2897000	2729000	2575000	2391000
20	2746000	2875000	3123000	3559000	3573000	3663000	3477000	3140000	2892000	2725000	2563000	2393000
21	2787000	2873000	3157000	3582000	3552000	3671000	3464000	3121000	2887000	2720000	2562000	2409000
22	2821000	2873000	3193000	3627000	3531000	3683000	3451000	3097000	2880000	2712000	2555000	2400000
23	2841000	2871000	3230000	3634000	3510000	3689000	3482000	3078000	2880000	2703000	2552000	2391000
24	2859000	2873000	3255000	3652000	3492000	3674000	3479000	3061000	2871000	2699000	2546000	2385000
25	2880000	2866000	3277000	3679000	3465000	3656000	3475000	3047000	2871000	2691000	2541000	2380000
26	2886000	2858000	3294000	3722000	3442000	3648000	3472000	3026000	2859000	2683000	2535000	2374000
27	2895000	2864000	3309000	3781000	3431000	3632000	3469000	3011000	2853000	2672000	2529000	2368000
28	2905000	2862000	3323000	3812000	3423000	3614000	3451000	2995000	2840000	2663000	2525000	2364000
29	2915000	2864000	3342000	3832000	---	3597000	3441000	2984000	2838000	2668000	2517000	2357000
30	2921000	2856000	3352000	3837000	---	3574000	3431000	2987000	2829000	2657000	2513000	2354000
31	2934000	---	3359000	3837000	---	3552000	---	2985000	---	2647000	2509000	---
MAX	2934000	2938000	3359000	3837000	3853000	3689000	3527000	3432000	2985000	2823000	2651000	2502000
MIN	2311000	2856000	2849000	3334000	3423000	3334000	3377000	2984000	2829000	2647000	2509000	2354000
(+)	164.71	164.03	168.24	171.86	168.74	169.74	168.80	165.15	163.79	162.15	160.85	159.35
(@)	+534000	-78000	+503000	+478000	-414000	+129000	-121000	-446000	-156000	-182000	-138000	-155000

CAL YR 1994 MAX 3359000 MIN 2311000 (@) +992000
WTR YR 1995 MAX 3853000 MIN 2311000 (@) -46000

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

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1964 to September 1984, September 1993 to current year. Chemical and Biochemical analyses: November 1967 to September 1984, September 1993 to current year.

310816094041401 - SAM RAYBURN RESERVOIR SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
08...	1505	1.00	125	7.1	12.5	1.70	11.2	104
08...	1507	10.0	125	7.1	12.0	--	10.8	99
08...	1509	20.0	125	7.1	12.0	--	10.7	98
08...	1511	30.0	125	7.0	12.0	--	10.5	96
08...	1513	40.0	125	7.0	12.0	--	10.4	95
08...	1515	50.0	125	7.0	12.0	--	10.3	94
08...	1517	65.0	125	7.0	12.0	--	10.1	92
APR								
18...	1438	1.00	120	7.1	21.0	1.40	8.8	99
18...	1440	10.0	120	7.0	20.5	--	8.7	97
18...	1442	20.0	120	7.0	20.0	--	8.7	96
18...	1444	30.0	120	6.9	20.0	--	8.7	96
18...	1446	40.0	120	6.7	18.0	--	8.4	89
18...	1448	50.0	120	6.6	16.5	--	8.2	84
18...	1450	60.0	120	6.5	16.5	--	8.2	84
AUG								
29...	1330	1.00	105	8.1	31.5	2.30	6.7	91
29...	1332	10.0	105	7.3	31.0	--	6.2	84
29...	1334	20.0	100	6.8	30.5	--	5.1	68
29...	1336	30.0	120	6.4	28.5	--	2.9	37
29...	1338	40.0	120	6.7	24.5	--	2.9	35
29...	1340	52.0	130	6.7	23.5	--	2.9	34

310437094065501 - SAM RAYBURN RESERVOIR SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
08...	1640	1.00	130	7.3	13.0	1.60	12.5	117	K1	K1	26	10
08...	1642	10.0	130	7.2	12.0	--	12.6	115	--	--	--	--
08...	1644	20.0	130	7.1	12.0	--	12.6	115	--	--	--	--
08...	1646	30.0	130	7.1	12.0	--	12.6	115	--	--	--	--
08...	1648	40.0	130	7.1	12.0	--	12.5	114	--	--	--	--
08...	1650	50.0	130	7.1	12.0	--	12.5	114	--	--	--	--
08...	1652	60.0	130	7.1	12.0	--	12.4	113	--	--	--	--
08...	1654	70.0	130	7.1	12.0	--	12.4	113	--	--	--	--
08...	1656	80.0	130	7.1	12.0	--	12.5	114	--	--	--	--
08...	1658	90.5	130	7.0	12.0	--	12.0	110	--	--	25	9
APR												
18...	1640	1.00	120	6.9	19.0	1.30	8.8	95	K1	K1	24	11
18...	1642	10.0	120	6.9	18.0	--	8.8	93	--	--	--	--
18...	1644	20.0	120	6.8	17.0	--	8.8	91	--	--	--	--
18...	1646	30.0	120	6.8	17.0	--	8.8	91	--	--	--	--
18...	1648	40.0	120	6.7	16.5	--	8.7	89	--	--	--	--
18...	1650	50.0	120	6.7	15.5	--	8.6	86	--	--	--	--
18...	1652	60.0	120	6.6	15.0	--	8.5	85	--	--	--	--
18...	1654	70.0	125	6.6	15.0	--	8.5	85	--	--	--	--
18...	1656	80.0	125	6.6	15.0	--	8.5	85	--	--	--	--
18...	1658	88.0	125	6.6	15.0	--	8.4	84	--	--	23	7
AUG												
29...	1545	1.00	100	8.2	32.0	2.40	6.9	95	K1	K18	27	9
29...	1547	10.0	100	8.2	31.0	--	6.9	93	--	--	--	--
29...	1549	20.0	100	7.2	30.0	--	6.4	85	--	--	--	--
29...	1551	30.0	100	6.5	28.0	--	2.9	37	--	--	--	--
29...	1553	40.0	110	6.8	24.5	--	3.0	36	--	--	--	--
29...	1555	50.0	120	6.8	22.0	--	3.0	34	--	--	--	--
29...	1557	60.0	130	6.9	21.0	--	3.2	36	--	--	--	--
29...	1559	70.0	130	6.9	20.0	--	3.2	35	--	--	--	--
29...	1601	80.0	145	6.9	20.0	--	3.2	35	--	--	28	0

310437094065501 - SAM RAYBURN RESERVOIR SITE CC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
FEB												
08...	5.9	2.7	13	1	2.4	16	16	15	<0.10	7.3	72	0.110
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	0.090
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--
08...	5.7	2.7	13	1	2.4	16	15	17	<0.10	7.4	73	0.110
APR												
18...	5.3	2.6	11	1	2.8	13	16	14	<0.10	6.8	67	0.060
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	0.120
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	0.110
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--
18...	5.1	2.4	11	1	2.5	16	15	13	<0.10	7.9	68	0.100
AUG												
29...	6.0	2.9	11	0.9	2.4	18	15	13	<0.10	6.9	68	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--
29...	6.0	3.1	11	0.9	2.6	39	9.0	16	<0.10	12	93	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB											
08...	<0.010	0.110	0.110	<0.015	--	<0.20	<0.010	<0.010	--	60	7
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	<0.010	0.090	0.090	<0.015	--	<0.20	<0.010	<0.010	--	80	20
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--
08...	<0.010	0.110	0.110	<0.015	--	0.20	<0.010	<0.010	--	120	12
APR											
18...	<0.010	0.060	0.060	<0.015	--	0.30	<0.010	<0.010	--	370	7
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	<0.010	0.120	0.120	0.020	0.38	0.40	0.010	0.010	0.03	450	20
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	<0.010	0.110	0.110	0.020	0.28	0.30	0.010	<0.010	--	480	350
18...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
18...	<0.010	0.100	0.100	0.030	0.27	0.30	0.020	<0.010	--	540	710
AUG											
29...	<0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	9	34
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	<0.010	--	<0.050	0.170	0.23	0.40	0.010	0.010	0.03	1100	1800
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--
29...	0.010	--	<0.050	0.850	0.35	1.2	0.190	0.200	0.61	5000	3000

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

310802094112201 - SAM RAYBURN RESERVOIR SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
09...	1105	1.00	130	7.2	11.5	2.00	10.2	92
09...	1107	10.0	130	7.2	11.5	--	10.3	93
09...	1109	20.0	130	7.2	11.5	--	10.3	93
09...	1111	30.0	130	7.2	11.5	--	10.3	93
09...	1113	40.0	130	7.2	11.5	--	10.3	93
09...	1115	50.0	130	7.2	11.5	--	10.3	93
09...	1117	60.0	130	7.2	11.5	--	10.3	93
09...	1119	70.0	130	7.2	11.5	--	10.3	93
09...	1121	80.0	130	7.2	11.5	--	10.3	93
APR								
19...	1000	1.00	115	7.0	20.5	1.50	8.8	98
19...	1002	10.0	120	7.0	20.5	--	8.8	98
19...	1004	20.0	120	6.8	19.5	--	8.7	95
19...	1006	30.0	120	6.7	18.5	--	8.6	92
19...	1008	40.0	120	6.6	17.0	--	8.4	87
19...	1010	50.0	120	6.6	16.0	--	8.3	84
19...	1012	60.0	120	6.6	16.0	--	8.3	84
19...	1014	70.0	120	6.7	16.0	--	8.3	84
19...	1016	80.0	120	6.8	16.0	--	8.4	85
AUG								
30...	1025	1.00	120	8.1	31.5	2.10	6.9	94
30...	1027	10.0	120	7.7	31.0	--	6.8	92
30...	1029	20.0	120	6.8	30.0	--	5.9	78
30...	1031	30.0	120	6.5	27.5	--	3.0	38
30...	1033	40.0	135	6.6	24.5	--	3.0	36
30...	1035	50.0	145	6.7	21.5	--	3.2	36
30...	1037	60.0	150	6.7	20.5	--	3.2	36
30...	1039	69.0	150	6.6	20.5	--	3.1	34

311039094141201 - SAM RAYBURN RESERVOIR SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
09...	1145	1.00	130	7.1	11.5	2.10	10.2	92
09...	1147	10.0	130	7.1	11.5	--	10.2	92
09...	1149	20.0	130	7.1	11.5	--	10.2	92
09...	1151	30.0	130	7.1	11.5	--	10.2	92
09...	1153	40.0	130	7.1	11.5	--	10.2	92
09...	1155	50.0	130	7.1	11.5	--	10.2	92
09...	1157	60.0	130	7.1	11.5	--	10.1	91
09...	1159	76.0	130	7.1	11.5	--	10.1	91
APR								
19...	1045	1.00	120	7.1	21.0	1.50	8.8	99
19...	1047	10.0	120	7.0	20.5	--	8.8	98
19...	1049	20.0	120	6.9	20.0	--	8.7	96
19...	1051	30.0	120	6.8	19.5	--	8.5	93
19...	1053	40.0	120	6.7	19.0	--	8.4	91
19...	1055	50.0	120	6.7	19.0	--	8.4	91
19...	1057	60.0	125	6.6	17.0	--	7.9	82
AUG								
30...	1059	1.00	120	8.2	31.0	1.90	6.9	93
30...	1101	10.0	120	7.9	31.0	--	6.8	91
30...	1103	20.0	120	6.6	30.0	--	4.7	62
30...	1105	30.0	125	6.5	27.0	--	2.9	36
30...	1107	40.0	140	6.7	24.5	--	3.1	37
30...	1109	50.0	145	6.7	22.5	--	3.1	36
30...	1111	60.0	150	6.7	21.0	--	3.2	36

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

311828094191801 - SAM RAYBURN RESERVOIR SITE IC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
09...	1230	1.00	115	6.7	11.5	0.70	10.0	90	K1	K2	23	7
09...	1232	10.0	115	6.7	11.5	--	10.0	90	--	--	--	--
09...	1234	20.0	115	6.7	11.5	--	10.1	91	--	--	--	--
09...	1236	30.0	115	6.7	11.5	--	10.1	91	--	--	--	--
09...	1238	40.0	115	6.7	11.5	--	10.1	91	--	--	--	--
09...	1240	50.0	115	6.7	11.5	--	10.0	90	--	--	--	--
09...	1242	65.0	115	6.7	11.5	--	10.0	90	--	--	23	7
APR												
19...	1125	1.00	120	6.9	21.0	1.00	8.6	97	K1	K1	27	11
19...	1127	10.0	125	7.0	20.5	--	8.5	95	--	--	--	--
19...	1129	20.0	125	6.9	20.0	--	8.3	92	--	--	--	--
19...	1131	30.0	125	6.8	19.0	--	8.0	87	--	--	--	--
19...	1133	40.0	125	6.8	19.0	--	8.0	87	--	--	--	--
19...	1135	50.0	125	6.7	18.5	--	7.9	85	--	--	--	--
19...	1137	60.0	130	6.4	17.0	--	6.9	72	--	--	--	--
19...	1139	70.0	135	6.4	17.0	--	6.8	71	--	--	29	11
AUG												
30...	1145	1.00	125	8.6	31.5	1.60	7.2	98	K1	20	27	7
30...	1147	10.0	125	8.2	31.0	--	6.8	91	--	--	--	--
30...	1149	20.0	125	6.7	29.5	--	3.2	42	--	--	--	--
30...	1151	30.0	135	6.6	27.5	--	2.9	37	--	--	--	--
30...	1153	40.0	140	6.8	25.0	--	3.2	39	--	--	--	--
30...	1155	50.0	165	6.8	23.0	--	3.0	35	--	--	--	--
30...	1157	57.0	165	6.8	22.5	--	3.1	36	--	--	33	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB												
09...	5.0	2.6	10	0.9	2.8	16	15	12	<0.10	11	69	0.110
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	0.130
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	5.1	2.6	10	0.9	2.9	16	15	13	<0.10	11	70	0.120
APR												
19...	5.7	3.0	10	0.8	2.3	16	17	12	<0.10	7.3	67	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	0.090
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	6.2	3.2	11	0.9	2.5	18	18	15	<0.10	10	79	0.110
AUG												
30...	5.8	3.0	11	0.9	2.5	20	14	12	<0.10	7.4	68	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	7.5	3.4	11	0.8	2.7	47	6.9	18	<0.10	12	102	--

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

311828094191801 - SAM RAYBURN RESERVOIR SITE IC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB												
09...	--	<0.010	0.110	0.110	0.020	0.28	0.30	<0.010	0.010	0.03	200	3
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	<0.010	0.130	0.130	0.020	0.28	0.30	<0.010	0.010	0.03	290	<10
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	<0.010	0.120	0.120	0.020	0.28	0.30	<0.010	0.010	0.03	450	5
APR												
19...	--	<0.010	--	<0.050	0.020	0.28	0.30	0.010	<0.010	--	540	13
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	<0.010	0.090	0.090	0.070	0.33	0.40	0.020	0.010	0.03	780	70
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.110	0.010	0.120	0.120	0.210	0.39	0.60	0.030	0.030	0.09	1200	440
AUG												
30...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	11	31
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<0.010	--	<0.050	0.320	0.28	0.60	0.090	0.090	0.28	1900	1000
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<0.010	--	<0.050	1.40	0.30	1.7	0.290	0.310	0.95	7000	2500

311804094234901 - SAM RAYBURN RESERVOIR SITE JC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB								
09...	1420	1.00	110	6.6	11.5	0.50	9.8	88
09...	1422	10.0	110	6.6	11.5	--	9.8	88
09...	1424	20.0	110	6.6	11.5	--	9.9	89
09...	1426	30.0	110	6.6	11.5	--	9.8	88
09...	1428	40.0	110	6.6	11.5	--	9.8	88
09...	1430	48.0	100	6.6	11.5	--	9.7	88
APR								
19...	1352	1.00	135	6.8	22.0	1.00	8.4	96
19...	1354	10.0	135	6.6	21.0	--	8.1	91
19...	1356	20.0	135	6.4	20.5	--	7.6	85
19...	1358	30.0	135	6.4	20.0	--	7.5	83
19...	1400	44.0	135	6.4	20.0	--	7.4	82
AUG								
30...	1418	1.00	135	8.7	31.5	1.20	7.2	98
30...	1420	10.0	145	7.6	31.0	--	6.1	82
30...	1422	20.0	155	6.9	29.5	--	3.3	43
30...	1424	30.0	170	6.8	28.0	--	3.1	40
30...	1426	36.0	170	6.8	28.0	--	3.2	41

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

312216094280601 - SAM RAYBURN RESERVOIR SITE KC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
09...	1500	1.00	115	6.4	11.0	0.50	9.7	87	K1	K1	26	10
09...	1502	10.0	115	6.4	11.0	--	9.7	87	--	--	--	--
09...	1504	20.0	115	6.5	11.0	--	9.7	87	--	--	--	--
09...	1506	35.0	115	6.5	11.0	--	9.2	82	--	--	27	11
APR												
19...	1430	1.00	100	6.5	21.5	0.50	8.0	91	22	86	23	7
19...	1432	10.0	100	6.4	21.5	--	7.9	90	--	--	--	--
19...	1434	20.0	100	6.4	21.0	--	7.9	89	--	--	--	--
19...	1436	34.0	100	6.4	21.0	--	7.8	88	--	--	22	6
AUG												
30...	1500	1.00	280	7.4	31.0	0.52	5.9	79	K3	K12	36	0
30...	1502	5.00	285	7.3	31.0	--	5.6	75	--	--	--	--
30...	1504	10.0	285	7.3	31.0	--	5.6	75	--	--	--	--
30...	1506	20.0	285	7.3	31.0	--	5.6	75	--	--	--	--
30...	1508	25.0	285	7.4	31.0	--	5.6	75	--	--	38	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB												
09...	5.6	3.0	10	0.8	2.5	16	17	12	<0.10	21	81	0.120
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	0.120
09...	5.7	3.0	10	0.8	2.5	16	17	12	<0.10	12	73	0.130
APR												
19...	4.9	2.5	8.6	0.8	2.3	16	12	10	<0.10	7.8	59	0.140
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	4.7	2.4	7.9	0.7	2.3	16	11	10	<0.10	7.7	57	0.130
AUG												
30...	8.0	3.9	41	3	3.3	43	24	45	<0.10	14	165	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	8.3	4.1	44	3	3.4	43	23	47	0.10	14	170	--

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB												
09...	0.120	0.010	0.130	0.130	0.020	0.28	0.30	<0.010	<0.010	--	160	34
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	0.120	0.010	0.130	0.130	0.020	0.28	0.30	0.010	0.010	0.03	390	40
09...	--	<0.010	0.130	0.130	0.020	0.38	0.40	0.010	0.020	0.06	290	35
APR												
19...	--	<0.010	0.140	0.140	0.060	0.34	0.40	0.010	0.010	0.03	250	34
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.130	0.010	0.140	0.140	0.060	0.34	0.40	0.030	0.020	0.06	820	46
AUG												
30...	--	<0.010	--	<0.050	0.020	0.38	0.40	0.010	<0.010	--	230	58
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<0.010	--	<0.050	0.020	0.38	0.40	0.030	<0.010	--	400	150
30...	--	--	--	--	--	--	--	--	--	--	--	--
30...	--	<0.010	--	<0.050	<0.015	--	0.30	0.020	<0.010	--	380	78

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

311000094010301 - SAM RAYBURN RESERVOIR SITE LC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB											
08...	1610	1.00	110	6.8	13.0	0.90	11.9	111	0.100	0.100	0.010
08...	1612	10.0	110	6.8	12.0	--	11.9	109	--	--	--
08...	1614	20.0	110	6.8	12.0	--	11.8	108	--	--	--
08...	1616	35.0	110	6.8	12.0	--	11.4	104	0.090	--	<0.010
APR											
18...	1600	1.00	110	7.0	22.0	--	8.6	99	--	--	<0.010
18...	1602	10.0	115	6.9	21.5	--	8.6	98	--	--	--
18...	1604	20.0	115	6.8	21.0	--	8.5	96	--	--	--
18...	1606	28.0	115	6.5	20.0	--	7.7	85	--	--	<0.010
AUG											
29...	1515	1.00	95	8.0	34.0	2.20	6.4	91	--	--	<0.010
29...	1517	10.0	105	7.3	31.0	--	6.4	86	--	--	--
29...	1519	20.0	100	6.8	30.5	--	4.0	53	--	--	--
29...	1521	25.0	125	6.7	29.0	--	2.8	36	--	--	0.010

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB										
08...	0.110	0.110	0.020	0.18	0.20	<0.010	0.010	0.03	110	<10
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	0.090	0.090	0.020	0.28	0.30	0.020	<0.010	--	130	<10
APR										
18...	--	<0.050	<0.015	--	0.30	0.010	<0.010	--	340	10
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	380	70
AUG										
29...	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	<10	60
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	<0.050	0.380	0.32	0.70	0.020	0.010	0.03	2200	1700

311137094051401 - SAM RAYBURN RESERVOIR SITE MC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB										
08...	1535	1.00	115	6.9	12.5	1.35	11.7	108	0.060	<0.010
08...	1537	10.0	115	6.9	12.0	--	11.6	106	--	--
08...	1539	20.0	115	6.9	12.0	--	11.6	106	--	--
08...	1541	34.0	115	6.9	12.0	--	11.4	104	0.060	<0.010
APR										
18...	1515	1.00	115	7.0	21.5	1.30	8.6	98	--	<0.010
18...	1517	10.0	115	6.9	21.0	--	8.6	97	--	--
18...	1519	20.0	115	6.9	20.5	--	8.6	96	--	--
18...	1521	30.0	115	6.8	20.5	--	8.5	95	--	--
18...	1523	36.0	110	6.6	19.5	--	8.1	88	--	<0.010
AUG										
29...	1420	1.00	100	8.3	33.0	2.35	6.6	92	--	<0.010
29...	1422	10.0	100	7.6	31.0	--	6.4	86	--	--
29...	1424	20.0	105	6.9	30.5	--	3.7	49	--	--
29...	1426	30.0	115	6.7	28.0	--	2.8	36	--	--
29...	1428	39.0	130	6.8	26.0	--	2.9	36	--	<0.010

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

311137094051401 - SAM RAYBURN RESERVOIR SITE MC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB										
08...	0.060	0.060	<0.015	--	0.30	<0.010	<0.010	--	150	<10
08...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
08...	0.060	0.060	<0.015	--	0.30	<0.010	<0.010	--	150	<10
APR										
18...	--	<0.050	<0.015	--	0.30	0.020	<0.010	--	340	<10
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--
18...	--	<0.050	0.020	0.28	0.30	0.010	<0.010	--	450	20
AUG										
29...	--	<0.050	0.070	0.33	0.40	0.030	<0.010	--	20	60
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--
29...	--	<0.050	1.30	0.20	1.5	0.230	0.230	0.71	6100	2200

311817094190701 - SAM RAYBURN RESERVOIR SITE NC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
FEB											
09...	1310	1.00	85	6.6	11.5	0.55	9.8	89	0.130	0.130	0.010
09...	1312	10.0	85	6.6	11.5	--	9.8	89	--	--	--
09...	1314	20.0	85	6.6	11.5	--	9.8	89	--	--	--
09...	1316	30.0	90	6.6	11.5	--	9.7	88	--	--	--
09...	1318	40.0	95	6.6	11.5	--	9.4	85	0.130	0.130	0.010
APR											
19...	1215	1.00	115	6.8	22.0	1.00	8.5	98	--	--	<0.010
19...	1217	10.0	115	6.7	21.5	--	8.4	95	--	--	--
19...	1219	20.0	110	6.6	21.0	--	8.2	92	--	--	--
19...	1221	30.0	110	6.4	21.0	--	7.8	88	--	--	--
19...	1222	39.0	110	6.5	21.0	--	7.9	89	0.070	0.070	0.020
AUG											
30...	1330	1.00	120	7.1	31.5	0.90	5.4	73	--	--	<0.010
30...	1332	10.0	120	6.9	30.5	--	3.9	52	--	--	--
30...	1334	20.0	140	6.8	30.0	--	3.1	41	--	--	--
30...	1336	30.0	150	6.8	29.0	--	3.0	39	--	--	<0.010

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB										
09...	0.140	0.140	0.040	0.26	0.30	0.010	0.010	0.03	180	10
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	0.140	0.140	0.030	0.27	0.30	0.010	0.010	0.03	190	20
APR										
19...	--	<0.050	<0.015	--	0.30	0.020	0.010	0.03	800	30
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--
19...	0.090	0.090	0.180	0.32	0.50	0.040	0.030	0.09	1100	160
AUG										
30...	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	60	110
30...	--	--	--	--	--	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--	--
30...	--	<0.050	0.960	0.34	1.3	0.180	0.180	0.55	3300	1200

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site CC (310437094065501)

Phytoplankton Analyses October 1994 to September 1995

Date	2-8-95
Time	1640
TOTAL CELLS/mL	3,985
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	5.25

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Melosira varians	149
Order Pennales	
Synedra ulna	59
CHLOROPHYTA	
Ankistrodesmus falcatus	119
Chlamydomonas sp.	119
Mougeotia sp.	297
Pediastrum duplex	30
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
EUGLENOPHYTA	
Trachelomonas sp.	119
CRYPTOPHYTA	
Cryptomonas erosa	119

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site IC (311828094191801)

Phytoplankton Analyses October 1994 to September 1995

Date	2-9-95
Time	1230
TOTAL CELLS/mL	3,480
NUMBER OF SPECIES	6
DEPTH COLLECTED (ft)	2.30

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Melosira varians	149
CHLOROPHYTA	
Ankistrodesmus falcatus	59
Chlamydomonas sp.	149
Scenedesmus opoliensis	30
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
EUGLENOPHYTA	
Trachelomonas sp.	119

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site KC (312216094280601)

Phytoplankton Analyses October 1994 to September 1995

Date	2-9-95
Time	1500
TOTAL CELLS/mL	4,073
NUMBER OF SPECIES	7
DEPTH COLLECTED (ft)	1.64

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	59
Order Pennales	
Navicula rhyncocephala	178
CHLOROPHYTA	
Ankistrodesmus falcatus	89
Chlamydomonas sp.	149
CYANOPHYTA	
Aphanocapsa delicatissima	3,271
EUGLENOPHYTA	
Trachelomonas sp.	297
PYRRHOPHYTA	
Peridinium pusillum	30

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site CC (310437094065501)

Phytoplankton Analyses October 1994 to September 1995

Date	4-18-95
Time	1640
TOTAL CELLS/mL	10,589
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	2.1

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Melosira varians	1,071
CHLOROPHYTA	
Ankistrodesmus falcatus	149
Chlamydomonas sp.	149
Mougeotia sp.	2,260
Scenedesmus opoliensis	30
CYANOPHYTA	
Aphanizomenon flos-aquae	1,190
Aphanocapsa delicatissima	5,651
EUGLENOPHYTA	
Trachelomonas sp.	59
CRYPTOPHYTA	
Cryptomonas erosa	30

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site IC (311828094191801)

Phytoplankton Analyses October 1994 to September 1995

Date	4-19-95
Time	1125
TOTAL CELLS/mL	16,030
NUMBER OF SPECIES	12
DEPTH COLLECTED (ft.)	1.6

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	32
Melosira varians	149
Order Pennales	
Fragilaria crotonensis	119
CHLOROPHYTA	
Ankistrodesmus falcatus	654
Chlamydomonas sp.	149
Mougeotia sp.	2,706
Pediastrum duplex	30
Scenedesmus opoliensis	119
CYANOPHYTA	
Aphanizomenon flos-aquae	5,948
Aphanocapsa delicatissima	5,353
Chroococcus limneticus	357
EUGLENOPHYTA	
Trachelomonas sp.	119

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site KC (312216094280601)

Phytoplankton Analyses October 1994 to September 1995

Date	4-19-95
Time	1430
TOTAL CELLS/mL	6,127
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	0.8

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Melosira varians	327
CHLOROPHYTA	
Ankistrodesmus falcatus	357
Chlamydomonas sp.	30
Mougeotia sp.	773
Scenedesmus opoliensis	30
CYANOPHYTA	
Aphanocapsa delicatissima	3,866
Aphanocapsa elachista	595
EUGLENOPHYTA	
Trachelomonas sp.	119
CRYPTOPHYTA	
Cryptomonas erosa	30

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site CC (310437094065501)

Phytoplankton Analyses October 1994 to September 1995

Date	8-29-95
Time	1545
TOTAL CELLS/mL	**25,963**
NUMBER OF SPECIES	**8**
DEPTH COLLECTED (ft.)	**3.9**

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	30
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	223
Synedra ulna var. *ulna*	223
CHLOROPHYTA	
Ankistrodesmus falcatus	119
Chlamydomonas sp.	59
Scenedesmus opoliensis	30
CYANOPHYTA	
Aphanocapsa delicatissima	19,331
Oscillatoria sp.	5,948

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site IC (311828094191801)

Phytoplankton Analyses October 1994 to September 1995

Date	8-30-95
Time	1145
TOTAL CELLS/mL	20,015
NUMBER OF SPECIES	5
DEPTH COLLECTED (ft.)	2.6

Organisms	Cells/mL
BACILLARIOPHYTA	
Pennales	
Fragilaria crotonensis var. *crotonensis*	595
CHLOROPHYTA	
Ankistrodesmus falcatus	59
Cosmarium sp.	30
CYANOPHYTA	
Aphanocapsa delicatissima	14,870
Oscillatoria sp.	4,461

08039300 SAM RAYBURN RESERVOIR NEAR JASPER, TX--Continued

Sam Rayburn Reservoir Site KC (312216094280601)

Phytoplankton Analyses October 1994 to September 1995

Date	8-30-95
Time	1500
TOTAL CELLS/mL	20,580
NUMBER OF SPECIES	5
DEPTH COLLECTED (ft.)	0.8

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	506
CHLOROPHYTA	
Chlamydomonas sp.	59
CYANOPHYTA	
Aphanocapsa delicatissima	15,465
Oscillatoria sp.	4,461
EUGLENOPHYTA	
Trachelomonas sp.	89

08039500 ANGELINA RIVER AT HWY 63 NEAR HORGER, TX

WATER-QUALITY RECORDS

LOCATION.--Lat 31°00'54", long 94°09'07", Jasper County, Hydrologic Unit 1202005, at bridge on state HWY 63, 0.25 mile east of Horger, 7 miles upstream from Indian Creek and 20 miles upstream from mouth.

DRAINAGE AREA.--3,435 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB 09...	0910	137	7.6	12.0	23	3.7	11.6	107	2.2	26	10
APR 18...	1425	123	6.0	18.0	55	6.2	7.9	84	0.9	24	11
AUG 29...	1630	123	6.1	30.0	22	3.3	5.1	68	1.4	28	7

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)
FEB 09...	5.9	2.7	13	1	2.4	16	16	15	<0.10	7.0	72
APR 18...	5.5	2.5	11	1	2.4	13	15	15	<0.10	7.3	67
AUG 29...	6.2	2.9	11	0.9	2.2	21	14	12	<0.10	7.9	70

DATE	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)	RESIDUE VOLATILE, SUSPENDED (MG/L)	RESIDUE FIXED NON FILTERABLE (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)
FEB 09...	10	6	4	0.100	<0.010	0.100	0.100	0.020	0.18	0.20	<0.010
APR 18...	4	3	1	0.080	<0.010	0.080	0.080	0.020	0.28	0.30	<0.010
AUG 29...	3	3	0	--	<0.010	--	<0.050	0.020	0.28	0.30	<0.010

DATE	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DISSOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G)	COBALT, DISSOLVED (UG/L AS CO)
FEB 09...	<0.010	6.8	<1	--	37	<0.5	2.0	--	<5	--	<3
APR 18...	<0.010	8.1	<1	<1	37	<0.5	<1.0	<1	<5	3	<3
AUG 29...	<0.010	7.6	2	--	40	<0.5	4.0	--	<5	--	<3

DATE	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO)	COPPER, DISSOLVED (UG/L AS CU)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU)	IRON, DISSOLVED (UG/L AS FE)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G)
FEB 09...	--	<10	--	100	--	30	--	<4	2	--
APR 18...	<5	<10	3	330	3300	10	<10	5	6	120
AUG 29...	--	<10	--	230	--	40	--	8	300	--

DATE	MERCURY DISSOLVED (UG/L AS HG)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN)
FEB 09...	<0.1	--	<10	20	<1	<1.0	73	<6	7	--
APR 18...	<0.1	<0.01	<10	<10	<1	<1.0	74	<6	10	9
AUG 29...	<0.1	--	10	20	<1	2.0	76	<6	<3	--

08040000 B.A. STEINHAGEN LAKE AT TOWN BLUFF, TX

LOCATION.--Lat 30°47'43", long 94°10'48", Tyler County, Hydrologic Unit 12020003, near right bank 70 ft upstream from outlet structure of Town Bluff Dam on Neches River, 0.4 mi north of Town Bluff and at mile 113.7.

DRAINAGE AREA.--7,573 mi².

PERIOD OF RECORD.--April 1951 to current year. Prior to October 1967, published as Dam B Reservoir at Town Bluff.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Oct. 25, 1954, at site 490 ft upstream at same datum.

REMARKS.--The lake is formed by a rolled earthfill dam with concrete spillway sections. The total length of dam is 6,698 ft, including a concrete spillway and non-overflow section. Deliberate impoundment of water began Apr. 16, 1951, and the dam was completed in June 1951. The uncontrolled spillway is 6,100 ft long. A 326-foot-long gated service spillway with six 40.0- by 35.0-foot tainter gates is located near right end of dam. The capacity of the spillways at maximum flood design is 218,300 ft³/s. The capacity table is based on a survey made in 1945. Water is used for industrial, municipal and irrigation supplies. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam (nonoverflow)	95.0	-
Design flood	93.0	306,400
Crest of uncontrolled spillway (top of tainter gates)	85.0	124,700
Top of conservation pool	83.0	94,200
Bottom of tainter gates (sill)	50.0	0

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,400 acre-ft May 22, 1953 (elevation, 85.21 ft); no storage Sept. 18 to Oct. 13, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 102,400 acre-ft Oct. 18 (elevation, 83.58 ft); minimum, 68,800 acre-ft Nov. 19 (elevation, 80.92 ft).

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

75.0	22,310	79.0	50,090	82.0	81,280
76.0	27,960	80.0	59,320	83.0	94,250
77.0	34,460	81.0	69,680	84.0	108,700
78.0	41,830				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76600	91270	84890	85270	77780	78730	73930	79330	80790	80420	95350	84130
2	75890	91540	83880	85910	82380	81770	71890	77420	81270	81400	95350	83500
3	77780	87060	86290	86680	85910	84000	71890	79210	82510	81890	90340	82750
4	77660	87450	86030	86290	84630	85400	74500	79570	81030	83250	85780	81640
5	77900	91540	85010	84890	82510	87450	77900	80060	79090	86030	84380	81030
6	77900	90070	83130	83500	80660	88100	82260	80540	77300	88620	83630	80660
7	79090	87840	81770	80180	77540	93980	84890	80540	77180	90200	85010	80180
8	86030	86550	80420	75540	72230	91000	84130	81520	78610	91000	85010	79690
9	87320	85910	80180	74850	71550	84890	82510	78970	81150	90200	84510	80060
10	87840	82510	82260	74040	73810	81150	84510	80180	81150	89680	83380	80910
11	89150	81150	84510	75310	76710	86420	93430	82750	80060	88890	82140	81770
12	90740	80540	87970	79570	79090	95070	86030	85520	78490	88360	79450	83250
13	90200	79810	91940	89020	81030	93020	78130	86930	77300	91140	78850	84380
14	89280	78850	92890	91270	82010	82880	81030	86420	75660	92350	77420	85650
15	90340	77780	88490	87710	82260	79210	86680	83380	74270	92480	76710	86550
16	92890	75890	92890	84510	81400	77660	88620	78970	73700	91540	76950	86550
17	100700	74270	94390	82750	79690	79210	83880	78610	73930	90070	76950	86290
18	94110	71780	90740	99710	78250	83750	79210	81270	74270	89020	77900	85780
19	80300	71000	86420	99140	77070	88750	75780	80790	74730	87320	79570	85010
20	77420	75540	88490	94110	75780	92350	74730	80660	75310	86800	80790	84260
21	89540	78610	91000	91140	74850	91270	70440	80790	76360	85650	82510	85140
22	86030	81030	91000	93700	75430	85780	72570	83000	77660	84510	84000	84890
23	84630	83500	91000	94800	76010	78010	79810	85780	78370	83000	85520	85010
24	86930	83880	90200	96040	75660	73020	86800	87450	78490	83000	87450	86680
25	80660	84510	88100	95210	74850	75540	87710	88100	77900	80180	87840	88490
26	79570	84260	84380	95350	73700	79330	85780	86800	76130	80540	87840	89410
27	86550	87450	78490	100900	74960	82630	82380	86160	75080	83500	87060	89940
28	86680	87060	78130	95630	77070	81150	77780	86550	74850	86030	86030	89540
29	82880	87060	80060	90070	---	79570	78130	87060	77180	90870	85400	88490
30	80540	85910	82010	84260	---	77780	79090	87060	79090	91810	84760	87450
31	85520	---	83500	79090	---	75780	---	83000	---	92750	84630	---
MAX	100700	91540	94390	100900	85910	95070	93430	88100	82510	92750	95350	89940
MIN	75890	71000	78130	74040	71550	73020	70440	77420	73700	80180	76710	79690
(+)	82.34	82.37	82.18	81.82	81.65	81.54	81.82	82.14	81.82	82.89	82.27	82.49
(@)	-9980	+390	-2410	-4410	-2020	-1290	+3310	+3910	-3910	+13660	-8120	+2820

CAL YR 1994 MAX 100700 MIN 25950 (@) +55660
WTR YR 1995 MAX 100900 MIN 70440 (@) +11910

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

08040600 NECHES RIVER NEAR TOWN BLUFF, TX

LOCATION.--Lat 30°47'27", long 94°09'03", Jasper-Tyler County line, Hydrologic Unit 12020003, on left bank 1.8 mi downstream from Town Bluff Dam, 2.0 mi northeast of Town Bluff, 1.0 mi upstream from Walnut Run, 6.5 mi downstream from Wolf Creek and at mile 114.9.

DRAINAGE AREA.--7,574 mi².

PERIOD OF RECORD.--March 1951 to current year. Prior to Oct. 27, 1989, published as Neches River at Town Bluff.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Dec. 4, 1954 to Oct. 27, 1989, water-stage recorder at site 1.5 mi upstream at same datum. Prior to May 21, 1953, water-stage recorder, and May 21, 1953, to Dec. 3, 1954, nonrecording gage at former site at same datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by B. A. Steinhagen Lake (station 08040000) 1.8 mi upstream and by Sam Rayburn Reservoir (station 08039300) 37.9 mi upstream. There are some diversions upstream from station. Prior to October 1989, published as 08040500 Neches River at Town Bluff, Tx. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--13 years (water years 1952-64) prior to regulation by Sam Rayburn Reservoir, 4,406 ft³/s (3,192,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1952-64).--Maximum discharge, 90,900 ft³/s May 21, 22, 1953 (elevation, 82.85 ft) at former site; no flow at times due to regulation of B. A. Steinhagen Lake.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1884 reached a stage about 86.8 ft (discharge, about 120,000 ft³/s) and is the highest since that date, from information by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3540	10400	5940	18400	20900	17700	19500	17900	14000	4060	4070	2870
2	3550	10600	5940	18400	20700	17700	19400	18500	13200	4040	4270	2870
3	3500	11000	6040	18400	20900	18300	18900	18200	11600	4060	4680	2880
4	3800	8560	6110	18400	20700	19400	18500	18200	11100	3930	4180	2950
5	3810	8430	6000	18400	20200	20200	18700	18700	10700	4040	3560	2960
6	3820	9330	5960	18400	19800	20300	19000	19000	10200	4070	3450	2980
7	3760	9980	5600	18400	19500	20400	19000	19200	8760	3930	3370	2970
8	2820	9250	5240	18300	19400	20500	19000	19200	7420	3470	3720	2980
9	3330	9280	5330	18300	19100	20100	19000	19000	6000	3440	3800	2980
10	3860	9280	5600	18500	18700	19800	18900	18500	5300	3400	3790	3030
11	3920	8970	5610	18700	18700	19900	20500	18700	5100	3400	3700	3040
12	3910	8420	5560	18700	18700	20100	20300	19400	4990	3510	3660	3050
13	3930	8450	5730	19000	18800	20300	18200	19900	4920	3750	3650	3070
14	3890	8760	6100	19300	18900	21200	17600	20400	4900	3850	3640	3070
15	3920	8930	6850	19200	19100	20100	18100	20600	4830	3890	3630	3060
16	3950	8920	8460	19000	19500	19900	19100	20600	4440	3960	3640	3080
17	10300	8870	12100	19100	19500	20000	19300	19800	3610	3960	3410	3090
18	20400	8410	15000	19500	19500	20000	19900	18800	3560	3960	3060	3110
19	23700	7260	16800	21000	19500	20100	20400	19000	3530	3940	2740	3220
20	23200	4910	17900	19700	19500	20300	20300	18800	3400	3790	2710	3320
21	27700	3850	18000	18500	19300	20400	20400	18700	3210	3860	2690	2940
22	34600	3870	18000	18300	18600	20200	19800	18500	3440	3860	2720	3050
23	34800	3820	18000	19000	18200	19800	19500	18200	3690	3840	2710	3110
24	31800	4480	17900	20300	18200	19500	19500	18200	3690	3830	2670	3130
25	29000	5140	17800	20600	18200	18700	20000	18100	3710	3800	2740	3140
26	27100	5210	17700	20600	18200	17800	20000	17700	3790	3800	2780	3150
27	22200	5240	17600	22900	17900	18500	19900	16900	4020	3720	2740	3160
28	18700	5520	17500	25100	17700	19600	19800	15800	4020	3950	3270	3170
29	17200	5920	17800	23600	---	19700	18800	15300	3980	2800	2890	3180
30	14000	5940	18300	22100	---	19700	17800	15300	4060	4100	2850	3170
31	10200	---	18300	21400	---	19700	---	14900	---	4040	2590	---
TOTAL	404210	227000	354770	609500	537900	609900	579100	570000	179170	118050	103380	91780
MEAN	13040	7567	11440	19660	19210	19670	19300	18390	5972	3808	3335	3059
MAX	34800	11000	18300	25100	20900	21200	20500	20600	14000	4100	4680	3320
MIN	2820	3820	5240	18300	17700	17700	17600	14900	3210	2800	2590	2870
AC-FT	801800	450300	703700	1209000	1067000	1210000	1149000	1131000	355400	234200	205100	182000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995#, BY WATER YEAR (WY)

MEAN	2562	2758	4305	6357	7609	8861	8379	8610	7241	4848	3170	2698
MAX	13040	10570	14580	19660	20800	26430	20220	22560	17000	22870	8252	6652
(WY)	1995	1974	1974	1995	1974	1992	1969	1969	1979	1989	1979	1973
MIN	186	94.0	131	600	252	1178	1231	1003	1281	896	338	313
(WY)	1965	1965	1965	1965	1981	1971	1981	1971	1971	1967	1971	1971

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1965 - 1995#	
ANNUAL TOTAL	2671880		4384760			
ANNUAL MEAN	7320		12010		5605	
HIGHEST ANNUAL MEAN					12010	1995
LOWEST ANNUAL MEAN					961	1971
HIGHEST DAILY MEAN	34800	Oct 23	34800	Oct 23	46600	Jul 3 1989
LOWEST DAILY MEAN	2100	Jan 16	2590	Aug 31	2.0	Dec 12 1965
ANNUAL SEVEN-DAY MINIMUM	2540	Jan 13	2710	Aug 19	2.4	Dec 11 1965
INSTANTANEOUS PEAK FLOW			35400	Oct 23	49200	Jul 2 1989
INSTANTANEOUS PEAK STAGE			76.17	Oct 23	78.49	Jul 2 1989
ANNUAL RUNOFF (AC-FT)	5300000		8697000		4061000	
10 PERCENT EXCEEDS	15100		20300		15400	
50 PERCENT EXCEEDS	5180		11100		3140	
90 PERCENT EXCEEDS	3390		3120		962	

Period of regulated streamflow.

08041000 NECHES RIVER AT EVADALE, TX

LOCATION.--Lat 30°21'20", long 94°05'35", Jasper-Hardin County line, Hydrologic Unit 12020003, near right bank on downstream side of bridge on U.S. Highway 96 at Evadale, 0.8 mi upstream from Mill Creek, 16 mi upstream from Village Creek, and at mile 55.6.

DRAINAGE AREA.--7,951 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to December 1906, April 1921 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 718: 1929. WSP 1342: 1905-07, 1924. WSP 1732: Drainage area at former site.

GAGE.--Water-stage recorder. Datum of gage is 8.25 ft above sea level. July 1, 1904, to Dec. 31, 1906, nonrecording gage on Gulf, Colorado, and Santa Fe Railway Co. bridge at site 1.2 mi downstream at datum 5.50 ft lower; Apr. 1, 1921, to Dec. 7, 1948, nonrecording gages at site 1.2 mi downstream at present datum; Dec. 8, 1948, to Nov. 8, 1963, water-stage recorder at site 1.2 mi downstream at present datum.

REMARKS.--Records fair. Flow regulated by B. A. Steinhagen Lake (station 08040000) 58.1 mi upstream, and by Sam Rayburn Reservoir (station 08039300) 95.7 mi upstream. There are some diversions upstream for municipal use. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--45 years (water years 1905-06, 1922-64) 6,308 ft³/s (4,570,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1905-06, 1922-64).--Maximum discharge, 92,100 ft³/s May 11, 1944 (gage height, 23.58 ft, from floodmark), at site then in use; minimum daily, 63 ft³/s Nov. 26-28, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1884 reached a stage of 26.2 ft, at former site (discharge, about 125,000 ft³/s), and flood in August 1915 reached a stage of 24.5 ft, at former site (discharge, about 102,000 ft³/s). These are the highest floods since at least 1884. Stages furnished by Gulf, Colorado, and Santa Fe Railway Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3420	18100	5270	20900	28600	21600	22300	19300	17700	4380	4540	2960
2	3420	12800	5290	21100	26800	20800	21900	18400	16700	4320	4670	2960
3	3420	9500	5610	21200	25500	20400	21500	17900	15400	4320	4740	3030
4	3410	9610	5760	e21400	24700	20300	21500	18000	14200	4310	4940	3070
5	3520	10100	5730	21400	24300	20700	22000	18200	12500	4360	4920	3120
6	3650	9520	5640	21600	24200	21300	22000	17900	11400	4460	4450	3160
7	3710	9120	5530	21800	23800	22300	21600	18200	10700	4490	4100	3180
8	3820	9450	5380	21800	23300	23000	21400	18900	9810	4450	3850	3190
9	3340	9740	4920	21600	22900	23300	21100	19400	8700	4070	3780	3200
10	3270	9570	4870	21500	22700	23400	21300	19300	7390	3840	3790	3200
11	3610	9420	e4900	21500	22200	22900	23900	19100	6280	3750	3770	3200
12	3780	9310	e4920	21600	21600	22400	24400	18900	5760	3720	3720	3200
13	3810	9060	4950	22700	21300	22600	24600	19100	5480	3750	3670	3180
14	3820	8740	5070	22900	21300	23200	23800	19300	5270	3970	3650	3180
15	3800	8520	5270	22800	21400	23400	22000	19700	5190	4080	3650	3180
16	e4000	8320	5870	22900	21500	24200	20500	20000	5130	4190	3630	3180
17	e4900	8300	7100	22900	21600	23700	19800	20300	4960	4260	3610	3190
18	e16500	8360	8720	23100	21800	22800	19900	20700	4420	4300	3600	3290
19	23200	8200	11300	23400	22200	22200	20200	20200	4220	4370	3520	3360
20	25900	7700	13700	24000	22500	21800	20900	19300	3900	4370	3290	3400
21	28000	6190	16600	24900	22300	21800	21600	19000	3790	4270	3180	3400
22	29000	4630	18800	24700	22200	21900	21500	18700	3600	4240	3140	3290
23	31000	4000	20000	23700	22000	22200	21800	18600	3620	4210	3080	3130
24	36000	3790	20300	22900	21500	22000	21000	18500	3840	4180	3060	3160
25	40700	3910	20600	22700	20900	21900	21200	18200	3960	4140	3040	3170
26	41000	4440	20600	23800	20600	21500	19900	18000	3990	4130	3090	3170
27	38900	4670	20500	28000	20500	21300	19800	17900	4080	4150	3090	3170
28	35900	4720	20700	31400	22000	20600	20000	19100	4200	4090	3060	3180
29	31500	4840	21000	32000	---	21000	19900	20500	4310	4170	3350	3180
30	26500	5130	21000	31600	---	22200	19800	18800	4390	3770	3300	3180
31	22300	---	20900	30300	---	22500	---	17500	---	4180	3140	---
TOTAL	489100	239760	346800	738100	636200	685200	643100	586900	214890	129290	114420	95460
MEAN	15780	7992	11190	23810	22720	22100	21440	18930	7163	4171	3691	3182
MAX	41000	18100	21000	32000	28600	24200	24600	20700	17700	4490	4940	3400
MIN	3270	3790	4870	20900	20500	20300	19800	17500	3600	3720	3040	2960
AC-FT	970100	475600	687900	1464000	1262000	1359000	1276000	1164000	426200	256400	227000	189300

08041000 NECHES RIVER AT EVADALE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995#, BY WATER YEAR (WY)

MEAN	2866	3054	4834	7176	8526	9810	9441	9315	8066	5565	3467	2910
MAX	15780	11800	15240	23810	22720	28790	21440	24120	19920	25680	9644	7090
(WY)	1995	1974	1974	1995	1995	1992	1995	1969	1991	1989	1979	1979
MIN	268	188	301	628	614	1352	1432	1220	1397	1118	396	398
(WY)	1965	1965	1965	1965	1981	1971	1981	1981	1971	1967	1971	1971

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1965 - 1995#	
ANNUAL TOTAL	2741550		4919220			
ANNUAL MEAN	7511		13480		6239	
HIGHEST ANNUAL MEAN					13480	1995
LOWEST ANNUAL MEAN					1128	1971
HIGHEST DAILY MEAN	41000	Oct 26	41000	Oct 26	47400	Jul 6 1989
LOWEST DAILY MEAN	2660	Jan 16	2960	Sep 1	82	Aug 14 1971
ANNUAL SEVEN-DAY MINIMUM	2870	Jan 5	3060	Aug 31	126	Nov 18 1965
INSTANTANEOUS PEAK FLOW			41400	Oct 25	47900	Jul 6 1989
INSTANTANEOUS PEAK STAGE			19.33	Oct 25	20.79	Jul 6 1989
ANNUAL RUNOFF (AC-FT)	5438000		9757000		4520000	
10 PERCENT EXCEEDS	15900		23400		17100	
50 PERCENT EXCEEDS	5000		12800		3470	
90 PERCENT EXCEEDS	3360		3290		1160	

e Estimated
Period of regulated streamflow.

08041000 NECHES RIVER AT EVADALE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: September 1939 to August 1994 (Discontinued). Pesticide analyses: February 1968 to July 1981. Sediment analyses: October 1960 to August 1994 (Discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1947 to current year.
WATER TEMPERATURE: October 1947 to current year.

INSTRUMENTATION.--From October 1954 to September 1963, water temperature was continuously recorded at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 670 microsiemens Mar. 21,25,31,1994; minimum daily, 23 microsiemens Sept. 19, 1963.
WATER TEMPERATURE (1947-85, 1987 to current year): Maximum daily, 34.0°C June 29, 1953, and several days during Aug.,1992, Aug. and Sept. 1993; minimum daily, 3.0°C Jan. 30, 31, 1948, Jan. 31, 1949, and Jan 24, 1963.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily, 190 microsiemens July 11; minimum daily, 43 microsiemens Apr. 13,14.
WATER TEMPERATURE: Maximum daily, 32.0°C July 30, Aug. 6 - Sept. 21; minimum daily, 9.0°C Jan. 3.

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	489100	77	51	68000	9.6	12700	11	14700	18
NOV.	1994	239760	134	82	53400	17	11000	19	12300	29
DEC.	1994	346800	111	70	65900	14	13000	16	14700	25
JAN.	1995	738100	115	73	145000	15	28900	16	32600	26
FEB.	1995	636200	126	79	136000	16	27400	18	30800	28
MAR.	1995	685200	110	71	131000	14	25700	16	29100	25
APR.	1995	643100	106	68	118000	13	23000	15	26100	24
MAY	1995	586900	115	73	116000	14	23000	16	25900	26
JUNE	1995	214890	113	71	41400	14	8250	16	9290	25
JULY	1995	129290	132	81	28400	17	5840	19	6520	29
AUG.	1995	114420	133	83	25500	17	5200	19	5820	29
SEPT	1995	95460	136	84	21700	17	4450	19	4970	30
TOTAL		4919220	**	**	950000	**	188000	**	213000	**
WTD.AVG.		13480	113	72	**	14	**	16	**	25

08041000 NECHES RIVER AT EVADALE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY EQUIVALENT MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	143	152	97	88	137	96	106	62	161	127	142
2	150	133	154	103	93	136	73	127	64	135	128	135
3	149	116	143	122	125	116	123	127	118	129	147	136
4	145	103	153	123	95	115	124	122	78	134	125	132
5	146	104	150	122	103	140	82	128	118	128	125	132
6	140	104	149	118	116	139	81	144	105	131	140	131
7	146	121	149	125	116	139	122	124	94	152	133	143
8	140	127	152	132	122	138	128	124	64	152	131	130
9	140	132	151	136	122	134	125	119	118	129	141	130
10	139	131	150	136	127	134	126	124	118	128	140	135
11	139	132	150	136	122	130	104	124	122	190	144	144
12	139	136	155	136	133	129	124	120	129	169	129	131
13	140	139	152	136	133	118	43	120	129	143	132	131
14	140	141	156	140	133	118	43	122	129	142	123	131
15	142	146	153	146	132	103	112	119	139	141	136	133
16	102	147	162	144	133	99	119	123	164	129	134	134
17	102	146	155	145	135	97	116	151	153	125	132	138
18	99	147	153	138	126	94	108	122	135	124	135	131
19	99	151	129	139	133	92	105	122	132	---	131	136
20	96	148	128	138	134	101	103	123	154	125	135	129
21	62	149	108	94	138	107	105	123	138	129	135	128
22	53	152	91	94	141	100	111	125	139	129	127	131
23	73	155	87	131	142	98	114	123	142	130	131	139
24	44	173	95	130	143	104	115	121	163	130	131	136
25	51	167	83	90	143	99	116	122	145	135	129	135
26	96	168	84	89	143	85	107	124	137	124	135	139
27	89	157	91	91	144	84	107	122	142	130	132	137
28	44	---	95	72	155	84	107	54	143	129	143	139
29	47	153	81	93	---	84	122	55	171	131	132	186
30	63	153	91	67	---	84	125	53	171	130	133	135
31	64	---	83	73	---	84	---	50	---	145	129	---
MEAN	108	140	129	117	127	110	106	115	127	137	133	136
MAX	156	173	162	146	155	140	128	151	171	190	147	186
MIN	44	103	81	67	88	84	43	50	62	124	123	128

WTR YR 1995 MEAN 124 MAX 190 MIN 43

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25.0	17.0	14.0	12.0	10.0	10.0	16.0	22.0	27.0	30.0	31.0	32.0
2	25.0	17.0	14.0	12.0	10.0	10.0	16.0	22.0	27.0	30.0	31.0	32.0
3	25.0	17.0	14.0	9.0	10.0	10.0	15.0	22.0	27.0	30.0	31.0	32.0
4	25.0	17.0	14.0	11.0	10.0	10.0	15.0	23.0	27.0	30.0	31.0	32.0
5	25.0	17.0	14.0	11.0	10.0	10.0	16.0	23.0	28.0	30.0	31.0	32.0
6	24.0	17.0	14.0	11.0	10.0	10.0	15.0	23.0	28.0	30.0	32.0	32.0
7	25.0	17.0	14.0	10.0	10.0	10.0	15.0	24.0	28.0	30.0	32.0	32.0
8	24.0	17.0	14.0	10.0	10.0	10.0	14.0	24.0	28.0	30.0	32.0	32.0
9	24.0	17.0	14.0	10.0	10.0	10.0	15.0	23.0	28.0	30.0	32.0	32.0
10	24.0	17.0	13.0	10.0	10.0	10.0	15.0	24.0	28.0	30.0	32.0	32.0
11	24.0	17.0	13.0	10.0	10.0	10.0	15.0	24.0	28.0	30.0	32.0	32.0
12	24.0	17.0	13.0	10.0	11.0	10.0	16.0	24.0	29.0	30.0	32.0	32.0
13	20.0	16.0	13.0	10.0	12.0	10.0	16.0	24.0	29.0	30.0	32.0	32.0
14	20.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	29.0	30.0	32.0	32.0
15	20.0	16.0	13.0	10.0	11.0	10.0	16.0	26.0	29.0	30.0	32.0	32.0
16	20.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	29.0	30.0	32.0	32.0
17	20.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	29.0	30.0	32.0	32.0
18	19.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	29.0	30.0	32.0	32.0
19	19.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	30.0	---	32.0	32.0
20	19.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	30.0	30.0	32.0	32.0
21	19.0	16.0	13.0	10.0	10.0	10.0	16.0	26.0	30.0	30.0	32.0	32.0
22	19.0	16.0	13.0	10.0	10.0	10.0	18.0	26.0	30.0	30.0	32.0	31.0
23	19.0	15.0	12.0	10.0	10.0	12.0	18.0	26.0	30.0	31.0	32.0	31.0
24	19.0	15.0	13.0	10.0	10.0	12.0	18.0	26.0	30.0	31.0	32.0	31.0
25	19.0	15.0	12.0	10.0	10.0	12.0	18.0	26.0	30.0	30.0	32.0	31.0
26	18.0	15.0	12.0	10.0	10.0	12.0	20.0	26.0	30.0	30.0	32.0	31.0
27	18.0	15.0	12.0	10.0	10.0	12.0	20.0	26.0	30.0	31.0	32.0	31.0
28	18.0	---	12.0	10.0	10.0	12.0	22.0	26.0	30.0	31.0	32.0	31.0
29	17.0	14.0	12.0	10.0	---	12.0	22.0	26.0	30.0	31.0	32.0	31.0
30	17.0	14.0	12.0	10.0	---	12.0	21.0	26.0	30.0	32.0	32.0	30.0
31	17.0	---	12.0	10.0	---	12.0	---	26.0	---	31.0	32.0	---
MEAN	21.0	16.0	13.0	10.0	10.0	10.5	17.0	25.0	29.0	30.5	32.0	31.5
MAX	25.0	17.0	14.0	12.0	12.0	12.0	22.0	26.0	30.0	32.0	32.0	32.0
MIN	17.0	14.0	12.0	9.0	10.0	10.0	14.0	22.0	27.0	30.0	31.0	30.0

WTR YR 1995 MEAN 20.5 MAX 32.0 MIN 9.0

08041500 VILLAGE CREEK NEAR KOUNTZE, TX

LOCATION.--Lat 30°23'52", long 94°15'48", Hardin County, Hydrologic Unit 12020006, on downstream side of bridge on Farm Road 418, 1.6 mi upstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 3.1 mi upstream from Cypress Creek, 3.4 mi northeast of Kountze and 4.3 mi downstream from Beech Creek.

DRAINAGE AREA.--860 mi².

PERIOD OF RECORD.--May 1924 to September 1927, October 1927 to November 1929 (discharge measurements only), April 1939 to current year.
Water-quality records: November 1967 to September 1985.

REVISED RECORDS.--WSP 1732: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 25.12 ft above sea level. Prior to Apr. 30, 1939, nonrecording gage at site 1.6 mi downstream at different datum. Apr. 30, 1939 to Sept. 30, 1966, water-stage recorder at site 2,000 ft downstream at present datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. There are small diversions above station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1884, about 34 ft in August 1915 at site 2,000 ft downstream at present datum; stage was determined on basis of information by engineers of Gulf, Colorado, and Santa Fe Railway Co. for site 1.6 mi downstream.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft³/s.

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 19	2200	43,000	25.54	Apr. 7	1600	5,160	15.77
Jan. 29	0400	14,000	19.84				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	83	611	462	1630	4700	2780	e2840	468	1190	196	494	441
2	82	568	410	1630	3360	e3190	e2080	437	1450	396	935	292
3	79	537	477	1490	2420	2910	e1510	407	1580	522	1260	226
4	79	514	866	1360	1800	2680	1090	386	1980	401	1350	203
5	78	507	1130	1020	1350	2500	1560	379	2270	327	1090	184
6	76	580	1220	851	1110	2480	2940	376	2050	564	689	170
7	75	745	1010	823	1000	2710	4850	375	1140	586	471	159
8	263	950	764	807	922	e3000	4810	404	558	826	465	152
9	609	798	633	814	899	e3200	4040	544	425	662	540	150
10	339	640	574	753	894	e3400	e4000	697	363	399	553	147
11	324	580	562	697	871	e3600	e4200	779	333	291	437	142
12	291	608	637	665	861	2390	e4500	667	337	239	336	137
13	229	581	733	834	849	e3100	e4470	523	485	212	283	130
14	183	529	730	1300	821	e3400	4300	461	682	205	263	127
15	161	493	643	1600	794	e3600	3750	437	665	204	262	124
16	161	471	721	1800	812	e3900	2600	394	523	243	278	123
17	1830	456	1510	1750	844	4350	1530	348	344	257	320	123
18	17300	446	1820	1570	837	4810	1060	314	286	248	361	136
19	37100	434	1760	2170	829	3900	892	298	255	295	310	135
20	38400	421	1680	2670	905	2970	792	342	232	280	248	174
21	21400	406	1550	5180	940	2130	786	536	214	248	235	202
22	9640	391	1580	7600	866	e1480	1000	483	200	282	223	216
23	5580	376	1330	5610	758	e1150	1230	359	190	286	218	224
24	3680	367	996	4350	669	983	1190	293	182	216	216	264
25	2520	353	836	3780	612	885	1070	262	174	182	290	234
26	1850	344	730	e3800	572	816	871	242	169	163	344	222
27	1370	343	655	e8500	548	853	721	227	162	150	295	e160
28	1020	345	612	13000	1250	929	611	228	154	139	298	e140
29	840	361	825	13400	---	1250	542	357	152	133	252	e130
30	733	448	1260	11100	---	2360	502	492	156	144	283	e120
31	663	---	1470	7150	---	3280	---	773	---	220	576	---
TOTAL	147038	15203	30186	109704	33093	80986	66337	13288	18901	9516	14175	5387
MEAN	4743	507	974	3539	1182	2612	2211	429	630	307	457	180
MAX	38400	950	1820	13400	4700	4810	4850	779	2270	826	1350	441
MIN	75	343	410	665	548	816	502	227	152	133	216	120
AC-FT	291600	30160	59870	217600	65640	160600	131600	26360	37490	18870	28120	10690
CFSM	5.52	.59	1.13	4.11	1.37	3.04	2.57	.50	.73	.36	.53	.21
IN.	6.36	.66	1.31	4.75	1.43	3.50	2.87	.57	.82	.41	.61	.23

08041500 VILLAGE CREEK NEAR KOUNTZE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 1995h, BY WATER YEAR (WY)

MEAN	388	722	1059	1502	1455	1210	1182	1196	879	498	259	303
MAX	4743	6430	5835	5693	4420	3311	6733	6932	6668	4963	1580	2111
(WY)	1995	1941	1941	1974	1966	1992	1979	1953	1950	1989	1975	1961
MIN	22.8	34.9	115	113	169	206	104	89.5	69.5	31.1	28.8	26.5
(WY)	1968	1968	1955	1957	1968	1940	1971	1963	1956	1971	1956	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1924 - 1995h	
ANNUAL TOTAL	456702		543814			
ANNUAL MEAN	1251		1490		887	
HIGHEST ANNUAL MEAN					2248	1950
LOWEST ANNUAL MEAN					190	1971
HIGHEST DAILY MEAN	38400	Oct 20	38400	Oct 20	62200	Nov 26 1940
LOWEST DAILY MEAN	75	Oct 7	75	Oct 7	16	Oct 1 1956
ANNUAL SEVEN-DAY MINIMUM	79	Oct 1	79	Oct 1	18	Sep 28 1956
INSTANTANEOUS PEAK FLOW			43000	Oct 19	67200	Nov 26 1940
INSTANTANEOUS PEAK STAGE			25.54	Oct 19	27.60	Nov 26 1940
ANNUAL RUNOFF (AC-FT)	905900		1079000		642700	
ANNUAL RUNOFF (CFSM)	1.45		1.73		1.03	
ANNUAL RUNOFF (INCHES)	19.76		23.52		14.02	
10 PERCENT EXCEEDS	2500		3380		2150	
50 PERCENT EXCEEDS	561		609		332	
90 PERCENT EXCEEDS	139		170		80	

e Estimated
h See PERIOD OF RECORD paragraph.

08041700 PINE ISLAND BAYOU NEAR SOUR LAKE, TX

LOCATION.--Lat 30°06'21", long 94°20'04", Jefferson-Hardin County line, Hydrologic Unit 12020007, on right bank on downstream side of bridge on county road and 5.1 mi southeast of Sour Lake.

DRAINAGE AREA.--336 mi².

PERIOD OF RECORD.--October 1967 to current year.
Water-quality records.--Chemical analyses: February 1968 to June 1989. Specific conductance: February 1968 to September 1989. Water temperature: February 1968 to September 1989.

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

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Low flow for period March through September is affected by small diversions and return flow from irrigated fields. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s :

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 20	1700	48,800	37.50	Jan. 31	1100	4,160	8.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	758	16	565	3620	e2110	e331	e80	1390	1180	644	71
2	10	448	16	560	2920	2070	e328	e70	1870	1240	1030	124
3	11	258	391	525	2360	1880	299	e60	1960	1000	938	125
4	12	178	589	463	1990	1650	327	45	1860	566	872	97
5	12	146	484	362	1690	1400	679	50	1470	339	896	75
6	12	134	397	272	1250	1210	962	46	844	766	949	51
7	13	119	298	236	691	1170	1060	42	313	934	1010	38
8	32	114	222	203	309	e1340	1090	117	116	826	1040	42
9	76	113	163	168	182	e1520	1150	293	75	586	799	47
10	97	103	122	139	143	e1790	1230	274	67	349	436	27
11	74	93	93	117	124	1900	1300	195	75	206	197	20
12	49	83	72	101	111	1860	1280	133	97	136	126	18
13	38	74	59	214	99	e1770	1260	87	90	100	106	16
14	36	70	50	463	87	e1880	1200	68	69	96	99	16
15	30	59	45	633	78	e2020	1090	58	70	145	124	16
16	35	52	54	745	72	2100	994	54	69	339	129	15
17	1740	45	141	792	77	2150	867	50	69	263	110	15
18	15600	37	305	905	109	2220	659	55	70	170	79	15
19	35800	32	417	1110	148	2200	345	147	61	108	62	15
20	47400	29	503	1070	177	2040	e250	202	54	82	53	24
21	46200	26	546	1020	188	1840	e210	208	52	77	155	81
22	36800	23	533	979	193	e1480	e270	196	51	76	187	63
23	25500	21	458	1010	178	1020	e270	136	49	74	169	42
24	15900	20	371	1030	146	511	e260	101	49	70	144	25
25	8670	19	270	1040	117	e400	e251	82	49	63	135	17
26	5190	18	171	992	98	e300	203	72	49	65	119	15
27	3640	18	112	1300	86	e240	145	60	52	63	95	13
28	2730	16	88	1940	1480	e240	124	59	57	60	74	12
29	2060	15	201	2650	---	e250	e105	200	118	63	57	12
30	1570	16	403	3650	---	e280	e90	498	684	75	64	11
31	1120	---	505	4120	---	e302	---	680	---	186	72	---
TOTAL	250467	3137	8095	29374	18723	43143	18629	4418	11899	10303	10970	1158
MEAN	8080	105	261	948	669	1392	621	143	397	332	354	38.6
MAX	47400	758	589	4120	3620	2220	1300	680	1960	1240	1040	125
MIN	10	15	16	101	72	240	90	42	49	60	53	11
AC-FT	496800	6220	16060	58260	37140	85570	36950	8760	23600	20440	21760	2300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	497	385	566	725	639	590	634	563	676	417	190	204
MAX	8080	2095	2158	2206	1850	1838	4972	3589	2795	3291	1660	1487
(WY)	1995	1987	1987	1974	1992	1993	1979	1989	1981	1989	1983	1979
MIN	2.90	2.48	12.4	4.75	13.5	89.1	21.4	29.1	37.8	33.4	12.3	10.1
(WY)	1970	1989	1990	1971	1989	1978	1987	1978	1984	1980	1977	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	345097.4		410316			
ANNUAL MEAN	945		1124		507	
HIGHEST ANNUAL MEAN					1167	1979
LOWEST ANNUAL MEAN					133	1970
HIGHEST DAILY MEAN	47400	Oct 20	47400	Oct 20	47400	Oct 20 1994
LOWEST DAILY MEAN	8.8	Sep 30	10	Oct 1	.00	Oct 21 1979
ANNUAL SEVEN-DAY MINIMUM	9.6	Sep 26	11	Oct 1	.62	Sep 14 1984
INSTANTANEOUS PEAK FLOW			48800	Oct 20	48800	Oct 20 1994
INSTANTANEOUS PEAK STAGE			37.50	Oct 20	37.50	Oct 20 1994
ANNUAL RUNOFF (AC-FT)	684500		813900		367000	
10 PERCENT EXCEEDS	1090		1810		1380	
50 PERCENT EXCEEDS	106		155		91	
90 PERCENT EXCEEDS	19		27		9.7	

e Estimated

08042000 TAYLOR BAYOU NEAR LABELLE, TX

LOCATION.--Lat 29°52'30", long 94°09'34", Jefferson County, Hydrologic Unit 12040201, near center of stream on downstream side of bridge on county road, 0.7 mi south of LaBelle, 6.0 mi upstream from Hillebrandt Bayou, 7.2 mi upstream from State Highway 73 and 11.2 mi upstream from saltwater gates and barge locks. Distances are measured along rectified channel.

DRAINAGE AREA.--262 mi².

PERIOD OF RECORD.--April 1954 to September 1984 (daily mean and peak discharge for storms of 1.0 inch or more runoff, except for period Sept. 10-22, 1961). October 1984 to current year (gage heights only).

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4.63 ft below sea level, originally determined by several comparisons of water surface with auxiliary water-stage recorder 7.2 mi downstream during times of no flow and ideal weather conditions. Prior to October 1984, auxiliary water-stage recorder 7.2 mi downstream.

REMARKS.--Records poor. Prior to October 1984, records were computed using fall as a factor. Low flow is regulated by drainage from ricefields and operation of saltwater gates and barge locks. An unknown amount of water is diverted above and below gage for irrigation of ricefields.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,590 ft³/s Sept. 22, 1963, and Apr. 23, 1979; maximum gage height, 11.78 ft Sept. 20, 1963 (backwater from Hillebrandt Bayou); minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.31 ft July 17, 1954. Maximum stage since at least 1941, that of Sept. 20, 1963, and Apr. 23, 1979. Flood of Sept. 13, 1961 (Hurricane Carla), reached a stage of 11.51 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1941 reached a stage of 11.3 ft, from information by U.S. Army Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 8.9 ft Oct. 18 at 2400 hours; minimum, 5.0 ft Feb. 20 at 1700 hours.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	6.4	5.6	6.6	5.6	7.5	6.7	---	---	7.4	7.4	---
2	---	6.2	5.6	---	5.7	7.3	6.7	---	---	7.4	7.6	---
3	---	6.2	---	---	5.8	6.6	6.6	---	---	7.1	7.4	---
4	6.1	6.1	---	---	5.6	6.2	7.1	---	---	7.1	6.8	---
5	6.1	6.1	---	---	5.6	6.4	7.4	---	---	7.0	6.6	---
6	6.0	6.1	---	6.2	5.7	6.3	7.5	---	---	7.0	6.7	---
7	6.1	5.8	7.2	6.3	5.8	7.0	7.4	---	---	6.6	6.8	---
8	6.4	5.7	---	---	5.6	6.9	6.8	---	---	6.4	7.0	---
9	6.4	5.8	---	---	5.6	6.0	6.6	---	---	6.1	6.8	---
10	5.8	5.8	---	---	5.7	6.1	6.9	---	---	6.0	6.7	---
11	5.7	5.7	---	---	5.6	6.2	7.1	---	---	5.7	6.6	---
12	5.6	5.8	---	---	5.5	6.2	6.5	---	---	5.9	6.8	---
13	5.6	5.9	---	6.4	5.5	6.9	6.4	---	---	6.1	6.8	---
14	5.6	5.9	---	6.2	5.6	7.0	6.4	---	---	6.2	6.8	---
15	5.9	6.0	---	---	5.7	7.0	6.5	---	---	6.3	6.7	---
16	6.2	6.0	6.4	---	5.8	6.7	6.4	---	---	6.4	6.6	---
17	8.7	5.7	6.4	---	5.7	6.5	6.5	---	---	6.2	6.6	---
18	8.9	5.6	---	6.3	5.8	6.3	6.6	---	---	6.0	6.4	---
19	8.9	5.5	---	6.4	5.7	6.2	6.5	---	---	6.0	---	---
20	8.9	5.6	---	---	5.6	6.3	6.5	---	---	5.9	---	---
21	8.9	5.6	---	---	5.3	6.3	6.5	---	---	6.0	---	---
22	8.8	5.6	---	---	5.5	6.1	6.4	---	---	5.7	---	---
23	8.8	5.5	---	---	5.6	6.1	---	---	---	5.9	---	---
24	8.5	5.3	---	5.6	5.6	6.2	---	---	5.9	6.0	---	---
25	8.1	5.5	---	5.6	5.5	6.2	---	---	5.9	5.8	---	---
26	7.4	5.6	---	5.8	5.5	6.3	---	---	5.9	5.9	---	---
27	6.7	5.8	---	6.9	5.6	6.3	---	---	5.9	5.9	---	---
28	6.5	5.8	---	6.9	7.4	6.2	---	---	6.1	5.9	---	---
29	6.5	5.8	---	6.5	---	6.9	---	---	6.2	6.0	---	---
30	6.6	5.8	---	6.1	---	7.2	---	---	7.4	6.2	---	---
31	6.6	---	6.4	5.6	---	7.1	---	---	---	6.8	---	---
MAX	---	6.4	---	---	7.4	7.5	---	---	---	7.4	---	---

08042500 HILLEBRANDT BAYOU NEAR LOVELL LAKE, TX

LOCATION.--Lat 29°55'44", long 94°06'35", Jefferson County, Hydrologic Unit 12040201, near center of stream on downstream side of bridge on county road, 1.3 mi southeast of Lovell Lake and 4.4 mi upstream (along rectified channel) from Taylor Bayou.

DRAINAGE AREA.--128 mi².

PERIOD OF RECORD.--April 1954 to September 1984 (daily mean and peak discharge for storms of 1.0 inch or more runoff, except for the period Sept. 11-18, 1961). October 1984 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 4.63 ft below sea level, originally determined by comparisons of water surface with Taylor Bayou near LaBelle, an auxiliary gage 5.6 mi downstream, during times of no flow and calm wind conditions. Prior to Aug. 28. 1963, auxiliary water-stage recorder on Taylor Bayou, 1.2 mi downstream from Hillebrandt Bayou, nonrecording gages on Taylor Bayou 2.3 and 5.2 mi downstream from Hillebrandt Bayou; Aug. 28, 1963, to Sept. 30, 1984, auxiliary water-stage recorder 3.0 mi downstream. Gage was destroyed on Aug. 24, 1991 and re-installed on Mar. 4, 1992.

REMARKS.--Records good. Prior to October 1984, records were computed using fall as a factor. Low flow regulated by drainage from ricefields and operation of saltwater gates and barge locks. An unknown amount of water is diverted above and below gage for rice irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft³/s Sept. 18, 1963; maximum gage height, 12.34 ft Sept. 19, 1963; minimum discharge not determined (affected by tides and pumping); minimum gage height, 2.33 ft July 17, 1954 Maximum stage since at least 1941, 12.34 ft Sept. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 9.3 ft Oct. 17, at 2200 hours; minimum, 4.9 ft Dec. 11, at 1200 hours.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	6.6	5.7	6.6	5.8	7.0	6.8	---	---	7.2	7.4	---
2	6.1	6.5	5.7	6.0	5.8	6.6	6.8	---	---	6.6	7.6	---
3	6.2	---	7.7	6.1	6.0	6.5	6.8	---	---	6.9	---	---
4	6.3	---	7.7	6.1	5.7	6.4	7.1	---	---	7.1	---	---
5	6.3	---	6.8	6.0	5.8	6.5	7.3	---	---	7.1	---	---
6	6.2	---	7.0	6.2	5.9	6.5	7.3	---	---	7.0	---	---
7	6.3	---	6.8	6.3	5.9	6.9	7.1	---	---	6.3	---	---
8	6.6	---	6.4	5.8	5.8	6.5	6.9	---	---	6.5	---	---
9	6.6	---	6.2	5.9	5.8	6.1	6.8	---	---	6.3	---	---
10	6.0	---	6.0	5.9	5.9	6.3	7.1	---	---	6.2	---	---
11	5.9	5.8	5.3	5.8	5.7	6.3	7.3	---	---	5.9	---	---
12	5.8	5.9	5.5	5.8	5.6	6.4	6.6	---	---	6.1	---	---
13	5.8	6.0	5.7	6.5	5.6	7.0	6.6	---	---	6.2	---	---
14	5.8	6.1	5.8	6.2	5.8	7.0	6.5	---	---	6.4	---	---
15	6.1	6.1	6.0	5.9	5.9	7.0	6.6	---	---	6.5	---	---
16	6.4	6.1	6.4	5.6	6.0	6.8	6.6	---	---	6.5	---	---
17	9.3	5.8	6.5	5.9	5.8	6.6	6.7	---	---	6.4	---	---
18	9.3	5.7	6.2	6.2	5.9	6.5	6.7	---	---	6.1	---	---
19	8.7	5.7	5.9	6.4	5.8	6.4	6.7	---	---	6.2	---	---
20	8.2	5.7	6.0	5.7	5.7	6.5	6.7	---	---	6.1	---	---
21	7.7	5.8	6.0	5.8	5.5	6.5	6.6	---	---	6.2	---	---
22	7.8	5.7	6.0	6.0	5.7	6.4	6.5	---	---	5.8	---	---
23	7.8	5.6	5.6	6.0	5.8	6.3	6.6	---	---	6.0	---	---
24	7.6	5.5	5.7	5.7	5.8	6.3	---	---	---	6.2	---	---
25	7.4	5.7	5.7	5.8	5.6	6.4	---	---	---	5.9	---	---
26	7.1	5.8	5.7	6.0	5.7	6.5	---	---	---	6.0	---	---
27	6.9	5.9	5.6	6.8	5.7	6.5	---	---	6.1	6.0	---	---
28	6.7	5.9	6.0	6.8	7.1	6.4	---	---	6.2	6.0	---	---
29	6.7	5.9	6.1	6.4	---	6.9	---	---	6.4	6.1	---	---
30	6.8	5.9	6.1	6.2	---	7.1	---	---	7.2	6.4	---	---
31	6.8	---	6.3	5.8	---	7.1	---	---	---	6.9	---	---
MAX	9.3	---	7.7	6.8	7.1	7.1	---	---	---	7.2	---	---

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 mi downstream from Big Cleveland Creek, 7 mi upstream from Carroll Creek, 7 mi northeast of Jacksboro and at mile 660.

DRAINAGE AREA.--683 mi².

PERIOD OF RECORD.--March 1956 to current year.
Water-quality records.--Sediment records: October 1976 to September 1978.

GAGE.--Water-stage recorder. Datum of gage is 869.28 ft above sea level, from Texas Department of Transportation. Sept. 20, 1960, to May 30, 1961, nonrecording gage at same site and datum.

REMARKS.--Records good except those for estimated daily discharges, which are fair. At end of year, flow from 70.9 mi² upstream from this station was partly controlled by 21 floodwater-retarding structures with a combined detention capacity of 19,780 acre-ft. No flow at times. Rain gage at station. Satellite telemeter at station.

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

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 10	0830	1510	16.74	July 08	1930	1270	15.60

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	1.7	.85	7.8	.64	.08	.60	2.1	67	93	53	.00
2	.00	.99	.70	12	.55	.08	.91	2.1	37	165	458	.00
3	.00	.67	.70	11	.47	.10	1.4	2.0	16	35	714	.00
4	.00	.37	.71	8.1	.37	.14	e30	2.1	9.1	11	729	.00
5	.00	.33	.93	5.4	.24	.19	31	8.1	6.8	60	725	.00
6	.00	.07	1.1	4.4	.13	.43	55	203	8.4	604	435	.00
7	.00	.03	1.3	3.4	.06	.60	28	636	8.6	813	94	.00
8	.00	.09	1.6	2.4	.04	.31	20	982	4.5	1170	41	.00
9	.00	.77	101	1.4	.04	.08	10	1280	2.9	1020	21	.00
10	24	1.0	138	.56	.05	.05	4.5	1470	2.3	150	9.6	.00
11	16	35	154	.73	1.1	.06	2.2	1020	9.8	31	5.0	.00
12	3.6	290	142	.95	1.2	.23	1.3	199	155	14	2.9	.00
13	1.3	314	79	.96	1.1	2.4	1.2	75	404	7.3	1.7	.00
14	.65	159	35	.85	1.6	14	.79	49	357	4.5	1.2	.00
15	.27	387	16	.70	1.4	102	.58	29	228	2.9	.99	.00
16	.05	681	9.6	.62	1.2	279	.50	16	60	2.0	.85	.00
17	.01	915	5.8	.64	1.1	358	.38	10	21	1.6	.72	.00
18	.77	765	3.6	1.5	1.1	303	209	7.0	10	1.4	.62	.20
19	.44	52	2.2	2.8	1.0	123	491	4.9	5.8	1.7	.57	1.1
20	1.9	256	1.4	2.3	.91	31	245	3.6	3.7	70	.57	.98
21	221	487	1.2	6.3	.69	13	84	2.9	2.6	20	.55	.47
22	431	347	1.3	34	.51	6.3	40	2.4	2.0	5.4	.45	.23
23	387	131	1.3	21	.42	3.4	24	2.2	1.6	2.6	.40	.11
24	253	40	1.6	8.5	.24	2.0	14	2.5	1.6	1.7	.40	.07
25	59	17	1.3	4.3	.18	1.4	8.7	47	1.4	1.3	.31	.07
26	31	7.9	1.1	2.6	.15	1.1	5.9	197	1.3	1.1	.14	.10
27	86	4.1	1.0	2.3	.13	.84	4.4	320	1.1	.91	.06	.08
28	46	2.4	1.0	1.8	.11	.63	3.1	329	1.0	.78	.03	.05
29	17	1.6	2.3	1.4	---	.56	2.6	145	.99	.67	.02	.02
30	8.8	1.1	2.8	1.0	---	.45	2.2	61	.94	.58	.01	.01
31	3.7	---	5.7	.75	---	.49	---	33	---	.96	.00	---
TOTAL	1592.49	4899.12	716.09	152.46	16.73	1244.92	1322.26	7142.9	1431.43	4293.40	3297.09	3.49
MEAN	51.4	163	23.1	4.92	.60	40.2	44.1	230	47.7	138	106	.12
MAX	431	915	154	34	1.6	358	491	1470	404	1170	729	1.1
MIN	.00	.03	.70	.56	.04	.05	.38	2.0	.94	.58	.00	.00
AC-FT	3160	9720	1420	302	33	2470	2620	14170	2840	8520	6540	6.9

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1995, BY WATER YEAR (WY)

MEAN	130	57.8	55.0	36.9	45.4	93.9	209	412	221	34.6	19.0	57.3
MAX	2363	498	1025	369	303	697	3186	3127	1689	251	134	416
(WY)	1982	1958	1992	1985	1992	1990	1957	1989	1989	1975	1989	1962
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1978	1978	1959	1959	1959	1956	1956	1984	1984	1963	1972	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1956 - 1995	
ANNUAL TOTAL	14763.26		26112.38			
ANNUAL MEAN	40.4		71.5		116	
HIGHEST ANNUAL MEAN					564	1957
LOWEST ANNUAL MEAN					.072	1984
HIGHEST DAILY MEAN	915	Nov 17	1470	May 10	29200	Apr 27 1957
LOWEST DAILY MEAN	.00	May 10	.00	Oct 1	.00	Mar 1 1956
ANNUAL SEVEN-DAY MINIMUM	.00	Jun 6	.00	Oct 1	.00	Mar 1 1956
INSTANTANEOUS PEAK FLOW			1510	May 10	35100	Apr 27 1957
INSTANTANEOUS PEAK STAGE			16.74	May 10	32.10	Apr 27 1957
ANNUAL RUNOFF (AC-FT)	29280		51790		84250	
10 PERCENT EXCEEDS	139		224		137	
50 PERCENT EXCEEDS	.33		1.8		.83	
90 PERCENT EXCEEDS	.00		.05		.00	

e Estimated

TRINITY RIVER BASIN
08042900 BEANS CREEK AT WIZARD WELLS, TX

(Flood-hydrograph partial-record station)

LOCATION.--Lat 33°11'59", Long 97°58'01", Jack County, Hydrologic Unit 12030101, on the downstream side, at first pile from right end of bridge on Farm Road 1156, 900 ft. east of intersection of a county road and FM 1156 in Wizard Wells.

DRAINAGE AREA.--29.6 mi².

PERIOD OF RECORD.--June 1992 to current year (annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 848.40 ft. above mean sea level.

REMARKS.--Records fair. Telephone telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	1030	1,350	12.30				

08042950 BIG CREEK NEAR CHICO, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 33°18'27", Long 97°55'05", Wise County, Hydrologic Unit 12030101, on the downstream side, at second pile from right end of bridge on Farm Road 1810, 7.2 mi west of intersection of FM 1156 and State Highway 114 in Chico.

DRAINAGE AREA.--50.3 mi^3.

PERIOD OF RECORD.--June 1992 to September 1995 (discontinued, annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 866.43 ft above sea level.

REMARKS.--Records poor. Telephone telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 8	0415	4,740	11.46				

TRINITY RIVER MAIN STEM
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 mi upstream from Big Sandy Creek and at mile 626.

DRAINAGE AREA.--1,111 mi².

PERIOD OF RECORD.--April 1932 to current year. Prior to October 1950, end-of-month values only.
Water-quality records.--Chemical analyses: October 1969 to September 1984.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Jan. 12, 1988, nonrecording gages at various sites in vicinity of present gage at present datum.

REMARKS.--The reservoir is formed by a rolled earthfill dam 2,040 ft long. The dam was completed in December 1931 and storage began Apr. 1, 1932. The original dam was 1,900 ft long, but was lengthened to the present length (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. For elevations of outlet works, see table below. Capacity tables are based on surveys made in 1956 and 1968. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	874.0	--
Crest of spillway	866.0	889,700
Top of gates	842.0	456,900
Top of conservation pool	836.0	374,800
Sill of gates	820.0	202,200
Lowest value outlet (invert)	751.4	0

COOPERATION.--Capacity table No. 5-C was provided by Tarrant County Water Control and Improvement District No. 1. The table was put into use Oct. 1, 1988.

EXTREMES FOR PERIOD OF RECORD.--Prior to Jan. 12, 1988, once-daily reading of nonrecording gage at 0700 hours; 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 CURRENT YEAR.--Maximum contents, 389,900 acre-ft May 10 at 0400 hours (elevation, 837.15 ft); minimum 342,700 acre-ft Oct. 3 (elevation, 833.44 ft).

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

830.0	302,100	836.0	374,800	842.0	457,000
832.0	325,300	838.0	401,200	844.0	486,300
834.0	349,500	840.0	428,500	845.0	501,400

TRINITY RIVER MAIN STEM--Continued
08043000 BRIDGEPORT RESERVOIR ABOVE BRIDGEPORT, TX

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	343400	357400	374400	374700	373500	371500	374500	375700	375200	372400	376100	373100
2	343200	357400	374500	374400	373400	371200	374500	375700	375200	372500	381000	372900
3	343300	357800	374900	374300	373300	371200	375200	376000	375200	371200	381400	372200
4	343900	357700	374900	374200	373300	371500	376100	375700	375400	372200	381600	372400
5	343500	357900	374500	374000	373100	372300	377300	377500	375200	372900	381600	371700
6	343600	357900	374800	374500	372800	371600	377800	380300	374800	373500	381600	371900
7	343600	357900	374500	374400	372500	371700	378300	381200	374800	374700	379500	372000
8	343600	358200	374400	374800	372500	371700	378000	388700	374300	375800	377300	371000
9	343800	358300	376700	374900	372500	372000	377400	389700	374500	377000	376000	370600
10	343800	358100	376700	374800	372200	372000	377400	388200	375600	376500	375600	370300
11	344600	358200	376400	374000	373000	372000	376600	385000	375700	375600	375600	370600
12	344700	358200	376400	373800	372900	373500	376600	379700	375700	375100	375300	370700
13	344700	358700	376100	373100	372800	375100	376800	376500	375700	374800	375200	370300
14	344500	365000	376000	372900	372600	376800	376200	375600	375700	374800	374900	371000
15	344600	367000	375300	372700	373300	377700	376500	375300	376000	374800	374700	370400
16	344600	368400	375500	372600	372900	377800	376900	375100	375700	374700	374900	370300
17	345000	370200	374900	372800	372900	379600	377000	374900	375600	374000	374500	370600
18	346000	372100	374700	372900	372800	379900	377300	374700	375300	375100	374500	371500
19	346200	372700	374300	373000	372800	378800	377400	374700	375500	375100	375300	371300
20	350600	382600	374800	373000	372800	378700	377500	374500	375500	374500	374900	371100
21	352500	382600	374700	372800	373500	378000	377400	374300	374800	374500	374900	370200
22	353400	381400	374700	372600	373100	378200	377100	374000	374500	374300	374900	369800
23	354000	380800	374300	372800	373400	378200	376800	375300	374300	374000	374800	369400
24	355900	379700	374400	372800	372800	378000	376600	375200	374000	373300	374200	369200
25	357300	377900	374400	372900	372200	377800	376600	377400	373800	373500	374200	369700
26	357600	376800	374300	373000	372200	377300	376100	377700	373800	373100	374200	369600
27	357900	376100	374200	373300	371700	374300	376000	377100	373800	372800	374000	369400
28	357800	375300	374300	373300	371500	374000	375800	377100	373800	372600	373800	369000
29	358100	374900	375100	373100	---	374000	376000	377100	373000	372200	373900	368800
30	358100	374500	374900	373000	---	373900	376000	375200	372800	372000	373300	369300
31	357700	---	374900	373400	---	374300	---	375100	---	373600	373500	---
MAX	358100	382600	376700	374900	373500	379900	378300	389700	376000	377000	381600	373100
MIN	343200	357400	374200	372600	371500	371200	374500	374000	372800	371200	373300	368800
(+)	834.65	835.98	836.01	835.89	835.74	835.96	836.09	836.02	835.84	835.91	835.90	835.57
(@)	+14400	+16800	+400	-1500	-1900	+2800	+1700	-900	-2300	+800	-100	-4200

CAL YR 1994 MAX 395200 MIN 343200 (@) +13200
WTR YR 1995 MAX 389700 MIN 343200 (@) +26000

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

08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TX

LOCATION.--Lat 33°13'54", long 97°41'40", Wise County, Hydrologic Unit 12030101, at downstream side of bridge on U.S. Highway 380, 1.9 mi upstream from Greathouse Branch, 4.0 mi east of Bridgeport, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--333 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1148: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 724.44 ft above sea level. Prior to Oct. 1, 1984, at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since May 1, 1956, runoff from 100 mi² above this station is affected at times by storage in Lake Amon G. Carter, 30 mi upstream, with a capacity of 15,240 acre-ft at elevation 920.0 ft (spillway crest). During the year, the city of Bowie diverted water from Lake Amon G. Carter for municipal use and discharged sewage effluent into tributaries to Big Sandy Creek upstream from this station. Flow was also affected at times by discharge from the flood-detention pools of 19 floodwater-retarding structures with a combined capacity of 11,430 acre-ft. These structures control runoff from a 46.0 mi² area upstream from this station and below Lake Amon G. Carter. Rain gage at station. Satellite telemeter at station.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	5.9	53	40	22	14	24	32	201	9.9	353	5.1
2	3.2	5.9	52	38	22	14	23	34	137	9.1	1010	4.6
3	3.2	5.8	56	37	21	15	24	44	114	7.8	649	4.2
4	3.3	5.5	53	37	20	16	267	63	100	6.7	290	3.9
5	2.6	6.9	47	35	20	17	123	57	94	123	193	3.7
6	2.2	7.0	43	35	16	16	72	603	90	218	160	3.5
7	27	6.8	40	32	16	17	55	571	81	111	140	3.3
8	49	6.9	38	31	15	16	44	1120	72	78	124	3.2
9	6.9	9.6	194	28	15	13	38	1820	64	57	110	3.0
10	4.2	12	339	28	17	13	63	1410	60	46	96	2.9
11	3.2	9.2	174	28	32	13	75	731	110	39	85	2.9
12	2.7	7.2	115	28	34	15	44	585	114	34	74	2.8
13	2.6	6.6	96	28	23	127	31	518	80	30	65	2.7
14	2.4	751	85	27	20	245	30	425	67	30	58	2.7
15	2.6	967	82	28	21	205	28	341	59	27	51	2.6
16	2.7	193	79	27	20	131	26	272	52	26	45	2.6
17	2.7	69	76	28	18	82	52	220	45	29	40	2.5
18	4.1	40	67	30	17	62	155	187	42	24	34	2.5
19	7.7	27	62	37	17	55	107	164	39	25	29	e2.4
20	49	2590	58	37	17	49	187	142	33	27	28	e2.4
21	347	1310	55	31	17	44	e157	126	28	23	42	e2.3
22	231	288	49	29	18	37	e95	112	23	18	28	e2.3
23	37	135	45	28	17	34	e58	98	19	15	23	e2.3
24	43	101	44	27	17	32	e53	119	17	11	19	e2.2
25	169	88	42	26	15	32	e49	280	15	9.3	16	e2.2
26	79	81	40	26	15	42	50	842	13	8.1	13	e2.1
27	25	76	38	32	17	42	76	376	11	7.1	11	e2.1
28	13	70	42	30	16	31	48	199	11	6.3	9.7	e2.1
29	8.7	64	57	26	---	28	40	155	9.5	5.8	8.6	e2.0
30	7.1	59	56	24	---	27	34	130	9.6	5.3	6.9	e2.0
31	6.6	---	46	22	---	25	---	131	---	5.9	5.7	---
TOTAL	1150.9	7004.3	2323	940	535	1509	2128	11907	1810.1	1072.3	3816.9	85.1
MEAN	37.1	233	74.9	30.3	19.1	48.7	70.9	384	60.3	34.6	123	2.84
MAX	347	2590	339	40	34	245	267	1820	201	218	1010	5.1
MIN	2.2	5.5	38	22	15	13	23	32	9.5	5.3	5.7	2.0
AC-FT	2280	13890	4610	1860	1060	2990	4220	23620	3590	2130	7570	169

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1995, BY WATER YEAR (WY)

MEAN	111	42.5	43.7	31.1	49.2	89.9	128	206	173	34.9	14.2	26.6
MAX	1829	388	743	316	292	887	1569	1284	1922	426	230	491
(WY)	1982	1941	1992	1946	1946	1945	1942	1990	1941	1950	1973	1962
MIN	.000	.000	.000	.000	.000	.000	.000	.002	.000	.000	.000	.000
(WY)	1939	1939	1939	1940	1939	1940	1956	1980	1953	1964	1938	1938

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1937 - 1995	
ANNUAL TOTAL	19468.56		34281.6			
ANNUAL MEAN	53.3		93.9		79.2	
HIGHEST ANNUAL MEAN					336	1942
LOWEST ANNUAL MEAN					2.12	1956
HIGHEST DAILY MEAN	2590	Nov 20	2590	Nov 20	23800	Oct 13 1981
LOWEST DAILY MEAN	.59	Aug 30	2.0	Sep 29	.00	May 29 1937
ANNUAL SEVEN-DAY MINIMUM	.71	Aug 25	2.1	Sep 24	.00	Jun 20 1937
INSTANTANEOUS PEAK FLOW			5300	Nov 20	53000	Jun 10 1941
INSTANTANEOUS PEAK STAGE			12.55	Nov 20	15.69	Jun 10 1941
ANNUAL RUNOFF (AC-FT)	38620		68000		57370	
10 PERCENT EXCEEDS	85		189		94	
50 PERCENT EXCEEDS	13		32		6.0	
90 PERCENT EXCEEDS	1.1		3.3		.00	

e Estimated

08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: April 1993 to current year. Sediment analyses: April 1993 to September 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
12...	1126	2.7	670	7.8	16.0	8.5	88	250	55	70	18	43
NOV												
21...	1055	1300	202	7.3	13.5	7.6	74	75	7	23	4.2	8.0
DEC												
07...	1107	40	840	8.1	13.5	9.9	96	320	49	90	22	53
JAN												
11...	1040	29	990	8.1	10.0	10.7	97	350	59	99	25	60
FEB												
08...	1000	15	1070	8.1	6.0	11.3	91	390	68	110	29	70
MAR												
23...	0947	34	815	8.1	19.0	7.8	86	310	47	88	21	55
APR												
20...	1115	177	498	7.8	16.5	7.8	82	170	13	48	12	34
MAY												
25...	1141	100	598	7.6	21.5	7.8	90	220	43	63	15	37
JUL												
13...	1545	30	409	8.1	32.0	7.3	101	140	17	41	10	26
31...	1020	5.7	845	7.8	28.0	5.2	68	290	73	80	23	60
AUG												
29...	1520	8.6	534	8.00	30.5	8.00	108	200	37	56	15	35

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
12...	1	6.1	0	237	194	190	62	63	0.3	14	416	394
NOV												
21...	0.4	6.8	0	83	68	68	8.3	12	0.1	8.8	129	113
DEC												
07...	1	5.0	0	325	266	260	60	81	0.30	14	515	486
JAN												
11...	1	3.8	0	355	291	290	75	93	0.3	6.5	572	538
FEB												
08...	2	3.4	0	398	326	320	80	110	0.3	12	644	612
MAR												
23...	1	4.6	0	316	259	250	51	82	0.3	9.6	489	468
APR												
20...	1	5.5	0	190	156	160	26	45	0.2	8.6	299	274
MAY												
25...	1	5.4	0	215	176	180	37	57	0.3	9.4	359	331
JUL												
13...	0.9	5.8	0	154	126	120	23	35	0.20	6.0	244	223
31...	2	4.7	--	--	--	220	97	80	0.3	13	518	491
AUG												
29...	1	6.0	0	201	165	162	39	47	0.30	8.6	320	307

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
12...	0.090	0.090	0.0	0.110	0.11	0.1	0.61	0.43	0.33	0.4	0.5
NOV											
21...	0.120	--	<0.010	0.120	0.12	<0.015	0.92	0.80	--	0.4	0.8
DEC											
07...	0.150	--	<0.010	0.150	0.15	0.0	0.45	0.27	0.17	0.2	0.3
JAN											
11...	0.080	0.080	0.0	0.090	0.1	<0.015	0.39	0.30	--	<0.20	0.3
FEB											
08...	0.130	0.130	0.0	0.150	0.15	0.0	0.45	0.27	0.17	0.2	0.3
MAR											
23...	0.090	0.090	0.0	0.110	0.11	0.0	0.51	0.37	0.27	0.3	0.4
APR											
20...	0.210	0.210	0.0	0.230	0.23	0.11	1.0	0.69	0.49	0.6	0.8
MAY											
25...	0.170	0.170	0.0	0.180	0.18	0.1	0.58	0.34	0.24	0.3	0.4
JUL											
13...	0.120	--	<0.010	0.120	0.120	0.030	0.52	0.37	0.37	0.40	0.40
31...	--	--	<0.010	--	<0.050	0.0	0.30	0.27	0.27	0.3	0.3
AUG											
29...	0.160	--	<0.010	0.160	0.160	<0.015	0.56	0.40	--	0.30	0.40

08044000 BIG SANDY CREEK NEAR BRIDGEPORT, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
12...	0.1	0.1	0.1	0.18	5.6	0.8	46	0.34	99	5	250
NOV											
21...	0.28	0.16	0.12	0.37	7.8	5.1	508	1780	91	100	21
DEC											
07...	0.0	0.0	0.0	0.06	4.4	0.5	50	5.4	45	3	360
JAN											
11...	0.0	0.0	<0.010	--	3.9	0.8	38	3.0	49	4	640
FEB											
08...	0.0	<0.010	0.0	0.03	3.5	0.6	43	1.7	61	4	770
MAR											
23...	0.0	0.0	0.0	0.03	6.3	0.9	84	7.7	74	4	340
APR											
20...	0.12	0.1	0.1	0.28	7.2	>4.2	399	191	99	28	22
MAY											
25...	0.0	0.0	0.0	0.06	6.1	1.2	80	22	97	9	16
JUL											
13...	0.040	0.040	0.030	0.09	5.8	0.8	42	3.4	100	10	15
31...	0.0	<0.010	0.0	0.06	4.6	0.9	82	1.3	85	5	230
AUG											
29...	0.060	0.030	0.030	0.09	5.2	0.8	42	0.98	97	<3	95

08044135 GARRETT CREEK NEAR PARADISE, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 33°06'18", long 97°39'17", Wise County, Hydrologic Unit 12030101, on the downstream side, at second pile from right end of bridge on State Highway 114, 3.8 mi. downstream from Rush Creek and 3.9 mi. southeast of Paradise.

DRAINAGE AREA.--52.5 mi².

PERIOD OF RECORD.--June 1992 to September 1995 (discontinued, annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 692.61 ft. above sea level.

REMARKS.-- Records good. Telephone telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 14	2015	1,590	14.24				

08044140 SALT CREEK NEAR PARADISE, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 33°05'54", long 97°38'59", Wise County, Hydrologic Unit 12030101, on the downstream side, at second pile from right end of bridge on State Highway 114, 2.0 mi downstream from Cottonwood Creek and 4.5 mi southeast of Paradise.

DRAINAGE AREA.--52.7 mi^2.

PERIOD OF RECORD.--June 1992 to current year (discontinued, annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 702.12 ft above sea level.

REMARKS.-- Records good. Telephone telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 14	1045	868	6.92				

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 mi².

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

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Bridgeport Reservoir (station 08043000) 25 mi upstream and by Lake Carter. In addition, flow from a 91.2 mi² area 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. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 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 April 1942 reached a stage of 20.6 ft, present site and datum, from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	52	118	106	66	47	77	81	408	51	498	25
2	17	44	116	95	66	59	74	80	310	51	1300	24
3	17	44	123	95	67	56	72	91	246	46	2280	23
4	48	42	118	97	66	54	467	114	201	40	1790	22
5	35	53	103	93	65	56	518	183	174	128	1210	18
6	19	58	97	92	64	53	352	1150	157	380	1010	19
7	224	42	93	91	63	66	388	1410	137	246	1000	18
8	693	41	88	83	58	52	410	2700	120	161	1060	17
9	177	51	150	80	58	50	386	3760	111	493	1130	17
10	67	83	703	84	62	48	387	3070	111	617	940	17
11	41	58	718	227	78	47	476	3440	230	613	285	17
12	26	48	554	353	120	46	389	3870	252	395	153	18
13	22	47	476	350	88	393	278	4220	167	160	114	22
14	19	1210	459	344	77	713	232	3750	136	64	97	22
15	21	4760	454	169	77	610	246	1990	188	60	82	19
16	22	2630	447	76	73	577	168	1020	244	74	76	16
17	22	1040	444	76	69	466	94	511	148	79	79	17
18	25	432	436	76	64	554	203	354	85	67	67	20
19	57	228	251	90	64	652	224	275	76	211	62	26
20	619	905	135	89	61	644	371	238	72	117	62	27
21	1200	4220	121	84	60	628	310	213	69	67	61	23
22	1090	4070	114	77	57	623	191	188	65	48	60	18
23	446	2130	109	76	113	613	273	163	60	43	51	19
24	175	1450	102	75	191	259	394	185	57	37	49	18
25	616	1240	98	71	190	114	384	385	62	35	44	19
26	448	1060	95	70	193	188	368	818	57	36	42	25
27	189	841	94	74	106	131	202	1170	57	32	40	20
28	104	572	98	81	54	101	111	1120	56	28	37	16
29	74	239	128	73	---	87	91	1060	54	26	33	15
30	63	134	144	67	---	82	84	825	53	26	31	14
31	58	---	118	65	---	79	---	577	---	29	27	---
TOTAL	6652	27824	7304	3579	2370	8148	8220	39011	4163	4460	13770	591
MEAN	215	927	236	115	84.6	263	274	1258	139	144	444	19.7
MAX	1200	4760	718	353	193	713	518	4220	408	617	2280	27
MIN	17	41	88	65	54	46	72	80	53	26	27	14
AC-FT	13190	55190	14490	7100	4700	16160	16300	77380	8260	8850	27310	1170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1995#, BY WATER YEAR (WY)

MEAN	317	193	191	112	111	199	275	747	494	208	226	185
MAX	4063	1248	3073	929	944	1366	4339	5908	5439	1330	1157	1643
(WY)	1982	1982	1992	1992	1992	1987	1990	1990	1989	1950	1950	1962
MIN	2.96	4.81	2.21	.75	.10	.26	.59	25.2	2.76	7.11	.025	.23
(WY)	1957	1984	1953	1956	1953	1955	1955	1959	1953	1979	1980	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1947 - 1995#	
ANNUAL TOTAL	106137		126092			
ANNUAL MEAN	291		345		273	
HIGHEST ANNUAL MEAN					1094	1982
LOWEST ANNUAL MEAN					58.6	1953
HIGHEST DAILY MEAN	6070	May 13	4760	Nov 15	38800	Oct 14 1981
LOWEST DAILY MEAN	14	Jul 26	14	Sep 30	.00	Aug 6 1948
ANNUAL SEVEN-DAY MINIMUM	18	Jun 30	18	Sep 5	.00	Sep 25 1952
INSTANTANEOUS PEAK FLOW			5590	Nov 15	60400	Oct 14 1981
INSTANTANEOUS PEAK STAGE			18.07	Nov 15	25.87	Oct 14 1981
ANNUAL RUNOFF (AC-FT)	210500		250100		197600	
10 PERCENT EXCEEDS	541		867		502	
50 PERCENT EXCEEDS	75		94		67	
90 PERCENT EXCEEDS	24		25		3.7	

Period of regulated streamflow.

TRINITY RIVER BASIN
08044800 WALNUT CREEK AT RENO, TX

(Flood-hydrograph partial-record station)

LOCATION.--Lat 32°56'44", long 97°34'58", Parker County, Hydrologic Unit 12030101, on the downstream side, at first pile from the left end of 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 mi².

PERIOD OF RECORD.--April 1992 to current year (annual maximum).

GAGE.--Water-stage recorder. Datum of gage is 681.11 ft above sea level.

REMARKS.--Records good. Telephone telemeter at station.

PEAK DISCHARGE FOR CURRENT YEAR.--

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 20	0945	1,800	10.50				

08045000 EAGLE MOUNTAIN RESERVOIR ABOVE FORT WORTH, TX

LOCATION.--Lat 32°52'39", long 97°28'29", Tarrant County, Hydrologic Unit 12030101, at right 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 mi².

PERIOD OF RECORD.--February 1934 to current year. Prior to October 1950, end-of-month values only.

REVISED RECORDS.--WSP 1922: Drainage area.

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

REMARKS.--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 reservoir is used for flood control and for part of the municipal water supply for the city of Fort Worth. Capacities are based on a survey made in 1968. For statement regarding regulation by Natural Resource Conservation Service floodwater-retarding structures, see station 08044500. For storage above the reservoir, see REMARKS for West Fork Trinity River near Boyd (station 08044500). Figures given herein represent total contents. Telephone telemeter at station. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	682.0	-
Crest of spillway	676.0	545,900
Top of gates (new side-channel spillway)	659.0	283,200
Crest of (old service) spillway (top of conservation pool)	649.1	178,400
Crest of spillway (new side-channel spillway)	637.0	89,450
Lowest gated outlet (invert)	599.9	36

COOPERATION.--New capacity table, No. 4-C, furnished by Tarrant County Water Control and Improvement District No. 1, was put into use Oct. 1, 1988.

EXTREMES FOR PERIOD OF RECORD.--Prior to Oct. 16, 1987, once-daily reading of nonrecording gage at 0700 hours, maximum contents observed, 333,500 acre-ft Apr. 26, 1942 (elevation, 659.9 ft); minimum observed since first appreciable storage in 1935, 57,690 acre-ft Nov. 19, 20, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 185,300 acre-ft May 6 at 0430 hours (elevation, 649.85 ft); minimum, 165,000 acre-ft Oct. 6 (elevation, 647.56 ft).

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

631.0	57,400	646.0	152,100	655.0	237,300
641.0	115,400	649.0	177,500	658.0	271,300
644.0	136,700	652.0	206,000	660.0	295,500

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166700	177400	176000	178200	177800	177800	177500	177300	178300	177000	174800	173000
2	166700	177500	176300	178000	177800	177600	177400	177100	178200	176700	179400	172600
3	166500	177600	176900	178100	177900	177100	177700	177400	178200	176500	180200	172100
4	166100	178700	177200	177900	178200	177000	179100	177400	178400	175800	180000	171500
5	165700	178600	177600	177900	178000	177000	181600	183200	178900	177600	180000	170900
6	165400	177900	178000	178400	178100	178000	180800	181000	178900	177800	180000	170800
7	166400	177600	178100	177900	178400	176900	178800	179100	179100	178000	178900	170900
8	167300	177700	179100	177900	178400	176700	178100	182900	179000	178000	178500	169500
9	167300	178000	179700	178000	177900	176600	177300	182700	179000	178200	178600	169000
10	167200	177700	180200	178500	178200	176800	177800	181000	180500	178900	178700	168400
11	167200	177900	180600	178500	178400	176700	177000	178700	180300	179600	178600	167900
12	167200	177900	180100	178800	178200	177700	177200	178400	179700	179700	178300	167500
13	167200	178000	179600	178300	178200	180100	177200	178500	178900	179300	178000	169300
14	166100	180200	179100	178100	178100	180500	176500	179000	178800	179000	177600	169000
15	166100	179200	178500	178200	178600	180100	177600	179600	178600	178800	177500	168900
16	165900	180800	178000	178300	178100	179600	177900	177900	178900	178400	177400	168800
17	165700	179800	177300	178300	177800	178500	177900	177900	178900	178300	177300	169000
18	168400	178600	177000	178800	177400	177800	178200	177400	178900	177800	177400	169500
19	168700	178000	176800	178500	177700	177300	178600	177600	178900	177800	177900	170100
20	171800	179500	177200	178000	177600	177800	178700	177800	178900	177400	177700	169800
21	175200	178000	177400	178100	177700	177500	178800	178200	178800	177100	177600	169700
22	177500	181600	177700	178000	177300	177800	178900	178200	178700	176600	177200	168900
23	178700	181500	178000	178000	177900	178000	177700	178900	178600	176100	176900	168500
24	179500	179800	178200	178000	177900	177800	177900	179100	178600	175800	176300	168200
25	179300	178400	178400	178000	177900	178500	178100	179300	178600	175200	175400	167800
26	177800	177700	178500	178100	177900	178800	178200	179600	177900	174700	175500	167600
27	177100	177700	178800	178400	178300	178400	178300	179400	178000	174200	175100	167300
28	177000	177500	178900	178100	178000	178000	177700	178900	177700	173600	174800	167100
29	177200	177100	178800	178000	---	177800	178200	179100	177500	172900	174200	166700
30	177400	176700	178600	177800	---	177400	177600	178700	177300	172500	173800	166700
31	177600	---	178700	177800	---	177400	---	178400	---	174200	173400	---
MAX	179500	181600	180600	178800	178600	180500	181600	183200	180500	179700	180200	173000
MIN	165400	176700	176000	177800	177300	176600	176500	177100	177300	172500	173400	166700
(+)	649.01	648.91	649.13	649.03	649.06	648.99	649.01	649.10	648.98	648.62	648.53	647.77
(@)	+9900	-900	+2000	-900	+200	-600	+200	+800	-1100	-3100	-800	-6700

CAL YR 1994 MAX 191100 MIN 159500 (@) +700
WTR YR 1995 MAX 183200 MIN 165400 (@) -1000

(+) 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 mi².

PERIOD OF RECORD.--October 1981 to current year.
Water-quality records.--Chemical analyses: January 1970 to September 1984.

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

REMARKS.--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 October 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. Area-capacity curves are based on a survey made in 1968. Figures given herein represent total contents. Gage-height telemeter at station. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	606.3	-
Crest of concrete spillway	594.0	37,070
Lowest gated outlet (invert)	584.25	12,290

COOPERATION.--Copies of the capacity table (prepared by the U.S. Army Corps of Engineers) and area-capacity curves (prepared by Freese and Nichols Consulting Engineers Inc.) were provided by Tarrant County Water Control and Improvement District No. 1.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 43,210 acre-ft May 8 at 1045 hours (elevation, 595.66 ft); minimum, 34,970 acre-ft Sept. 11 (elevation, 593.38 ft).

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

589.0	22,300	594.0	37,070	598.0	52,890
592.0	30,540	596.0	44,520	599.0	57,400

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35380	36430	37830	37790	37040	37040	37320	37470	38650	35480	36460	35520
2	35410	36260	37390	37430	37040	37140	37070	37390	38190	35550	37570	35450
3	35580	35990	37180	37430	36770	37140	37070	37500	37610	35380	38760	35350
4	35480	36060	36900	37210	36730	37210	37210	37320	37390	35850	39230	35210
5	35480	36330	36660	37210	36730	37540	37830	39730	37360	36020	39230	35140
6	35480	36800	36600	37390	36730	37140	38980	42100	36930	36060	39230	35140
7	35720	37110	36330	37390	36460	37000	39340	42060	36770	36020	39190	35140
8	35680	36930	36430	37390	36360	37000	39160	42330	36600	36060	38870	35180
9	35550	37360	37110	37290	36360	36870	38620	41830	36630	35950	38760	35080
10	35520	37430	37570	37290	36360	36770	38620	42250	36830	35890	38760	35010
11	35450	37040	37830	37070	36430	36700	38400	42480	38150	35850	38510	34970
12	35410	36900	38400	37070	36430	36900	38190	42020	38440	36020	37790	35140
13	35410	36730	38620	37830	36430	38040	37790	41750	38080	36090	37390	36020
14	35380	37830	38620	38150	36700	38190	37610	41940	37650	36060	37070	35890
15	35480	40750	38620	37790	36870	38190	37680	41870	37430	35950	36800	35850
16	35580	40980	38580	37790	37110	38870	37680	40860	37250	35890	36560	35890
17	35820	41090	38510	37470	37110	38870	37860	39840	37040	35850	36330	35850
18	37110	40200	38400	37750	37250	38870	37790	38800	36830	35820	36090	35920
19	36900	39190	38150	37750	37180	38580	37680	38150	36830	35680	35920	36020
20	37750	40750	37610	37830	37000	38470	37680	37570	36830	35620	35680	35850
21	37430	40670	37210	37570	36800	38470	37720	37360	36430	35480	35580	35680
22	37110	40170	37040	37430	36700	38470	37900	37210	36220	35480	35520	35350
23	37040	40940	37000	37430	36700	38220	37860	37790	36020	35720	35450	35380
24	37500	41130	36830	37430	36700	38010	37860	37360	35850	35790	35410	35450
25	39270	40670	36800	37290	36870	38110	37720	37680	35580	35720	35480	35450
26	39520	40090	36800	37290	37110	38220	37720	37750	35450	35650	35580	35480
27	38760	39450	36970	37290	37110	37830	37540	38440	35550	35620	35620	35520
28	38080	39370	37210	37290	37040	37720	37470	39300	35620	35580	35650	35580
29	37500	39230	37430	37290	---	37720	37610	39230	35650	35450	35650	35480
30	37180	38580	37570	37180	---	37790	37540	39300	35550	35450	35680	35550
31	36800	---	37790	37180	---	37570	---	39050	---	36160	35620	---
MAX	39520	41130	38620	38150	37250	38870	39340	42480	38650	36160	39230	36020
MIN	35380	35990	36330	37070	36360	36700	37070	37210	35450	35380	35410	34970
(+)	593.92	594.42	594.20	594.03	593.99	594.14	594.13	594.55	593.55	593.73	593.57	593.55
(@)	+1390	+1780	-790	-610	-140	+530	-30	+1510	-3500	+610	-540	-70

CAL YR 1994 MAX 44680 MIN 35140 (@) +1160
WTR YR 1995 MAX 42480 MIN 34970 (@) +140

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

08045850 CLEAR FORK TRINITY RIVER NEAR WEATHERFORD, TX
(Flood-hydrograph partial-record station)

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 mi².

PERIOD OF RECORD.--July 1924 to September 1925, November 1947 to September 1985. October 1985 to current year (peaks above base discharge).

REVISED RECORDS.--WSP 1312. 1925(M). WDR TX-76-2: Drainage area.

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

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

AVERAGE DISCHARGE FOR PERIOD (water years 1981-85).-- 23.0 ft³/s (16,660 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,080 ft³/s Nov. 1, 1981 (gage height, 21.58 ft); minimum, no flow Sept. 12-15, 1984.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 190 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 15	1415	378	11.83	Apr. 6	0200	290	11.48
Nov. 20	1515	460	12.12	Aug. 1 or 2	Unknown	Unknown	Unknown

08046020 CLEAR FORK TRINITY RIVER ABOVE BENBROOK NEAR ALEDO, TX

LOCATION.--Lat 32°37'14", long 97°31'46", Tarrant County, Hydrologic Unit 12030102, on U.S. Highway 377, over center of channel at upstream side of upstream bridge, 0.25 mi southwest of FM 2376, 0.25 mi northeast of FM 1187 and 6.5 mi southwest of Benbrook.

DRAINAGE AREA.--258 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
05...	1040	18	728	7.4	22.0	14	2.2	7.6	89	0.7	270	17
DEC												
08...	1400	74	628	7.8	15.0	30	8.9	9.4	96	0.5	240	23
JAN												
19...	1205	159	546	8.4	10.0	25	13	10.2	92	0.9	220	19
MAR												
10...	1150	34	730	7.8	12.0	9	2.4	13.2	125	0.7	310	37
MAY												
04...	1315	43	614	7.3	19.0	23	27	8.8	97	1.5	250	43
JUN												
09...	1115	39	681	7.7	29.0	27	12	7.2	96	0.6	300	39

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
05...	88	13	52	1	5.7	256	52	57	0.6	13	439	7
DEC												
08...	78	12	35	1	3.5	220	41	41	0.30	13	358	25
JAN												
19...	76	8.2	22	0.6	3.2	210	36	28	0.3	10	309	14
MAR												
10...	100	14	42	1	3.0	270	51	49	0.6	6.5	433	5
MAY												
04...	83	11	29	0.8	2.9	210	41	38	0.4	11	347	57
JUN												
09...	100	12	35	0.9	3.4	260	47	42	0.4	13	414	24

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
05...	5	2	0.570	0.570	0.0	0.590	0.59	<0.010	--	0.4	0.53
DEC											
08...	20	5	0.260	0.260	0.0	0.270	0.27	<0.015	--	0.3	0.12
JAN											
19...	3	11	0.320	--	<0.010	0.320	0.32	0.0	0.28	0.3	0.1
MAR											
10...	1	4	0.990	0.990	0.0	1.00	1.0	<0.015	--	0.3	0.17
MAY											
04...	4	53	0.720	0.720	0.020	0.740	0.740	0.110	0.49	0.60	0.200
JUN											
09...	8	16	0.670	0.670	0.0	0.690	0.69	0.0	--	<0.20	0.18

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
05...	0.48	1.5	6.1	--	--	--	--	--	--	--	--
DEC											
08...	0.11	0.34	4.9	--	--	--	--	--	--	--	--
JAN											
19...	0.10	0.31	6.2	2	66	<0.5	<1	<5	<3	<10	14
MAR											
10...	0.15	0.46	5.4	--	--	--	--	--	--	--	--
MAY											
04...	0.200	0.61	8.3	2	81	<0.5	1	<5	<3	<10	19
JUN											
09...	0.17	0.52	6.2	3	100	<0.5	2	<5	<3	<10	7

08046020 CLEAR FORK TRINITY RIVER ABOVE BENBROOK NEAR ALEDO, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
19...	<10	5	8	<0.1	<10	<10	<1	<1	400	<6	4
MAR											
10...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	30	5	10	<0.1	<10	<10	<1	<1	510	<6	3
JUN											
09...	20	5	24	0.2	20	<10	<1	<1	620	<6	<3

08046150 BEAR CREEK AT FM 1187 NEAR BENBROOK, TX

LOCATION.--Lat 32°35'38", long 97°30'47", Tarrant County, Hydrologic Unit 12030102, on FM 1187 bridge over center of channel at upstream side of bridge, 0.3 mi downstream from an unnamed tributary on left bank, 0.3 mi upstream from Benbrook Lake and 6.4 mi south of Benbrook.

DRAINAGE AREA.--62.8 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)
DEC 08...	1550	40	467	7.6	14.0	8	4.6	9.2	91	0.4	220
JAN 19...	0950	73	471	7.9	8.0	18	4.0	10.0	86	0.5	230
MAR 10...	0945	15	453	7.6	10.0	3	0.3	11.4	103	0.1	230
MAY 04...	1100	32	452	7.7	19.0	9	0.4	8.6	94	0.8	220
JUN 09...	0915	12	442	7.7	27.0	5	1.2	7.6	98	0.6	230
JUL 07...	1115	4.3	415	7.3	30.0	6	1.5	8.2	111	0.4	200

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC 08...	4	83	4.2	10	0.3	1.4	220	18	7.7	0.30	8.7
JAN 19...	0	84	5.3	26	0.7	1.4	240	17	8.7	0.3	8.6
MAR 10...	13	86	3.8	11	0.3	0.8	220	22	9.4	0.3	7.3
MAY 04...	13	83	3.6	10	0.3	0.9	210	16	8.1	0.4	8.8
JUN 09...	24	86	3.9	10	0.3	0.9	210	20	7.7	0.3	12
JUL 07...	11	73	3.8	10	0.3	1.0	190	21	8.3	0.3	12

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)
DEC 08...	266	14	12	2	0.060	<0.010	0.060	0.1	<0.015	--	<0.20
JAN 19...	298	7	2	5	0.160	<0.010	0.160	0.16	<0.015	--	0.2
MAR 10...	271	2	<1	--	0.050	<0.010	0.050	0.0	<0.015	--	<0.20
MAY 04...	258	2	<1	--	0.200	<0.010	0.200	0.200	0.020	0.18	0.20
JUN 09...	266	3	4	0	0.140	<0.010	0.140	0.140	0.020	--	<0.20
JUL 07...	242	<1	2	--	--	<0.010	--	<0.050	<0.015	--	<0.20

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
DEC 08...	<0.010	<0.010	2.1	--	--	--	--	--	--	--	--
JAN 19...	0.0	<0.010	4.2	2	71	<0.5	<1	<5	<3	<10	4
MAR 10...	<0.010	<0.010	1.9	--	--	--	--	--	--	--	--
MAY 04...	0.030	<0.010	2.5	<1	69	<0.5	2	<5	<3	<10	6
JUN 09...	<0.010	<0.010	2.0	<1	76	<0.5	2	<5	<3	<10	7
JUL 07...	<0.010	<0.010	1.5	--	--	--	--	--	--	--	--

08046150 BEAR CREEK AT FM 1187 NEAR BENBROOK, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC											
08...	--	--	--	--	--	--	--	--	--	--	--
JAN											
19...	<10	5	3	<0.1	<10	<10	<1	<1	450	<6	4
MAR											
10...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	10	<4	2	<0.1	<10	<10	<1	<1	390	<6	<3
JUN											
09...	10	6	4	<0.1	10	<10	<1	2	440	<6	3
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--

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 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--September 1952 to current year. Prior to October 1970, published as Benbrook Reservoir.

REVISED RECORDS.--WSP 1922: Drainage area.

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

REMARKS.--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 x 13.0-foot broome-type gates and two 30-inch steel pipes controlled by slide gates. Deliberate impoundment began Sept. 29, 1952. From August 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 mi². Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	747.0	-
Crest of spillway	724.0	258,600
Crest of notch in spillway	710.0	164,800
Top of conservation storage	694.0	88,250
Crest of intake to wet wells (inverts)	656.0	6,550
Lowest gated outlet (invert)	622.0	12

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 212,200 acre-ft May 3, 1990 (elevation, 717.54 ft); minimum since lake first filled in 1957, 61,450 acre-ft Oct. 10, 1984 (elevation, 686.16 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 125,600 acre-ft May 11 (elevation, 702.67 ft); minimum, 79,780 acre-ft Oct. 3 (elevation, 691.69 ft).

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

688.0	67,250	695.0	92,060	700.0	113,000
691.0	77,350	696.0	96,000	701.0	117,600
692.0	80,890	697.0	100,050	702.0	122,300
693.0	84,520	698.0	104,200	703.0	127,200
694.0	88,250	699.0	108,600		

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80930	85850	93220	90370	89080	89150	89530	88810	89420	88470	88510	87830
2	80710	85890	92680	90260	88700	89230	89760	88550	89310	88470	90640	87760
3	80850	86000	92220	90220	88510	89270	90030	88850	89150	88590	91950	87610
4	80750	86300	91710	90140	88360	89310	90520	88700	88930	88250	92020	87570
5	80600	87050	91140	89800	88360	89310	93380	90790	88810	88660	91560	87420
6	80420	87230	90640	89340	88550	89460	94130	99720	88740	88850	90720	87310
7	80600	87380	89990	88930	88700	89760	93460	103500	88700	88930	89950	87230
8	80600	87500	89610	88550	88960	89690	92530	118500	88700	88960	89530	87120
9	80390	87720	89760	88550	89120	89310	91410	122500	88660	88960	89080	87010
10	80320	88020	90750	88700	89190	89000	90910	124600	89530	88930	88620	86900
11	80280	88210	90980	88890	89270	89000	90220	125200	90980	88850	88470	86820
12	80250	88360	90830	89000	89310	89460	89570	124000	90410	88810	88440	86710
13	80170	88510	90600	89150	89380	94800	89040	122500	89000	88740	88440	87830
14	80170	89570	90410	89120	89500	96950	88810	120800	88510	88660	88360	87870
15	80170	92140	90220	88930	89380	97720	88660	119000	88550	88590	88280	87910
16	80170	92870	89990	88700	89230	97110	88470	117200	88550	88590	88170	87870
17	80250	92370	89720	88740	88930	96150	88660	115000	88590	88550	88100	87870
18	81430	92060	89380	89760	88850	95150	88660	111700	88620	88510	88060	88470
19	81830	91950	89080	90370	88930	94010	89000	107700	88660	88510	88360	88890
20	83060	94160	88780	90370	88930	92800	89530	103600	88700	88470	88360	89040
21	82480	95790	88620	90330	89000	91560	89500	100000	88700	88360	88360	88930
22	84520	96150	88700	90220	89000	90720	89380	96710	88700	88130	88280	88810
23	84740	96190	88960	90220	89000	90070	89230	93730	88660	88020	88210	88740
24	84820	96110	89190	90070	89000	89380	89040	91600	88620	87610	88170	88700
25	85080	95910	89460	89950	89080	89380	88740	90180	88620	87420	88130	88660
26	85300	95670	89650	90560	89120	90220	88400	89720	88550	87310	88130	88660
27	85480	95310	89840	90750	89150	89910	88400	89720	88510	87160	88060	88660
28	85590	94830	89950	90680	89150	88660	88620	89610	88620	87050	88060	88660
29	85670	94240	90180	90600	---	88470	88740	89460	88510	86900	88060	88660
30	85780	93770	90220	90300	---	88810	89000	89380	88510	86780	88020	88550
31	85780	---	90330	89570	---	89150	---	89380	---	87610	87910	---
MAX	85780	96190	93220	90750	89500	97720	94130	125200	90980	88960	92020	89040
MIN	80170	85850	88620	88550	88360	88470	88400	88550	88510	86780	87910	86710
(+)	693.34	695.44	694.55	694.35	694.24	694.24	694.20	694.30	694.07	693.83	693.91	694.08
(@)	+4750	+7990	-3440	-760	-420	0	-150	+380	-870	-900	+300	+640

CAL YR 1994 MAX 106400 MIN 80170 (@) +1020
WTR YR 1995 MAX 125200 MIN 80170 (@) +7520

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

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1969 to September 1982. February 1990 to current year.

REVISED RECORDS.--TX-93-1: Phytoplankton.

323858097265601 - BENBROOK LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
14...	1143	89500	1.00	409	8.1	9.0	0.67	9.6	86	K4
14...	1147	--	10.0	409	8.1	9.0	--	9.6	86	--
14...	1151	--	20.0	409	8.1	9.0	--	9.6	86	--
14...	1155	--	30.0	406	8.1	9.0	--	9.6	86	--
14...	1159	--	40.0	408	8.1	9.0	--	9.6	86	--
14...	1203	--	50.0	407	8.1	9.0	--	9.6	86	--
14...	1207	--	59.0	412	8.0	9.0	--	9.4	84	--
MAY										
19...	1252	110000	1.00	390	8.1	23.5	0.79	7.3	88	K7
19...	1257	--	10.0	390	7.9	23.0	--	6.0	72	--
19...	1303	--	20.0	391	7.9	23.0	--	5.7	68	--
19...	1309	--	30.0	392	7.7	22.5	--	4.9	58	--
19...	1315	--	40.0	396	7.4	21.5	--	2.8	33	--
19...	1320	--	50.0	396	7.4	21.5	--	2.2	26	--
19...	1326	--	61.0	394	7.2	21.0	--	0.2	2	--
JUL										
19...	0933	88500	1.00	342	7.8	30.0	1.22	6.9	94	K16
19...	0938	--	10.0	343	7.7	29.5	--	6.7	91	--
19...	0943	--	20.0	385	7.0	27.5	--	0.4	5	--
19...	0948	--	30.0	388	7.0	26.5	--	0.4	5	--
19...	0953	--	40.0	394	6.9	26.5	--	0.4	5	--
19...	0958	--	50.0	409	6.8	26.0	--	0.4	5	--
19...	1004	--	57.0	436	6.5	25.5	--	0.5	6	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)
FEB									
14...	K1	170	6	54	7.6	20	0.7	3.2	160
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	170	6	54	7.6	20	0.7	3.2	160
MAY									
19...	K6	160	11	54	6.9	17	0.6	3.3	150
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	160	11	54	7.0	18	0.6	3.3	150
JUL									
19...	K7	120	14	37	7.2	18	0.7	3.3	110
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	160	0	53	7.5	18	0.6	3.9	170

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

323858097265601 - BENBROOK LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
FEB									
14...	26	25	0.30	6.8	240	0.120	--	<0.010	0.120
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	26	24	0.30	6.8	239	0.120	--	<0.010	0.120
MAY									
19...	22	20	0.30	4.9	220	0.060	0.060	0.010	0.070
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	22	21	0.30	6.1	225	0.270	0.270	0.020	0.290
JUL									
19...	22	20	0.30	4.4	177	--	--	<0.010	--
19...	--	--	--	--	--	--	--	<0.010	--
19...	--	--	--	--	--	--	--	<0.010	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	12	20	0.20	12	237	--	--	<0.010	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB									
14...	0.120	0.120	0.28	0.40	0.010	0.010	0.03	<3	2
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--
14...	0.120	0.140	0.26	0.40	<0.010	0.010	0.03	<3	21
MAY									
19...	0.070	<0.015	--	0.20	<0.010	<0.010	--	<3	<1
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	0.290	0.090	0.21	0.30	0.040	0.050	0.15	12	90
JUL									
19...	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	4	1
19...	<0.050	<0.015	--	0.20	<0.010	0.020	0.06	--	--
19...	<0.050	<0.015	--	<0.20	<0.010	<0.010	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	<0.050	2.40	0.10	2.5	0.350	0.370	1.1	790	830

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

323908097273401 - BENBROOK LAKE SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
14...	1217	1.00	409	8.1	9.0	9.7	87
14...	1219	10.0	408	8.1	9.0	9.7	87
14...	1221	20.0	409	8.1	9.0	9.7	87
14...	1224	30.0	408	8.1	9.0	9.7	87
14...	1227	40.0	408	8.1	9.0	9.7	87
14...	1231	50.0	410	8.1	9.0	9.9	88
MAY							
19...	1335	1.00	388	8.1	23.5	7.1	86
19...	1338	10.0	392	7.9	23.0	6.0	72
19...	1342	20.0	390	7.9	23.0	5.6	67
19...	1346	30.0	396	7.7	22.5	4.8	57
19...	1351	40.0	395	7.5	21.5	3.0	35
19...	1356	47.0	395	7.6	21.5	3.1	36
JUL							
19...	1016	1.00	340	7.9	30.0	7.1	96
19...	1019	10.0	340	7.7	29.5	6.6	89
19...	1022	20.0	379	7.2	28.0	0.3	4
19...	1026	30.0	385	7.2	27.0	0.3	4
19...	1029	40.0	388	7.2	26.5	0.3	4
19...	1032	47.0	392	7.2	26.5	0.5	6

323735097274701 - BENBROOK LAKE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
14...	1249	1.00	410	8.2	8.5	0.61	9.9	87	K5	K3	170	8
14...	1255	10.0	409	8.2	8.5	--	9.9	87	--	--	--	--
14...	1300	20.0	409	8.2	8.5	--	9.9	87	--	--	--	--
14...	1304	30.0	411	8.2	8.5	--	9.9	87	--	--	--	--
14...	1309	42.0	412	8.1	8.5	--	9.8	86	--	--	170	4
MAY												
19...	1403	1.00	384	8.3	24.0	0.73	8.4	102	K11	K1	170	14
19...	1407	10.0	390	8.1	23.0	--	6.6	79	--	--	--	--
19...	1412	20.0	390	7.9	23.0	--	6.1	73	--	--	--	--
19...	1417	30.0	391	7.7	22.5	--	4.5	53	--	--	--	--
19...	1422	40.0	394	7.4	22.0	--	2.2	26	--	--	--	--
19...	1427	45.0	399	7.5	21.5	--	1.5	17	--	--	170	12
JUL												
19...	1042	1.00	345	8.5	29.5	1.19	7.4	100	K7	K2	150	9
19...	1047	10.0	346	7.9	29.5	--	6.9	93	--	--	--	--
19...	1052	20.0	382	7.2	27.5	--	0.3	4	--	--	--	--
19...	1057	30.0	387	7.2	27.0	--	0.3	4	--	--	--	--
19...	1104	40.0	389	7.3	27.0	--	0.4	5	--	--	120	10

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB												
14...	55	7.6	20	0.7	3.2	160	27	25	0.30	6.7	242	0.120
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	54	7.6	21	0.7	3.2	160	27	25	0.30	6.7	243	0.120
MAY												
19...	55	7.0	17	0.6	3.4	150	22	21	0.30	4.7	222	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	55	7.0	18	0.6	3.3	150	21	20	0.30	6.9	225	0.150
JUL												
19...	47	7.1	18	0.6	3.1	140	22	21	0.30	5.0	207	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	38	7.2	19	0.7	3.4	120	19	21	0.20	6.8	184	--

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

323735097274701 - BENBROOK LAKE SITE BC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB												
14...	--	<0.010	0.120	0.120	0.100	0.20	0.30	<0.010	0.010	0.03	<3	1
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	0.120	0.120	0.100	0.20	0.30	<0.010	<0.010	--	<3	6
MAY												
19...	--	<0.010	--	<0.050	0.020	0.18	0.20	<0.010	<0.010	--	<3	2
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.150	0.040	0.190	0.190	0.230	0.27	0.50	0.030	0.030	0.09	<3	150
JUL												
19...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	0.020	0.06	320	220
19...	--	<0.010	--	<0.050	<0.015	--	<0.20	<0.010	0.020	0.06	--	--
19...	--	<0.010	--	<0.050	0.020	0.18	0.20	<0.010	<0.010	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	<0.010	--	<0.050	0.170	0.23	0.40	0.030	0.050	0.15	3	4

323628097275101 - BENBROOK LAKE SITE CR

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB							
14...	1316	1.00	412	8.2	8.5	9.9	87
14...	1318	10.0	411	8.2	8.5	9.9	87
14...	1321	20.0	412	8.2	8.5	9.9	87
14...	1324	28.0	413	8.2	8.5	10.0	88
MAY							
19...	1440	1.00	390	8.1	23.5	7.3	88
19...	1443	10.0	389	8.0	22.5	6.5	77
19...	1446	20.0	390	7.8	22.0	5.5	64
19...	1449	29.0	392	7.8	22.0	4.8	56
JUL							
19...	1123	1.00	345	8.0	30.0	7.5	103
19...	1125	10.0	346	7.6	29.0	6.2	83
19...	1127	20.0	386	7.2	27.5	0.4	5
19...	1130	26.0	390	7.2	27.0	0.5	6

323629097280901 - BENBROOK LAKE SITE CL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB							
14...	1334	1.00	410	8.2	8.0	10.2	89
14...	1336	10.0	414	8.2	8.0	10.2	89
14...	1339	24.0	417	8.2	8.0	10.2	89
MAY							
19...	1457	1.00	390	8.2	23.5	7.8	94
19...	1500	10.0	391	7.9	22.5	5.9	70
19...	1503	20.0	389	7.7	22.0	4.8	56
19...	1506	28.0	391	7.6	22.0	3.8	45
JUL							
19...	1139	1.00	343	8.0	30.0	7.8	107
19...	1142	10.0	344	7.8	29.5	7.1	96
19...	1145	23.0	389	7.3	27.5	0.5	7

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

323652097291901 - BENBROOK LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
14...	1351	1.00	420	8.2	8.0	0.61	10.3	90	K13	K10	170	5
14...	1355	10.0	420	8.2	8.0	--	10.5	91	--	--	--	--
14...	1359	20.0	430	8.2	7.5	--	10.2	88	--	--	--	--
14...	1403	25.0	439	8.1	7.5	--	9.8	84	--	--	180	3
MAY												
19...	1517	1.00	388	8.3	24.5	0.67	8.8	108	K19	K11	160	9
19...	1522	10.0	423	7.8	23.0	--	5.6	67	--	--	--	--
19...	1527	20.0	456	7.5	22.5	--	3.0	36	--	--	--	--
19...	1532	29.0	464	7.5	22.5	--	2.6	31	--	--	200	14
JUL												
19...	1157	1.00	367	7.9	30.5	0.45	6.9	95	K10	K3	130	7
19...	1206	10.0	347	7.7	29.5	--	6.1	83	--	--	--	--
19...	1213	24.0	391	7.2	28.0	--	0.4	5	--	--	140	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB												
14...	56	7.7	21	0.7	3.2	170	27	25	0.30	6.6	248	0.130
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	59	7.9	21	0.7	3.1	180	28	25	0.30	6.6	258	0.140
MAY												
19...	54	6.8	18	0.6	3.4	150	22	20	0.30	4.8	222	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	68	8.0	19	0.6	3.8	190	23	23	0.30	9.2	268	0.100
JUL												
19...	41	7.3	19	0.7	3.3	120	22	22	0.30	6.0	196	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	46	7.3	18	0.7	3.3	150	18	22	0.30	7.1	211	--

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB												
14...	--	<0.010	0.130	0.130	0.070	0.23	0.30	<0.010	<0.010	--	4	<1
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	--	--	--
14...	--	<0.010	0.140	0.140	0.080	0.22	0.30	<0.010	0.010	0.03	<3	5
MAY												
19...	--	0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	<3	3
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--
19...	0.100	0.020	0.120	0.120	0.080	0.22	0.30	0.030	0.040	0.12	<3	67
JUL												
19...	--	<0.010	--	<0.050	0.020	0.18	0.20	<0.010	<0.010	--	5	4
19...	--	<0.010	--	<0.050	<0.015	--	0.20	<0.010	0.010	0.03	--	--
19...	--	<0.010	--	<0.050	0.190	0.21	0.40	0.040	0.070	0.21	720	620

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site AC (323858097265601)

Phytoplankton Analyses October 1994 to September 1995

Date	2-14-95
Time	1143
TOTAL CELLS/mL	4,075
NUMBER OF SPECIES	8
DEPTH COLLECTED (ft.)	1.1

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	297
Order Pennales	
Cocconeis placentula	30
CHLOROPHYTA	
Ankistrodesmus falcatus	268
Chlamydomonas sp.	119
Scenedesmus bijuga	30
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
Chroococcus limneticus	238
EUGLENOPHYTA	
Trachelomonas sp.	119

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site DC (323652097291901)

Phytoplankton Analyses October 1994 to September 1995

Date	2-14-95
Time	1351
TOTAL CELLS/mL	6,274
NUMBER OF SPECIES	10
DEPTH COLLECTED (ft.)	1.0

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	238
Order Pennales	
Cocconeis placentula	59
CHLOROPHYTA	
Ankistrodesmus falcatus	803
Chlamydomonas sp.	89
Scenedesmus opoliensis	178
Selenastrum Westii	59
CYANOPHYTA	
Aphanocapsa delicatissima	2,974
Aphanocapsa elachista	1,190
Chroococcus limneticus	357
EUGLENOPHYTA	
Trachelomonas sp.	327

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site AC (323858097265601)

Phytoplankton Analyses October 1994 to September 1995

Date	5-19-95
Time	1252
TOTAL CELLS/mL	**49,991**
NUMBER OF SPECIES	**16**
DEPTH COLLECTED (ft)	**1.3**

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	595
CHLOROPHYTA	
Ankistrodesmus falcatus	297
Chlamydomonas sp.	178
Cosmarium sp.	30
Pediastrum duplex	89
Scenedesmus opoliensis	59
Selenastrum Westii	30
CYANOPHYTA	
Anabaena spiroides	13,978
Aphanizomenon flos-aquae	3,866
Aphanocapsa delicatissima	20,818
Aphanocapsa elachista	595
Merismopedia tenuissima	8,089
CHRYSOPHYTA	
Dinobryon sociale	30
EUGLENOPHYTA	
Trachelomonas sp.	981
PYRRHOPHYTA	
Ceratium hirundinella	59
CRYPTOPHYTA	
Cryptomonas erosa	297

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site DC (323652097291901)

Phytoplankton Analyses October 1994 to September 1995

Date	5-19-95
Time	1532
TOTAL CELLS/mL	67,747
NUMBER OF SPECIES	15
DEPTH COLLECTED (ft.)	1.1

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	333
Stephanodiscus astraea	83
Order Pennales	
Nitzschia denticula	59
CHLOROPHYTA	
Ankistrodesmus falcatus	119
Chlamydomonas sp.	1,338
Pediastrum duplex	30
Scenedesmus opoliensis	30
Selenastrum Westii	59
CYANOPHYTA	
Anabaena spiroides	18,141
Aphanizomenon flos-aquae	3,569
Aphanocapsa delicatissima	27,361
Chroococcus limneticus	357
Merismopedia tenuissima	14,751
EUGLENOPHYTA	
Trachelomonas sp.	1,011
CRYPTOPHYTA	
Cryptomonas erosa	506

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site AC (323858097265601)

Phytoplankton Analyses October 1994 to September 1995

Date	7-19-95
Time	0933
TOTAL CELLS/mL	32,151
NUMBER OF SPECIES	14
DEPTH COLLECTED (ft)	2.0

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	506
CHLOROPHYTA	
Chlamydomonas sp.	89
Cosmarium sp.	30
Pediastrum duplex	30
Scenedesmus bijuga	30
Selenastrum Westii	30
Staurastrum sp.	30
CYANOPHYTA	
Aphanizomenon flos-aquae	5,353
Aphanocapsa delicatissima	22,008
Chroococcus limneticus	238
Merismopedia tenuissima	3,331
CHRYSOPHYTA	
Dinobryon sociale	30
EUGLENOPHYTA	
Trachelomonas sp.	387
PYRRHOPHYTA	
Peridinium pusillum	59

08046500 BENBROOK LAKE NEAR BENBROOK, TX--Continued

Benbrook Lake Site DC (323652097291901)

Phytoplankton Analyses October 1994 to September 1995

Date	7-19-95
Time	1157
TOTAL CELLS/mL	32,831
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft)	0.75

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	89
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	327
CHLOROPHYTA	
Chlamydomonas sp.	30
Cosmarium sp.	59
Pediastrum duplex	59
Scenedesmus bijuga	59
Selenastrum Westii	327
CYANOPHYTA	
Anabaena spiroides	2,379
Aphanocapsa delicatissima	14,275
Merismopedia tenuissima	5,710
Oscillatoria sp.	9,219
EUGLENOPHYTA	
Trachelomonas sp.	268
PYRRHOPHYTA	
Peridinium pusillum	30

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 mi².

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder. Datum of gage is 604.22 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Benbrook Lake (station 08046500), 1.5 mi upstream, since September 1952.
There is a diversion 1.0 mi upstream for Pecan Valley Golf Course. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1948-52) prior to regulation by Benbrook Lake, 105 ft³/s (76,070 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1948-52).--Maximum discharge, 82,900 ft³/s May 17, 1949 (gage height, 28.72 ft), from rating curve extended above 11,000 ft³/s on basis of velocity-area studies and slope-area measurement of 82,900 ft³/s; no flow at times most years. Maximum stage since at least 1922, that of May 17, 1949.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	4.6	433	180	436	75	5.1	124	193	9.4	24	9.5
2	45	4.6	432	180	318	76	5.2	188	191	9.5	28	9.9
3	44	4.8	432	182	227	77	5.0	190	191	9.5	177	10
4	42	6.1	429	178	226	77	6.0	183	193	9.7	273	10
5	40	13	424	291	104	77	18	214	194	12	410	10
6	23	4.6	424	377	7.3	74	504	107	115	9.3	495	10
7	8.7	4.7	424	376	7.3	75	860	58	52	9.2	407	11
8	6.1	5.2	428	257	7.0	159	856	72	51	8.7	225	11
9	5.1	6.8	340	124	6.9	236	855	39	51	8.7	225	11
10	4.9	5.1	113	51	53	236	752	37	74	8.6	224	11
11	5.4	5.0	238	50	86	91	645	421	71	8.5	89	11
12	5.4	4.9	329	48	84	7.4	511	1300	509	8.1	9.7	12
13	5.8	4.9	329	48	84	38	414	1290	821	8.6	9.5	41
14	5.5	21	329	137	83	9.6	290	1260	362	8.4	9.2	5.3
15	5.3	7.9	328	194	163	372	211	1260	11	8.7	9.4	5.3
16	5.2	304	326	196	233	849	211	1260	10	8.5	9.7	5.4
17	5.2	673	326	122	233	845	215	1350	9.9	9.4	9.5	5.4
18	27	420	326	9.0	135	841	214	1900	9.8	9.0	9.5	16
19	4.1	353	301	108	78	839	225	2240	9.8	8.4	16	6.6
20	7.0	461	170	203	78	835	216	2220	9.4	8.9	10	5.4
21	4.9	441	165	203	79	834	213	1960	9.3	9.8	9.8	5.4
22	4.7	440	68	201	80	620	211	1760	8.9	95	9.9	5.2
23	4.5	440	5.5	195	78	475	211	1570	9.6	94	9.5	4.7
24	4.4	443	5.6	194	77	531	211	1240	9.2	94	9.3	4.4
25	8.6	440	5.6	196	76	406	213	908	9.7	75	9.4	4.3
26	4.9	440	5.6	200	75	240	213	461	9.0	18	9.5	4.4
27	4.7	440	119	196	75	434	97	199	9.6	19	9.7	4.3
28	4.6	439	187	191	75	830	17	194	9.6	18	9.3	5.0
29	4.6	436	183	191	---	333	17	193	9.2	19	9.4	5.6
30	4.4	436	183	336	---	5.9	15	191	9.3	19	9.6	5.9
31	4.4	---	184	436	---	5.7	---	195	---	35	9.8	---
TOTAL	395.4	6709.2	7992.3	5850.0	3264.5	10603.6	8436.3	24584	3221.3	676.9	2774.7	266.0
MEAN	12.8	224	258	189	117	342	281	793	107	21.8	89.5	8.87
MAX	46	673	433	436	436	849	860	2240	821	95	495	41
MIN	4.1	4.6	5.5	9.0	6.9	5.7	5.0	37	8.9	8.1	9.2	4.3
AC-FT	784	13310	15850	11600	6480	21030	16730	48760	6390	1340	5500	528

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1995#, BY WATER YEAR (WY)

MEAN	24.9	93.6	52.5	81.2	84.6	123	98.3	234	221	61.3	24.2	17.6
MAX	215	1479	680	1845	792	748	881	2351	1804	1070	198	164
(WY)	1994	1992	1992	1992	1992	1970	1977	1990	1957	1989	1979	1962
MIN	.000	.053	.042	.000	.000	.13	.10	.000	.000	.029	.000	.000
(WY)	1953	1971	1954	1953	1953	1953	1959	1959	1953	1953	1953	1953

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1953 - 1995#	
ANNUAL TOTAL	43963.9		74774.2			
ANNUAL MEAN	120		205		93.0	
HIGHEST ANNUAL MEAN					514	1992
LOWEST ANNUAL MEAN					.27	1953
HIGHEST DAILY MEAN	991	May 21	2240	May 19	6320 May 3	1990
LOWEST DAILY MEAN	4.1	Oct 19	4.1	Oct 19	.00 Oct 1	1952
ANNUAL SEVEN-DAY MINIMUM	4.6	Oct 27	4.6	Oct 27	.00 Oct 1	1952
INSTANTANEOUS PEAK FLOW			2270	May 18	67400 May 3	1990
INSTANTANEOUS PEAK STAGE			8.00	May 18	14.71 May 3	1990
ANNUAL RUNOFF (AC-FT)	87200		148300		67370	
10 PERCENT EXCEEDS	407		461		182	
50 PERCENT EXCEEDS	25		75		6.8	
90 PERCENT EXCEEDS	6.5		5.3		.10	

Period of regulated streamflow.

08047000 CLEAR FORK TRINITY RIVER NEAR BENBROOK, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1980 to September 1982, October 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
14...	1145	75	435	8.1	9.0	13	9.4	10.8	96	0.6	170	18
MAY												
19...	0915	2010	405	7.8	21.0	15	7.8	9.0	103	1.4	160	11
JUL												
19...	1024	24	418	7.4	28.0	52	5.3	6.2	82	2.2	160	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
FEB												
14...	54	7.5	20	0.7	3.2	150	26	25	0.3	6.7	233	11
MAY												
19...	54	6.6	17	0.6	3.3	150	22	20	0.3	5.5	221	11
JUL												
19...	52	7.2	18	0.6	4.0	160	15	21	0.20	11	231	8

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
FEB											
14...	7	4	0.130	--	<0.010	0.130	0.13	0.12	0.28	0.4	0.0
MAY											
19...	6	5	0.170	0.170	0.010	0.180	0.180	0.040	0.26	0.30	0.010
JUL											
19...	8	0	0.080	0.080	0.030	0.110	0.110	1.40	0.30	1.7	0.110

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FEB											
14...	0.0	0.03	13	1	59	<0.5	<1	<5	<3	<10	8
MAY											
19...	0.020	0.06	5.4	2	55	<0.5	<1	<5	<3	<10	8
JUL											
19...	0.150	0.46	7.0	7	53	<0.5	<1.0	<5	<3	<10	22

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB											
14...	<10	6	2	<0.1	<10	<10	<1	<1	370	<6	<3
MAY											
19...	20	5	3	<0.1	20	<10	<1	<1	330	<6	<3
JUL											
19...	<10	5	650	<0.1	<10	<10	<1	1.0	370	<6	7

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 mi downstream from Marys Creek and 10 mi downstream from Benbrook Dam.

DRAINAGE AREA.--518 mi².

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

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

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

REMARKS.--No estimated daily discharges. Records good. Since September 1952, flow largely regulated by Benbrook Lake (station 08046500) 10 mi upstream. 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. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--28 years (water years 1925-52) prior to regulation by Benbrook Lake, 112 ft³/s (81,140 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1925-52).--Maximum discharge, 107,000 ft³/s May 17, 1949 (gage height, 28.20 ft, present datum), from rating curve extended above 16,000 ft³/s on basis of contracted-opening measurement of 107,000 ft³/s; no flow at times. Maximum stage since at least 1900, that of May 17, 1949, present datum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 25, 1922, reached a stage of 27.5 ft, present datum (discharge, 74,300 ft³/s, by slope-area measurement of peak flow); data furnished by Fort Worth city engineer.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	12	411	283	444	64	37	89	256	18	78	12
2	24	11	411	261	371	64	36	187	209	18	708	13
3	24	23	411	265	254	64	34	363	207	16	307	13
4	27	108	411	253	247	64	69	218	195	16	320	11
5	22	296	411	321	176	64	581	1640	193	173	406	9.5
6	25	31	411	423	38	64	502	1130	153	38	516	9.0
7	106	25	411	411	36	90	866	392	65	29	459	12
8	28	24	499	327	35	102	850	2450	64	23	222	14
9	11	64	538	181	33	206	849	273	64	18	222	13
10	8.3	31	286	70	44	222	1000	181	303	13	222	18
11	6.1	25	258	59	108	144	689	380	566	13	149	14
12	5.8	23	356	57	98	30	578	1360	433	16	27	13
13	6.1	23	356	59	93	779	463	1360	837	9.8	20	703
14	8.0	396	355	112	89	172	362	1360	497	11	20	40
15	14	273	356	187	129	333	253	1360	36	10	21	29
16	14	221	356	187	239	874	253	1360	31	16	19	23
17	11	610	356	242	222	849	283	1430	28	14	16	20
18	558	445	356	195	164	849	332	1910	25	11	15	198
19	31	324	356	189	80	840	354	2340	25	12	123	118
20	647	878	290	288	80	828	317	2340	21	11	75	36
21	92	491	200	288	80	825	262	2130	19	6.6	25	27
22	31	445	138	308	77	674	246	1890	19	44	17	22
23	25	444	36	286	76	478	239	1700	16	107	16	19
24	22	437	34	279	77	558	234	1370	17	76	15	17
25	224	433	34	279	76	580	214	1040	16	75	15	15
26	34	433	34	379	73	569	189	587	15	29	15	12
27	28	441	107	297	72	370	143	242	18	17	15	12
28	25	432	349	275	70	819	40	215	29	15	14	13
29	22	418	318	262	---	469	40	210	17	16	12	14
30	18	411	283	337	---	43	38	196	16	21	12	13
31	15	---	318	437	---	39	---	322	---	418	12	---
TOTAL	2135.3	8228	9446	7797	3581	12126	10353	32025	4390	1310.4	4113	1482.5
MEAN	68.9	274	305	252	128	391	345	1033	146	42.3	133	49.4
MAX	647	878	538	437	444	874	1000	2450	837	418	708	703
MIN	5.8	11	34	57	33	30	34	89	15	6.6	12	9.0
AC-FT	4240	16320	18740	15470	7100	24050	20540	63520	8710	2600	8160	2940

08047500 CLEAR FORK TRINITY RIVER AT FORT WORTH, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1995#, BY WATER YEAR (WY)

MEAN	60.3	111	82.0	112	124	187	162	334	278	78.2	32.4	33.1
MAX	353	1555	1118	2198	1019	1081	1012	3020	2219	1300	247	245
(WY)	1994	1992	1992	1992	1992	1990	1977	1990	1989	1989	1979	1962
MIN	.000	.84	1.68	2.28	2.84	.91	3.12	3.41	.27	.75	.54	.28
(WY)	1953	1955	1979	1957	1953	1956	1954	1959	1953	1954	1954	1954

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1953 - 1995#	
ANNUAL TOTAL	57712.3		96987.2			
ANNUAL MEAN	158		266		133	
HIGHEST ANNUAL MEAN					660	1992
LOWEST ANNUAL MEAN					4.55	1954
HIGHEST DAILY MEAN	1220	May 25	2450	May 8	11000	Mar 11 1990
LOWEST DAILY MEAN	5.8	Oct 12	5.8	Oct 12	.00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	8.5	Oct 9	8.5	Oct 9	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			12100	May 5	20900	May 2 1990
INSTANTANEOUS PEAK STAGE			14.31	May 5	16.80	May 2 1990
ANNUAL RUNOFF (AC-FT)	114500		192400		96140	
10 PERCENT EXCEEDS	424		625		290	
50 PERCENT EXCEEDS	50		112		16	
90 PERCENT EXCEEDS	22		14		.76	

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 mi².

PERIOD OF RECORD.--October 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 and biochemical analyses: October 1967 to September 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 ft³/s. Datum of gage is 519.24 ft above sea level. Prior to Aug. 22, 1954, at site 1,200 ft upstream at same datum. Aug. 22, 1954, to Oct. 15, 1955, at site 2,000 ft upstream at same datum.

REMARKS.--Records good. Flow is largely regulated by Lake Worth (station 08045400) on the West Fork Trinity River and by Benbrook Lake (station 08046500) on the Clear Fork Trinity River. At times, flow is sustained by releases from the flood-detention pool of Benbrook Lake. The city of Fort Worth diverts water from river upstream from station and from Cedar Creek Reservoir (station 08063010) for municipal and industrial uses and returns sewage effluent to river downstream from station 08048543. There are many small diversions upstream from station. Maximum stage since at least 1866, that of May 17, 1949. Maximum stages have been affected by levee construction, levee breaks and channel rectification. Rain gage at station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	60	933	671	595	180	183	229	1210	28	191	17
2	40	42	724	588	573	199	132	317	763	27	1060	18
3	39	60	594	533	448	204	88	585	477	26	924	19
4	47	114	537	454	371	210	212	351	324	24	1530	18
5	43	716	515	410	322	215	1050	757	276	448	2020	15
6	46	74	501	540	193	222	1320	3670	222	64	2050	13
7	244	55	498	568	104	243	2100	4190	97	39	1830	22
8	112	85	643	540	65	271	2190	8080	79	34	1330	26
9	33	293	766	426	53	e359	1880	4080	71	28	1170	25
10	25	241	593	294	48	e395	1980	3670	341	22	1130	36
11	21	167	560	204	73	318	1480	4370	1200	19	1040	31
12	20	82	846	163	94	182	1130	5490	1010	23	577	32
13	19	57	1060	207	101	1620	837	4780	1470	19	281	1190
14	21	632	1120	297	110	1020	641	4760	863	16	163	84
15	33	1950	1170	412	122	1360	453	4790	184	31	81	45
16	35	2770	1170	502	160	2000	448	4400	111	34	45	37
17	30	3360	1130	619	213	1940	458	3480	67	25	29	32
18	1120	3140	1110	677	248	1900	684	3100	46	20	22	255
19	154	1990	1040	724	257	1830	567	2930	37	19	94	273
20	1010	2530	845	740	247	1670	669	2520	31	18	138	e105
21	542	3250	506	749	210	1560	478	2190	28	15	43	e58
22	226	2450	333	755	178	1440	515	1910	27	29	25	e43
23	112	2650	140	757	159	1120	606	1740	28	167	22	e36
24	132	3160	101	725	149	1130	561	1440	34	113	20	e31
25	1010	3180	85	666	140	1200	493	1180	30	101	18	e25
26	1590	2660	72	647	139	1400	391	804	25	46	19	e21
27	1290	2100	97	621	153	807	401	580	33	25	21	21
28	763	1710	433	575	172	1210	221	1040	54	20	21	20
29	356	1450	505	531	---	870	196	1270	32	21	21	20
30	152	1100	512	513	---	330	207	1230	27	27	19	20
31	109	---	596	579	---	258	---	1440	---	805	17	---
TOTAL	9409	42128	19735	16687	5697	27663	22571	81373	9197	2333	15951	2588
MEAN	304	1404	637	538	203	892	752	2625	307	75.3	515	86.3
MAX	1590	3360	1170	757	595	2000	2190	8080	1470	805	2050	1190
MIN	19	42	72	163	48	180	88	229	25	15	17	13
AC-FT	18660	83560	39140	33100	11300	54870	44770	161400	18240	4630	31640	5130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1995#, BY WATER YEAR (WY)

MEAN	304	285	272	250	341	458	606	1177	803	253	120	159
MAX	4548	3855	6071	3521	2412	3103	5595	12430	10240	3030	1447	2482
(WY)	1982	1982	1992	1992	1932	1945	1942	1990	1989	1941	1950	1962
MIN	.12	3.64	5.02	6.08	5.57	4.72	7.71	15.2	5.73	1.33	.000	.000
(WY)	1940	1956	1935	1930	1940	1940	1930	1959	1954	1956	1956	1930

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1921 - 1995#	
ANNUAL TOTAL	178482		255332			
ANNUAL MEAN	489		700		419	
HIGHEST ANNUAL MEAN					1823	1990
LOWEST ANNUAL MEAN					15.6	1956
HIGHEST DAILY MEAN	6960	May 14	8080	May 8	47300	Apr 25 1922
LOWEST DAILY MEAN	19	Oct 13	13	Sep 6	.00	Aug 2 1924
ANNUAL SEVEN-DAY MINIMUM	21	Aug 12	17	Aug 31	.00	Jul 24 1925
INSTANTANEOUS PEAK FLOW			12500	May 8	85000	Apr 25 1922
INSTANTANEOUS PEAK STAGE			5.50	May 8	25.91	May 17 1949
ANNUAL RUNOFF (AC-FT)	354000		506500		303600	
10 PERCENT EXCEEDS	1230		1920		1070	
50 PERCENT EXCEEDS	101		293		40	
90 PERCENT EXCEEDS	28		23		5.8	

e Estimated
Period of regulated streamflow.

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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 478.70 ft above sea level.

REMARKS.--Records good. Flow is largely regulated by Lake Worth (station 08045400) on the West Fork Trinity River and by Benbrook Lake (station 08046500) on the Clear Fork Trinity River. 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. Rain gage at station. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	66	1080	748	567	104	281	295	1450	28	490	18
2	47	41	833	624	488	131	218	438	856	25	1450	15
3	49	131	679	586	330	146	157	885	553	24	1050	15
4	66	187	606	488	304	128	425	461	367	21	1510	16
5	59	1640	582	461	268	129	1720	1730	297	597	1990	17
6	48	141	570	637	96	130	1510	6050	258	123	2080	13
7	458	83	561	583	57	322	2230	3920	135	44	1890	e31
8	274	86	887	528	55	117	2310	8950	99	39	1380	25
9	69	461	1100	374	50	199	2000	4200	89	31	1180	23
10	50	283	849	222	48	188	2510	3560	332	27	1130	40
11	44	203	677	170	142	160	1670	3920	2060	22	1060	31
12	37	104	999	147	92	23	1290	4800	905	17	634	e29
13	32	77	1260	328	71	2760	978	4340	1490	17	308	e2120
14	29	1090	1360	579	75	1330	779	4270	969	15	184	128
15	49	2830	1380	648	79	1360	573	4300	217	15	98	57
16	56	3140	1350	477	248	2230	560	4070	141	23	63	41
17	55	3630	1290	739	260	2130	586	3400	97	20	37	39
18	2220	3450	1270	886	243	2060	957	3060	77	35	32	191
19	263	2500	1150	616	151	1960	871	2940	56	29	125	462
20	e1490	3260	909	656	127	1760	999	2610	38	17	248	139
21	e858	3480	528	596	92	1610	622	2320	33	19	76	60
22	336	2780	378	599	70	1510	633	2020	29	15	40	47
23	170	2840	174	511	62	1020	719	1870	27	180	33	51
24	153	3220	134	437	60	1060	677	1570	27	131	28	50
25	1260	3210	122	411	49	1470	615	1290	27	92	25	47
26	e1620	2800	112	801	52	1870	499	932	26	66	22	32
27	e1530	2320	123	540	70	914	507	646	53	36	20	28
28	962	1940	666	468	101	1370	297	1040	74	33	18	25
29	461	1670	604	430	---	1090	256	1350	43	26	23	23
30	216	1270	588	453	---	456	268	1300	34	22	21	21
31	111	---	768	592	---	370	---	1520	---	1190	23	---
TOTAL	13117	48933	23589	16335	4307	30107	27717	84057	10859	2979	17268	3834
MEAN	423	1631	761	527	154	971	924	2712	362	96.1	557	128
MAX	2220	3630	1380	886	567	2760	2510	8950	2060	1190	2080	2120
MIN	29	41	112	147	48	23	157	295	26	15	18	13
AC-FT	26020	97060	46790	32400	8540	59720	54980	166700	21540	5910	34250	7600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1995#, BY WATER YEAR (WY)

MEAN	499	493	507	357	421	763	680	1935	1398	252	109	95.5
MAX	4881	3878	6459	4067	2924	2418	5668	12540	9448	1654	557	216
(WY)	1982	1982	1992	1992	1992	1992	1990	1990	1989	1982	1995	1980
MIN	9.82	23.8	13.7	30.2	36.4	43.9	35.3	60.6	22.4	5.67	9.21	9.27
(WY)	1978	1980	1978	1978	1981	1986	1983	1988	1978	1978	1985	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1977 - 1995#	
ANNUAL TOTAL	215615		283102			
ANNUAL MEAN	591		776		627	
HIGHEST ANNUAL MEAN					2071	1992
LOWEST ANNUAL MEAN					40.1	1978
HIGHEST DAILY MEAN	6360	May 14	8950	May 8	35200	May 3 1990
LOWEST DAILY MEAN	23	Aug 16	13	Sep 6	1.2	Jul 12 1978
ANNUAL SEVEN-DAY MINIMUM	26	Aug 13	17	Aug 31	2.3	Jul 8 1978
INSTANTANEOUS PEAK FLOW			13700	May 6	46600	May 2 1990
INSTANTANEOUS PEAK STAGE			26.75	May 6	38.02	May 2 1990
ANNUAL RUNOFF (AC-FT)	427700		561500		454100	
10 PERCENT EXCEEDS	1630		2120		1620	
50 PERCENT EXCEEDS	156		330		52	
90 PERCENT EXCEEDS	41		27		15	

e Estimated
Period of regulated streamflow.

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1976 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to current year.
pH: October 1976 to current year.
WATER TEMPERATURE: October 1976 to current year.
DISSOLVED OXYGEN: October 1976 to current year.

INSTRUMENTATION.--Since October 1976, a four-parameter water-quality monitor continuously records water temperature, dissolved oxygen, pH, and specific conductance at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument, pump, or power failure. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request. Dissolved oxygen values bypassing saturation can be attributed to algae blooms in close proximity to the well intake. National water-quality assessment program data are included in this record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,000 microsiemens Nov. 6, 1978; minimum, 90 microsiemens Sept. 10, 1992.
pH: Maximum, 9.8 units Aug. 8, Sept. 2. 1980; minimum, 6.6 units Aug. 15, 1987.
WATER TEMPERATURE: Maximum, 38.5°C Aug. 21, 1993; minimum, 0.0°C Jan. 31, Feb. 1, 2, 1985.
DISSOLVED OXYGEN: Maximum, 22.1 mg/L Oct. 4, 1983; minimum, 0.0 mg/L on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 596 microsiemens Mar. 12 and 13; minimum, 117 microsiemens Oct. 20.
pH: Maximum, 8.8 units Nov. 5 and Jan. 21; minimum, 7.2 units Feb. 13.
WATER TEMPERATURE: Maximum, 36.5°C July 12; minimum, 6.5°C Jan. 5.
DISSOLVED OXYGEN: Maximum, 13.9 mg/L July 8; minimum, 4.0 mg/L June 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
13...	1143	13	433	8.1	20.5	9.4	105	160	24	52	6.7	28
NOV												
17...	1205	3410	415	8.2	16.0	9.4	97	140	19	42	7.8	28
DEC												
06...	1430	533	430	7.9	16.0	10.3	105	150	18	49	7.7	23
JAN												
10...	1503	238	488	8.3	14.0	12.0	118	170	21	57	7.8	27
FEB												
22...	1446	184	492	8.4	14.5	13.2	131	200	36	65	8.3	27
MAR												
24...	1025	1100	448	8.2	17.5	9.6	102	180	23	57	8.4	25
APR												
26...	0926	354	502	8.0	18.0	8.8	94	190	25	60	8.7	28
MAY												
30...	1422	1320	481	8.3	26.0	8.9	111	180	21	54	9.9	32
JUL												
14...	0755	33	522	7.7	30.5	5.9	80	180	24	58	8.2	38
28...	0930	46	427	7.7	30.5	6.4	86	150	17	49	7.2	27
AUG												
28...	1125	28.0	469	7.8	32.0	7.4	103	170	23	53	8.0	33

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT											
13...	1	4.0	0	163	134	130	36	30	0.3	6.3	257
NOV											
17...	1	4.7	0	144	118	120	27	37	0.2	7.1	240
DEC											
06...	0.8	4.0	0	166	136	130	32	29	0.3	7.6	248
JAN											
10...	0.9	4.3	0	187	153	150	38	32	0.3	5.5	289
FEB											
22...	0.8	3.7	5	185	159	160	39	32	0.3	2.7	292
MAR											
24...	0.8	3.9	5	178	154	150	31	32	0.3	2.3	258
APR											
26...	0.9	4.1	0	196	161	160	35	34	0.3	2.2	286
MAY											
30...	1	4.7	0	188	154	150	32	40	0.3	5.0	284
JUL											
14...	1	4.6	0	189	155	150	50	41	0.3	7.6	319
28...	1	3.9	0	164	135	130	34	31	0.3	9.0	259
AUG											
28...	1	4.6	0	174	142	140	41	36	0.4	8.6	280

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
13...	244	0.030	0.030	0.0	0.050	0.0	<0.015	0.70	--	0.2	0.7
NOV											
17...	225	0.100	0.100	0.0	0.120	0.12	0.0	0.46	0.26	0.3	0.5
DEC											
06...	235	0.180	0.180	0.0	0.190	0.19	0.0	0.28	0.28	0.3	0.3
JAN											
10...	265	0.250	0.250	0.0	0.270	0.27	0.0	0.36	0.16	0.2	0.4
FEB											
22...	275	0.100	0.100	0.050	0.150	0.150	<0.015	0.30	--	0.20	0.3
MAR											
24...	253	0.080	0.080	0.0	0.090	0.1	0.1	0.34	0.24	0.3	0.4
APR											
26...	269	0.130	--	<0.010	0.130	0.13	0.0	0.37	0.27	0.3	0.4
MAY											
30...	271	0.070	--	<0.010	0.070	0.1	0.0	0.28	--	<0.20	0.3
JUL											
14...	301	0.160	0.160	0.010	0.170	0.170	0.050	0.45	0.25	0.30	0.50
28...	242	0.050	--	<0.010	0.050	0.050	0.030	0.47	0.27	0.30	0.50
AUG											
28...	270	--	--	<0.010	--	<0.050	<0.015	0.50	--	0.40	0.50

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
13...	0.24	0.1	0.10	0.31	5.6	2.2	38	1.3	99	10	3
NOV											
17...	0.1	0.0	0.0	0.06	4.4	1.6	99	911	92	6	1
DEC											
06...	0.0	0.0	0.0	0.06	4.0	0.9	27	39	99	<3	2
JAN											
10...	0.0	<0.010	<0.010	--	4.1	0.6	13	8.4	77	<3	9
FEB											
22...	0.020	<0.010	<0.010	--	3.7	0.8	20	9.9	99	5	8
MAR											
24...	<0.010	<0.010	<0.010	--	4.1	0.8	46	137	96	370	3
APR											
26...	0.0	<0.010	<0.010	--	6.0	0.9	45	43	97	<3	3
MAY											
30...	<0.010	<0.010	<0.010	--	4.5	1.7	50	178	92	6	2
JUL											
14...	0.010	0.010	<0.010	--	4.0	1.6	39	3.5	98	7	6
28...	0.020	<0.010	<0.010	--	4.2	1.9	50	6.2	98	8	1
AUG											
28...	0.030	<0.010	<0.010	--	4.3	1.4	34	2.6	99	<3	4

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	13117	307	176	6230	20	697	23	827	120
NOV.	1994	48933	352	201	26600	23	3100	28	3720	140
DEC.	1994	23589	441	251	16000	31	1990	38	2440	160
JAN.	1995	16335	424	242	10700	30	1310	36	1600	160
FEB.	1995	4307	473	268	3120	34	400	42	493	170
MAR.	1995	30107	425	242	19600	30	2420	36	2960	160
APR.	1995	27717	442	251	18800	31	2350	38	2870	160
MAY	1995	84057	452	257	58300	32	7360	40	9040	170
JUNE	1995	10859	336	192	5620	23	664	27	800	130
JULY	1995	2979	403	230	1850	28	225	34	274	150
AUG.	1995	17268	395	225	10500	27	1260	33	1530	150
SEPT	1995	3834	314	180	1860	20	208	24	247	120
TOTAL		283102	**	**	179000	**	22000	**	26800	**
WTD.AVG.		776	412	234	**	29	**	35	**	150

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	265	215	240	445	424	437	---	---	e360	451	440	447
2	267	230	251	464	445	456	---	---	e390	458	443	451
3	344	250	290	454	305	389	---	---	e410	466	458	462
4	344	257	292	432	219	405	---	---	e420	473	464	468
5	294	248	263	325	154	279	---	---	e428	474	469	472
6	350	286	311	408	325	377	---	---	e430	472	457	465
7	359	171	316	410	396	402	446	435	443	466	456	462
8	381	289	337	410	381	395	445	312	402	468	454	461
9	444	381	426	498	260	364	406	367	381	477	468	472
10	473	444	460	363	340	351	400	365	389	491	474	485
11	476	427	451	430	336	370	466	396	437	496	481	489
12	449	406	425	440	429	435	445	397	420	493	476	486
13	436	355	401	440	430	434	505	421	449	494	467	481
14	396	367	375	499	223	393	489	474	481	467	445	460
15	429	385	411	423	274	345	476	461	469	445	435	441
16	446	401	422	431	410	417	---	---	e470	435	421	427
17	401	360	378	426	333	413	---	---	e468	437	390	404
18	365	150	254	423	416	418	---	---	e465	399	319	362
19	234	216	226	432	423	426	---	---	e458	368	336	352
20	254	117	204	439	348	394	---	---	e440	395	340	370
21	281	192	213	524	433	481	442	434	438	393	387	389
22	302	197	263	---	---	e320	462	442	451	400	392	395
23	364	302	338	---	---	e280	489	461	475	406	393	397
24	378	306	364	---	---	e270	502	489	497	409	403	406
25	378	250	326	---	---	e260	512	502	508	413	408	410
26	378	266	351	---	---	e280	524	512	520	416	317	389
27	377	370	373	---	---	e290	528	515	525	401	371	388
28	382	369	376	---	---	e300	545	443	505	421	401	411
29	390	382	385	---	---	e320	454	436	445	429	421	424
30	403	390	396	---	---	e340	481	444	465	434	429	432
31	424	403	417	---	---	---	481	434	452	432	421	427
MONTH	476	117	340	524	154	368	545	312	448	496	317	432

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	435	427	430	519	508	512	505	486	496	515	497	507
2	446	433	437	525	517	520	517	499	508	523	505	512
3	455	446	452	530	500	513	544	511	532	525	426	468
4	466	454	460	505	501	502	531	370	488	461	432	439
5	468	464	466	506	496	502	530	284	415	459	288	431
6	488	468	476	545	496	506	442	310	382	388	266	324
7	508	488	499	561	485	529	447	430	439	421	388	404
8	---	---	e510	540	519	530	442	435	438	472	311	387
9	---	---	e513	546	530	538	439	424	434	493	472	486
10	---	---	e518	543	508	526	427	250	389	534	478	496
11	539	485	509	526	510	518	438	339	401	524	498	509
12	535	499	526	596	515	546	446	418	440	527	501	507
13	556	535	549	596	243	322	450	413	446	512	505	508
14	550	517	528	464	301	363	461	416	446	511	505	508
15	520	505	513	---	---	e390	467	431	458	515	506	511
16	513	476	495	---	---	e422	475	434	464	508	411	458
17	477	460	465	474	456	463	479	417	470	504	398	445
18	483	468	474	469	448	461	463	417	448	486	461	478
19	525	483	500	459	448	455	466	350	439	461	447	454
20	530	478	504	462	444	452	459	350	441	447	431	440
21	492	475	485	459	452	455	476	447	456	434	427	431
22	497	484	492	463	452	456	492	470	488	430	421	426
23	501	481	492	464	436	454	500	492	496	425	419	422
24	515	484	496	451	437	445	500	494	498	429	420	424
25	504	486	500	486	259	414	501	493	497	457	429	438
26	505	492	500	391	292	356	503	494	499	459	442	446
27	503	484	494	410	283	353	499	493	496	486	459	473
28	508	494	502	436	399	421	502	493	498	499	475	489
29	---	---	---	454	429	436	517	499	509	489	476	483
30	---	---	---	474	454	465	513	499	507	486	478	482
31	---	---	---	495	467	480	---	---	---	484	440	477
MONTH	556	427	492	596	243	461	544	250	464	534	266	460

e Estimated

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	451	427	439	553	532	543	388	310	347	478	455	467
2	466	451	457	563	541	552	383	213	297	477	459	469
3	479	466	473	579	561	570	275	231	244	473	455	464
4	477	457	468	578	553	568	441	275	387	474	461	469
5	473	451	463	567	312	436	444	430	440	555	447	472
6	476	445	462	466	430	456	430	413	421	---	---	e468
7	497	451	482	479	438	464	428	411	421	---	---	e480
8	507	471	486	476	451	467	432	421	426	483	448	471
9	511	474	491	478	458	469	436	428	431	490	451	475
10	478	339	451	484	453	468	436	428	432	475	408	442
11	---	---	e202	470	454	463	439	354	412	---	---	e427
12	---	---	e216	480	465	473	379	320	361	---	---	e380
13	---	---	e200	499	478	490	397	335	374	---	---	e278
14	---	---	e263	538	499	521	391	336	370	366	303	336
15	---	---	e350	528	504	512	421	176	348	421	366	398
16	---	---	e425	---	---	e514	---	---	e323	421	388	408
17	503	485	493	---	---	e478	---	---	e361	404	382	394
18	508	487	499	---	---	e436	---	---	e450	408	277	376
19	508	495	499	---	---	e495	510	190	444	324	267	291
20	531	506	513	---	---	e505	473	259	428	326	315	322
21	541	525	535	---	---	e506	465	363	409	---	---	e332
22	549	521	538	---	---	e510	459	416	438	375	354	361
23	548	474	521	---	---	e405	467	427	453	408	359	376
24	524	494	508	---	---	e213	461	440	451	408	359	375
25	519	502	511	---	---	e223	487	454	470	366	348	355
26	531	502	518	---	---	e305	468	452	460	386	362	370
27	585	515	544	---	---	e300	472	449	461	392	359	378
28	537	403	448	---	---	e372	471	457	464	397	364	382
29	513	466	492	453	428	442	506	463	479	398	376	389
30	541	494	520	478	453	470	481	440	464	403	391	398
31	---	---	---	487	239	386	501	445	460	---	---	---
MONTH	585	339	449	579	239	452	510	176	411	555	267	400
YEAR	596	117	431									

e Estimated

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.4	7.9	8.1	8.5	8.2	8.4	8.4	8.2	8.3	8.5	8.2	8.3
2	8.3	7.9	8.1	8.4	8.2	8.3	8.3	8.2	8.3	8.5	8.2	8.4
3	8.2	7.9	8.0	8.5	8.0	8.3	8.3	8.2	8.2	8.5	8.3	8.4
4	8.3	7.9	8.1	8.4	8.0	8.2	8.4	8.2	8.3	8.4	8.2	8.3
5	8.4	7.9	8.1	8.8	8.1	8.2	8.4	8.1	8.3	8.4	8.2	8.3
6	8.4	8.0	8.2	8.3	7.8	8.0	---	---	---	8.5	8.2	8.3
7	8.5	7.9	8.1	8.1	7.8	8.0	8.5	8.1	8.2	8.5	8.2	8.3
8	8.2	7.9	8.0	8.2	7.8	8.0	8.2	8.0	8.1	8.5	8.2	8.3
9	8.2	8.0	8.1	8.1	7.9	7.9	8.1	8.0	8.1	8.4	8.2	8.3
10	8.4	8.0	8.2	8.1	7.9	8.0	8.2	8.0	8.1	8.4	8.2	8.3
11	8.5	8.0	8.3	8.1	7.8	8.0	8.2	8.0	8.1	8.6	8.1	8.3
12	8.5	8.1	8.3	8.1	7.9	8.0	8.3	8.1	8.2	8.5	8.2	8.4
13	8.6	8.1	8.3	8.1	7.9	8.0	8.2	8.0	8.2	8.6	8.2	8.4
14	8.4	8.0	8.2	8.0	7.8	7.9	8.1	8.0	8.0	8.6	8.2	8.3
15	8.1	8.0	8.0	7.8	7.6	7.6	8.1	8.0	8.0	8.5	8.2	8.3
16	8.1	7.9	8.0	8.3	7.6	8.0	---	---	---	8.6	8.3	8.5
17	8.3	7.9	8.1	8.3	8.1	8.1	---	---	---	8.5	8.2	8.3
18	8.5	8.0	8.1	8.2	8.1	8.2	---	---	---	8.4	8.0	8.2
19	8.0	7.9	8.0	8.2	8.0	8.1	---	---	---	8.5	8.4	8.4
20	8.3	7.9	8.0	---	---	---	---	---	---	8.7	8.4	8.5
21	8.2	7.8	7.9	---	---	---	8.1	7.9	8.0	8.8	8.5	8.6
22	7.9	7.7	7.8	---	---	---	8.1	7.9	8.0	8.6	8.4	8.5
23	8.1	7.7	7.9	8.2	8.2	8.2	8.0	7.9	8.0	8.7	8.5	8.6
24	8.2	7.9	8.0	8.2	8.2	8.2	8.1	7.9	8.0	8.7	8.4	8.6
25	8.0	7.8	7.9	8.2	8.2	8.2	8.0	7.9	8.0	8.7	8.4	8.6
26	8.2	7.9	8.1	8.2	8.2	8.2	8.0	7.9	8.0	8.6	8.4	8.5
27	8.3	8.1	8.2	8.3	8.2	8.3	8.1	7.9	8.0	8.6	8.3	8.4
28	8.4	8.2	8.3	8.3	8.2	8.3	8.1	7.9	8.0	8.6	8.3	8.4
29	8.6	8.2	8.4	8.3	8.3	8.3	8.1	7.9	8.0	8.5	8.3	8.4
30	8.6	8.2	8.4	8.4	8.2	8.3	8.2	7.9	8.0	8.6	8.4	8.5
31	8.5	8.1	8.3	---	---	---	8.3	8.0	8.1	8.6	8.3	8.4
MONTH	8.6	7.7	8.1	8.8	7.6	8.1	8.5	7.9	8.1	8.8	8.0	8.4

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	27.5	24.0	25.5	18.0	16.0	17.5	14.0	12.5	13.0	11.0	9.0	10.0
2	28.0	24.5	26.5	19.5	16.5	18.0	13.5	12.5	13.0	10.0	8.5	9.0
3	28.5	25.5	26.5	23.0	19.5	21.5	15.0	13.0	14.0	8.5	8.0	8.5
4	28.0	24.0	26.0	23.0	17.5	22.5	17.0	14.5	15.5	8.5	7.0	7.5
5	28.0	25.5	26.5	20.0	16.0	18.5	---	---	---	7.5	6.5	7.0
6	27.0	24.5	25.5	22.5	17.5	20.5	---	---	---	10.0	7.0	8.0
7	25.5	23.0	24.5	21.5	18.5	19.5	15.5	14.5	15.0	10.0	7.5	8.5
8	23.5	21.5	22.5	21.0	17.5	19.5	14.5	12.5	13.5	10.5	7.5	8.5
9	21.5	19.0	20.5	21.0	16.5	19.0	12.5	10.5	11.5	11.0	8.0	9.5
10	21.5	18.5	20.0	17.0	16.0	16.5	11.5	10.0	10.5	14.0	10.0	11.5
11	22.0	18.5	20.0	18.5	16.0	17.0	10.5	9.5	10.0	14.5	11.0	12.5
12	22.5	18.0	20.0	17.0	14.5	15.5	11.0	8.5	9.5	15.5	13.5	14.5
13	23.0	20.5	21.5	17.5	15.5	16.5	11.5	10.0	11.0	15.0	11.5	13.0
14	21.0	20.0	21.0	18.5	17.0	18.0	11.5	11.0	11.5	13.0	10.5	11.5
15	20.0	19.0	19.0	17.0	16.5	17.0	11.5	11.5	11.5	12.0	10.0	10.5
16	21.5	19.0	20.0	17.0	16.0	16.5	---	---	---	11.5	10.0	10.5
17	24.0	21.5	22.5	16.5	15.5	16.0	---	---	---	12.5	11.0	12.0
18	23.5	20.5	21.5	16.0	15.5	16.0	---	---	---	11.5	10.0	11.0
19	24.0	21.0	22.0	17.5	16.0	16.5	---	---	---	11.0	9.0	9.5
20	---	---	---	19.0	17.0	18.0	---	---	---	11.0	8.5	9.5
21	---	---	---	---	---	---	12.5	10.0	11.0	10.5	9.0	9.5
22	24.5	20.5	22.0	---	---	---	12.0	10.0	11.0	9.5	8.5	9.5
23	23.5	20.0	22.0	15.5	14.5	15.0	11.5	9.5	10.5	10.5	7.5	8.5
24	23.0	21.0	21.5	14.5	14.5	14.5	11.0	9.5	10.0	10.0	7.5	8.5
25	21.0	18.0	19.5	14.5	14.0	14.5	11.0	8.0	9.5	10.0	8.5	9.5
26	20.0	17.0	18.5	15.0	14.5	14.5	10.5	8.0	9.5	11.5	10.0	10.5
27	20.0	18.5	19.0	15.5	14.5	15.0	11.5	9.0	10.0	13.5	11.0	12.0
28	20.5	17.0	19.0	14.5	14.0	14.0	11.5	10.0	10.5	12.0	10.5	11.0
29	21.5	18.0	19.5	14.0	13.0	13.5	11.0	10.0	10.5	10.5	9.0	10.0
30	21.5	18.5	20.0	14.0	12.5	13.0	12.0	10.0	11.0	11.0	8.0	9.0
31	21.0	18.0	19.5	---	---	---	12.0	11.0	11.0	11.5	8.0	9.5
MONTH	28.5	17.0	22.0	23.0	12.5	17.0	17.0	8.0	11.5	15.5	6.5	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.0	9.0	10.0	11.5	10.0	10.5	20.0	14.5	17.0	24.5	21.5	23.0
2	13.0	9.5	11.0	10.0	8.5	9.0	21.0	16.0	18.0	24.0	21.0	22.0
3	12.5	9.5	11.0	9.5	8.5	9.0	19.5	16.0	18.0	21.5	19.5	20.5
4	13.0	10.0	11.5	8.5	8.0	8.5	19.0	17.0	17.5	22.5	19.5	20.5
5	13.0	10.0	11.0	10.0	8.0	9.0	17.5	16.0	17.0	23.5	19.5	21.0
6	12.5	9.0	10.5	12.5	8.5	10.0	18.5	16.0	17.0	24.5	18.5	20.5
7	12.5	10.0	11.0	12.0	8.5	10.0	18.5	17.0	18.0	26.0	22.0	24.0
8	---	---	---	12.5	7.0	9.5	20.0	17.5	19.0	24.5	20.0	21.5
9	---	---	---	12.5	9.0	10.5	21.0	19.0	20.0	24.0	22.0	23.0
10	---	---	---	13.0	9.0	10.5	20.5	18.5	20.0	23.0	22.0	22.5
11	13.0	9.0	11.0	14.0	10.0	11.5	18.5	17.0	17.5	22.0	21.0	21.5
12	10.5	8.0	9.0	15.5	12.5	14.0	20.0	17.5	18.5	22.0	20.5	21.0
13	9.5	7.0	8.0	15.5	13.5	14.0	21.5	18.0	19.5	24.0	21.5	22.5
14	8.0	7.5	8.0	14.0	12.5	14.0	22.0	18.5	20.0	24.5	22.5	23.5
15	12.0	8.0	10.0	14.5	12.5	13.0	23.5	19.0	21.0	25.0	22.5	23.5
16	10.5	8.5	9.5	14.0	12.0	13.0	23.0	21.5	22.0	25.0	23.0	24.0
17	12.0	9.0	10.0	14.0	12.0	13.0	23.5	21.5	22.0	24.5	23.0	23.5
18	12.0	8.5	10.0	14.5	13.0	14.0	24.5	20.5	22.0	24.0	22.0	23.0
19	13.5	9.5	11.0	16.5	14.0	15.0	22.0	19.5	21.0	23.5	21.5	22.5
20	14.5	9.5	12.0	17.0	15.5	16.0	23.0	19.5	21.0	23.5	21.0	22.5
21	15.5	11.0	13.0	16.5	15.0	16.0	23.5	19.5	21.5	24.0	21.5	22.5
22	15.5	11.5	13.5	18.0	16.0	17.0	21.5	19.0	20.5	24.5	21.5	23.0
23	18.0	13.0	15.0	19.5	17.5	18.0	19.5	17.5	18.5	24.0	22.5	23.5
24	17.0	13.5	15.5	17.5	16.5	17.0	21.0	17.0	18.5	24.0	22.5	23.5
25	15.5	13.0	14.0	19.0	16.5	17.5	22.5	18.0	20.0	24.0	21.0	23.0
26	16.5	13.5	15.0	18.0	17.0	17.5	22.5	19.0	20.5	25.0	23.0	23.5
27	17.5	15.0	16.0	19.5	15.5	17.0	22.5	19.0	20.5	27.0	23.0	25.0
28	15.5	11.5	13.5	17.0	14.5	15.5	24.0	19.5	21.5	27.5	24.5	25.5
29	---	---	---	15.5	14.0	15.0	25.5	20.5	22.5	27.5	25.5	26.0
30	---	---	---	17.5	14.5	16.0	25.0	21.0	23.0	26.0	24.5	25.0
31	---	---	---	17.5	15.0	16.0	---	---	---	27.0	25.0	25.5
MONTH	18.0	7.0	11.5	19.5	7.0	13.5	25.5	14.5	20.0	27.5	18.5	23.0

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.0	24.0	25.5	29.5	26.0	27.5	29.5	27.5	28.0	34.0	29.0	31.5
2	29.0	25.5	27.0	30.0	28.0	29.0	29.0	26.5	27.5	34.5	29.5	32.0
3	28.5	26.5	27.0	32.0	27.5	29.5	28.5	26.5	27.5	35.0	30.0	32.0
4	30.0	26.0	27.5	31.5	28.0	30.0	31.0	28.0	29.0	33.0	29.5	31.0
5	29.0	25.5	27.0	30.0	23.5	27.5	30.5	29.5	30.0	33.5	28.5	30.5
6	29.5	24.5	27.0	30.0	27.0	28.5	32.5	30.0	31.0	---	---	---
7	29.5	26.0	27.5	33.5	29.5	31.0	31.5	28.5	30.0	---	---	---
8	29.5	27.0	28.5	34.5	30.0	32.0	31.0	29.5	30.0	30.5	27.0	28.0
9	29.5	27.5	28.5	34.0	30.5	32.0	31.0	29.5	30.0	29.0	25.5	27.0
10	29.5	23.5	28.0	35.0	30.5	32.5	31.5	29.0	30.0	28.5	25.0	26.5
11	26.5	23.5	25.0	36.0	30.5	33.0	32.0	29.5	30.5	---	---	---
12	26.5	24.0	25.0	36.5	31.0	33.5	33.0	29.5	31.0	---	---	---
13	28.5	24.5	26.5	36.0	32.0	33.5	33.0	29.0	31.0	---	---	---
14	29.0	26.0	27.5	35.0	30.5	32.5	33.0	29.0	31.0	27.0	25.0	26.0
15	30.0	24.5	27.0	34.5	30.5	32.0	34.5	28.5	31.5	28.5	26.5	27.5
16	29.0	25.5	27.5	---	---	---	---	---	---	30.5	27.0	28.5
17	29.0	26.0	27.5	---	---	---	---	---	---	31.0	28.5	29.0
18	29.0	26.5	28.0	---	---	---	---	---	---	28.5	25.5	27.5
19	30.0	27.0	28.5	---	---	---	34.5	27.5	31.5	27.5	26.0	26.5
20	31.0	28.0	29.5	---	---	---	33.0	27.5	30.5	26.5	24.5	25.5
21	32.0	28.5	30.0	---	---	---	33.0	29.5	31.5	---	---	---
22	33.0	28.5	30.5	---	---	---	34.0	30.5	32.0	20.0	17.5	18.5
23	32.5	29.0	30.5	---	---	---	33.5	30.5	32.0	20.0	18.0	19.0
24	32.5	28.0	30.0	---	---	---	33.0	30.0	31.5	21.5	19.0	20.0
25	31.5	28.0	29.5	---	---	---	33.5	29.5	31.5	23.0	21.5	22.0
26	31.5	27.0	29.0	---	---	---	34.5	30.0	32.0	24.5	21.5	22.5
27	29.0	26.5	28.0	---	---	---	35.5	30.5	32.5	27.0	22.0	24.0
28	29.0	25.0	27.0	---	---	---	35.5	30.5	32.5	29.0	24.0	26.0
29	29.0	27.5	28.5	35.0	31.0	32.5	33.5	30.5	31.5	29.5	25.0	26.5
30	28.5	27.0	28.0	33.0	30.0	31.0	34.0	30.0	31.5	29.5	25.0	26.5
31	---	---	---	30.0	27.0	28.5	34.5	28.0	31.0	---	---	---
MONTH	33.0	23.5	28.0	36.5	23.5	31.0	35.5	26.5	30.5	35.0	17.5	26.5
YEAR	36.5	6.5	20.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.0	5.9	7.4	10.6	8.4	9.4	11.2	10.4	10.7	11.0	9.2	9.9
2	8.9	6.1	7.5	9.8	8.6	9.2	10.8	10.3	10.5	11.2	8.8	10.0
3	8.1	5.5	6.9	9.9	7.7	8.5	10.9	10.0	10.3	10.7	8.6	9.7
4	8.4	5.6	7.0	9.2	6.4	7.7	11.1	9.8	10.2	11.1	8.4	9.8
5	8.9	5.7	7.4	9.2	8.3	8.8	---	---	---	10.8	7.9	9.7
6	8.7	5.8	7.4	8.3	7.0	7.8	---	---	---	11.6	8.9	10.3
7	7.5	5.8	6.6	9.3	6.2	8.2	11.3	9.8	10.3	11.6	8.7	10.1
8	8.0	5.9	6.8	9.4	7.9	8.7	10.5	9.9	10.2	11.9	9.0	10.5
9	9.1	6.6	7.8	9.0	7.6	8.3	10.9	10.1	10.5	11.7	7.9	9.8
10	9.9	7.4	8.6	9.7	8.4	8.9	11.5	10.8	11.1	11.2	7.4	9.3
11	11.2	7.8	9.4	10.1	8.5	9.2	11.7	10.9	11.2	10.8	6.8	8.6
12	10.1	7.2	9.1	10.0	8.5	9.2	11.9	11.1	11.4	9.8	5.6	7.8
13	11.5	8.0	9.3	9.7	8.5	9.1	11.6	11.0	11.2	11.2	7.2	8.9
14	10.1	7.4	8.6	9.2	8.0	8.5	11.4	11.0	11.1	11.8	8.6	10.0
15	7.6	6.8	7.3	8.9	8.3	8.6	11.4	11.0	11.2	12.1	9.7	10.6
16	8.3	6.5	7.3	9.8	8.1	9.2	---	---	---	11.5	9.0	10.1
17	9.0	6.5	7.8	9.9	9.5	9.7	---	---	---	---	---	---
18	8.1	7.0	7.7	10.2	9.7	9.9	---	---	---	11.7	9.8	10.8
19	7.7	6.7	7.2	9.8	9.1	9.6	---	---	---	11.7	9.2	10.6
20	---	---	---	9.2	6.7	8.3	---	---	---	12.6	9.8	11.2
21	---	---	---	---	---	---	---	---	---	11.8	9.3	10.6
22	8.0	7.4	7.6	---	---	---	---	---	---	11.3	8.0	10.1
23	8.4	7.0	7.6	10.4	10.0	10.2	---	---	---	12.4	8.9	10.7
24	8.8	6.9	7.6	10.4	10.2	10.3	---	---	---	12.8	8.3	10.5
25	8.3	7.1	7.8	10.5	10.2	10.3	---	---	---	12.4	8.2	10.1
26	8.9	8.3	8.6	10.5	10.0	10.3	---	---	---	11.8	7.8	10.2
27	9.0	8.2	8.5	10.4	9.8	10.1	---	---	---	11.7	9.3	10.5
28	9.5	7.9	8.8	10.8	10.0	10.3	---	---	---	10.7	8.3	9.5
29	10.0	8.4	9.0	10.9	10.2	10.5	---	---	---	10.8	8.5	9.6
30	10.3	8.0	9.0	11.1	10.5	10.7	---	---	---	12.4	8.5	10.3
31	10.1	7.7	8.8	---	---	---	10.5	7.6	9.5	12.9	9.2	11.1
MONTH	11.5	5.5	7.9	11.1	6.2	9.3	11.9	7.6	10.7	12.9	5.6	10.0

08048543 WEST FORK TRINITY RIVER AT BEACH STREET, FORT WORTH, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.0	8.1	10.9	---	---	---	13.6	11.3	12.3	10.8	7.2	8.9
2	13.1	9.1	10.8	---	---	---	13.6	10.6	12.0	11.0	7.4	9.0
3	11.7	8.0	9.8	---	---	---	12.8	10.2	11.7	8.8	7.5	8.2
4	12.7	7.4	10.1	---	---	---	12.5	9.7	11.2	9.3	7.7	8.3
5	12.1	7.2	9.6	---	---	---	11.3	9.9	10.6	9.9	7.5	8.3
6	---	---	---	---	---	---	11.5	10.7	11.1	8.0	6.9	7.7
7	---	---	---	---	---	---	11.5	10.7	11.1	8.0	6.1	7.4
8	---	---	---	---	---	---	11.3	10.2	10.8	8.1	6.1	7.8
9	---	---	---	---	---	---	11.0	9.9	10.5	8.3	7.7	8.0
10	---	---	---	---	---	---	10.2	9.6	9.8	8.9	7.6	8.2
11	---	---	---	---	---	---	11.2	9.7	10.6	9.3	8.4	8.8
12	---	---	---	---	---	---	11.2	10.2	10.7	9.6	8.8	9.3
13	---	---	---	---	---	---	11.3	10.0	10.5	10.1	9.2	9.6
14	---	---	---	---	---	---	10.7	9.5	10.1	10.4	9.2	9.8
15	---	---	---	---	---	---	11.1	8.9	9.9	10.8	9.7	10.3
16	11.8	6.3	9.3	---	---	---	10.5	8.7	9.4	10.9	9.9	10.4
17	11.7	6.4	9.0	---	---	---	10.0	8.3	9.0	10.3	8.1	8.9
18	11.0	7.0	8.9	---	---	---	10.3	8.2	9.1	9.0	8.0	8.5
19	---	---	---	---	---	---	9.3	8.0	8.6	9.0	8.4	8.7
20	---	---	---	---	---	---	10.0	8.4	9.2	9.0	8.3	8.6
21	---	---	---	---	---	---	10.1	8.2	9.0	9.0	8.2	8.6
22	---	---	---	---	---	---	9.3	8.2	8.7	9.0	8.1	8.6
23	---	---	---	---	---	---	10.3	8.7	9.5	9.1	7.9	8.4
24	---	---	---	---	---	---	10.8	9.1	9.8	9.1	7.9	8.4
25	---	---	---	---	---	---	10.8	8.6	9.6	9.9	7.9	8.4
26	---	---	---	---	---	---	10.3	8.4	9.2	9.2	7.8	8.5
27	---	---	---	---	---	---	10.6	8.4	9.3	10.2	7.4	8.7
28	---	---	---	---	---	---	11.1	7.9	9.3	9.7	7.5	8.4
29	---	---	---	13.6	12.3	13.0	11.3	7.7	9.2	9.4	7.6	8.3
30	---	---	---	13.2	11.6	12.4	11.0	7.4	8.9	9.2	7.7	8.3
31	---	---	---	13.4	11.5	12.2	---	---	---	9.1	7.6	8.1
MONTH	13.1	6.3	9.8	13.6	11.5	12.5	13.6	7.4	10.0	11.0	6.1	8.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.8	7.5	8.1	11.0	7.8	9.3	7.7	6.8	7.2	9.1	5.3	7.2
2	9.1	7.4	8.1	10.5	8.6	9.5	8.0	6.5	7.4	9.0	4.7	6.7
3	9.0	7.0	7.9	10.6	8.2	9.3	7.8	7.5	7.6	8.7	5.1	6.7
4	10.1	6.8	8.2	11.4	7.6	9.2	9.4	7.6	8.2	7.6	4.5	5.8
5	10.1	6.7	8.2	10.4	7.9	8.8	8.2	6.6	7.4	7.7	4.1	5.7
6	9.9	6.7	8.1	10.2	7.4	8.7	---	---	---	---	---	---
7	9.2	6.3	7.6	13.8	7.2	10.3	---	---	---	---	---	---
8	9.7	6.4	7.8	13.9	8.4	10.9	8.1	6.4	7.1	9.6	5.3	6.8
9	9.9	6.1	7.7	11.1	7.4	9.3	7.5	5.7	6.6	7.9	4.5	6.1
10	8.2	6.1	7.1	10.9	6.5	8.4	6.6	4.8	5.9	8.3	5.5	6.7
11	7.2	6.6	7.0	10.5	6.5	8.3	7.7	4.4	5.6	---	---	---
12	7.1	4.9	6.6	11.0	6.3	8.4	8.2	5.5	6.7	---	---	---
13	7.2	4.0	5.4	10.4	6.2	8.3	7.4	4.7	5.8	---	---	---
14	---	---	---	11.5	6.4	8.7	---	---	---	6.8	5.5	6.2
15	---	---	---	11.5	6.0	9.0	---	---	---	9.7	5.7	7.4
16	---	---	---	10.5	6.0	8.7	---	---	---	11.6	6.5	8.6
17	8.7	5.6	7.0	9.5	7.3	8.3	---	---	---	10.2	5.7	7.9
18	8.1	5.8	6.9	8.7	7.3	8.0	---	---	---	8.5	5.9	7.2
19	8.7	6.2	7.2	9.0	7.6	8.2	7.3	5.0	6.0	8.1	5.5	6.4
20	9.4	6.6	7.8	8.8	7.4	8.1	---	---	---	9.2	5.5	7.1
21	10.2	6.7	8.2	8.5	7.4	7.9	---	---	---	---	---	---
22	11.2	7.1	8.9	8.5	7.4	7.9	---	---	---	9.7	7.3	8.4
23	13.0	7.6	10.0	8.9	7.4	8.1	---	---	---	9.9	8.6	9.1
24	12.4	10.1	10.8	8.9	7.2	8.0	7.9	5.8	6.9	10.6	9.2	9.7
25	11.2	9.8	10.5	---	---	---	9.0	5.3	6.9	11.0	9.2	9.9
26	11.3	9.6	10.4	---	---	---	9.0	5.2	7.0	12.1	9.1	10.4
27	11.1	9.1	9.7	---	---	---	8.8	5.3	7.0	12.7	9.2	10.8
28	9.2	5.6	7.2	---	---	---	8.3	4.9	6.6	12.3	8.3	10.1
29	10.4	8.0	8.8	9.8	6.8	8.2	10.4	4.3	6.8	10.6	7.2	8.9
30	9.9	7.7	8.7	9.4	5.9	7.6	9.7	4.9	6.9	10.0	6.6	8.2
31	---	---	---	7.3	6.4	6.9	9.4	5.1	7.0	---	---	---
MONTH	13.0	4.0	8.1	13.9	5.9	8.6	10.4	4.3	6.8	12.7	4.1	7.8
YEAR	13.9	4.0	8.9									

08048920 DEER CREEK OUTFALL AT I-35W, FORT WORTH, TX

LOCATION.--Lat 32°35'18", long 97°19'08", Tarrant County, Hydrologic Unit 12030102, storm sewer outfall to Deer Creek between axis and northbound I-35W Interstate Highway lanes, 0.75 mi south of Garden Acres Drive and 0.75 mi north of FM 1187.

DRAINAGE AREA.--0.10 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1994 to current year.

REMARKS.--Water-quality samples and associated discharge data were collected for selected storm events from storm sewer systems draining urban basins. This study is in cooperation with the North Central Texas Council of Governments to fulfill requirements (by EPA) for the Texas Department of Transportation in applying for a National Pollution Discharge Elimination System (NPDES) storm-water discharge permit.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	PRECIP-ITATION TOTAL INCHES/ STORM	ELAPSED TIME OF STORM (HOURS)	STORM WATER FLOW (MGD)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	PH WATER WHOLE LAB (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 07-07	1500	0.68	3.0	0.27	249	204	8.0	7.7	22.5	59	5.4	21000
NOV 02-03	2344	0.32	3.1	0.13	77	395	7.8	7.4	20.0	35	4.7	250000
NOV 09-09	0525	0.36	4.1	0.13	352	364	7.4	7.5	17.5	29	2.7	55000

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT 07-07	10000	46	3	43	104	151	102	16	1.4	15	41	1
NOV 02-03	31000	83	3	80	208	47	214	28	3.1	41	51	2
NOV 09-09	87000	94	0	100	194	21	205	32	3.3	35	44	2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	ANTIMONY TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 07-07	1.6	14	13	0.600	1.0	0.150	0.060	<10.0	2	<10	5	14
NOV 02-03	2.4	35	37	0.880	0.60	0.080	0.060	<20.0	2	<10	<1	4
NOV 09-09	1.7	26	33	0.420	0.40	0.060	0.020	<20.0	1	<10	<1	2

08048920 DEER CREEK OUTFALL AT I-35W, FORT WORTH, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	CYANIDE, TOTAL EPA (MG/L AS CN)	CYANIDE TOTAL (MG/L AS CN)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE EPA (UG/L AS AG)	THAL-LIUM, TOTAL (UG/L AS TL)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 07-07	17	<0.010	<0.010	14	<0.10	44	<1	<1	<0.500	<10	60	14
NOV 02-03	4	<0.010	<0.010	5	<0.10	2	<1	<1	<0.500	<10	40	12
NOV 09-09	3	<0.010	<0.010	3	<0.10	1	<1	<1	<0.500	<5	30	7.9

DATE	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	PHENOLS TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L)	METHANE BROMO CHLORO-WAT UNFLTRD REC (UG/L)	BROMO-FORM TOTAL (UG/L)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)
OCT 07-07	<1	2	<4.0	<4.0	<4.00	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
NOV 02-03	<1	3	<0.2	<0.2	<0.20	<0.2	<0.20	<0.20	<0.20	<0.2	<0.20	<0.2
NOV 09-09	<1	<1	<1.0	<1.0	<1.00	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	CHLORO-ETHANE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	METHYL-CHLO-RIDE TOTAL (UG/L)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L)
OCT 07-07	<4.0	<20	<4.0	<4.0	<4.0	<4.0	<20	<4.0	<4.0	<4.0	<4.0	<4.0
NOV 02-03	<0.2	<1.0	<0.2	<0.2	<0.2	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PHENYL-HYDRA-ZINE WATER TOT.REC (UG/L)	CIS-1,2 -DI-CHLORO-ETHENE WATER TOTAL (UG/L)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L)
OCT 07-07	<5.0	<5.0	<5.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0
NOV 02-03	<5.0	<5.0	<5.0	<0.2	<0.2	<0.2	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<5.0	<5.0	<5.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0

DATE	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L)	ETHYL-BENZENE TOTAL (UG/L)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L)	METHYL-BROMIDE TOTAL (UG/L)	METHYL-ENE CHLO-RIDE TOTAL (UG/L)	METHYL ETHER TERT-BUTYL WAT UNF REC (UG/L)	NAPHTH-ALENE TOTAL (UG/L)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L)	STYRENE TOTAL (UG/L)
OCT 07-07	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0
NOV 02-03	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20	<0.2	<0.2	<0.2	<5.0	<0.20	<0.2
NOV 09-09	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0

DATE	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)
OCT 07-07	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
NOV 02-03	<0.2	<0.2	<0.2	<0.2	<0.20	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

08048920 DEER CREEK OUTFALL AT I-35W, FORT WORTH, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L)	MESIT-YLENE WATER UNFLTRD REC (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/L)	BENZI-DINE TOTAL (UG/L)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/L)
OCT 07-07	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0
NOV 02-03	<0.20	<0.20	<0.2	<0.20	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0
NOV 09-09	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0

DATE	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	PARA-CHLORO-META CRESOL TOTAL (UG/L)	2-CHLORO-NAPH-THALENE TOTAL (UG/L)	2-CHLORO-PHENOL TOTAL (UG/L)	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L)
OCT 07-07	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0
NOV 02-03	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0
NOV 09-09	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0

DATE	3,3'-DI-CHLORO-BENZI-DINE TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	DIETHYL PHTHAL-ATE TOTAL (UG/L)	DI-METHYL PHTHAL-ATE TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L)	4,6-DINITRO -ORTHO-CRESOL TOTAL (UG/L)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L)
OCT 07-07	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0
NOV 02-03	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0
NOV 09-09	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0

DATE	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CHLORO-BENZENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISO-PHORONE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	N-NITRO -SODI-METHY-LAMINE TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	4-NITRO-PHENOL TOTAL (UG/L)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)
OCT 07-07	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0
NOV 02-03	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0
NOV 09-09	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0

DATE	N-NITRO -SODI-PHENY-LAMINE TOTAL (UG/L)	PENTA-CHLORO-PHENOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	PYRENE TOTAL (UG/L)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	P,P' DDT, TOTAL (UG/L)	ALPHA BHC TOTAL (UG/L)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
OCT 07-07	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030
NOV 02-03	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030
NOV 09-09	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030

DATE	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	P,P' DDD, TOTAL (UG/L)	P,P' DDE, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN-I WATER WHOLE REC (UG/L)	ENDO-SULFAN BETA TOTAL (UG/L)	ENDO-SULFAN SULFATE TOTAL (UG/L)	ENDRIN WATER UNFLTRD REC (UG/L)	ENDRIN ALDE-HYDE TOTAL (UG/L)
OCT 07-07	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20
NOV 02-03	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20
NOV 09-09	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20

08048920 DEER CREEK OUTFALL AT I-35W, FORT WORTH, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	HEPTACHLOR, TOTAL (UG/L)	HEPTACHLOR EPOXIDE TOTAL (UG/L)	TOXAPHENE, TOTAL (UG/L)	AROCLOR 1016 PCB TOTAL (UG/L)	AROCLOR 1221 PCB TOTAL (UG/L)	AROCLOR 1232 PCB TOTAL (UG/L)	AROCLOR 1242 PCB TOTAL (UG/L)	AROCLOR 1248 PCB TOTAL (UG/L)	AROCLOR 1254 PCB TOTAL (UG/L)	AROCLOR 1260 PCB TOTAL (UG/L)	DIAZINON, TOTAL (UG/L)
OCT 07-07	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
NOV 02-03	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
NOV 09-09	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05

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 mi².

WATER-DISCHARGE RECORDS

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

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

REMARKS.--No estimated daily discharges. Records good except those less than 10 ft³/s, which are poor. Peak discharge from rating extended above 7,700 ft³/s on basis of area-velocity study. No flow at times. Rain gage at station. Satellite telemeter at station.

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 (08048980). Flood of May 18, 1989, may have equalled, or slightly exceeded, the indicated known maximum stage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	3.3	8.3	12	11	9.3	13	8.8	37	2.7	14	.03
2	.00	3.5	8.3	10	10	7.6	11	8.6	8.4	3.0	74	.00
3	.00	8.2	8.2	10	9.8	7.6	10	44	7.3	3.0	12	.00
4	7.5	6.5	8.1	10	9.0	8.1	66	16	6.9	2.9	6.8	.00
5	2.9	440	7.9	9.6	8.6	7.9	1080	91	6.4	7.0	4.0	.00
6	.78	39	7.5	9.2	8.6	7.0	178	522	8.8	5.2	7.2	.00
7	1.0	11	7.5	8.7	8.5	123	68	71	6.9	3.5	3.5	.00
8	11	8.1	30	8.2	8.4	35	44	3620	6.2	2.9	.61	.00
9	3.9	37	33	7.9	8.3	11	26	156	5.9	2.6	.03	.00
10	1.9	23	97	7.7	8.0	9.8	124	75	6.0	2.3	.00	.00
11	.55	9.0	39	7.8	8.7	9.5	84	55	454	2.1	.00	.00
12	.11	7.4	17	7.9	8.9	9.4	31	46	17	1.6	.00	.00
13	.03	6.8	12	9.7	8.0	2720	15	38	8.1	1.3	.00	243
14	.02	56	16	8.7	8.3	516	11	23	6.9	1.1	.00	10
15	.02	305	16	7.9	8.8	156	10	15	6.2	.79	.00	4.7
16	.02	67	15	7.3	9.8	129	9.7	13	5.6	.69	.00	2.2
17	.08	29	11	39	9.4	89	9.4	11	5.1	.75	.00	.80
18	70	15	10	91	8.5	74	45	11	4.6	.78	.00	11
19	13	42	9.8	94	8.3	67	470	9.9	4.3	2.0	.00	17
20	73	243	9.5	31	7.9	58	605	9.2	4.2	1.7	.00	6.2
21	62	81	9.0	16	7.7	51	77	8.8	3.8	.54	.00	89
22	18	35	8.5	32	7.5	47	44	8.4	3.7	.40	.00	25
23	6.7	16	8.2	25	7.1	41	31	8.0	3.5	.55	.00	6.8
24	5.0	13	8.2	13	6.7	35	18	8.0	3.3	3.5	.00	4.3
25	45	11	8.1	11	6.4	70	12	12	3.1	1.7	.00	2.5
26	13	10	8.7	185	6.5	117	12	8.5	3.0	1.0	.00	2.2
27	6.0	10	9.0	99	6.9	55	10	19	2.8	.41	.00	1.6
28	4.7	9.5	39	46	6.9	26	9.7	8.5	3.0	.26	.00	.76
29	4.1	9.1	49	21	---	27	9.4	7.5	3.3	.10	.00	1.2
30	3.5	8.7	23	14	---	26	9.2	7.9	2.8	.06	.00	1.1
31	3.5	---	13	12	---	17	---	8.0	---	34	1.4	---
TOTAL	357.31	1563.1	554.8	871.6	232.5	4566.2	3142.4	4948.1	648.1	90.43	123.54	429.39
MEAN	11.5	52.1	17.9	28.1	8.30	147	105	160	21.6	2.92	3.99	14.3
MAX	73	440	97	185	11	2720	1080	3620	454	34	74	243
MIN	.00	3.3	7.5	7.3	6.4	7.0	9.2	7.5	2.8	.06	.00	.00
AC-FT	709	3100	1100	1730	461	9060	6230	9810	1290	179	245	852

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1995, BY WATER YEAR (WY)

MEAN	56.3	20.0	77.2	32.2	61.2	54.9	76.5	121	43.5	5.64	5.59	6.35
MAX	240	52.1	367	117	162	147	233	339	141	14.3	21.7	14.3
(WY)	1992	1995	1992	1992	1993	1995	1990	1990	1993	1993	1991	1995
MIN	.68	1.81	.72	7.16	7.11	3.52	11.0	9.51	3.32	2.15	.31	.19
(WY)	1990	1990	1991	1993	1991	1991	1992	1993	1994	1990	1994	1990

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1990 - 1995	
ANNUAL TOTAL	6347.03		17527.47			
ANNUAL MEAN	17.4		48.0		46.7	
HIGHEST ANNUAL MEAN					92.6	1992
LOWEST ANNUAL MEAN					20.4	1994
HIGHEST DAILY MEAN	966	May 12	3620	May 8	5990	Dec 20 1991
LOWEST DAILY MEAN	.00	Aug 20	.00	Oct 1	.00	Aug 18 1990
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 25	.00	Aug 10	.00	Aug 25 1990
INSTANTANEOUS PEAK FLOW			6630	May 8	11400	Dec 20 1991
INSTANTANEOUS PEAK STAGE			17.89	May 8	21.96	Dec 20 1991
ANNUAL RUNOFF (AC-FT)	12590		34770		33830	
10 PERCENT EXCEEDS	29		70		64	
50 PERCENT EXCEEDS	6.9		8.5		5.6	
90 PERCENT EXCEEDS	.04		.02		.03	

08048970 VILLAGE CREEK AT EVERMAN, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1989 to current year.

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

INSTRUMENTATION.--From October 1989 to September 1990, a four-parameter water-quality monitor continuously recorded specific conductance, pH, water temperature, and dissolved oxygen at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,000 microsiemens on several days during January and May 1990; minimum, 129 microsiemens 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 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
OCT											
07...	0945	0.29	375	7.5	23.0	3.4	41	1.1	140	6	45
DEC											
09...	0945	14	685	7.8	10.0	8.4	76	1.0	240	21	84
JAN											
20...	0950	33	553	7.9	8.0	10.2	88	1.5	190	38	63
MAR											
16...	1530	118	502	8.4	19.0	9.0	99	1.6	180	16	61
JUN											
07...	1500	6.6	782	7.5	29.5	10.0	135	0.4	270	43	86
JUL											
06...	0954	0.30	771	7.9	25.0	5.2	64	1.2	240	35	73

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT										
07...	6.6	21	0.8	4.4	130	34	17	0.3	4.6	213
DEC										
09...	7.1	41	1	4.6	220	63	45	0.30	4.4	381
JAN										
20...	7.6	36	1	4.6	150	61	36	0.2	9.7	312
MAR										
16...	7.1	29	0.9	4.2	170	50	24	0.2	13	290
JUN										
07...	14	65	2	--	230	--	--	--	6.5	--
JUL										
06...	13	67	2	3.0	200	100	61	0.3	8.0	447

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
OCT										
07...	--	--	0.0	--	<0.050	<0.010	--	0.5	0.0	0.0
DEC										
09...	0.100	--	<0.010	0.100	0.10	<0.015	--	0.3	0.0	0.0
JAN										
20...	0.450	0.450	0.0	0.470	0.47	0.15	0.55	0.7	0.1	0.1
MAR										
16...	0.460	0.460	0.010	0.470	0.470	0.030	0.57	0.60	0.110	0.090
JUN										
07...	0.070	--	<0.010	0.070	0.070	0.040	0.46	0.50	<0.010	0.020
JUL										
06...	--	--	--	--	--	--	--	--	--	--

08048970 VILLAGE CREEK AT EVERMAN, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)
OCT										
07...	0.06	--	--	--	--	--	--	--	--	--
DEC										
09...	0.09	--	--	--	--	--	--	--	--	--
JAN										
20...	0.25	2	49	<0.5	<1	<5	<3	<10	36	<10
MAR										
16...	0.28	--	--	--	--	--	--	--	--	--
JUN										
07...	0.06	--	75	<0.5	<1.0	<5	<3	<10	5	<10
JUL										
06...	--	<1	65	<0.5	<1	<5	<3	<10	5	<10

DATE	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT										
07...	--	--	--	--	--	--	--	--	--	--
DEC										
09...	--	--	--	--	--	--	--	--	--	--
JAN										
20...	6	10	<0.1	<10	<10	<1	<1	440	<6	4
MAR										
16...	--	--	--	--	--	--	--	--	--	--
JUN										
07...	15	4	--	<10	<10	--	3.0	870	<6	11
JUL										
06...	13	8	<0.1	<10	<10	<1	<1	760	<6	16

08049200 LAKE ARLINGTON AT ARLINGTON, TX

LOCATION.--Lat 32°42'58", long 97°11'32", Tarrant County, Hydrologic Unit 12030102, in new pumphouse at right end of Arlington Dam on Village Creek near western boundary of Arlington, 1.5 mi upstream from the Texas and Pacific Railway Co. bridge and 7 mi upstream from mouth.

DRAINAGE AREA.--143 square miles.

WATER-CONTENTS RECORDS

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

REVISED RECORDS.--WSP 1922: Drainage area.

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

REMARKS.--The lake is formed by a rolled earthfill dam 6,482 ft long. The service spillway is a 10-foot diameter uncontrolled circular drop inlet. The spillway is an 882-foot-wide cut through natural ground near the right end of dam. The dam was completed and storage began Mar. 31, 1957. Capacities are based on a 1980 survey. The dam was built by the City of Arlington to impound water for municipal and industrial uses. Water is diverted from Cedar Creek Reservoir (station 08063010) into Lake Arlington. Water is pumped from the lake to a generating plant of Texas Electric Service Co. Gage-height telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	572.0	--
Crest of Spillway	559.7	64,360
Crest of drop inlet (top of conservation pool)	550.0	39,930
Lowest gated outlet (invert)	505.0	40

COOPERATION.--Capacity table provided by the city of Arlington.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,500 acre-ft May 17, 1989 (elevation, 562.42 ft); minimum since lake first filled in April 1957, 18,110 acre-ft Oct. 17, 1971 (elevation, 534.27).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 51,320 acre-ft May 8 @ 2200 hours (elevation, 554.84 ft); minimum, 23,650 acre-ft Oct. 7 (elevation, 541.36 ft).

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

534.0	14,060	546.0	31,750	557.0	56,900
538.0	18,870	550.0	39,930	560.0	65,220
542.0	24,650	554.0	49,230	563.0	74,310

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24570	27270	32670	33660	36550	34710	40340	40090	39120	38990	32300	27700
2	24400	27270	32670	33660	36510	34730	40180	40000	39060	39060	32820	27410
3	24240	27220	32610	33680	36450	34730	40110	40270	38950	38970	33040	27130
4	24030	28230	32570	33720	36340	34770	40380	40340	38890	38550	33040	26840
5	23930	29200	32570	33780	36260	34770	43920	40340	38670	38310	33040	26490
6	23750	29220	32530	33740	36180	34750	43580	44390	38500	38500	33080	26170
7	23960	29130	32630	33820	36090	35360	43310	42860	38330	38520	32980	26090
8	23990	29150	32760	33740	35950	35380	43010	51300	38080	38520	32780	25920
9	23990	29270	33250	33740	35930	35380	42670	45920	37840	38550	32650	25760
10	23990	29220	33390	33680	35800	35340	42400	43440	38500	38160	32390	25590
11	23960	29110	33390	33680	35720	35280	42110	42340	41220	38010	32120	25430
12	23890	29020	33330	33680	35620	35380	41590	41650	41060	37650	31890	25210
13	23900	28870	33450	33700	35540	43780	41250	41130	40790	35740	31620	27560
14	23900	30770	33540	33680	35480	44210	40860	40820	40450	34830	31370	27670
15	23980	31300	33620	33620	35440	43010	40630	40570	40200	34550	31180	27700
16	24040	31330	33680	33640	35340	42310	40500	40340	40720	34310	30920	27630
17	24090	31370	33740	33840	35340	41700	40340	40200	40470	34040	30670	27630
18	25230	31410	33880	34140	35260	41270	40360	40020	40200	33780	30390	27670
19	25260	32140	33840	34670	35170	41060	40470	39890	39950	33580	30220	28120
20	26040	32940	33920	34810	35110	40840	44700	39740	39740	33370	30120	28180
21	26610	33040	33840	34830	34990	40610	43260	39550	39500	33060	30030	28160
22	26680	33020	33740	34890	34910	40470	42150	39400	39330	32690	29840	28250
23	26720	33020	33700	35030	34810	40360	41520	39210	39980	32650	29640	28250
24	26780	32960	33580	35050	34750	40220	41130	39210	40090	32510	29440	28270
25	27720	32960	33540	35050	34730	40880	40790	39120	39630	32350	29260	28250
26	27820	33020	33540	35090	34730	41180	40570	39040	39380	32060	29000	28180
27	27790	32960	33640	36200	34730	40970	40450	39140	38990	31890	28710	28180
28	27720	32780	33740	36410	34750	40790	40340	39100	38890	31390	28490	28140
29	27600	32740	33760	36450	---	40680	40180	38950	40340	31050	28230	28030
30	27510	32720	33740	36510	---	40500	40160	38860	39570	30710	28010	27940
31	27410	---	33680	36530	---	40430	---	39100	---	31330	27870	---
MAX	27820	33040	33920	36530	36550	44210	44700	51300	41220	39060	33080	28270
MIN	23750	27220	32530	33620	34730	34710	40110	38860	37840	30710	27870	25210
(+)	543.64	546.50	546.99	548.39	547.52	550.22	550.10	549.61	549.83	545.78	543.91	543.95
(@)	+2690	+5310	+960	+2850	-1780	+5680	-270	-1060	+470	-8240	-3460	+70

CAL YR 1994 MAX 44140 MIN 23750 (@) -6100
WTR YR 1995 MAX 51300 MIN 23750 (@) +3220

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

08049200 LAKE ARLINGTON AT ARLINGTON, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1964 to current year.

324304097113601 - LAKE ARLINGTON SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESERVOIR STORAGE (AC-FT)	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DISSOLVED (MG/L AS CA)
FEB												
10...	1156	36500	1.00	341	8.1	13.0	0.90	10.0	98	120	8	41
10...	1201	--	10.0	343	8.1	13.0	--	10.0	98	--	--	--
10...	1206	--	20.0	343	8.1	13.0	--	9.1	89	--	--	--
10...	1211	--	30.0	342	8.0	13.0	--	8.9	87	--	--	--
10...	1217	--	43.0	341	8.0	13.0	--	8.4	82	120	7	41
MAY												
12...	1100	41900	1.00	310	7.8	22.5	0.55	7.0	83	110	8	38
12...	1104	--	10.0	308	7.7	22.5	--	6.7	80	--	--	--
12...	1109	--	20.0	295	7.4	21.5	--	4.8	56	--	--	--
12...	1114	--	30.0	271	7.3	21.0	--	3.8	44	--	--	--
12...	1120	--	44.0	255	7.1	20.5	--	1.8	21	97	3	33
JUL												
17...	1424	34100	1.00	309	8.3	34.0	2.70	7.5	109	110	7	34
17...	1430	--	10.0	313	7.7	32.5	--	4.7	67	--	--	--
17...	1436	--	20.0	338	7.1	28.5	--	0.5	7	--	--	--
17...	1442	--	30.0	343	7.0	27.0	--	0.5	6	--	--	--
17...	1448	--	40.0	367	6.8	25.0	--	0.7	9	130	0	43

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)
FEB												
10...	4.8	21	0.8	4.4	110	34	18	0.30	4.1	197	0.240	0.240
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	4.8	21	0.8	4.3	120	34	19	0.30	4.1	199	0.240	0.240
MAY												
12...	4.3	18	0.7	4.2	100	29	15	0.20	3.6	177	0.260	0.260
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--
12...	3.5	13	0.6	4.3	94	21	11	0.20	6.3	151	0.240	0.240
JUL												
17...	4.9	19	0.8	4.4	98	27	16	0.20	2.4	167	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--
17...	4.7	16	0.6	4.6	150	9.5	14	0.20	11	201	--	--

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB											
10...	0.040	0.280	0.280	0.060	0.24	0.30	<0.010	0.010	0.03	<3	11
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--
10...	0.040	0.280	0.280	0.060	0.34	0.40	<0.010	<0.010	--	<3	44
MAY											
12...	0.050	0.310	0.310	<0.015	--	0.40	0.030	0.030	0.09	7	3
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.110	0.350	0.350	0.120	0.48	0.60	0.100	0.080	0.25	49	130
JUL											
17...	<0.010	--	<0.050	0.030	0.37	0.40	<0.010	0.020	0.06	11	19
17...	<0.010	--	<0.050	0.080	0.32	0.40	0.010	0.020	0.06	20	80
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.010	--	<0.050	2.40	0.30	2.7	0.590	0.620	1.9	580	3000

08049200 LAKE ARLINGTON AT ARLINGTON, TX--Continued

324320097121101 - LAKE ARLINGTON SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
10...	1228	1.00	342	8.2	13.5	8.9	88
10...	1232	10.0	347	8.2	13.0	9.3	91
10...	1235	20.0	344	8.1	13.0	9.2	90
10...	1238	32.0	344	8.1	13.0	8.9	87
MAY							
12...	1144	1.00	308	7.8	22.5	7.0	83
12...	1146	10.0	311	7.8	22.5	6.9	82
12...	1149	20.0	307	7.7	22.5	6.5	77
12...	1152	33.0	266	7.4	21.0	3.4	39
JUL							
17...	1459	1.00	306	8.3	34.0	7.3	106
17...	1502	10.0	312	7.8	32.0	4.9	69
17...	1505	20.0	334	7.3	29.0	0.5	7
17...	1508	30.0	341	7.4	28.0	0.7	9

324253097121801 - LAKE ARLINGTON SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
10...	1253	1.00	345	8.1	13.5	0.79	9.0	89
10...	1257	10.0	345	8.1	13.5	--	9.0	89
10...	1300	20.0	345	8.1	13.0	--	8.8	86
10...	1303	30.0	344	8.1	13.0	--	8.6	84
10...	1307	38.0	348	8.0	13.0	--	8.2	80
MAY								
12...	1205	1.00	309	7.8	23.0	0.64	6.9	83
12...	1207	10.0	307	7.7	22.5	--	6.7	80
12...	1209	20.0	290	7.4	21.5	--	4.8	56
12...	1212	30.0	251	7.3	21.0	--	2.9	34
12...	1214	40.0	251	7.4	21.0	--	2.3	27
JUL								
17...	1519	1.00	307	8.3	35.0	0.85	7.1	105
17...	1523	10.0	309	7.6	32.5	--	4.4	62
17...	1527	20.0	335	7.2	28.5	--	0.4	5
17...	1531	30.0	340	7.2	27.5	--	0.4	5
17...	1535	38.0	367	7.2	25.5	--	0.6	8

324301097123301 - LAKE ARLINGTON SITE BL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
10...	1320	1.00	344	8.1	13.5	8.7	86
10...	1323	10.0	344	8.1	13.0	8.6	84
10...	1327	20.0	347	8.1	13.0	8.4	82
10...	1330	32.0	345	8.0	13.0	8.4	82
MAY							
12...	1221	1.00	308	7.8	22.5	7.0	83
12...	1224	10.0	307	7.8	22.5	6.9	82
12...	1227	20.0	306	7.7	22.5	6.6	79
12...	1231	32.0	265	7.4	21.0	3.5	41
JUL							
17...	1543	1.00	307	8.4	35.0	7.2	106
17...	1547	10.0	306	8.2	33.0	6.5	93
17...	1551	20.0	334	7.3	29.0	0.4	5
17...	1555	28.0	339	7.5	28.5	0.6	8

08049200 LAKE ARLINGTON AT ARLINGTON, TX--Continued

324257097130301 - LAKE ARLINGTON SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
10...	1342	1.00	343	8.1	15.5	0.67	8.9	92
10...	1344	13.0	346	8.1	15.5	--	8.7	90
MAY								
12...	1241	1.00	310	7.8	25.0	0.49	7.2	90
12...	1244	10.0	311	7.8	25.0	--	7.1	89
12...	1247	17.0	311	7.8	25.0	--	7.0	87
JUL								
17...	1603	1.00	311	8.1	41.5	0.76	5.2	85
17...	1605	10.0	311	8.2	40.5	--	5.3	85
17...	1607	15.0	312	8.2	40.0	--	5.4	86

324228097130301 - LAKE ARLINGTON SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
10...	1353	1.00	344	8.1	14.5	0.70	8.7	88
10...	1357	10.0	344	8.1	13.0	--	8.6	84
10...	1401	19.0	343	8.1	13.0	--	8.5	83
MAY								
12...	1257	1.00	309	7.7	23.5	0.52	6.7	81
12...	1300	10.0	307	7.6	22.0	--	6.0	71
12...	1304	22.0	271	7.4	21.5	--	3.6	42
JUL								
17...	1618	1.00	311	8.1	37.0	0.61	5.0	76
17...	1623	10.0	307	8.0	33.0	--	5.2	74
17...	1628	19.0	336	7.4	30.0	--	0.6	8

324143097132201 - LAKE ARLINGTON SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)
FEB											
10...	1417	1.00	344	8.3	13.0	9.2	90	130	7	42	4.9
10...	1423	10.0	344	8.3	13.0	9.3	91	--	--	--	--
10...	1427	24.0	347	8.2	12.5	8.7	84	130	7	42	4.9
MAY											
12...	1317	1.00	298	7.9	22.5	7.7	92	110	2	38	4.2
12...	1324	10.0	297	7.8	22.0	7.0	83	--	--	--	--
12...	1331	24.0	276	7.4	21.5	3.6	42	100	0	35	3.8
JUL											
17...	1638	1.00	304	8.5	35.0	7.9	117	100	11	34	4.8
17...	1645	10.0	301	8.3	32.5	6.9	98	--	--	--	--
17...	1652	20.0	337	7.4	30.5	0.5	7	120	16	39	4.9

08049200 LAKE ARLINGTON AT ARLINGTON, TX--Continued

324143097132201 - LAKE ARLINGTON SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB											
10...	21	0.8	4.3	120	34	19	0.30	4.0	201	0.210	0.210
10...	--	--	--	--	--	--	--	--	--	--	--
10...	21	0.8	4.2	120	34	19	0.30	4.0	201	0.210	0.210
MAY											
12...	17	0.7	4.2	110	26	15	0.20	3.7	175	0.200	0.200
12...	--	--	--	--	--	--	--	--	--	--	--
12...	14	0.6	4.3	100	23	12	0.20	6.0	163	0.230	0.230
JUL											
17...	19	0.8	4.6	94	27	16	0.20	2.5	165	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	18	0.7	4.4	100	23	17	0.20	4.1	173	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB											
10...	0.030	0.240	0.240	0.020	0.28	0.30	<0.010	<0.010	--	<3	<1
10...	--	--	--	--	--	--	--	--	--	--	--
10...	0.040	0.250	0.250	0.040	0.26	0.30	<0.010	<0.010	--	<3	5
MAY											
12...	0.050	0.250	0.250	<0.015	--	0.40	0.040	0.040	0.12	8	1
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.070	0.300	0.300	0.120	0.48	0.60	0.070	0.070	0.21	16	33
JUL											
17...	<0.010	--	<0.050	0.030	0.37	0.40	0.020	0.020	0.06	10	77
17...	--	--	--	--	--	--	--	--	--	--	--
17...	<0.010	--	<0.050	0.230	0.27	0.50	0.010	0.020	0.06	150	1000

324133097130601 - LAKE ARLINGTON SITE EL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB							
10...	1434	1.00	342	8.2	13.0	9.0	88
10...	1438	10.0	346	8.2	13.0	8.9	87
10...	1442	18.0	343	8.1	12.5	8.5	82
MAY							
12...	1344	1.00	300	7.9	22.5	7.8	93
12...	1347	10.0	299	7.9	22.5	7.4	88
12...	1350	20.0	280	7.4	21.5	4.0	47
JUL							
17...	1619	1.00	304	8.6	34.5	8.0	117
17...	1702	10.0	300	8.4	32.5	6.9	98
17...	1705	16.0	308	8.1	32.0	4.4	62

324041097134601 - LAKE ARLINGTON SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB											
10...	1458	1.00	355	8.3	12.5	9.6	93	130	8	44	5.1
10...	1504	14.0	366	8.2	12.0	9.2	88	140	12	46	5.3
MAY											
12...	1408	1.00	299	7.6	22.0	6.6	78	120	6	40	4.3
12...	1416	10.0	299	7.6	22.0	6.5	77	--	--	--	--
12...	1424	16.0	298	7.6	22.0	6.2	73	120	6	40	4.3
JUL											
17...	1723	1.00	297	8.5	35.5	7.6	113	100	10	32	4.8
17...	1729	13.0	320	8.0	31.0	4.3	59	110	10	35	5.0

08049200 LAKE ARLINGTON AT ARLINGTON, TX--Continued

324041097134601 - LAKE ARLINGTON SITE FC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB											
10...	23	0.9	3.9	120	36	20	0.20	4.0	211	0.180	0.180
10...	23	0.9	4.0	120	37	21	0.30	3.9	216	0.180	0.180
MAY											
12...	16	0.6	4.5	110	24	13	0.20	5.6	176	0.220	0.220
12...	--	--	--	--	--	--	--	--	--	--	--
12...	16	0.6	4.6	110	24	13	0.20	5.8	176	0.210	0.210
JUL											
17...	19	0.8	4.6	90	27	16	0.20	2.7	160	--	--
17...	20	0.8	4.3	98	28	16	0.20	3.5	171	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB											
10...	0.030	0.210	0.210	<0.015	--	0.30	<0.010	<0.010	--	<3	<1
10...	0.030	0.210	0.210	0.020	0.28	0.30	0.010	<0.010	--	<3	1
MAY											
12...	0.040	0.260	0.260	0.020	0.48	0.50	0.080	0.060	0.18	15	8
12...	--	--	--	--	--	--	--	--	--	--	--
12...	0.040	0.250	0.250	0.030	0.47	0.50	0.060	0.060	0.18	19	25
JUL											
17...	<0.010	--	<0.050	0.030	0.37	0.40	<0.010	0.010	0.03	4	10
17...	<0.010	--	<0.050	0.050	0.25	0.30	<0.010	0.020	0.06	7	42

08049240 RUSH CREEK AT WOODLAND PARK BOULEVARD, ARLINGTON, TX
(National water-quality assessment program)

LOCATION.--Lat 32°42'50", long 97°10'19", Tarrant County, Hydrologic Unit 12030102, near left bank at downstream side of bridge on Woodland Park Blvd., 0.3 mi upstream from bridge on Spur Highway 303, 0.6 mi downstream from bridge on Arkansas Lane, and 4.0 mi southwest of main Post Office in Arlington.

DRAINAGE AREA.----26.6 mi².

PERIOD OF RECORD.--Chemical analyses: March 1993 to current year.

PERIOD OF DAILY RECORD.--
DAILY MEAN DISCHARGE: May 1993 to September 1994 (discontinued).
SPECIFIC CONDUCTANCE: April 1993 to May 1994 (discontinued).
pH: April 1993 to May 1994 (discontinued).
WATER TEMPERATURES: April 1993 to May 1994 (discontinued).
DISSOLVED OXYGEN: April 1993 to April 1994 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
17...	0955	0.35	556	7.5	20.5	6.7	75	190	79	58	11	38
NOV												
16...	1409	17	450	7.6	16.0	8.9	91	160	62	52	8.5	25
DEC												
06...	1058	5.3	1100	7.7	15.5	9.8	99	380	200	110	26	83
JAN												
10...	1148	0.50	1070	7.8	12.0	10.8	101	340	170	100	23	85
FEB												
07...	1334	0.80	1180	8.0	10.0	11.8	105	390	210	110	27	91
MAR												
22...	1036	10	1120	7.9	19.5	8.3	92	410	220	120	26	87
APR												
21...	1053	32	523	7.6	17.5	7.6	81	190	79	59	11	32
MAY												
24...	1148	33	1170	7.6	24.5	6.6	80	410	230	120	27	90
JUL												
14...	0945	0.80	886	7.6	28.5	4.5	59	310	160	93	20	69
28...	1025	0.65	686	7.4	29.5	6.1	81	240	100	72	15	51
SEP												
13...	1255	245	191	7.4	23.0	6.9	81	64	20	21	2.8	8.1

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
17...	1	4.6	0	135	111	110	100	42	0.3	8.1	348	330
NOV												
16...	0.8	5.6	0	125	102	100	69	27	0.2	12	284	263
DEC												
06...	2	5.7	0	217	178	170	260	100	0.40	9.9	746	702
JAN												
10...	2	4.4	0	211	173	170	240	100	0.4	4.3	712	663
FEB												
07...	2	4.5	0	210	172	170	290	110	0.4	3.7	794	741
MAR												
22...	2	5.4	3	222	187	180	260	100	0.5	8.8	744	721
APR												
21...	1	5.1	0	139	114	110	88	35	0.3	10	340	311
MAY												
24...	2	5.2	0	225	184	180	260	110	0.5	10	802	735
JUL												
14...	2	6.2	0	185	152	150	200	76	0.50	12	596	569
28...	1	4.7	0	173	142	140	130	54	0.50	12	449	425
SEP												
13...	0.4	4.6	0	54	45	46	22	8.7	0.2	5.4	118	104

08049240 RUSH CREEK AT WOODLAND PARK BOULEVARD, ARLINGTON, TX--Continued
(National water-quality assessment program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
17...	0.370	0.370	0.0	0.380	0.38	0.0	0.68	0.26	0.26	0.3	0.3
NOV											
16...	0.450	0.450	0.0	0.470	0.47	0.0	0.97	0.47	0.47	0.5	0.5
DEC											
06...	0.130	--	<0.010	0.130	0.13	<0.015	--	--	--	<0.20	<0.20
JAN											
10...	0.270	0.270	0.0	0.280	0.28	0.0	--	--	--	<0.20	<0.20
FEB											
07...	0.140	0.140	0.0	0.160	0.16	0.0	--	--	0.17	0.2	<0.20
MAR											
22...	0.260	0.260	0.0	0.280	0.28	0.0	0.58	0.28	0.18	0.2	0.3
APR											
21...	0.480	0.480	0.0	0.500	0.50	0.1	1.1	0.53	0.43	0.5	0.6
MAY											
24...	0.190	0.190	0.020	0.210	0.210	0.040	0.41	0.16	--	<0.20	0.20
JUL											
14...	0.340	0.340	0.010	0.350	0.350	0.030	0.75	0.37	0.27	0.30	0.40
28...	--	--	<0.010	--	<0.050	0.060	0.30	0.24	0.14	0.20	0.30
SEP											
13...	0.740	0.740	0.0	0.790	0.79	0.14	1.7	0.76	0.56	0.7	0.9

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
17...	0.0	0.0	0.0	0.09	5.1	0.2	4	0.00	97	24	79
NOV											
16...	0.13	0.1	0.1	0.21	6.0	0.6	19	0.86	99	100	110
DEC											
06...	0.0	0.0	<0.010	--	3.8	0.2	8	0.12	51	5	210
JAN											
10...	<0.010	<0.010	<0.010	--	3.3	0.3	22	0.03	62	4	440
FEB											
07...	<0.010	<0.010	<0.010	--	3.6	0.3	4	0.01	97	4	280
MAR											
22...	<0.010	<0.010	<0.010	--	4.1	0.3	6	0.16	93	<3	240
APR											
21...	0.1	0.1	0.1	0.18	6.9	0.8	20	1.7	97	96	98
MAY											
24...	<0.010	<0.010	0.010	0.03	3.4	0.5	41	3.7	72	<3	220
JUL											
14...	0.040	0.040	0.020	0.06	4.3	0.7	11	0.02	95	6	82
28...	<0.010	<0.010	<0.010	--	3.6	0.7	11	0.02	88	14	610
SEP											
13...	0.26	0.20	0.19	0.58	7.2	>5.0	--	--	--	120	10

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 mi².

WATER-DISCHARGE RECORDS

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

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

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

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow is affected at times by three upstream reservoirs with a combined capacity of 248,600 acre-ft, of which 76,550 acre-ft is for flood control. During the current year, the city of Fort Worth discharged sewage 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. Rain gage at station. Satellite telemeter at station.

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 April 1922 reached a stage of 29.0 ft (former site and datum), from flood-marks.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	328	1270	1160	972	469	768	668	2500	122	4150	157
2	209	301	1140	977	939	503	601	713	1340	112	2380	152
3	223	749	993	946	766	596	516	1410	826	131	2250	151
4	218	525	888	868	670	551	1270	1280	528	111	2040	140
5	213	3980	848	756	621	516	3010	1900	403	1490	2180	158
6	202	1200	809	862	542	548	4470	11000	355	1080	2450	150
7	654	570	802	935	365	1550	3270	8680	308	270	2290	146
8	1280	435	1310	866	327	813	3120	11700	206	170	1970	168
9	404	1030	1440	743	320	576	2860	16900	179	139	1590	159
10	252	1240	2180	619	316	632	2430	8290	268	128	1470	156
11	227	697	1140	473	377	594	e2100	5230	4880	124	1420	181
12	210	508	1120	426	569	598	e1970	5470	1450	118	1190	182
13	202	396	1310	447	459	5770	1730	5560	1840	116	678	3030
14	191	762	1430	719	442	e4380	1520	5120	1700	111	438	1320
15	210	e2910	1470	967	440	3270	1180	5080	741	102	331	406
16	243	e2790	1460	860	549	3250	1050	4940	315	99	254	291
17	273	3160	1410	1210	727	3050	1010	4360	239	107	220	259
18	2820	3260	1360	1260	688	2790	1870	3690	187	106	194	300
19	2900	2770	1320	1500	589	2610	2170	3500	168	116	175	1280
20	1630	3380	1210	1060	533	2440	4340	3160	154	126	760	877
21	4330	e3180	954	1020	489	2210	2360	2880	135	102	619	396
22	1740	e3040	725	994	433	2110	1660	2450	127	94	271	317
23	699	2470	565	1040	401	1820	1480	2280	120	150	212	264
24	841	2920	393	886	380	1640	1350	2050	113	420	198	253
25	2380	3050	353	829	365	1990	1230	1800	110	214	197	249
26	2740	2830	320	1170	376	e3070	1070	1370	109	169	170	243
27	1830	2390	336	1430	381	2170	974	1180	116	140	172	224
28	1370	1960	728	1020	e431	1860	834	954	334	107	173	218
29	951	1730	1140	e983	---	1940	654	1450	206	96	162	213
30	580	1470	940	e973	---	1420	983	1520	144	90	166	201
31	407	---	942	975	---	944	---	1620	---	743	164	---
TOTAL	30633	56031	32306	28974	14467	56680	53850	128205	20101	7203	30934	12241
MEAN	988	1868	1042	935	517	1828	1795	4136	670	232	998	408
MAX	4330	3980	2180	1500	972	5770	4470	16900	4880	1490	4150	3030
MIN	191	301	320	426	316	469	516	668	109	90	162	140
AC-FT	60760	111100	64080	57470	28700	112400	106800	254300	39870	14290	61360	24280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995#, BY WATER YEAR (WY)

MEAN	509	442	471	440	608	735	830	1665	1106	395	243	331
MAX	5779	4472	8319	4504	3281	4521	7245	14030	11990	3475	1478	3094
(WY)	1982	1982	1992	1992	1992	1945	1942	1990	1989	1941	1950	1962
MIN	13.6	18.9	25.0	21.7	26.7	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1925 - 1995#	
ANNUAL TOTAL	318125		471625			
ANNUAL MEAN	872		1292		651	
HIGHEST ANNUAL MEAN					2629	1992
LOWEST ANNUAL MEAN					79.3	1956
HIGHEST DAILY MEAN	7940	May 15	16900	May 9	48900	May 3 1990
LOWEST DAILY MEAN	117	Apr 19	90	Jul 30	4.5	Sep 7 1925
ANNUAL SEVEN-DAY MINIMUM	128	Apr 18	107	Jul 16	7.3	Jun 17 1925
INSTANTANEOUS PEAK FLOW			20300	May 9	64400	May 3 1990
INSTANTANEOUS PEAK STAGE			29.21	May 9	33.88	May 3 1990
ANNUAL RUNOFF (AC-FT)	631000		935500		471700	
10 PERCENT EXCEEDS	2160		3020		1520	
50 PERCENT EXCEEDS	394		802		171	
90 PERCENT EXCEEDS	206		153		46	

e Estimated
Period of regulated streamflow.

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: January 1964 to current year. Chemical and biochemical analyses: January 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1966 to September 1992, August 1993 to current year.
pH: October 1976 to September 1992, August 1993 to current year.
WATER TEMPERATURE: October 1966 to September 1992, August 1993 to current year.
DISSOLVED OXYGEN: October 1976 to September 1992, August 1993 to current year.

INSTRUMENTATION.--Since November 1976, a four-parameter water-quality monitor records water temperature, DO, pH, and specific conductance continuously at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument, probe, or probeline. Where maximum or minimum specific conductance values are not shown, mean value is estimated. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance with the exception of the 1993 water year. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,320 microsiemens Dec. 12, 1978; minimum, 108 microsiemens May 1, 1986.
pH: Maximum, 8.6 units July 2, 1981, June 27, 1982, Mar. 26, 1983, Feb. 5, 1986, May 5-6, 1995; minimum, 6.6 units Jan. 6, 1979.
WATER TEMPERATURE: Maximum, 35.0°C Aug. 8, 1982; minimum, 3.0°C Jan. 9, 1973.
DISSOLVED OXYGEN: Maximum, 14.8 mg/L Dec. 14, 16, 1983; minimum, 0.0 mg/L on several days during period of record.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 922 microsiemens June. 24; minimum, 207 microsiemens Oct. 18.
pH: Maximum, 8.6 units May 5 and 6; minimum, 7.0 units on several days.
WATER TEMPERATURE: Maximum, 33.0°C July 28; minimum, 8.5°C Jan. 5 and 6.
DISSOLVED OXYGEN: Maximum, 11.7 mg/L Sept. 28; minimum, 3.9 mg/L Aug. 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
JAN											
30...	1415	957	620	7.9	12.0	10.2	96	1.0	210	39	71
APR											
04...	1412	2180	579	7.6	18.0	8.4	91	3.1	180	43	59
JUL											
11...	1020	140	808	8.0	29.5	8.3	113	1.9	200	39	65
AUG											
03...	1334	1550	309	7.6	28.0	6.0	79	2.3	120	16	41
29...	1218	180	803	7.2	31.5	6.6	93	2.1	190	49	60

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
JAN											
30...	8.5	45	1	5.3	170	60	45	0.5	7.4	366	4.28
APR											
04...	7.7	44	1	6.2	140	63	46	0.4	6.0	336	4.66
JUL											
11...	9.2	84	3	9.5	160	68	84	0.80	9.4	470	9.28
AUG											
03...	3.7	19	0.8	3.9	100	28	19	0.3	7.3	192	1.78
29...	10	89	3	10	140	73	87	1.0	11	426	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
JAN										
30...	4.28	0.0	4.30	4.3	0.0	0.47	0.5	0.19	0.18	0.55
APR										
04...	4.66	0.040	4.70	4.70	0.100	0.60	0.70	0.300	0.300	0.92
JUL										
11...	9.28	0.020	9.30	9.30	0.060	0.94	1.0	0.840	0.830	2.5
AUG										
03...	1.78	0.0	1.80	1.8	0.1	0.44	0.5	0.12	0.13	0.40
29...	--	--	--	--	--	--	--	--	--	--

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	30633	410	227	18700	30	2500	37	3040	140
NOV.	1994	56031	458	253	38300	34	5170	41	6230	160
DEC.	1994	32306	549	302	26300	46	4050	51	4430	170
JAN.	1995	28974	569	312	24400	49	3840	53	4140	170
FEB.	1995	14467	651	355	13900	62	2430	62	2430	180
MAR.	1995	56680	439	243	37100	33	5010	40	6050	150
APR.	1995	53850	534	293	42700	45	6500	49	7170	170
MAY	1995	128205	455	251	86900	34	11800	41	14200	150
JUNE	1995	20101	533	292	15900	45	2460	49	2680	160
JULY	1995	7203	662	360	7000	66	1280	64	1240	170
AUG.	1995	30934	438	242	20200	33	2730	39	3290	150
SEPT	1995	12241	653	356	11800	63	2070	62	2060	180
TOTAL		471625	**	**	343000	**	49800	**	56900	**
WTD.AVG.		1292	489	269	**	39	**	45	**	160

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	775	759	766	654	621	631	527	504	519	581	523	552
2	776	765	771	725	654	686	544	517	532	550	522	541
3	767	746	755	732	652	683	568	526	557	579	531	562
4	748	719	735	729	587	625	586	549	573	592	557	579
5	734	700	715	655	248	403	593	548	575	626	566	597
6	748	719	737	444	316	386	585	548	572	625	580	610
7	735	575	690	576	444	508	595	555	580	596	563	585
8	575	343	408	643	567	592	582	483	550	594	550	576
9	505	362	433	---	---	e530	525	444	477	584	541	569
10	550	505	537	554	430	463	472	413	437	618	567	591
11	626	542	608	574	454	521	526	444	502	684	610	639
12	674	606	647	624	553	585	569	518	552	716	670	689
13	729	656	700	701	618	642	561	519	536	721	689	708
14	734	713	722	---	---	e580	537	515	528	730	619	679
15	734	683	709	---	---	e400	539	519	530	619	530	581
16	724	707	714	---	---	e390	541	519	531	565	520	550
17	723	663	699	---	---	e400	542	517	533	588	477	555
18	685	207	392	465	453	460	540	508	527	559	477	531
19	312	222	262	476	457	465	530	509	520	546	463	491
20	404	272	359	499	372	451	548	516	535	563	488	538
21	272	231	245	448	355	394	575	535	561	560	502	541
22	352	246	308	469	446	456	623	569	606	601	549	575
23	492	352	438	490	464	473	658	605	636	577	555	569
24	529	492	509	472	456	465	735	657	683	605	552	583
25	516	327	407	466	449	457	757	721	738	618	578	601
26	400	327	364	464	454	459	759	714	737	604	470	560
27	459	384	444	470	461	466	751	701	721	546	466	504
28	483	459	474	481	467	476	748	667	704	573	512	551
29	527	476	509	493	479	487	674	586	615	591	535	575
30	588	522	558	510	487	501	591	547	571	604	562	588
31	626	579	598	---	---	---	588	543	574	607	559	589
MONTH	776	207	555	732	248	501	759	413	575	730	463	579

e Estimated

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	574	543	566	720	681	702	712	657	688	731	664	703
2	576	540	564	733	696	713	749	699	728	754	707	732
3	606	548	576	748	715	726	787	724	751	730	631	696
4	622	591	612	722	691	704	813	572	659	631	525	578
5	633	593	618	709	680	695	594	356	488	666	581	636
6	630	593	615	685	642	662	487	356	430	581	264	364
7	689	621	642	658	560	622	555	470	519	494	293	418
8	739	689	718	591	554	575	581	553	567	434	298	330
9	754	739	745	654	580	626	592	574	583	444	326	386
10	765	721	753	653	615	630	616	452	580	525	444	488
11	793	736	757	650	613	634	510	414	436	548	521	537
12	787	702	738	---	---	e600	504	421	473	553	450	511
13	702	663	679	---	---	e320	539	504	523	475	446	454
14	698	648	668	---	---	e330	563	539	554	487	459	464
15	711	688	699	396	356	381	604	557	590	472	461	467
16	712	686	698	405	393	399	639	591	624	472	443	451
17	699	613	636	409	402	406	638	563	627	480	452	466
18	613	590	602	411	404	409	646	525	580	486	480	484
19	610	571	594	415	386	402	572	382	521	487	473	480
20	632	594	616	402	390	398	423	367	380	476	468	473
21	669	605	632	411	402	407	489	423	461	474	466	471
22	695	666	680	416	406	412	539	489	515	476	468	473
23	716	680	701	---	---	e410	559	512	546	481	475	478
24	725	689	708	---	---	e410	568	536	559	505	481	493
25	742	711	727	---	---	e410	596	556	583	539	498	526
26	744	700	719	---	---	e415	633	578	613	561	535	552
27	750	698	726	---	---	e410	656	610	638	605	559	579
28	723	688	708	---	---	e490	673	625	645	619	595	612
29	---	---	---	527	511	519	729	668	700	598	570	586
30	---	---	---	607	526	569	733	669	706	570	560	566
31	---	---	---	671	602	646	---	---	---	572	426	558
MONTH	793	540	668	748	356	517	813	356	576	754	264	517

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	563	426	512	817	751	797	566	240	310	778	769	772
2	540	513	530	854	805	839	397	276	326	795	778	790
3	587	540	572	834	755	809	369	294	334	803	778	785
4	632	574	610	797	738	767	386	327	347	824	778	799
5	656	614	637	763	363	586	477	378	450	813	765	779
6	670	635	651	479	358	411	474	434	455	767	731	745
7	711	670	687	609	479	530	442	424	436	738	722	728
8	732	685	712	699	609	652	476	437	455	761	738	752
9	779	732	757	755	699	742	497	469	484	764	753	757
10	---	---	e784	793	749	774	497	467	487	759	745	749
11	---	---	e500	801	754	781	504	412	474	760	741	752
12	389	296	354	808	753	781	438	413	434	---	---	e730
13	---	---	e390	844	808	833	485	428	464	---	---	e650
14	472	437	460	872	830	855	518	470	492	---	---	e590
15	516	472	489	864	852	857	564	511	528	---	---	e530
16	587	516	549	875	850	862	605	562	588	---	---	e585
17	643	587	613	874	847	864	645	605	633	---	---	e601
18	677	643	662	847	794	819	700	639	668	---	---	e580
19	708	677	695	842	790	813	---	---	e630	---	---	e570
20	732	708	725	867	800	848	---	---	e590	---	---	e580
21	790	732	761	862	795	834	---	---	e550	---	---	e630
22	855	790	828	882	855	868	619	485	541	691	609	641
23	884	855	875	880	756	852	680	619	656	723	679	701
24	922	875	903	854	561	675	750	680	725	745	694	730
25	890	875	884	596	560	575	758	714	746	783	712	757
26	917	864	895	680	596	642	779	743	765	743	689	722
27	864	826	856	723	680	707	780	769	775	730	690	716
28	867	779	836	764	713	750	794	775	784	789	726	767
29	779	697	718	852	759	814	776	744	766	797	779	788
30	781	734	753	861	842	852	763	738	745	816	778	801
31	---	---	---	865	420	721	782	763	777	---	---	---
MONTH	922	296	673	882	358	758	794	240	562	824	609	703
YEAR	922	207	598									

e Estimated

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.6	7.4	7.5	7.8	7.5	7.7	7.8	7.7	7.8	7.8	7.7	7.7
2	7.6	7.4	7.4	7.9	7.6	7.7	7.8	7.7	7.7	7.8	7.7	7.8
3	7.5	7.4	7.4	7.8	7.5	7.6	7.8	7.7	7.7	7.9	7.7	7.7
4	7.5	7.4	7.4	7.7	7.5	7.6	7.8	7.7	7.7	7.8	7.6	7.7
5	7.6	7.4	7.5	8.1	7.4	7.8	7.8	7.7	7.8	7.7	7.5	7.6
6	7.6	7.4	7.5	7.9	7.8	7.8	7.9	7.8	7.8	7.7	7.5	7.6
7	7.8	7.2	7.5	7.9	7.8	7.8	7.9	7.8	7.8	7.7	7.6	7.6
8	7.6	7.1	7.3	7.9	7.8	7.8	7.9	7.6	7.8	7.7	7.6	7.6
9	7.4	7.3	7.3	8.0	7.7	7.8	7.7	7.5	7.6	7.7	7.6	7.6
10	7.5	7.3	7.4	7.8	7.7	7.8	7.7	7.5	7.6	7.7	7.6	7.6
11	7.5	7.4	7.4	7.8	7.8	7.8	7.7	7.6	7.6	7.8	7.5	7.6
12	7.5	7.4	7.4	7.9	7.8	7.8	7.7	7.6	7.6	7.7	7.6	7.7
13	7.5	7.4	7.4	7.8	7.8	7.8	7.7	7.6	7.7	7.8	7.6	7.7
14	7.5	7.3	7.4	---	---	---	7.7	7.7	7.7	7.9	7.6	7.8
15	7.3	7.3	7.3	---	---	---	7.7	7.7	7.7	7.9	7.7	7.8
16	7.3	7.3	7.3	---	---	---	7.8	7.7	7.7	7.9	7.7	7.8
17	7.4	7.3	7.3	---	---	---	7.8	7.7	7.7	7.9	7.5	7.7
18	7.8	7.3	7.5	7.6	7.5	7.6	7.8	7.7	7.7	7.7	7.5	7.6
19	7.7	7.6	7.6	7.6	7.5	7.5	7.8	7.7	7.8	7.7	7.4	7.6
20	7.9	7.5	7.6	7.6	7.4	7.4	7.8	7.7	7.7	7.9	7.6	7.7
21	8.0	7.5	7.7	7.6	7.4	7.5	7.8	7.7	7.8	7.9	7.8	7.8
22	7.6	7.4	7.4	7.8	7.4	7.6	7.8	7.7	7.7	7.9	7.7	7.8
23	7.4	7.4	7.4	8.0	7.4	7.7	7.8	7.7	7.8	7.9	7.7	7.7
24	7.6	7.3	7.4	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.7	7.7
25	7.7	7.3	7.5	7.9	7.8	7.8	7.8	7.7	7.7	7.8	7.7	7.7
26	7.5	7.4	7.5	7.9	7.8	7.8	7.7	7.6	7.7	7.8	7.5	7.7
27	7.6	7.5	7.6	7.8	7.8	7.8	7.8	7.6	7.7	7.7	7.5	7.6
28	7.7	7.6	7.6	7.9	7.7	7.8	7.7	7.5	7.6	7.7	7.6	7.7
29	7.7	7.6	7.6	7.9	7.8	7.8	7.7	7.6	7.7	7.8	7.6	7.7
30	7.6	7.5	7.5	7.9	7.7	7.8	7.8	7.7	7.7	7.8	7.7	7.7
31	7.6	7.5	7.5	---	---	---	7.8	7.7	7.7	7.8	7.6	7.6
MONTH	8.0	7.1	7.5	8.1	7.4	7.7	7.9	7.5	7.7	7.9	7.4	7.7

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

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	11.0	11.5	15.0	13.0	14.0	18.5	16.0	17.0	22.5	21.5	22.0
2	13.0	11.5	12.5	13.0	11.0	12.0	---	---	---	22.0	20.5	21.5
3	13.5	12.5	13.0	11.0	10.0	10.5	19.5	17.5	18.5	21.0	18.5	20.0
4	14.0	12.5	13.5	11.0	10.0	10.5	19.0	17.5	18.0	20.5	18.5	19.5
5	14.0	12.0	13.0	12.5	11.0	12.0	17.5	16.0	16.5	21.5	19.5	20.5
6	14.0	11.5	13.0	14.5	11.5	12.5	17.5	16.0	16.5	20.0	18.0	19.0
7	13.5	12.0	12.5	14.0	10.5	12.0	18.5	17.5	18.0	21.0	19.5	20.5
8	13.5	12.0	12.5	---	---	---	19.5	18.5	18.5	21.0	19.5	20.0
9	13.5	13.0	13.0	---	---	---	20.5	19.5	20.0	21.5	20.0	20.5
10	15.0	13.5	14.0	---	---	---	20.5	19.0	20.0	22.0	21.5	22.0
11	15.0	12.5	13.5	14.5	12.0	13.5	19.0	17.0	17.5	22.0	21.5	21.5
12	12.5	11.5	12.0	16.0	13.5	14.5	18.0	17.0	17.5	21.5	21.0	21.5
13	11.5	10.5	11.0	---	---	---	20.0	18.0	19.0	23.0	21.0	22.0
14	11.0	10.0	10.5	---	---	---	21.5	19.0	20.0	24.0	23.0	23.5
15	13.0	11.0	12.0	---	---	---	21.5	19.5	20.5	24.5	23.5	24.0
16	13.0	12.0	12.5	14.5	13.5	14.0	21.5	21.0	21.5	24.5	23.5	24.0
17	13.0	11.5	12.5	14.5	14.0	14.0	22.0	21.5	21.5	24.0	23.5	23.5
18	13.0	11.0	12.0	15.0	14.0	14.5	22.0	21.0	21.5	24.0	23.0	23.5
19	14.0	11.5	13.0	16.0	15.0	15.5	---	---	---	23.0	22.5	22.5
20	15.0	12.0	14.0	17.5	16.0	17.0	---	---	---	23.0	22.5	22.5
21	16.0	13.0	14.5	17.5	17.0	17.0	21.5	20.0	21.0	23.5	22.5	23.0
22	16.0	14.5	15.5	18.5	17.5	18.0	21.5	20.0	20.5	24.5	22.5	23.5
23	18.0	15.5	16.5	19.5	18.5	18.5	20.0	18.0	19.0	24.5	23.0	24.0
24	18.0	16.5	17.5	19.5	18.0	19.0	19.0	17.5	18.0	24.5	23.5	24.0
25	17.0	16.0	16.5	19.0	18.0	18.5	20.0	18.5	19.0	24.0	23.5	23.5
26	17.5	16.0	16.5	19.0	18.0	18.5	20.5	19.0	19.5	24.5	23.0	23.5
27	18.0	17.0	17.5	18.5	17.5	18.0	21.0	19.5	20.5	25.5	23.5	24.5
28	18.0	15.0	16.5	17.5	16.0	17.0	21.5	20.0	20.5	26.5	24.5	25.5
29	---	---	---	16.0	15.0	15.5	23.0	20.5	21.5	27.0	25.5	26.0
30	---	---	---	16.5	15.0	15.5	22.5	21.0	21.5	26.5	25.0	26.0
31	---	---	---	17.0	16.0	16.5	---	---	---	26.5	24.0	25.5
MONTH	18.0	10.0	13.5	19.5	10.0	15.0	23.0	16.0	19.5	27.0	18.0	22.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	24.0	25.0	28.5	26.5	27.5	27.5	26.0	26.5	31.0	29.5	30.5
2	27.5	25.5	26.5	28.0	27.0	27.5	28.0	26.0	27.0	31.5	29.5	30.5
3	28.0	26.0	27.0	29.5	27.0	28.0	28.5	27.0	27.5	31.5	30.0	30.5
4	28.0	26.5	27.5	29.5	27.5	28.0	29.0	27.5	28.0	31.0	29.5	30.5
5	28.5	26.5	27.5	28.5	23.5	26.0	30.0	28.5	29.5	31.0	29.0	30.0
6	28.5	26.0	27.5	27.5	24.0	25.5	30.5	29.5	30.0	30.5	29.0	29.5
7	29.0	27.0	28.0	30.0	26.5	28.0	30.5	30.0	30.0	30.0	29.0	29.0
8	29.0	27.5	28.0	31.0	28.0	29.5	30.0	29.5	30.0	29.0	27.5	28.5
9	29.5	27.5	28.5	31.5	28.5	30.0	30.5	29.5	30.0	28.5	27.0	27.5
10	28.5	24.0	27.5	32.0	29.0	30.5	31.0	29.0	30.0	28.0	26.5	27.0
11	24.5	23.5	24.0	32.0	29.5	30.5	31.5	29.5	30.0	28.5	26.5	27.5
12	25.5	24.0	24.5	32.0	30.0	31.0	31.5	29.5	30.5	27.5	27.0	27.5
13	26.0	24.5	25.0	32.0	30.5	31.0	31.5	29.5	30.5	27.0	23.5	25.0
14	27.0	25.5	26.5	32.0	30.0	31.0	31.5	30.0	30.5	26.0	24.5	25.0
15	28.0	26.0	27.0	31.0	30.0	30.5	31.0	29.5	30.0	27.5	25.5	26.5
16	28.0	26.0	27.0	30.5	29.5	30.0	31.5	29.5	30.5	29.0	27.0	28.0
17	28.5	26.5	27.5	31.0	29.0	30.0	31.5	29.5	30.5	29.5	28.5	29.0
18	29.0	26.5	27.5	32.0	29.5	30.5	32.0	30.0	31.0	28.5	26.5	28.0
19	28.5	26.5	27.5	32.0	30.0	30.5	31.5	30.0	31.0	27.0	26.0	26.5
20	29.5	26.5	28.0	31.0	29.5	30.5	31.5	26.0	29.5	26.0	25.5	25.5
21	29.5	27.0	28.5	31.5	29.0	30.5	31.0	27.5	30.0	25.5	23.0	24.5
22	30.0	27.5	28.5	32.0	29.5	30.5	31.5	29.5	30.5	23.0	21.5	22.5
23	30.0	27.5	29.0	31.5	29.5	30.5	32.0	29.5	30.5	22.0	21.0	21.5
24	30.5	28.0	29.0	31.0	28.5	30.0	31.0	29.5	30.0	23.5	21.0	22.0
25	30.0	28.0	29.0	31.5	29.5	30.5	31.5	29.5	30.5	24.0	22.5	23.0
26	30.0	27.5	28.5	32.0	29.5	30.5	32.0	30.0	31.0	24.5	23.0	23.5
27	29.0	27.5	28.0	32.5	29.5	31.0	32.0	30.0	31.0	26.0	23.5	24.5
28	28.5	26.0	27.5	33.0	30.5	31.5	32.0	30.0	31.0	27.5	25.0	26.0
29	28.5	27.5	28.0	32.5	31.0	31.5	31.5	30.5	31.0	28.0	26.0	27.0
30	28.0	27.0	27.5	31.5	30.5	31.0	31.0	30.0	30.5	27.5	26.0	27.0
31	---	---	---	30.5	27.0	29.0	31.0	29.5	30.0	---	---	---
MONTH	30.5	23.5	27.5	33.0	23.5	30.0	32.0	26.0	30.0	31.5	21.0	27.0
YEAR	33.0	8.5	21.0									

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.2	5.6	7.1	---	---	---	9.0	8.4	8.7	10.0	9.7	9.9
2	7.8	5.5	6.9	---	---	---	8.8	8.5	8.6	10.6	9.7	10.1
3	7.3	5.8	6.8	8.7	7.5	7.9	8.6	8.2	8.4	10.4	9.8	10.1
4	7.1	5.2	6.4	9.6	7.2	7.4	8.4	7.9	8.2	10.3	9.7	10.0
5	7.2	5.4	6.4	9.6	7.3	8.0	8.5	7.7	8.1	11.9	9.8	10.6
6	7.5	5.8	6.7	7.9	7.7	7.8	8.2	7.7	8.0	11.8	10.3	11.3
7	9.1	5.6	6.7	7.9	7.5	7.7	8.5	7.6	8.1	12.0	9.6	11.2
8	6.3	4.4	5.1	7.5	7.0	7.4	8.5	7.7	8.1	11.9	11.1	11.5
9	6.8	4.5	5.8	8.2	6.8	7.2	8.7	7.7	8.1	11.8	10.6	11.3
10	7.3	6.4	6.8	7.1	6.5	6.8	9.2	8.6	8.9	11.6	10.8	11.1
11	7.6	6.0	7.2	7.0	6.6	6.8	9.2	8.6	8.9	11.7	10.3	10.7
12	7.7	6.2	7.2	6.7	5.9	6.4	9.3	8.7	9.0	10.7	9.7	10.1
13	7.9	5.9	7.0	5.9	4.3	5.2	9.5	9.2	9.3	10.9	9.1	9.8
14	7.5	6.8	7.2	7.8	4.2	5.8	9.3	8.9	9.1	11.6	9.5	10.3
15	7.2	6.6	6.9	7.7	6.7	7.2	9.3	9.0	9.1	11.8	9.9	10.4
16	7.1	6.5	6.9	7.7	7.3	7.5	9.5	9.0	9.2	12.0	10.9	11.4
17	7.2	6.6	6.9	7.7	7.5	7.6	9.7	8.9	9.4	11.2	9.3	10.1
18	9.8	6.0	7.3	7.7	7.6	7.7	10.0	9.2	9.6	---	---	---
19	7.1	6.4	7.0	7.8	7.3	7.5	9.9	9.2	9.7	---	---	---
20	8.4	6.8	7.2	7.4	7.0	7.2	9.8	9.1	9.4	10.3	9.8	10.1
21	---	---	---	7.7	7.1	7.3	9.9	9.0	9.4	10.4	9.9	10.1
22	---	---	---	7.7	7.5	7.6	9.8	9.0	9.3	10.4	9.6	10.0
23	---	---	---	8.0	7.6	7.8	9.8	9.1	9.4	10.4	9.7	10.1
24	---	---	---	8.2	8.0	8.1	9.7	9.1	9.4	11.1	9.2	10.1
25	---	---	---	8.3	8.0	8.1	9.9	9.0	9.4	10.9	10.4	10.7
26	---	---	---	8.2	8.0	8.1	9.7	8.8	9.2	10.7	9.0	9.9
27	---	---	---	8.1	7.9	8.1	10.3	9.1	9.5	10.0	9.4	9.6
28	---	---	---	8.3	7.9	8.1	9.7	9.4	9.5	9.8	9.1	9.5
29	---	---	---	8.7	8.2	8.4	9.8	9.3	9.6	10.2	9.6	9.8
30	---	---	---	9.0	8.3	8.6	10.1	9.4	9.7	10.9	10.0	10.3
31	---	---	---	---	---	---	10.2	9.7	9.9	11.2	9.5	10.6
MONTH	9.8	4.4	6.8	9.6	4.2	7.5	10.3	7.6	9.0	12.0	9.0	10.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.1	10.6	10.7	9.7	8.4	9.0	9.2	8.8	9.0	8.0	6.4	7.0
2	10.9	10.3	10.5	10.3	7.9	9.6	9.3	8.6	8.9	8.2	6.7	7.4
3	10.9	9.9	10.4	11.2	9.8	10.5	8.9	8.4	8.7	7.8	6.9	7.3
4	11.1	9.9	10.4	11.0	10.0	10.6	8.9	7.6	8.3	7.3	5.9	6.6
5	11.4	10.3	10.6	11.0	9.8	10.5	9.4	7.9	8.6	7.9	6.8	7.2
6	11.8	9.7	10.5	11.0	9.4	10.3	9.0	8.5	8.9	7.9	5.7	6.2
7	11.8	9.9	10.7	11.2	9.6	10.4	9.2	9.0	9.1	7.2	5.8	6.4
8	12.5	10.0	10.9	10.8	9.9	10.4	9.3	8.9	9.1	7.7	6.6	7.1
9	11.5	9.8	10.3	11.5	10.2	10.9	9.2	8.5	8.9	6.9	6.5	6.7
10	11.2	9.4	10.3	11.4	10.2	10.9	9.0	8.3	8.7	7.5	6.9	7.1
11	10.7	9.1	9.6	10.2	9.0	9.6	8.5	8.1	8.2	7.9	7.1	7.5
12	11.3	9.0	9.9	11.2	7.6	9.0	9.0	8.5	8.8	8.1	7.7	7.9
13	10.6	9.7	10.1	11.2	8.9	10.2	---	---	---	8.1	7.3	7.6
14	10.5	8.4	9.5	11.0	10.1	10.5	---	---	---	7.6	6.7	7.1
15	10.5	9.5	10.0	11.4	10.8	11.0	---	---	---	7.2	6.7	7.0
16	11.2	9.3	10.0	11.8	11.0	11.4	---	---	---	7.2	6.5	6.8
17	12.0	10.5	11.1	12.0	11.5	11.8	---	---	---	7.0	6.4	6.6
18	12.1	10.9	11.3	12.2	11.4	11.8	---	---	---	6.7	6.1	6.4
19	12.7	11.0	11.5	11.8	11.3	11.6	---	---	---	6.9	6.6	6.7
20	12.8	10.5	11.3	11.3	10.5	10.9	---	---	---	6.8	6.1	6.4
21	13.1	10.2	11.2	10.9	9.9	10.6	7.5	7.2	7.3	6.8	6.2	6.5
22	---	---	---	10.5	9.7	10.2	7.4	7.1	7.3	7.0	6.1	6.4
23	---	---	---	10.8	9.5	10.0	7.5	6.9	7.1	7.3	6.6	7.0
24	12.4	9.6	10.6	10.5	8.6	9.6	7.6	7.0	7.3	7.7	7.2	7.5
25	10.7	8.8	9.8	11.3	8.9	10.1	8.1	7.2	7.6	7.7	7.0	7.4
26	10.0	8.3	9.1	10.3	6.4	8.3	8.1	7.5	7.8	8.0	7.3	7.6
27	9.9	8.1	8.8	9.8	9.0	9.4	8.4	7.5	7.8	7.9	7.1	7.5
28	9.0	7.9	8.5	9.6	8.6	9.1	8.5	7.7	8.0	---	---	---
29	---	---	---	9.7	8.9	9.4	8.0	7.1	7.5	---	---	---
30	---	---	---	9.6	9.1	9.3	7.5	6.6	7.1	---	---	---
31	---	---	---	9.3	8.8	9.0	---	---	---	---	---	---
MONTH	13.1	7.9	10.3	12.2	6.4	10.2	9.4	6.6	8.2	8.2	5.7	7.0

08049500 WEST FORK TRINITY RIVER AT GRAND PRAIRIE, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	9.5	6.4	7.8	6.3	3.8	5.4	9.9	7.3	8.5
2	---	---	---	9.3	6.8	7.9	6.3	5.7	6.0	9.5	7.1	8.2
3	---	---	---	8.9	6.5	7.7	6.3	5.4	5.8	10.1	7.0	8.4
4	---	---	---	8.2	6.5	7.4	6.8	6.0	6.3	10.3	7.4	8.6
5	---	---	---	7.9	4.9	6.3	7.7	6.8	7.3	10.8	7.7	9.1
6	---	---	---	---	---	---	7.8	7.1	7.4	11.2	7.6	9.3
7	---	---	---	---	---	---	7.3	6.6	7.0	9.5	7.3	8.5
8	---	---	---	---	---	---	8.1	6.4	7.2	10.6	7.4	8.8
9	7.3	5.2	5.8	---	---	---	9.0	6.9	8.1	10.9	8.0	9.2
10	7.1	5.6	6.2	---	---	---	9.4	7.5	8.3	11.3	8.1	9.4
11	7.3	4.9	5.9	10.4	6.6	8.3	9.3	7.6	8.5	10.5	7.8	9.1
12	6.5	5.8	6.1	9.8	6.3	7.8	10.2	7.5	8.7	9.5	7.3	8.1
13	7.2	6.1	6.6	10.1	6.6	8.1	10.9	8.1	9.2	9.2	5.7	6.9
14	7.5	6.6	7.2	10.8	7.2	8.6	10.8	7.9	9.3	6.4	6.2	6.3
15	8.0	6.9	7.3	10.1	6.7	8.2	11.6	8.0	9.8	6.4	4.6	5.6
16	7.8	6.3	6.8	9.6	7.1	8.3	12.4	8.1	10.1	7.0	4.5	5.4
17	8.7	7.2	7.7	9.9	8.1	8.9	12.4	7.7	10.1	8.8	5.7	6.9
18	8.4	7.4	7.7	11.0	7.7	9.1	11.9	8.7	10.2	8.2	6.8	7.3
19	8.3	7.4	7.8	10.3	7.5	8.6	11.3	7.8	9.8	8.7	5.5	6.9
20	8.7	7.4	8.0	8.9	6.6	7.7	10.0	8.6	9.2	6.5	5.1	5.8
21	8.6	7.7	8.0	7.4	5.2	6.1	9.3	5.9	6.8	6.1	4.9	5.5
22	8.8	7.9	8.2	7.6	4.1	5.3	8.6	6.3	7.2	8.4	6.1	7.5
23	8.7	7.5	7.8	7.1	4.1	5.4	8.4	7.1	7.8	8.5	7.7	8.0
24	8.7	6.2	7.5	6.2	4.4	5.7	---	---	---	9.8	7.9	8.7
25	8.9	6.2	7.5	9.9	5.5	7.3	---	---	---	10.7	7.8	9.0
26	8.7	5.8	7.2	10.7	6.9	8.7	8.2	6.1	7.1	10.9	8.1	9.4
27	7.9	6.1	6.8	9.4	5.8	7.8	8.4	6.3	7.3	11.4	8.1	9.6
28	6.7	4.8	6.1	---	---	---	9.2	6.7	7.8	11.6	8.1	9.6
29	6.3	4.2	5.1	---	---	---	8.8	6.7	7.8	10.0	7.4	8.5
30	8.0	6.0	6.6	---	---	---	9.2	6.9	8.0	7.4	4.6	5.6
31	---	---	---	---	---	---	9.8	6.8	8.3	---	---	---
MONTH	8.9	4.2	7.0	11.0	4.1	7.6	12.4	3.8	8.0	11.6	4.5	7.9
YEAR	13.1	3.8	8.4									

08049580 MOUNTAIN CREEK NEAR VENUS, TX
(Flood-hydrograph partial-record station)

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

DRAINAGE AREA.--25.5 mi².

PERIOD OF RECORD.--November 1985 to September 1987. October 1987 to current year (peaks above base discharge).
Water-quality records.--Chemical analyses: December 1985 to September 1993.

GAGE.--Water-stage recorder. Datum of gage is 580.49 ft above sea level.

REMARKS.--Records good. Daily values and peak discharges less than 580 ft³/s are not published. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 580 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0500	688	7.74	May 6	0145	1,040	8.52
Nov. 15	0200	684	7.72	May 8	0715	2,940	11.07
Mar. 13	0715	2,920	11.05	June 11	0415	4,440	12.36
Apr. 5	1245	2,150	10.14				

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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 531.08 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	0330	1,010	14.38	May 6	0200	1,100	14.88
Mar. 13	1330	2,740	20.52	May 8	1200	4,250	24.06
Apr. 5	2000	2,560	19.96	June 11	1215	1,680	16.90
Apr. 20	0730	928	13.84				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.24	.56	5.5	6.9	2.8	13	3.6	116	2.0	185	.30
2	.00	.31	.65	3.7	6.9	3.2	12	2.9	15	1.9	61	.38
3	.00	81	.61	3.9	7.0	4.4	10	31	6.6	1.7	3.5	.36
4	.00	54	.57	3.7	4.1	3.9	144	11	3.5	1.5	3.4	.27
5	.00	550	.57	3.1	3.5	4.2	1250	133	2.9	17	1.1	.21
6	.00	15	.57	3.2	3.4	15	343	593	2.7	2.5	.70	.30
7	1.5	1.9	.79	2.9	3.9	91	69	89	2.9	1.4	.57	.38
8	.48	.98	1.4	2.3	3.3	24	35	2650	2.3	1.1	.57	.20
9	.07	23	20	2.1	3.1	12	24	188	1.9	.90	.53	e.18
10	.04	3.4	95	2.0	3.5	8.9	77	83	41	.78	.62	e.16
11	.02	1.3	20	2.1	4.5	6.4	80	47	915	.81	.42	e.16
12	.01	.72	6.2	16	3.9	7.7	17	34	85	.83	.42	e.14
13	.00	.62	3.6	53	3.4	1900	11	28	31	.75	.39	e21
14	.00	114	39	14	3.6	552	6.8	19	17	.70	.40	3.1
15	.03	391	25	5.2	4.3	145	5.3	15	11	.71	.33	.59
16	.09	34	18	4.0	4.6	79	4.9	14	8.9	.77	.34	.30
17	.50	5.5	9.2	7.0	4.1	48	4.8	19	6.8	.85	.35	.26
18	59	2.2	4.9	63	3.5	35	12	17	5.2	.88	.32	2.7
19	1.2	16	3.4	89	3.5	25	103	10	4.4	.83	.31	5.3
20	60	145	2.7	18	3.4	19	523	7.1	4.2	1.2	.38	.91
21	10	47	2.4	8.0	3.3	18	68	6.2	3.9	1.1	.26	62
22	1.8	6.9	2.1	9.3	3.3	15	22	5.5	3.7	.94	.24	9.3
23	.21	2.1	1.9	10	3.2	13	19	5.2	3.3	.95	.28	.65
24	1.1	1.4	1.8	7.1	2.9	11	12	16	2.8	.72	.51	.41
25	36	1.2	1.6	5.1	2.9	145	9.5	11	2.5	.55	.47	.32
26	1.3	1.0	1.6	121	3.2	187	7.3	6.7	2.3	.63	.47	.32
27	.20	.92	2.5	101	3.9	35	6.1	24	2.3	1.9	.46	.26
28	.13	.73	23	27	3.3	17	5.4	7.5	2.2	.64	.40	.21
29	.18	.68	24	13	---	24	4.7	4.3	2.1	.63	.37	.18
30	.22	.61	11	10	---	23	3.9	5.6	2.1	1.0	.36	.18
31	.22	---	7.2	7.4	---	16	---	54	---	51	.22	---
TOTAL	174.30	1502.71	331.82	622.6	110.4	3490.5	2902.7	4140.6	1310.5	99.17	264.69	111.03
MEAN	5.62	50.1	10.7	20.1	3.94	113	96.8	134	43.7	3.20	8.54	3.70
MAX	60	550	95	121	7.0	1900	1250	2650	915	51	185	62
MIN	.00	.24	.56	2.0	2.9	2.8	3.9	2.9	1.9	.55	.22	.14
AC-FT	346	2980	658	1230	219	6920	5760	8210	2600	197	525	220
CFSM	.09	.80	.17	.32	.06	1.79	1.54	2.13	.70	.05	.14	.06
IN.	.10	.89	.20	.37	.07	2.07	1.72	2.45	.78	.06	.16	.07

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995, BY WATER YEAR (WY)

MEAN	18.8	5.07	16.7	7.26	19.6	26.9	39.3	56.0	30.4	4.11	2.32	6.45
MAX	272	50.1	326	64.5	157	184	174	378	300	57.1	21.8	67.4
(WY)	1992	1995	1992	1992	1993	1977	1990	1989	1986	1975	1979	1973
MIN	.000	.000	.000	.000	.014	.13	.40	.074	.030	.000	.000	.000
(WY)	1964	1961	1964	1981	1981	1963	1978	1962	1963	1964	1961	1971

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995	
ANNUAL TOTAL	4254.88		15061.02			
ANNUAL MEAN	11.7		41.3		19.4	
HIGHEST ANNUAL MEAN					82.2	1992
LOWEST ANNUAL MEAN					1.34	1978
HIGHEST DAILY MEAN	550	Nov 5	2650	May 8	7900	May 17 1989
LOWEST DAILY MEAN	.00	Jul 30	.00	Oct 1	.00	Oct 1 1960
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 4	.02	Oct 9	.00	Oct 15 1960
INSTANTANEOUS PEAK FLOW			4250	May 8	22800	May 17 1989
INSTANTANEOUS PEAK STAGE			24.06	May 8	33.77	May 17 1989
ANNUAL RUNOFF (AC-FT)	8440		29870		14060	
ANNUAL RUNOFF (CFSM)	.19		.66		.31	
ANNUAL RUNOFF (INCHES)	2.52		8.92		4.20	
10 PERCENT EXCEEDS	18		62		13	
50 PERCENT EXCEEDS	1.1		3.5		.24	
90 PERCENT EXCEEDS	.00		.28		.00	

e Estimated

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 mi².

PERIOD OF RECORD.--August 1985 to current year.
Water-quality records.--Chemical and biochemical analyses: January 1986 to September 1993.

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

REMARKS.--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 December 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 capacity table was provided by the U.S. Army Corps of Engineers. The lake was built for water supply, conservation, and flood control. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	564.5	-
Crest of spillway	541.0	362,700
Top of conservation pool	522.0	176,900
Lowest gated outlet	466.0	1,095

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 274,600 acre-ft May 20, 1990 (elevation, 533.21 ft); minimum since initial filling began, 1,595 acre-ft Jan. 24, 1986 (elevation, 467.65 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 211,800 acre-ft May 14 (elevation, 526.41 ft); minimum, 147,300 acre-ft Oct. 11 (elevation, 517.86 ft).

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

517.0	141,800	520.0	162,300	523.0	184,500
518.0	148,700	521.0	169,500	525.0	200,200
519.0	155,700	522.0	176,900	524.0	192,200

08049800 JOE POOL LAKE NEAR DUNCANVILLE, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	148200	150000	166800	172200	176800	176100	181900	177900	178900	177000	174600	170500
2	148200	150000	166800	172200	176800	176200	181600	177700	179000	176800	175000	170400
3	148100	150900	166800	172200	176700	176200	181100	178000	178800	176600	175000	170200
4	147900	151900	166800	172200	176700	176200	181800	177800	178800	176300	175000	170000
5	147900	155700	166800	172200	176700	176200	191200	180000	178700	176700	174900	169700
6	147900	155900	166800	172100	176700	176700	192400	185000	178600	176600	174700	169500
7	148500	155900	166800	172200	176500	177200	191500	187000	178400	176400	174600	169300
8	148800	155800	166700	172200	176500	177300	189400	210300	178300	176300	174400	169000
9	148300	157400	167400	172200	176500	177300	187200	211300	178200	176100	174100	168800
10	147700	157700	168700	172200	176400	177300	188600	211600	179600	176000	174000	168600
11	147300	157700	169000	172300	176400	177300	187600	211300	190400	175900	173800	168500
12	147300	157600	169100	172600	176500	177800	185500	209100	189500	175700	173700	168600
13	147300	157700	169200	172700	176400	203500	183500	205700	187200	175500	173600	170800
14	147400	159600	169800	172700	176600	207800	180700	201700	184900	175300	173300	170800
15	147700	164600	170600	172700	176400	208100	178500	197700	182500	175000	173100	170700
16	147500	165100	171000	172700	176400	206400	177900	193600	180900	174900	172900	170500
17	147700	165400	171200	172800	176400	204100	177900	189700	180100	174700	172700	170500
18	148700	165500	171200	173400	176400	201400	178300	185500	179700	174500	172600	170900
19	148700	166100	171300	173900	176400	197500	180100	182800	179400	174400	172500	171100
20	149600	166900	171400	174000	176400	194300	183200	181900	179000	174100	172400	171000
21	150000	167200	171300	174100	176400	191300	183100	181000	178800	173900	172300	171600
22	150000	167100	171300	174300	176400	188500	182400	180100	178600	173700	172100	171500
23	150000	167300	171300	174400	176200	185900	181500	178900	178400	173700	171900	171300
24	150400	167200	171300	174400	176300	183900	180700	178500	178300	173300	171700	171100
25	150800	167200	171300	174400	176300	183600	179800	178200	178000	173200	171600	171000
26	150600	167300	171300	176100	176300	183600	179200	178100	177800	173000	171400	170800
27	150600	167200	171500	176700	176200	183600	178900	178200	177700	172800	171300	170800
28	150400	167000	171600	176700	176100	183300	178600	178200	177600	172600	171100	170700
29	150400	167000	171900	176700	---	183100	178500	178200	177400	172400	171000	170500
30	150200	166900	172100	176800	---	182700	178400	178200	177200	172200	170800	170400
31	150200	---	172200	176800	---	182600	---	178800	---	173200	170700	---
MAX	150800	167300	172200	176800	176800	208100	192400	211600	190400	177000	175000	171600
MIN	147300	150000	166700	172100	176100	176100	177900	177700	177200	172200	170700	168500
(+)	518.26	520.64	521.37	521.99	521.89	522.76	522.20	522.25	522.04	521.50	521.16	521.12
(@)	+1900	+16700	+5300	+4600	-700	+6500	-4200	+400	-1600	-4000	-2500	-300

CAL YR 1994 MAX 185600 MIN 147300 (@) -1900
WTR YR 1995 MAX 211600 MIN 147300 (@) +22100

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

08049950 FISH CREEK OUTFALL AT I-20, ARLINGTON, TX

LOCATION.--Lat 32°40'38", long 97°05'32", Tarrant County, Hydrologic Unit 12030102, storm sewer outfall to Fish Creek 200 ft east of Collins Street overpass on south side of I-20 eastbound lanes and 1 mi west of I-20 and Highway 360 intersection.

DRAINAGE AREA.--0.02 mi².

PERIOD OF RECORD.-- Chemical and biochemical analyses: February 1994 to current year.

REMARKS.--Water-quality samples and associated discharge data were collected for selected storm events from storm sewer systems draining urban basins. This study is in cooperation with the North Central Texas Council of Governments to fulfill requirements (by EPA) for the Texas Department of Transportation in applying for a National Pollution Discharge Elimination System (NPDES) storm-water discharge permit.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	PRECIP-ITATION TOTAL INCHES/ STORM	ELAPSED TIME OF STORM (HOURS)	STORM WATER FLOW (MGD)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	PH WATER WHOLE LAB (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
OCT 07-07	1525	1.1	3.0	0.24	82	179	8.4	7.4	22.0	53	5.4	90000
OCT 24-24	1335	0.50	3.0	0.11	91	139	6.2	7.2	20.0	55	5.4	170000
NOV 02-03	2322	0.83	3.9	0.20	842	113	7.6	6.8	20.0	31	6.3	47000
NOV 09-09	0707	0.44	2.9	0.08	122	175	7.8	7.0	18.5	62	9.2	160000

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM PERCENT	SODIUM AD-SORP-TION RATIO
OCT 07-07	26000	55	25	30	93	105	101	21	0.67	4.6	14	0.3
OCT 24-24	51000	45	12	33	69	104	86	17	0.54	1.7	7	0.1
NOV 02-03	2800	42	9	33	57	36	73	16	0.49	1.4	6	0.1
NOV 09-09	140000	55	3	52	83	138	93	21	0.74	1.6	5	0.1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	ANTIMONY TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
OCT 07-07	3.4	25	3.3	1.40	1.2	0.360	0.270	<10.0	1	<10	<1	3
OCT 24-24	2.5	11	1.7	1.10	1.2	0.410	0.300	<10.0	3	<10	<1	3
NOV 02-03	2.5	9.5	1.4	0.660	0.90	0.440	0.380	<20.0	2	<10	<1	2
NOV 09-09	4.0	9.7	2.9	0.600	1.2	0.680	0.530	<20.0	3	<10	<1	7

08049950 FISH CREEK OUTFALL AT I-20, ARLINGTON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	CYANIDE, TOTAL EPA (MG/L AS CN)	CYANIDE TOTAL (MG/L AS CN)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	SILVER, TOTAL RECOV-ERABLE EPA (UG/L AS AG)	THAL-LIUM, TOTAL (UG/L AS TL)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 07-07	10	<0.010	<0.010	11	<0.10	5	<1	<1	<0.500	<5	50	18
OCT 24-24	8	<0.010	<0.010	21	<0.10	5	<1	<1	<0.500	<5	50	20
NOV 02-03	7	<0.010	<0.010	8	<0.10	3	<1	<1	<0.500	<10	20	13
NOV 09-09	7	<0.010	<0.010	27	<0.10	7	<1	<1	<0.500	<5	60	21

DATE	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)	PHENOLS TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L)	METHANE BROMO CHLORO-WAT UNFLTRD REC (UG/L)	BROMO-FORM TOTAL (UG/L)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L)	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L)	CHLORO-BENZENE TOTAL (UG/L)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L)
OCT 07-07	<1	4	<4.0	<4.0	<4.00	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
OCT 24-24	2	3	<0.2	<0.2	<0.20	<0.2	<0.20	<0.20	<0.20	<0.2	<0.20	<0.2
NOV 02-03	<1	<1	<0.2	<0.2	<0.20	<0.2	<0.20	<0.20	<0.20	<0.2	<0.20	<0.2
NOV 09-09	<1	3	<0.2	<0.2	<0.20	<0.2	<0.20	<0.20	<0.20	<0.2	<0.20	<0.2

DATE	CHLORO-ETHANE TOTAL (UG/L)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L)	CHLORO-FORM TOTAL (UG/L)	METHYL-CHLO-RIDE TOTAL (UG/L)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT.REC (UG/L)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L)	1,1-DI CHLORO-PRO-PENE, WAT, WH TOTAL (UG/L)
OCT 07-07	<4.0	<20	<4.0	<4.0	<4.0	<4.0	<20	<4.0	<4.0	<4.0	<4.0	<4.0
OCT 24-24	<0.2	<1.0	<0.2	<0.2	<0.2	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 02-03	<0.2	<1.0	<0.2	<0.2	<0.2	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<0.3	<1.0	<0.2	<0.2	<0.2	<0.20	<1.0	<0.2	<0.2	<0.2	<0.2	<0.2

08049950 FISH CREEK OUTFALL AT I-20, ARLINGTON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	BENZENE O-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L)	1,2-DI-PHENYL-HYDRA-ZINE WATER TOT.REC (UG/L)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L)	1,2-TRANSDI CHLORO-ETHENE TOTAL (UG/L)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L)	2,2-DI CHLORO-PRO-PANE WAT, WH TOTAL (UG/L)
OCT 07-07	<5.0	<5.0	<5.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0
OCT 24-24	<5.0	<5.0	<5.0	<0.2	<0.2	<0.2	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 02-03	<5.0	<5.0	<5.0	<0.2	<0.2	<0.2	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<5.0	<5.0	<5.0	<0.2	<0.2	<0.2	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2

DATE	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	ETHYL-BENZENE TOTAL (UG/L) (34371)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	METHYL ETHER TERT-BUTYL WAT UNF REC (UG/L) (78032)	NAPHTH-ALENE TOTAL (UG/L) (34696)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	STYRENE TOTAL (UG/L) (77128)
OCT 07-07	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0
OCT 24-24	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20	<0.2	<0.2	<0.2	<5.0	<0.20	<0.2
NOV 02-03	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20	<0.2	<0.2	<0.2	<5.0	<0.20	<0.2
NOV 09-09	<0.2	<0.2	<0.2	<5.0	<0.20	<0.20	<0.2	<0.2	<0.2	<5.0	<0.20	<0.2

DATE	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L)	ETHANE, 1,1,2,2 TETRA-CHLORO-WAT UNF REC (UG/L)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	1,2,3-TRI-CHLORO BENZENE WAT, WH REC (UG/L)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L)	FREON-113 WATER UNFLTRD REC (UG/L)
OCT 07-07	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
OCT 24-24	<0.2	<0.2	<0.2	<0.2	<0.20	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 02-03	<0.2	<0.2	<0.2	<0.2	<0.20	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
NOV 09-09	<0.2	<0.2	<0.2	<0.2	<0.20	<5.0	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

08049950 FISH CREEK OUTFALL AT I-20, ARLINGTON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PSEUDO-CUMENE WATER UNFLTRD REC (UG/L)	MESIT-YLENE WATER UNFLTRD REC (UG/L)	VINYL CHLO-RIDE TOTAL (UG/L)	XYLENE WATER UNFLTRD REC (UG/L)	ACE-NAPHTH-ENE TOTAL (UG/L)	ACE-NAPHTH-YLENE TOTAL (UG/L)	ANTHRA-CENE TOTAL (UG/L)	BENZI-DINE TOTAL (UG/L)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE TOTAL (UG/L)	BENZO-A-PYRENE TOTAL (UG/L)	BENZO B FLUOR-AN-THENE TOTAL (UG/L)	BENZO K FLUOR-AN-THENE TOTAL (UG/L)
OCT 07-07	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0
OCT 24-24	<0.20	<0.20	<0.2	0.20	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0
NOV 02-03	<0.20	<0.20	<0.2	<0.20	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0
NOV 09-09	<0.20	<0.20	<0.2	<0.20	<5.0	<5.0	<5.0	<40.0	<10.0	<10.0	<10.0	<10.0

DATE	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L)	PARA-CHLORO-META CRESOL TOTAL (UG/L)	2-CHLORO-NAPH-THALENE TOTAL (UG/L)	2-CHLORO-PHENOL TOTAL (UG/L)	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L)	CHRY-SENE TOTAL (UG/L)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L)
OCT 07-07	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0
OCT 24-24	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0
NOV 02-03	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0
NOV 09-09	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<5.0	<10.0	<10.0

DATE	3,3'-DI-CHLORO-BENZI-DINE TOTAL (UG/L)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L)	DIETHYL PHTHAL-ATE TOTAL (UG/L)	DI-METHYL PHTHAL-ATE TOTAL (UG/L)	2,4-DI-METHYL-PHENOL TOTAL (UG/L)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L)	4,6-DINITRO -ORTHO-CRESOL TOTAL (UG/L)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L)
OCT 07-07	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0
OCT 24-24	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0
NOV 02-03	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0
NOV 09-09	<20.0	<5.0	<5.0	<5.0	<5.0	<5.0	<30.0	<20.0	<5.0	<5.0	<10.0	<5.0

08049950 FISH CREEK OUTFALL AT I-20, ARLINGTON, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	FLUOR-ANTHENE TOTAL (UG/L)	FLUOR-ENE TOTAL (UG/L)	HEXA-CHLORO-BENZENE TOTAL (UG/L)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L)	HEXA-CHLORO-ETHANE TOTAL (UG/L)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L)	ISO-PHORONE TOTAL (UG/L)	NITRO-BENZENE TOTAL (UG/L)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L)	2-NITRO-PHENOL TOTAL (UG/L)	4-NITRO-PHENOL TOTAL (UG/L)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L)
OCT 07-07	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0
OCT 24-24	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0
NOV 02-03	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0
NOV 09-09	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0

DATE	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L)	PENTA-CHLORO-PHENOL TOTAL (UG/L)	PHENAN-THRENE TOTAL (UG/L)	PHENOL (C6H-5OH) TOTAL (UG/L)	PYRENE TOTAL (UG/L)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	P,P' DDT, TOTAL (UG/L)	ALPHA BHC TOTAL (UG/L)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
OCT 07-07	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030
OCT 24-24	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030
NOV 02-03	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030
NOV 09-09	<5.0	<30.0	<5.0	<5.0	<5.0	<20.0	<0.040	<0.10	<0.03	<0.03	<0.09	<0.030

DATE	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L)	CHLOR-DANE, TOTAL (UG/L)	P,P' DDD, TOTAL (UG/L)	P,P' DDE, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN-I WATER WHOLE REC (UG/L)	ENDO-SULFAN BETA TOTAL (UG/L)	ENDO-SULFAN SULFATE TOTAL (UG/L)	ENDRIN WATER UNFLTRD REC (UG/L)	ENDRIN ALDE-HYDE TOTAL (UG/L)
OCT 07-07	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20
OCT 24-24	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20
NOV 02-03	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20
NOV 09-09	<0.10	<0.10	<0.1	<0.10	<0.04	<0.020	<0.10	<0.04	<0.60	<0.060	<0.20

DATE	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	AROCLOR 1016 PCB TOTAL (UG/L)	AROCLOR 1221 PCB TOTAL (UG/L)	AROCLOR 1232 PCB TOTAL (UG/L)	AROCLOR 1242 PCB TOTAL (UG/L)	AROCLOR 1248 PCB TOTAL (UG/L)	AROCLOR 1254 PCB TOTAL (UG/L)	AROCLOR 1260 PCB TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)
OCT 07-07	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
OCT 24-24	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
NOV 02-03	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05
NOV 09-09	<0.030	<0.80	<2	<0.1	<1.0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05

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 square miles.

PERIOD OF RECORD.--October 1960 to current year.
Water-quality records.--Chemical analyses: October 1969 to September 1985.

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

REMARKS.--The lake is formed by a rolled earthfill dam 5,800 ft long, including a controlled spillway with six 34 by 27 foot tainter gates. The dam was completed in December 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. The capacity curve is based on a survey made in 1963. For statement regarding regulation by Joe Pool Dam see station 08049900. Satellite telemeter at station. Rain gage at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	467.0	--
Top of gates	458.0	25,720
Top of dry weather conservation pool	457.0	22,840
Top of wet weather conservation pool	456.0	20,260
Crest of spillway (sill of tainter gates)	431.0	0

COOPERATION.--The capacity curve was provided by the Dallas Power and Light Co.

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 28,430 acre-ft Mar. 13 at 1100 hours (elevation, 458.82 ft); minimum, 19,810 acre-ft Feb. 11 (elevation, 455.81 ft).

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

453.0	13,600	456.0	20,260	458.0	25,720
454.0	15,670	457.0	22,840	459.0	29,020
455.0	17,890				

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20260	22870	20880	21780	23240	20070	22900	21600	22810	22810	22900	22170
2	20240	21860	20880	21810	23300	20210	21940	21890	22810	22810	23160	22120
3	20190	22450	20900	21860	23240	20260	20980	21990	22810	22810	23190	22070
4	20190	23160	20960	21890	23270	20310	21090	22320	22810	22710	23190	21990
5	20140	23560	20960	21910	23270	20340	23190	25950	23070	23270	23190	21860
6	20070	23360	21090	21940	23270	20620	21860	21700	22760	23270	23100	21810
7	20850	23420	20960	21990	23210	21400	21470	22090	22760	23270	23100	21760
8	20930	23500	21210	22010	22090	21470	23390	23990	22740	23270	23040	21730
9	20900	22740	21700	22120	21370	21450	23420	21210	22690	23210	23010	21700
10	20850	22190	22090	22220	20620	21520	22630	21340	22790	23190	22870	21680
11	20830	22250	22140	22250	19900	21630	21340	21600	22300	23130	22790	21680
12	20800	22270	22170	22220	19880	21810	21210	22690	22010	23070	22790	21680
13	20780	22320	22220	22250	19930	21990	21090	22810	23130	23010	22610	21650
14	20800	24080	22450	22250	19980	22090	22220	22660	23010	22960	22530	21650
15	20800	22790	22630	22250	20000	23040	22430	22500	22840	22900	22500	21680
16	20930	22320	22790	22300	19980	25090	23040	22320	22760	22870	22400	21650
17	21060	21680	22900	22430	20050	23360	23160	22140	22250	22810	22350	21650
18	22660	20360	22950	22870	20050	22580	21400	21810	22500	22760	22300	21650
19	22840	20670	22950	23100	20070	22660	22690	21830	22710	22760	22270	21630
20	23190	20980	23010	23130	20090	22500	22430	21630	22930	22690	22530	21630
21	22320	20650	23040	23160	20120	22580	21190	22450	23100	22610	22690	21630
22	22120	20650	23070	23360	20170	21990	22170	22900	23100	22500	22630	21630
23	22120	20750	23070	23440	20070	21140	23130	21400	23070	22530	22560	21630
24	22450	20800	23100	23500	20090	20670	22870	21580	23040	22450	22500	22170
25	23070	20830	23100	22190	20090	20780	21990	22250	22980	22380	22530	22190
26	23300	21060	23130	22740	20210	20340	21860	22580	22960	22270	22480	22380
27	23360	20880	23300	23040	20070	20600	22320	23190	22930	22220	22430	22380
28	23390	20880	22250	23070	20090	21010	22630	23210	22960	22170	22350	22380
29	23360	20850	21600	23100	---	21520	22980	22170	22900	22040	22320	22380
30	23360	20880	21680	23160	---	21940	22870	22170	22840	21960	22270	22300
31	23330	---	21810	23240	---	22450	---	22450	---	22580	22220	---
MAX	23390	24080	23300	23500	23300	25090	23420	25950	23130	23270	23190	22380
MIN	20070	20360	20880	21780	19880	20070	20980	21210	22010	21960	22220	21630
(+)	457.17	456.24	456.60	457.14	455.93	456.85	457.01	456.85	457.00	456.90	456.76	456.79
(@)	+3020	-2450	+930	+1430	-3150	+2360	+420	-420	+390	-260	-360	+80

CAL YR 1994 MAX 24080 MIN 20070 (@) -1200
WTR YR 1995 MAX 25950 MIN 19880 (@) +1990

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

08050100 MOUNTAIN CREEK AT GRAND PRAIRIE, TX

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

DRAINAGE AREA.--298 mi².

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

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

REMARKS.--Records fair except those for estimated daily discharges and those below 5 ft³/s, which are poor. Since March 1937, flow regulated by Mountain Creek Lake (station 08050050), 1.5 mi upstream. Several observations of water temperature were made during the year. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	156	3.0	4.6	2.3	1.4	2.0	724	14	3.6	411	3.3
2	3.2	616	2.3	3.8	2.1	1.8	566	5.2	4.1	3.2	5.7	3.3
3	3.1	14	2.3	3.3	2.3	1.9	793	308	3.6	3.4	3.3	3.0
4	3.4	31	2.2	3.1	2.0	1.4	505	3.3	3.1	5.3	3.0	3.0
5	3.2	1610	2.0	2.5	2.0	.99	157	392	3.1	6.7	3.0	3.0
6	2.8	298	1.6	2.5	1.5	1.1	1410	5760	3.9	27	3.1	3.0
7	16	8.4	1.3	2.4	1.3	14	662	e30	3.1	4.7	2.3	2.6
8	7.8	6.5	2.1	2.1	471	2.2	111	4710	2.9	3.8	2.4	2.9
9	4.5	727	11	2.1	395	1.4	1010	3020	2.9	3.7	2.3	3.1
10	4.6	500	15	2.1	245	1.0	1900	e27	152	3.6	2.3	2.9
11	4.9	7.3	3.8	2.0	411	1.1	2260	16	1450	3.5	2.4	3.2
12	4.6	5.6	2.9	1.9	1.9	1.2	1200	424	349	3.5	2.7	3.3
13	3.8	4.5	2.3	2.5	1.2	5370	1180	1520	453	3.7	2.6	159
14	3.8	52	5.2	1.8	1.4	2000	639	2210	1060	4.0	2.4	342
15	4.4	2400	4.6	1.5	1.3	28	826	2210	1060	3.9	2.5	2.7
16	6.7	803	8.3	1.5	1.2	19	607	2190	880	4.2	2.0	2.6
17	8.0	376	3.7	2.6	1.1	1850	85	2130	674	4.4	1.9	2.2
18	47	715	3.0	12	.94	1960	941	2060	4.2	4.0	2.0	2.7
19	9.6	12	2.6	6.0	.85	1680	21	1690	2.9	4.1	2.0	470
20	36	213	2.5	2.9	.90	1600	905	694	2.9	4.0	2.5	19
21	2050	453	2.1	2.4	.84	1590	867	5.4	2.7	3.3	3.6	2.7
22	382	6.4	1.9	5.9	.71	1810	2.8	134	2.6	17	3.1	429
23	6.8	5.2	1.7	4.2	.95	1960	2.6	1120	2.7	4.2	2.7	58
24	5.9	5.3	1.5	2.7	1.0	1620	523	512	3.0	3.5	2.5	2.2
25	730	5.0	1.9	549	.85	1220	810	5.8	3.2	2.9	2.7	1.9
26	41	4.0	2.1	265	1.0	860	337	3.6	3.5	2.6	2.7	2.0
27	8.9	3.6	2.2	10	1.2	5.6	6.1	20	3.6	2.1	3.0	1.8
28	6.4	3.2	540	5.5	1.1	3.6	4.6	5.5	4.2	1.8	3.1	1.6
29	5.8	3.0	453	3.7	---	3.9	4.3	543	3.7	1.7	3.4	1.5
30	5.8	3.9	4.2	2.7	---	2.6	266	20	3.6	2.0	3.8	1.5
31	4.5	---	4.0	2.5	---	2.4	---	6.1	---	3.4	3.7	---
TOTAL	3427.5	9047.9	1096.3	916.8	1553.94	23614.59	18603.4	32498.9	6161.5	148.8	495.7	1539.0
MEAN	111	302	35.4	29.6	55.5	762	620	1048	205	4.80	16.0	51.3
MAX	2050	2400	540	549	471	5370	2260	5760	1450	27	411	470
MIN	2.8	3.0	1.3	1.5	.71	.99	2.0	3.3	2.6	1.7	1.9	1.5
AC-FT	6800	17950	2170	1820	3080	46840	36900	64460	12220	295	983	3050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995#, BY WATER YEAR (WY)

MEAN	76.3	69.2	82.6	99.2	139	195	218	323	149	35.0	9.90	21.2
MAX	785	1286	1102	1483	714	1104	1170	1941	1028	511	88.6	188
(WY)	1974	1992	1972	1992	1975	1977	1966	1969	1990	1989	1962	1973
MIN	.22	.30	.26	.11	.17	.30	.91	.68	.50	.21	.16	.36
(WY)	1989	1964	1976	1976	1964	1976	1987	1984	1971	1972	1972	1972

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995#	
ANNUAL TOTAL	41658.18		99104.33			
ANNUAL MEAN	114		272		118	
HIGHEST ANNUAL MEAN					506	1992
LOWEST ANNUAL MEAN					4.39	1988
HIGHEST DAILY MEAN	2620	May 12	5760	May 6	24700	May 7 1969
LOWEST DAILY MEAN	.03	Apr 19	.71	Feb 22	.00	Jan 25 1964
ANNUAL SEVEN-DAY MINIMUM	.04	Apr 18	.87	Feb 19	.02	Dec 23 1983
INSTANTANEOUS PEAK FLOW			11300	Mar 13	38100	Apr 19 1976
INSTANTANEOUS PEAK STAGE			22.72	Mar 13	25.12	Dec 20 1991
ANNUAL RUNOFF (AC-FT)	82630		196600		85480	
10 PERCENT EXCEEDS	426		890		47	
50 PERCENT EXCEEDS	3.0		3.8		1.1	
90 PERCENT EXCEEDS	.66		1.8		.30	

e Estimated
Period of regulated streamflow.

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 the bridge on Farm Road 51, 31 ft downstream from the centerline of the 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 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	14	91	55	62	21	45	34	38	19	23	1.5
2	1.7	11	83	49	55	20	41	42	33	9.5	54	1.5
3	2.7	10	84	47	49	22	43	95	28	7.2	87	1.5
4	2.3	9.5	83	51	44	22	578	101	26	6.4	80	1.4
5	1.9	22	77	49	39	23	248	84	23	368	64	1.3
6	1.9	28	70	48	37	24	176	854	22	52	21	1.3
7	76	16	64	46	35	29	128	748	22	15	11	1.2
8	83	12	205	43	33	34	100	4740	20	8.4	6.9	1.2
9	9.2	63	1050	40	31	30	84	829	17	5.4	4.5	1.3
10	4.3	76	714	40	32	24	314	585	23	4.3	3.6	1.2
11	3.2	41	350	39	39	21	253	370	53	3.8	3.1	1.3
12	2.7	28	251	39	42	21	112	251	37	3.4	2.8	1.4
13	2.5	23	192	38	37	1660	79	213	26	3.3	2.5	1.4
14	2.4	2300	195	36	35	925	66	182	21	3.1	2.4	1.4
15	2.6	1180	185	33	38	543	58	158	17	3.3	2.2	1.4
16	2.7	592	247	32	38	334	51	128	14	2.9	2.1	1.4
17	3.0	303	177	35	36	233	63	101	14	2.7	2.0	1.8
18	4.0	226	140	36	32	181	122	80	12	2.7	1.9	1.5
19	8.3	186	121	47	29	154	461	68	11	4.2	2.0	2.4
20	33	2530	103	47	27	133	671	57	11	3.4	2.0	18
21	499	892	90	41	25	106	189	45	10	3.6	1.9	4.4
22	166	525	81	39	23	91	119	39	9.9	3.1	1.9	2.5
23	62	346	74	43	23	78	98	36	8.9	2.8	1.7	2.0
24	231	251	71	42	21	64	73	39	7.2	2.6	1.7	1.6
25	328	200	67	39	21	202	62	67	6.5	2.5	1.7	2.2
26	183	179	63	42	21	222	53	169	5.9	2.3	1.5	1.8
27	80	164	59	95	22	100	47	428	5.6	2.2	1.5	1.9
28	50	136	58	83	21	72	41	109	5.6	2.0	1.5	1.9
29	36	117	64	72	---	62	43	62	9.6	1.9	1.6	1.6
30	26	102	66	80	---	54	40	47	33	1.9	1.8	1.4
31	19	---	60	70	---	49	---	41	---	5.0	1.6	---
TOTAL	1929.1	10582.5	5235	1496	947	5554	4458	10802	570.2	557.9	396.4	66.7
MEAN	62.2	353	169	48.3	33.8	179	149	348	19.0	18.0	12.8	2.22
MAX	499	2530	1050	95	62	1660	671	4740	53	368	87	18
MIN	1.7	9.5	58	32	21	20	40	34	5.6	1.9	1.5	1.2
AC-FT	3830	20990	10380	2970	1880	11020	8840	21430	1130	1110	786	132

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1995, BY WATER YEAR (WY)

MEAN	82.5	63.8	179	90.9	143	187	181	402	197	22.0	4.41	37.3
MAX	310	353	743	316	348	565	1063	1359	659	91.1	12.8	105
(WY)	1994	1995	1992	1992	1987	1990	1990	1990	1989	1987	1995	1992
MIN	.72	2.56	2.61	5.72	18.0	6.54	6.25	5.79	5.36	1.02	.025	1.40
(WY)	1989	1990	1991	1986	1991	1986	1991	1988	1988	1988	1988	1990

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1986 - 1995	
ANNUAL TOTAL	46201.3		42594.8			
ANNUAL MEAN	127		117		133	
HIGHEST ANNUAL MEAN					277	1990
LOWEST ANNUAL MEAN					35.2	1991
HIGHEST DAILY MEAN	2530	Nov 20	4740	May 8	12500	May 2 1990
LOWEST DAILY MEAN	1.4	Aug 24	1.2	Sep 7	.00	Aug 2 1988
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 23	1.3	Sep 5	.00	Aug 2 1988
INSTANTANEOUS PEAK FLOW			12900	May 8	24000	May 16 1989
INSTANTANEOUS PEAK STAGE			19.50	May 8	25.33	May 16 1989
ANNUAL RUNOFF (AC-FT)	91640		84490		96030	
10 PERCENT EXCEEDS	276		232		254	
50 PERCENT EXCEEDS	35		37		19	
90 PERCENT EXCEEDS	2.1		1.9		1.5	

08050410 ELM FORK TRINITY RIVER NEAR GAINESVILLE, TX

LOCATION.--Lat 33°34'56", long 97°07'49", Cooke County, Hydrologic Unit 12030103, on Farm Road 2071 bridge, over center of channel at downstream side of bridge, 1.0 mi downstream from Atchison, Topeka, and Santa Fe Railroad Co. bridge, and 3.0 mi south of Cooke County Courthouse in Gainesville.

DRAINAGE AREA.--1.79 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
05...	1100	5.5	760	8.0	22.5	17	11	8.0	94	0.8	130	0
NOV												
23...	1300	386	417	8.0	12.0	40	36	10.0	93	1.7	170	10
JAN												
10...	0845	44	750	7.9	8.5	13	1.4	10.8	95	0.50	260	4
MAR												
01...	0935	33	737	7.8	9.5	9	3.0	8.9	79	2.3	210	0
APR												
18...	0945	137	649	8.0	18.0	20	14	8.2	89	2.4	250	26
JUN												
14...	1145	26	693	8.0	23.5	37	6.0	9.0	108	2.1	220	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
05...	47	4.0	120	5	5.2	270	48	43	0.6	11	468	28
NOV												
23...	61	3.2	19	0.6	3.6	160	18	21	0.2	13	237	60
JAN												
10...	95	5.9	53	1	2.6	260	49	54	0.3	4.6	432	7
MAR												
01...	75	6.0	66	2	2.7	230	51	57	0.3	2.7	407	13
APR												
18...	89	5.6	42	1	2.8	220	39	45	0.3	5.9	367	26
JUN												
14...	80	5.6	66	2	3.5	230	47	50	0.4	11	413	12

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
05...	6	22	5.16	5.16	0.0	5.20	5.2	0.0	0.57	0.6	1.1
NOV											
23...	30	30	0.840	0.840	0.0	0.860	0.86	0.0	0.77	0.8	0.1
JAN											
10...	<1	--	2.49	2.49	0.0	2.50	2.5	<0.015	--	0.2	0.23
MAR											
01...	9	4	2.28	2.28	0.0	2.30	2.3	<0.015	--	0.3	0.1
APR											
18...	3	23	0.970	0.970	0.0	0.990	0.99	0.1	0.23	0.3	0.0
JUN											
14...	5	7	2.29	2.29	0.0	2.30	2.3	0.0	0.38	0.4	0.19

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
05...	1.1	3.4	5.6	--	--	--	--	--	--	--	--
NOV											
23...	0.1	0.25	7.2	--	--	--	--	--	--	--	--
JAN											
10...	0.24	0.74	7.3	<1	88	<0.5	<1	<5	<3	<10	110
MAR											
01...	0.1	0.21	13	--	--	--	--	--	--	--	--
APR											
18...	0.1	0.18	15	1	86	<0.5	2	<5	<3	<10	13
JUN											
14...	0.19	0.58	14	1	84	<0.5	2	<5	<3	<10	13

08050410 ELM FORK TRINITY RIVER NEAR GAINESVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
23...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	<10	9	16	<0.1	<10	10	<1	<1	450	<6	4
MAR											
01...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	<10	10	1	<0.1	10	10	<1	<1	440	<6	5
JUN											
14...	20	5	7	<0.1	20	<10	<1	2	420	<6	<3

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 mi².

PERIOD OF RECORD.--August 1985 to current year.
Water-quality records.--Chemical and biochemical analyses: April 1993 to September 1993

GAGE.--Water-stage recorder. Datum of gage is 640.00 ft above sea level.

REMARKS.--No estimated discharges. Records fair. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 14	2000	1,070	13.41	May 8	0915	2,150	13.31

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	14	3.5	7.9	37	4.9	17	7.3	6.8	23	.00	.00
2	.07	7.1	4.7	6.6	31	4.7	15	7.6	3.8	6.5	.00	.00
3	.03	4.8	6.1	7.0	25	7.5	13	18	6.9	2.9	.00	.00
4	.60	3.8	6.5	10	20	10	177	31	2.1	1.4	.00	.00
5	2.3	24	5.2	9.7	18	12	79	27	.33	93	.00	.00
6	.80	29	4.5	9.3	17	11	55	127	.07	39	.00	.00
7	9.6	12	4.1	8.9	16	60	31	378	.09	15	.00	.00
8	88	4.0	4.1	7.5	15	39	21	1030	.05	4.1	.00	.00
9	12	85	109	7.2	14	23	15	293	.00	.74	.00	.00
10	1.5	112	132	7.4	14	18	99	65	48	.00	.00	.00
11	.90	54	46	8.4	19	15	299	46	264	.00	.00	.00
12	.74	32	25	9.5	27	14	60	40	63	.00	.00	.00
13	.59	17	20	10	20	243	35	37	28	.00	.00	.00
14	.62	400	21	9.4	19	214	26	31	10	.00	.00	.00
15	.58	276	29	8.9	20	105	21	20	3.5	.00	.00	.00
16	.62	91	88	9.5	20	64	17	17	.60	.00	.00	.00
17	3.6	43	50	14	18	43	16	16	.15	.00	.00	.00
18	4.5	26	25	23	16	34	46	13	.01	5.3	.00	.00
19	36	20	19	38	15	27	23	8.5	.00	44	.00	.00
20	14	129	15	26	17	22	198	6.9	.00	6.0	.00	.00
21	514	127	13	20	13	16	65	5.5	.00	27	.00	.00
22	372	39	10	19	11	14	27	3.5	.00	30	.00	.00
23	96	20	9.3	21	10	10	20	2.7	.00	1.8	.00	.00
24	264	15	8.6	21	8.4	5.9	17	5.8	.00	.00	.00	.00
25	761	13	8.0	19	7.0	43	14	157	.00	.00	.00	.00
26	176	11	7.6	19	6.9	209	11	186	.00	.00	.00	.00
27	110	11	7.1	35	7.4	68	9.7	47	.00	.00	.00	.00
28	83	7.4	7.2	29	6.6	36	8.2	29	.00	.00	.00	.00
29	59	4.9	9.8	24	---	27	8.7	11	86	.00	.00	.00
30	40	3.6	10	55	---	23	7.7	5.1	394	.00	.00	.00
31	23	---	9.3	47	---	20	---	5.7	---	.00	.00	---
TOTAL	2675.19	1635.6	717.6	547.2	468.3	1443.0	1451.3	2677.6	917.40	299.74	0.00	0.00
MEAN	86.3	54.5	23.1	17.7	16.7	46.5	48.4	86.4	30.6	9.67	.000	.000
MAX	761	400	132	55	37	243	299	1030	394	93	.00	.00
MIN	.03	3.6	3.5	6.6	6.6	4.7	7.7	2.7	.00	.00	.00	.00
AC-FT	5310	3240	1420	1090	929	2860	2880	5310	1820	595	.00	.00
CFSM	2.22	1.41	.60	.45	.43	1.20	1.25	2.23	.79	.25	.00	.00
IN.	2.56	1.57	.69	.52	.45	1.38	1.39	2.57	.88	.29	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1995, BY WATER YEAR (WY)

MEAN	33.4	16.1	58.6	22.0	39.3	39.4	55.7	83.2	43.3	35.2	.96	8.69
MAX	135	54.5	326	73.1	95.3	89.6	259	168	193	293	4.40	32.0
(WY)	1992	1995	1992	1992	1993	1990	1990	1989	1989	1994	1990	1992
MIN	.000	.000	.097	.60	2.00	2.72	1.82	.69	1.10	.000	.000	.000
(WY)	1988	1990	1990	1986	1991	1986	1987	1988	1988	1988	1986	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1985 - 1995	
ANNUAL TOTAL	19983.36		12832.93			
ANNUAL MEAN	54.7		35.2		36.4	
HIGHEST ANNUAL MEAN					72.7	1992
LOWEST ANNUAL MEAN					10.1	1991
HIGHEST DAILY MEAN	5410	Jul 11	1030	May 8	5410	Jul 11 1994
LOWEST DAILY MEAN	.02	Aug 31	.00	Jun 9	.00	Oct 1 1985
ANNUAL SEVEN-DAY MINIMUM	.09	Aug 25	.00	Jun 19	.00	Oct 1 1985
INSTANTANEOUS PEAK FLOW			2150	May 8	13300	Jul 10 1994
INSTANTANEOUS PEAK STAGE			13.41	Nov 14	14.94	Jul 10 1994
ANNUAL RUNOFF (AC-FT)	39640		25450		26340	
ANNUAL RUNOFF (CFSM)	1.41		.91		.94	
ANNUAL RUNOFF (INCHES)	19.16		12.30		12.73	
10 PERCENT EXCEEDS	78		84		35	
50 PERCENT EXCEEDS	6.4		9.7		2.6	
90 PERCENT EXCEEDS	.68		.00		.00	

08050815 JORDAN CREEK TRIBUTARY NEAR COLLINSVILLE, TX.

LOCATION.--Lat 33°32'15", long 96°55'22", Grayson County, Hydrologic Unit 12030103, at culvert on gravel road, 0.4 mi upstream from mouth of Jordan Creek, and 1.5 mi southwest of Collinsville.

DRAINAGE AREA.--1.65 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
05...	1245	0.10	860	7.8	20.0	70	4.1	4.2	47	1.9	94	0
NOV												
23...	0800	1.1	564	7.6	11.0	30	6.2	8.9	81	1.7	150	0
JAN												
10...	1215	0.64	779	8.3	11.0	30	3.8	15.9	148	0.5	160	0
MAR												
01...	1140	0.42	848	8.0	7.0	20	2.7	12.1	101	0.7	160	0
APR												
18...	1630	1.5	522	7.6	20.0	45	10	7.6	86	4.0	140	0
JUN												
12...	1500	0.56	550	7.6	20.5	70	3.7	6.2	70	1.9	140	14

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
05...	29	5.3	160	7	8.7	300	48	71	0.3	8.3	512	10
NOV												
23...	45	8.0	62	2	6.6	200	41	36	0.3	12	336	7
JAN												
10...	50	9.3	98	3	5.8	230	64	56	0.3	4.1	423	8
MAR												
01...	48	9.5	110	4	5.9	270	62	63	0.4	7.7	473	6
APR												
18...	44	7.7	54	2	5.7	160	40	32	0.3	9.3	298	22
JUN												
12...	44	7.0	58	2	8.9	120	44	62	0.3	10	317	7

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
05...	7	3	--	--	0.0	--	<0.050	0.0	0.77	0.8	0.95
NOV											
23...	7	0	1.09	1.09	0.11	1.20	1.2	0.28	1.0	1.3	0.35
JAN											
10...	5	3	--	--	<0.010	--	<0.050	<0.015	--	0.3	0.0
MAR											
01...	5	1	0.780	0.780	0.0	0.810	0.81	0.0	0.35	0.4	0.22
APR											
18...	4	18	0.850	0.850	0.13	0.980	0.98	0.35	0.65	1.0	0.38
JUN											
12...	4	3	1.09	1.09	0.11	1.20	1.2	0.17	0.83	1.0	0.52

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
05...	0.93	2.9	15	--	--	--	--	--	--	--	--
NOV											
23...	0.34	1.0	6.5	--	--	--	--	--	--	--	--
JAN											
10...	<0.010	--	6.9	<1	49	<0.5	<1	<5	<3	<10	50
MAR											
01...	0.19	0.58	30	--	--	--	--	--	--	--	--
APR											
18...	0.40	1.2	13	2	54	<0.5	<1	<5	<3	<10	180
JUN											
12...	0.50	1.5	13	5	60	<0.5	1	<5	<3	<10	220

08050815 JORDAN CREEK TRIBUTARY NEAR COLLINSVILLE, TX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
05...	--	--	--	--	--	--	--	--	--	--	--
NOV											
23...	--	--	--	--	--	--	--	--	--	--	--
JAN											
10...	<10	<4	130	<0.1	<10	<10	<1	<1	330	<6	14
MAR											
01...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	<10	6	130	<0.1	<10	<10	<1	<1	270	<6	8
JUN											
12...	20	<4	54	<0.1	<10	<10	<1	3	260	<6	4

08050840 RANGE CREEK NEAR COLLINSVILLE, TX

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

DRAINAGE AREA.--29.2 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 621.08 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Rain gage at station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	1.5	1.4	2.7	2.8	.33	1.1	30	.05	.00	.00	.00
2	.02	1.4	1.3	2.2	2.3	.32	.86	4.7	.03	.00	.00	.00
3	.01	1.1	1.6	2.2	1.7	.32	.70	54	.02	.00	.00	.00
4	.01	1.4	2.3	5.4	1.2	.42	308	102	.01	.00	.00	.00
5	.01	138	2.1	3.3	.95	.65	23	15	.00	.00	.00	.00
6	.00	19	2.5	2.9	.92	.64	14	303	.00	.00	.00	.00
7	.03	6.1	2.3	3.8	.82	25	4.8	293	.00	.00	.00	.00
8	.00	3.7	2.5	2.3	.78	6.9	2.7	1500	.00	.00	.00	.00
9	.00	77	289	1.8	.69	2.6	1.7	39	.00	.00	.00	.00
10	.00	46	171	1.6	.62	1.5	131	4.8	.00	.00	.00	.00
11	.00	9.2	17	1.5	9.1	.94	73	2.1	121	.00	.00	.00
12	.00	5.2	8.0	1.5	7.0	1.3	4.7	1.2	8.9	.00	.00	.00
13	.00	3.6	5.4	1.3	2.7	1350	1.9	.97	1.2	.00	.00	.00
14	.00	1720	6.2	1.3	1.9	116	.97	.86	.13	.00	.00	.00
15	.00	1020	7.2	1.2	2.0	24	.63	.48	.04	.00	.00	.00
16	.00	40	74	.88	2.1	14	.49	.32	.02	.00	.00	.00
17	.00	14	20	5.8	1.5	5.9	1.0	.27	.00	.00	.00	.00
18	.01	8.8	8.2	89	1.0	3.5	18	.20	.00	.00	.00	.00
19	.01	6.4	5.1	95	.81	2.5	17	.15	.00	.00	.00	.74
20	.10	356	3.8	10	.72	1.7	31	.12	.00	.21	.00	4.0
21	270	57	3.2	5.2	.61	1.1	4.1	.07	.00	.18	.00	.45
22	31	12	2.8	12	.54	.90	1.4	.04	.00	.01	.00	.04
23	5.4	6.3	2.2	16	.47	.75	.67	.03	.00	.00	.00	.01
24	185	4.5	1.9	5.7	.44	.61	.45	.04	.00	.00	.00	.00
25	423	3.9	1.6	3.7	.36	32	.36	123	.00	.00	.00	.00
26	49	3.7	1.5	5.4	.33	422	.23	197	.00	.00	.00	.00
27	8.3	3.7	1.4	17	.32	17	.13	6.3	.00	.00	.00	.00
28	4.1	3.1	1.6	7.0	.29	4.6	.10	1.8	.00	.00	.00	.00
29	2.3	2.2	3.4	4.4	---	2.9	.07	.58	.00	.00	.00	.00
30	2.0	1.7	2.9	6.6	---	2.2	1.8	.17	.00	.00	.00	.00
31	1.9	---	2.2	4.0	---	1.5	---	.07	---	.00	.00	---
TOTAL	982.22	3576.5	655.6	322.68	44.97	2044.08	645.86	2681.27	131.40	0.40	0.00	5.24
MEAN	31.7	119	21.1	10.4	1.61	65.9	21.5	86.5	4.38	.013	.000	.17
MAX	423	1720	289	95	9.1	1350	308	1500	121	.21	.00	4.0
MIN	.00	1.1	1.3	.88	.29	.32	.07	.03	.00	.00	.00	.00
AC-FT	1950	7090	1300	640	89	4050	1280	5320	261	.8	.00	10
CFSM	1.09	4.08	.72	.36	.06	2.26	.74	2.96	.15	.00	.00	.01
IN.	1.25	4.56	.84	.41	.06	2.60	.82	3.42	.17	.00	.00	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1995, BY WATER YEAR (WY)

MEAN	46.1	40.8	34.7	5.89	18.3	29.9	26.6	52.3	11.7	12.2	1.57	4.00
MAX	107	119	57.7	10.4	33.7	65.9	52.6	86.5	28.3	36.7	4.72	9.54
(WY)	1994	1995	1993	1995	1993	1995	1993	1995	1993	1994	1994	1994
MIN	.000	1.51	21.1	1.77	1.61	4.01	5.58	29.3	2.49	.000	.000	.17
(WY)	1993	1993	1995	1994	1995	1994	1994	1994	1994	1993	1993	1995

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1993 - 1995	
ANNUAL TOTAL	8663.94		11090.22			
ANNUAL MEAN	23.7		30.4		23.7	
HIGHEST ANNUAL MEAN					30.4	1995
LOWEST ANNUAL MEAN					20.1	1993
HIGHEST DAILY MEAN	1720	Nov 14	1720	Nov 14	2580	Oct 19 1993
LOWEST DAILY MEAN	.00	Apr 19	.00	Oct 6	.00	Oct 1 1992
ANNUAL SEVEN-DAY MINIMUM	.00	Apr 19	.00	Oct 8	.00	Oct 1 1992
INSTANTANEOUS PEAK FLOW			4440	Nov 14	7640	Oct 19 1993
INSTANTANEOUS PEAK STAGE			21.58	Nov 14	23.32	Oct 19 1993
ANNUAL RUNOFF (AC-FT)	17180		22000		17200	
ANNUAL RUNOFF (CFSM)	.81		1.04		.81	
ANNUAL RUNOFF (INCHES)	11.04		14.13		11.05	
10 PERCENT EXCEEDS	21		27		16	
50 PERCENT EXCEEDS	.54		.82		.40	
90 PERCENT EXCEEDS	.02		.00		.00	

08050840 RANGE CREEK NEAR COLLINSVILLE, TX--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
NOV 21...	1600	27	237	7.8	12.5	110	120	9.7	93	2.0	93	4
JAN 09...	1615	1.8	665	8.1	7.5	30	7.3	13.0	111	1.8	260	63
FEB 28...	1400	0.31	708	7.9	10.0	23	37	9.2	83	0.7	270	54
APR 17...	1600	0.54	440	7.5	20.0	55	25	6.2	71	2.3	190	25
JUN 12...	1315	7.7	292	7.6	21.0	37	55	7.4	84	2.7	110	33

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
NOV 21...	33	2.5	10	0.5	3.6	89	21	4.1	0.2	14	143	116
JAN 09...	96	5.7	35	0.9	3.2	200	120	15	0.2	5.2	402	7
FEB 28...	98	6.3	40	1	3.8	220	120	17	0.3	1	417	37
APR 17...	67	4.5	20	0.6	3.4	160	53	6.9	0.2	8.4	262	28
JUN 12...	39	2.8	15	0.6	4.9	76	30	10	0.2	14	183	76

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
NOV 21...	34	82	0.180	0.180	0.0	0.190	0.19	0.11	2.6	2.7	0.26
JAN 09...	<1	--	--	--	<0.010	--	<0.050	<0.015	--	0.4	0.0
FEB 28...	9	28	--	--	<0.010	--	<0.050	<0.015	--	0.4	0.0
APR 17...	3	25	0.190	0.190	0.0	0.210	0.21	0.0	0.67	0.7	0.0
JUN 12...	16	60	4.40	4.40	0.1	4.50	4.5	0.1	0.81	0.9	0.22

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV 21...	0.21	0.64	12	--	--	--	--	--	--	--	--
JAN 09...	0.0	0.09	9.5	1	80	<0.5	<1	<5	5	<10	70
FEB 28...	0.0	0.06	9.4	--	--	--	--	--	--	--	--
APR 17...	0.0	0.15	15	2	63	<0.5	<1	<5	<3	<10	73
JUN 12...	0.23	0.71	18	3	42	<0.5	1	<5	<3	<10	120

08050840 RANGE CREEK NEAR COLLINSVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
21...	--	--	--	--	--	--	--	--	--	--	--
JAN											
09...	10	7	14	<0.1	<10	<10	<1	1	640	<6	<3
FEB											
28...	--	--	--	--	--	--	--	--	--	--	--
APR											
17...	<10	5	20	<0.1	<10	<10	<1	2	460	<6	5
JUN											
12...	40	<4	3	<0.1	<10	<10	<1	2	250	<6	<3

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX

LOCATION.--Lat 32°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 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--July 1987 to current year.

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

REMARKS.--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. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	665.0	-
Spillway crest (uncontrolled)	645.5	1,262,000
Top of flood-control pool	640.5	1,065,000
Top of conservation pool	632.5	799,600
Invert, lowest gated outlet	551.0	990

COOPERATION.--Records of elevations and contents provided by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,219,000 acre-ft May 3, 1990 (elevation, 644.48 ft); minimum since initial filling began, 990 acre-ft July 1, 1987 (elevation, 551.00 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 890,000 acre-ft May 11 (elevation, 635.44 ft); minimum, 644,800 acre-ft Oct. 6 (elevation, 626.78 ft).

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

620.0	491,200	628.0	675,800	633.0	814,500
622.0	533,300	630.0	729,000	634.0	844,800
624.0	578,100	631.0	756,700	635.0	876.000
626.0	625,500	632.0	785,200	636.0	908,100

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	646300	675800	798300	803600	807700	803900	839000	808600	861800	800300	797400	779700
2	645800	676400	798900	803600	808600	803900	833500	806200	857800	799500	796500	778800
3	647100	676100	799500	802700	808300	801500	832300	808600	854300	798000	796500	778300
4	647100	677600	799500	800900	808300	800000	836500	808900	851900	799700	796800	777100
5	646300	678700	799700	799500	808300	800000	838100	809800	847200	801800	796500	776300
6	645300	678900	799700	800000	808300	803300	839300	822300	841700	801500	796200	775100
7	650300	678900	800000	799500	808300	801500	839900	835000	836200	801500	795400	774800
8	650300	678900	801500	799700	807100	800300	839900	881100	830800	801200	794800	773700
9	650100	681300	811600	799700	807400	800600	839300	887500	826200	800300	794200	772500
10	649600	682300	817500	800000	808600	800300	852800	888700	825600	799700	793300	772300
11	649300	682300	818100	800000	810100	800000	860900	889700	825600	799500	792700	771700
12	648600	682600	818400	800900	810100	801200	862100	889100	821700	798900	792100	774500
13	648300	682300	819600	801200	809500	838700	860300	888700	816900	798300	791000	774800
14	648300	736100	820200	800900	809200	852200	856500	887800	812200	798000	790400	774500
15	648300	765200	818400	800600	810100	855600	854000	886200	809800	798000	789800	774000
16	648300	769100	817200	800600	810100	857100	852200	884600	808900	797700	788900	773700
17	648300	771100	814800	801800	809800	857800	850000	883600	808300	797400	788400	778000
18	649300	771400	812200	803900	808900	857800	848500	882000	807400	798300	787500	778300
19	649300	772500	809500	804200	808600	856800	845700	880100	806200	798000	787500	780000
20	651600	789800	808000	804500	807700	857800	847900	878200	805600	797700	786600	779700
21	658200	795900	806200	804700	807100	857100	845700	876000	805000	797400	786300	778800
22	660700	796800	805300	805300	805900	856500	839000	872800	804500	796800	785200	777400
23	661000	797100	805000	804500	806200	853400	834400	868400	803900	796500	784300	776600
24	666800	797700	804700	805000	804700	850600	829200	866800	803300	796500	783700	776300
25	674500	798000	804500	805300	804200	855600	824100	868400	801800	795400	783200	776600
26	676900	798000	804200	806200	803900	861800	820200	867100	801200	794500	782900	776300
27	677400	798900	803900	806800	803900	862100	815400	870000	800300	793900	782300	775700
28	676900	799200	804200	806800	803900	859600	813300	869300	799500	793300	781700	775400
29	676900	798900	804200	807700	---	854700	811900	867800	799500	793000	781700	774800
30	676900	798600	803900	807400	---	849700	810400	865300	800600	792100	780900	775100
31	676900	---	804500	808300	---	844500	---	863400	---	797100	780300	---
MAX	677400	799200	820200	808300	810100	862100	862100	889700	861800	801800	797400	780000
MIN	645300	675800	798300	799500	803900	800000	810400	806200	799500	792100	780300	771700
(+)	628.04	632.46	632.66	632.79	632.64	633.99	632.86	634.60	632.53	632.41	631.83	631.65
(@)	+30600	+121700	+5900	+3800	-4400	+40600	-34100	+53000	-62800	-3500	-16800	-5200

CAL YR 1994 MAX 820200 MIN 527200 (@) +265100
WTR YR 1995 MAX 889700 MIN 645300 (@) +128800

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

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: February 1989 to current year.

REVISED RECORDS.--TX-93-1 Phytoplankton.

332138097024101 - RAY ROBERTS LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
23...	1218	806000	1.00	276	7.9	9.5	1.10	10.1	90	K1
23...	1222	--	10.0	275	7.9	9.0	--	10.1	89	--
23...	1225	--	20.0	276	7.8	9.0	--	9.9	88	--
23...	1228	--	30.0	276	7.8	9.0	--	9.9	88	--
23...	1231	--	40.0	277	7.8	9.0	--	9.8	87	--
23...	1234	--	50.0	278	7.8	8.5	--	9.7	85	--
23...	1237	--	60.0	278	7.8	8.5	--	9.5	83	--
23...	1241	--	70.0	279	7.8	8.5	--	9.4	82	--
23...	1244	--	79.0	279	7.8	8.5	--	9.3	81	--
MAY										
24...	1353	867000	1.00	290	8.0	22.5	1.37	7.5	89	<1
24...	1357	--	10.0	290	7.9	21.5	--	6.9	80	--
24...	1401	--	20.0	289	7.8	21.0	--	6.5	75	--
24...	1406	--	30.0	290	7.7	21.0	--	6.3	72	--
24...	1410	--	40.0	289	7.7	21.0	--	6.2	71	--
24...	1414	--	50.0	288	7.4	19.5	--	4.3	48	--
24...	1418	--	60.0	290	7.3	19.0	--	3.5	39	--
24...	1423	--	70.0	290	7.3	19.0	--	3.3	36	--
24...	1427	--	78.0	294	7.4	19.0	--	3.5	39	--
AUG										
10...	1322	794000	1.00	285	7.9	29.0	1.62	5.8	77	K1
10...	1327	--	10.0	284	7.6	28.0	--	4.6	60	--
10...	1332	--	20.0	288	7.2	28.0	--	3.6	47	--
10...	1337	--	30.0	289	7.1	28.0	--	2.6	34	--
10...	1342	--	40.0	290	7.0	27.0	--	1.7	22	--
10...	1347	--	50.0	310	6.9	23.0	--	0.2	2	--
10...	1352	--	60.0	317	7.0	22.0	--	0.2	2	--
10...	1357	--	70.0	319	7.1	21.5	--	0.2	2	--
10...	1402	--	76.0	325	7.2	21.5	--	0.3	3	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)
FEB									
23...	K1	110	5	37	3.6	14	0.6	4.3	100
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	100	0	36	3.6	15	0.6	4.3	100
MAY									
24...	K11	110	5	37	3.6	15	0.6	4.1	100
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	110	8	38	3.7	15	0.6	4.1	100
AUG									
10...	K2	97	0	33	3.6	15	0.7	4.1	98
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	120	6	40	3.9	15	0.6	4.1	110

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332138097024101 - RAY ROBERTS LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
FEB									
23...	15	17	0.20	4.1	158	0.330	0.330	0.010	0.340
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	15	17	0.20	4.3	160	0.340	0.340	0.010	0.350
MAY									
24...	14	16	0.20	1.3	154	0.290	--	<0.010	0.290
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	15	16	0.20	2.1	157	0.430	--	<0.010	0.430
AUG									
10...	15	18	0.20	2.0	150	--	--	<0.010	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	<0.010	--
10...	--	--	--	--	--	--	--	<0.010	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	12	18	0.20	5.5	168	--	--	<0.010	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB									
23...	0.340	<0.015	--	0.30	<0.010	<0.010	--	4	2
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	0.350	0.050	0.25	0.30	<0.010	<0.010	--	<3	30
MAY									
24...	0.290	0.020	0.18	0.20	<0.010	<0.010	--	<3	3
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	0.430	0.020	0.18	0.20	<0.010	<0.010	--	<3	54
AUG									
10...	<0.050	<0.015	--	0.20	<0.010	<0.010	--	3	26
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	40	160
10...	<0.050	0.310	0.19	0.50	<0.010	0.020	0.06	320	860
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	<0.050	0.700	0.20	0.90	0.080	0.090	0.28	1100	1500

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332200097010001 - RAY ROBERTS LAKE SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
23...	1252	1.00	276	8.0	9.5	10.3	92
23...	1255	10.0	277	7.9	9.5	10.2	91
23...	1258	20.0	276	7.9	9.0	10.0	89
23...	1301	30.0	279	7.8	8.5	9.7	85
23...	1304	40.0	280	7.8	8.5	9.6	84
23...	1307	50.0	280	7.8	8.5	9.6	84
23...	1311	60.0	280	7.8	8.5	9.3	81
23...	1313	69.0	280	7.8	8.5	9.3	81
MAY							
24...	1437	1.00	290	8.0	22.0	7.4	87
24...	1440	10.0	290	7.8	21.5	6.7	78
24...	1443	20.0	290	7.8	21.0	6.4	74
24...	1446	30.0	290	7.7	21.0	6.2	71
24...	1449	40.0	290	7.6	20.5	5.5	63
24...	1452	50.0	291	7.4	20.0	4.8	54
24...	1455	60.0	293	7.4	19.0	3.8	42
24...	1458	68.0	291	7.5	19.0	3.8	42
AUG							
10...	1410	1.00	284	7.9	29.0	5.9	79
10...	1412	10.0	284	7.6	28.5	5.1	67
10...	1415	20.0	287	7.1	28.0	3.0	39
10...	1418	30.0	289	7.0	27.5	2.1	27
10...	1421	40.0	291	7.0	27.0	1.0	13
10...	1424	50.0	309	7.0	23.0	0.2	2
10...	1427	60.0	314	7.1	22.5	0.2	2
10...	1430	67.0	318	7.2	22.0	0.3	4

332301097050601 - RAY ROBERTS LAKE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
23...	1327	1.00	278	8.0	10.0	10.6	96
23...	1329	10.0	279	8.0	9.5	10.5	94
23...	1331	20.0	280	8.0	9.5	10.4	93
23...	1333	30.0	278	7.9	9.5	10.1	90
23...	1335	40.0	280	7.9	9.0	10.0	89
23...	1338	50.0	280	7.8	9.0	9.5	84
23...	1341	60.0	281	7.7	9.0	9.1	81
23...	1344	70.0	280	7.7	9.0	9.1	81
23...	1347	82.0	283	7.7	9.0	8.9	79
MAY							
24...	1031	1.00	291	8.2	22.5	7.4	88
24...	1035	10.0	292	7.9	22.0	6.6	77
24...	1039	20.0	291	7.9	21.5	6.6	77
24...	1043	30.0	289	7.7	21.5	6.3	73
24...	1047	40.0	289	7.4	20.0	4.8	54
24...	1052	50.0	290	7.3	19.5	4.1	46
24...	1056	60.0	292	7.2	19.5	3.6	40
24...	1100	70.0	293	7.2	19.5	3.2	36
24...	1104	85.0	291	7.0	19.5	3.1	35
AUG							
10...	1015	1.00	288	7.8	29.0	5.2	69
10...	1018	10.0	287	7.6	28.5	4.9	65
10...	1021	20.0	291	7.2	28.0	3.3	43
10...	1024	30.0	290	7.1	27.5	3.1	40
10...	1027	40.0	302	7.0	26.0	0.2	3
10...	1030	50.0	315	7.0	23.5	0.3	4
10...	1033	60.0	325	7.0	22.0	0.3	4
10...	1037	70.0	324	7.0	21.5	0.3	3
10...	1040	77.0	327	7.2	21.5	0.3	3

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332353097020101 - RAY ROBERTS LAKE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
23...	1006	1.00	270	7.9	9.5	10.4	93
23...	1009	10.0	270	7.9	9.5	10.3	92
23...	1012	20.0	271	7.9	9.5	10.3	92
23...	1015	30.0	270	7.8	9.5	10.0	90
23...	1018	40.0	270	7.8	9.0	9.9	88
23...	1021	50.0	270	7.7	9.0	9.7	86
23...	1024	60.0	271	7.7	9.0	9.5	84
23...	1027	70.0	267	7.7	9.0	9.5	84
23...	1030	84.0	271	7.7	9.0	9.7	86
MAY							
24...	1124	1.00	288	8.1	23.0	7.2	86
24...	1127	10.0	288	8.0	22.0	7.1	83
24...	1130	20.0	288	7.9	21.5	6.8	79
24...	1133	30.0	291	7.8	21.5	6.7	78
24...	1136	40.0	289	7.7	21.0	6.2	71
24...	1139	50.0	289	7.4	19.5	5.0	56
24...	1142	60.0	289	7.3	19.0	3.8	42
24...	1145	70.0	288	7.3	19.0	3.5	39
24...	1148	80.0	290	7.3	19.0	3.5	39
24...	1151	88.0	290	7.3	19.0	3.5	39
AUG							
10...	1057	1.00	282	8.1	29.0	6.1	81
10...	1100	10.0	282	7.9	29.0	5.9	79
10...	1103	20.0	284	7.4	28.5	4.7	62
10...	1106	30.0	290	6.9	27.0	0.4	5
10...	1109	40.0	295	6.9	26.0	0.2	3
10...	1112	50.0	308	7.0	23.5	0.2	2
10...	1115	60.0	315	7.0	22.0	0.2	2
10...	1118	70.0	319	7.0	21.5	0.3	3
10...	1121	83.0	321	7.2	21.5	0.4	5

332459097063001 - RAY ROBERTS LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
23...	1404	1.00	285	8.1	11.5	0.80	10.7	100	K1	K1	110	0
23...	1407	10.0	284	8.1	10.5	--	10.7	98	--	--	--	--
23...	1410	20.0	286	8.0	10.0	--	10.2	92	--	--	--	--
23...	1414	30.0	323	7.7	9.0	--	8.6	76	--	--	--	--
23...	1417	40.0	346	7.7	9.0	--	8.1	72	--	--	--	--
23...	1421	50.0	520	7.6	8.5	--	7.1	62	--	--	--	--
23...	1425	57.0	532	7.6	8.5	--	7.2	63	--	--	180	9
MAY												
24...	1525	1.00	293	8.3	24.0	0.82	7.9	96	K3	K9	110	10
24...	1530	10.0	296	8.2	23.5	--	7.1	86	--	--	--	--
24...	1535	20.0	296	8.0	23.0	--	6.2	74	--	--	--	--
24...	1542	30.0	298	7.8	22.5	--	5.4	64	--	--	--	--
24...	1548	40.0	301	7.4	22.0	--	2.8	33	--	--	--	--
24...	1554	50.0	305	7.3	21.5	--	1.2	14	--	--	--	--
24...	1558	58.0	306	7.3	21.0	--	1.1	13	--	--	120	9
AUG												
10...	1456	1.00	283	8.1	30.5	1.07	6.4	88	K3	<1	97	3
10...	1500	10.0	283	7.9	30.0	--	6.1	83	--	--	--	--
10...	1505	20.0	292	7.2	28.5	--	2.9	38	--	--	--	--
10...	1510	30.0	291	7.1	28.0	--	1.6	21	--	--	--	--
10...	1514	40.0	318	7.0	25.5	--	0.2	3	--	--	--	--
10...	1518	52.0	334	7.1	23.5	--	0.7	8	--	--	120	0

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332459097063001 - RAY ROBERTS LAKE SITE DC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
FEB												
23...	37	3.6	16	0.7	4.2	110	15	17	0.20	3.9	163	0.320
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	63	5.8	39	1	4.0	170	34	51	0.20	2.5	306	0.710
MAY												
24...	39	3.5	15	0.6	4.0	100	14	16	0.20	2.2	156	0.260
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	41	3.6	15	0.6	4.1	110	14	17	0.20	3.6	166	0.520
AUG												
10...	33	3.6	16	0.7	4.3	94	16	19	0.20	2.6	151	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	41	4.0	15	0.6	<0.10	130	11	17	0.20	5.6	--	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB												
23...	0.320	0.010	0.330	0.330	0.020	0.28	0.30	<0.010	<0.010	--	<3	5
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	0.710	0.020	0.730	0.730	0.200	0.30	0.50	<0.010	<0.010	--	<3	28
MAY												
24...	0.260	0.030	0.290	0.290	0.030	0.27	0.30	<0.010	<0.010	--	<3	3
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	<0.010	0.520	0.520	0.020	0.28	0.30	<0.010	0.010	0.03	<3	54
AUG												
10...	--	<0.010	--	<0.050	<0.015	--	0.30	0.010	<0.010	--	7	30
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	0.020	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	30	170
10...	--	<0.010	--	<0.050	0.480	0.22	0.70	0.010	0.020	0.06	530	1300
10...	--	<0.010	--	<0.050	0.850	0.25	1.1	0.060	0.070	0.21	1500	1600

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332509096595301 - RAY ROBERTS LAKE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
23...	1137	1.00	269	8.1	10.5	1.10	10.8	99	K4	K1	99	1
23...	1140	10.0	270	8.0	10.0	--	10.7	97	--	--	--	--
23...	1143	20.0	271	8.0	10.0	--	10.7	97	--	--	--	--
23...	1146	30.0	272	7.9	9.5	--	10.3	92	--	--	--	--
23...	1149	40.0	266	7.7	9.0	--	9.6	85	--	--	--	--
23...	1152	50.0	260	7.6	9.0	--	9.2	81	--	--	--	--
23...	1155	60.0	259	7.6	9.0	--	9.1	81	--	--	--	--
23...	1159	71.0	259	7.6	9.0	--	9.2	81	--	--	97	2
MAY												
24...	1301	1.00	283	8.3	24.0	1.01	7.6	93	K6	K16	110	8
24...	1305	10.0	283	8.2	23.0	--	7.0	84	--	--	--	--
24...	1309	20.0	282	8.0	22.5	--	6.8	80	--	--	--	--
24...	1313	30.0	288	7.9	22.0	--	6.4	75	--	--	--	--
24...	1317	40.0	280	7.3	21.0	--	4.0	46	--	--	--	--
24...	1321	50.0	272	7.0	20.0	--	1.4	16	--	--	--	--
24...	1326	60.0	268	7.0	19.5	--	0.3	3	--	--	--	--
24...	1331	69.0	267	7.0	19.5	--	0.1	1	--	--	99	9
AUG												
10...	1239	1.00	280	8.2	30.0	1.25	6.5	88	<1	<1	98	3
10...	1243	10.0	280	8.0	29.5	--	6.0	81	--	--	--	--
10...	1246	20.0	281	7.5	29.5	--	5.0	67	--	--	--	--
10...	1250	30.0	279	6.9	28.0	--	0.2	3	--	--	--	--
10...	1254	40.0	300	6.8	25.5	--	0.2	3	--	--	--	--
10...	1258	50.0	315	7.0	23.5	--	0.2	2	--	--	--	--
10...	1302	60.0	321	7.1	22.5	--	0.2	2	--	--	--	--
10...	1305	66.0	323	7.2	22.5	--	0.4	5	--	--	110	0

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)
FEB												
23...	34	3.5	15	0.7	4.2	98	14	17	0.20	3.9	152	0.280
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	33	3.5	14	0.6	4.4	95	14	16	0.20	4.1	148	0.320
MAY												
24...	36	3.8	15	0.6	4.1	98	14	17	0.20	1.1	151	0.140
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	33	4.0	14	0.6	4.1	90	16	16	0.20	2.8	146	0.280
AUG												
10...	33	3.7	15	0.7	4.1	95	15	18	0.20	2.0	148	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	39	3.9	15	0.6	4.1	120	12	17	0.20	5.2	174	--

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

332509096595301 - RAY ROBERTS LAKE SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB												
23...	0.280	0.010	0.290	0.290	<0.015	--	0.30	<0.010	<0.010	--	4	1
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	<0.010	0.320	0.320	0.040	0.26	0.30	<0.010	<0.010	--	23	17
MAY												
24...	0.140	0.010	0.150	0.150	0.020	0.18	0.20	<0.010	<0.010	--	<3	5
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	0.280	0.020	0.300	0.300	0.090	0.21	0.30	<0.010	<0.010	--	38	480
AUG												
10...	--	<0.010	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	<3	6
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<10	20
10...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	0.010	0.03	130	130
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	<0.010	--	<0.050	0.660	0.24	0.90	0.100	0.120	0.37	1400	1200

332758097063301 - RAY ROBERTS LAKE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB							
23...	1442	1.00	312	8.1	11.5	10.8	101
23...	1444	10.0	346	8.1	10.5	10.4	95
23...	1447	20.0	385	7.8	10.0	9.2	83
23...	1449	30.0	669	7.7	9.5	9.6	86
23...	1452	38.0	675	7.6	9.5	9.6	86
MAY							
24...	1612	1.00	298	8.4	25.0	8.4	104
24...	1615	10.0	306	8.2	24.0	7.0	85
24...	1618	20.0	306	8.0	23.5	5.9	71
24...	1621	30.0	457	7.4	23.0	2.6	31
24...	1624	39.0	492	7.3	23.0	1.4	17
AUG							
10...	1540	1.00	281	8.2	31.5	6.9	96
10...	1543	10.0	284	8.0	30.0	4.5	61
10...	1546	20.0	295	7.1	30.0	1.8	24
10...	1550	30.0	366	7.0	29.5	0.2	3
10...	1554	36.0	441	7.1	29.0	0.3	4

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site AC (332138097024101)

Phytoplankton Analyses October 1994 to September 1995

Date	2-23-95
Time	1220
TOTAL CELLS/mL	**6,423**
NUMBER OF SPECIES	**9**
DEPTH COLLECTED (ft.)	**1.8**

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	119
Order Pennales	
Pinnularia brevicostata	59
CHLOROPHYTA	
Ankistrodesmus falcatus	327
Chlamydomonas sp.	208
Scenedesmus opoliensis	59
Selenastrum Westii	30
CYANOPHYTA	
Aphanocapsa delicatissima	4,758
Chroococcus limneticus	714
EUGLENOPHYTA	
Trachelomonas sp.	149

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site DC (332459097063001)

Phytoplankton Analyses October 1994 to September 1995

Date	2-23-95
Time	1404
TOTAL CELLS/mL	4,550
NUMBER OF SPECIES	7
DEPTH COLLECTED (ft.)	1.3

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Synedra ulna var. ulna	59
CHLOROPHYTA	
Ankistrodesmus falcatus	476
Chlamydomonas sp.	119
Scenedesmus opoliensis	30
CYANOPHYTA	
Aphanocapsa delicatissima	3,569
Chroococcus limneticus	238
EUGLENOPHYTA	
Trachelomonas sp.	59

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site AC (332138097024101)

Phytoplankton Analyses October 1994 to September 1995

Date	5-24-95
Time	1353
TOTAL CELLS/mL	18,231
NUMBER OF SPECIES	11
DEPTH COLLECTED (ft.)	2.25

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Stephanodiscus astraea	268
Order Pennales	
Cocconeis placentula	30
CHLOROPHYTA	
Ankistrodesmus falcatus	119
Chlamydomonas sp.	149
Scenedesmus opoliensis	59
CYANOPHYTA	
Anabaena spiroides	2,796
Aphanizomenon flos-aquae	1,249
Aphanocapsa delicatissima	11,301
Aphanocapsa elachista	1,784
EUGLENOPHYTA	
Trachelomonas sp.	446
PYRRHOPHYTA	
Ceratium hirundinella	30

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site DC (332459097063001)

Phytoplankton Analyses October 1994 to September 1995

Date	5-24-95
Time	1525
TOTAL CELLS/mL	31,465
NUMBER OF SPECIES	15
DEPTH COLLECTED (ft.)	1.4

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	134
Stephanodiscus astraea	134
CHLOROPHYTA	
Ankistrodesmus falcatus	59
Chlamydomonas sp.	119
Pediastrum duplex	59
Scenedesmus opoliensis	30
Selenastrum Westii	30
CYANOPHYTA	
Anabaena spiroides	13,056
Aphanizomenon flos-aquae	595
Aphanocapsa delicatissima	15,465
Aphanocapsa elachista	1,190
Chroococcus limneticus	119
EUGLENOPHYTA	
Trachelomonas sp.	297
PYRRHOPHYTA	
Ceratium hirundinella	59
CRYPTOPHYTA	
Cryptomonas erosa	119

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site AC (332138097024101)

Phytoplankton Analyses October 1994 to September 1995

Date	8-10-95
Time	1322
TOTAL CELLS/mL	63,407
NUMBER OF SPECIES	17
DEPTH COLLECTED (ft.)	2.65

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	30
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	30
Synedra ulna var. *ulna*	59
CHLOROPHYTA	
Ankistrodesmus falcatus	30
Chlamydomonas sp.	149
Cosmarium sp.	30
Scenedesmus opoliensis	119
Staurastrum sp.	30
CYANOPHYTA	
Anabaena spiroides	2,082
Aphanizomenon flos-aquae	595
Aphanocapsa delicatissima	26,171
Aphanocapsa elachista	5,353
Chroococcus limneticus	119
Merismopedia tenuissima	1,428
Oscillatoria sp.	26,766
EUGLENOPHYTA	
Trachelomonas sp.	327
PYRRHOPHYTA	
Ceratium hirundinella	89

08051100 RAY ROBERTS LAKE NEAR PILOT POINT, TX--Continued

Ray Roberts Lake Site DC (332459097063001)

Phytoplankton Analyses October 1994 to September 1995

Date	8-10-95
Time	1456
TOTAL CELLS/mL	29,472
NUMBER OF SPECIES	10
DEPTH COLLECTED (ft.)	1.75

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	59
CHLOROPHYTA	
Chlamydomonas sp.	59
CYANOPHYTA	
Anabaena spiroides	1,190
Aphanizomenon flos-aquae	595
Aphanocapsa delicatissima	15,465
Aphanocapsa elachista	2,379
Merismopedia tenuissima	1,428
Oscillatoria sp.	8,030
EUGLENOPHYTA	
Trachelomonas sp.	178
PYRRHOPHYTA	
Peridinium pusillum	89

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 Co. bridge, and 1.8 mi south of Sanger.

DRAINAGE AREA.--295 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 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 sea level. 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.

REMARKS.--No estimated daily discharges. Records good. There are no appreciable diversions above station. Flow affected at times by discharge from the flood-detention pools of 51 floodwater-retarding structures with a combined detention capacity of 38,850 acre-ft. These structures control runoff from 149 mi² in the Clear Creek watershed. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--31 years (water years 1950-80), 74.3 ft³/s (53,830 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1950-80).--Maximum discharge, 18,200 ft³/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 Co. Flood in May 1935 reached a stage of 34.0 ft, from information by Texas Department of Transportation. Both peaks now referenced to present site and datum.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	33	120	112	68	45	98	68	100	41	214	8.3
2	10	31	113	93	65	42	92	63	87	30	230	7.9
3	11	30	112	88	62	45	87	83	74	26	521	7.1
4	15	29	112	90	58	47	1050	192	65	24	402	6.0
5	11	38	109	89	55	50	623	143	60	255	195	5.4
6	12	43	102	88	53	50	374	1220	55	170	109	4.9
7	74	38	100	85	51	86	231	732	53	80	67	4.2
8	132	34	96	80	50	73	183	5060	50	52	47	4.2
9	41	40	578	76	48	56	156	1780	46	38	36	4.2
10	22	74	719	73	48	49	302	1190	46	31	29	6.8
11	17	55	341	73	80	46	580	970	83	25	24	8.7
12	15	44	229	72	99	46	262	694	94	22	22	14
13	13	39	189	71	75	1730	177	455	62	20	20	16
14	13	2790	176	68	71	1340	143	294	50	18	18	20
15	12	2550	186	64	72	838	125	204	44	16	17	17
16	14	1240	207	63	68	458	115	169	41	16	17	13
17	15	895	221	76	61	271	270	151	38	17	14	14
18	20	630	177	91	57	204	245	132	37	18	14	28
19	26	439	155	111	55	169	214	109	35	18	12	28
20	118	2240	150	90	54	143	534	97	33	17	12	50
21	682	1490	135	78	52	122	307	90	32	17	12	35
22	388	795	119	74	50	112	181	83	32	16	11	23
23	124	527	109	81	50	103	137	78	29	14	10	19
24	79	363	103	78	48	91	114	90	28	12	9.8	17
25	279	289	99	73	46	209	100	370	27	10	8.4	17
26	160	259	95	71	46	661	89	1160	25	10	8.3	18
27	90	244	92	87	46	307	82	729	25	9.6	8.3	17
28	61	200	90	94	46	180	75	418	25	7.9	8.3	15
29	49	158	100	81	---	137	70	192	25	7.9	8.3	14
30	42	133	105	76	---	120	70	131	30	7.9	8.3	12
31	37	---	106	71	---	106	---	109	---	11	11	---
TOTAL	2593	15770	5345	2517	1634	7936	7086	17256	1431	1057.3	2123.7	454.7
MEAN	83.6	526	172	81.2	58.4	256	236	557	47.7	34.1	68.5	15.2
MAX	682	2790	719	112	99	1730	1050	5060	100	255	521	50
MIN	10	29	90	63	46	42	70	63	25	7.9	8.3	4.2
AC-FT	5140	31280	10600	4990	3240	15740	14060	34230	2840	2100	4210	902

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1995#, BY WATER YEAR (WY)

MEAN	257	92.5	162	92.1	154	221	213	461	298	39.8	11.4	35.1
MAX	2739	526	1157	421	475	719	1811	1764	1307	174	68.5	155
(WY)	1982	1995	1992	1992	1989	1990	1990	1990	1989	1982	1995	1986
MIN	.70	1.09	5.83	6.62	9.22	26.2	27.7	15.5	13.1	.16	.000	.000
(WY)	1989	1981	1984	1981	1981	1986	1981	1984	1983	1984	1988	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1981 - 1995#	
ANNUAL TOTAL	55067.03		65203.7			
ANNUAL MEAN	151		179		170	
HIGHEST ANNUAL MEAN					476	1982
LOWEST ANNUAL MEAN					20.0	1983
HIGHEST DAILY MEAN	2790	Nov 14	5060	May 8	39700	Oct 13 1981
LOWEST DAILY MEAN	.33	Aug 30	4.2	Sep 7	.00	Oct 12 1980
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 25	5.1	Sep 4	.00	Aug 2 1981
INSTANTANEOUS PEAK FLOW			7970	May 8	104000	Oct 13 1981
INSTANTANEOUS PEAK STAGE			22.92	May 8	35.70	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	109200		129300		123200	
10 PERCENT EXCEEDS	333		380		310	
50 PERCENT EXCEEDS	51		71		31	
90 PERCENT EXCEEDS	7.8		12		1.9	

Period of regulated streamflow.

08051500 CLEAR CREEK NEAR SANGER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: April 1959, January 1966, October 1984 to current year. Sediment analyses: February 1966 to May 1977.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to August 1977.
WATER TEMPERATURE: May 1968 to August 1977.
SUSPENDED SEDIMENT DISCHARGE: May 1968 to August 1977.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
12...	1440	14	504	8.2	16.5	9.7	101	210	16	68	10	25
NOV												
21...	1435	1330	291	8.0	14.5	9.6	95	130	9	48	3.1	7.0
DEC												
07...	1418	101	581	8.3	14.0	9.9	97	250	8	87	8.8	23
JAN												
11...	1404	72	596	8.3	12.0	11.4	108	250	14	86	9.6	26
FEB												
08...	1332	50	619	8.2	7.5	12.4	104	250	15	83	11	31
MAR												
23...	1322	104	542	8.3	21.5	9.2	107	240	21	84	7.6	24
APR												
20...	1440	640	365	8.0	18.0	8.6	93	160	7	57	4.9	12
MAY												
26...	1013	1110	264	7.8	20.5	7.7	87	110	3	40	3.4	8.0
JUL												
13...	1300	20	589	8.0	31.5	8.1	111	210	21	64	12	39
31...	1350	7.9	673	8.0	26.5	7.4	94	220	26	62	15	55
AUG												
29...	1255	8.3	613	8.00	29.0	8.20	108	200	27	54	16	50

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
12...	0.7	3.8	0	238	195	190	32	25	0.3	12	303	294
NOV												
21...	0.3	3.6	0	151	124	120	11	6.2	0.2	12	183	167
DEC												
07...	0.6	2.5	3	293	245	240	35	21	0.30	13	367	339
JAN												
11...	0.7	1.8	0	293	240	240	40	26	0.2	8.8	331	343
FEB												
08...	0.8	1.6	0	290	238	240	44	33	0.2	9.2	382	357
MAR												
23...	0.7	2.1	0	268	220	220	34	24	0.3	8.6	321	317
APR												
20...	0.4	2.4	0	190	156	160	19	11	0.2	9.3	226	211
MAY												
26...	0.3	3.7	0	135	110	110	11	7.7	0.2	8.3	170	151
JUL												
13...	1	2.7	0	230	188	190	46	44	0.30	15	348	336
31...	2	2.1	--	--	--	190	60	59	0.3	15	396	384
AUG												
29...	2	2.8	0	212	174	171	60	51	0.30	15	357	354

08051500 CLEAR CREEK NEAR SANGER, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
12...	0.090	0.090	0.0	0.110	0.11	<0.015	0.51	0.40	--	<0.20	0.4
NOV											
21...	0.300	0.300	0.0	0.310	0.31	0.0	0.81	0.48	0.28	0.3	0.5
DEC											
07...	0.210	--	<0.010	0.210	0.21	<0.015	--	--	--	<0.20	<0.20
JAN											
11...	0.170	--	<0.010	0.170	0.17	<0.015	--	--	--	<0.20	<0.20
FEB											
08...	0.170	0.170	0.0	0.190	0.19	0.0	--	--	--	<0.20	<0.20
MAR											
23...	0.130	0.130	0.0	0.150	0.15	<0.015	--	--	--	0.3	<0.20
APR											
20...	0.290	0.290	0.0	0.300	0.30	0.0	0.80	0.47	0.37	0.4	0.5
MAY											
26...	0.490	0.490	0.0	0.510	0.51	0.1	1.0	0.43	0.23	0.3	0.5
JUL											
13...	0.070	--	<0.010	0.070	0.070	0.040	0.27	0.16	--	<0.20	0.20
31...	0.120	--	<0.010	0.120	0.12	0.0	--	--	--	<0.20	<0.20
AUG											
29...	0.070	--	<0.010	0.070	0.070	0.030	0.37	0.27	--	<0.20	0.30

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
12...	0.0	<0.010	0.0	0.03	3.8	0.6	34	1.3	88	4	14
NOV											
21...	0.1	0.0	0.0	0.12	7.8	>4.5	786	2820	80	22	2
DEC											
07...	0.0	0.0	0.0	0.03	2.9	0.4	42	11	82	<3	13
JAN											
11...	<0.010	<0.010	<0.010	--	2.6	0.3	14	2.7	57	<3	19
FEB											
08...	0.0	<0.010	<0.010	--	2.1	0.3	18	2.4	74	3	37
MAR											
23...	<0.010	0.0	<0.010	--	3.3	0.5	60	17	96	6	8
APR											
20...	0.0	0.0	0.0	0.06	7.1	>4.2	1140	1970	90	25	1
MAY											
26...	0.0	0.0	0.0	0.12	6.2	>5.0	1610	4830	87	26	<1
JUL											
13...	<0.010	<0.010	<0.010	--	2.3	0.6	71	3.8	77	3	8
31...	<0.010	<0.010	<0.010	--	2.4	0.2	27	0.58	94	7	17
AUG											
29...	0.060	<0.010	<0.010	--	2.3	0.3	23	0.52	81	<3	13

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1956 to September 1976, October 1979 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 534.76 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. There are several small diversions above station for irrigation. Flow affected at times by discharge from the flood-detention pools of 17 floodwater-retarding structures with a combined detention capacity of 10,460 acre-ft. These structures control runoff from 36.4 mi² above this station. Rain gage at station. Satellite telemeter at station.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 8	0530	1,070	14.38	Mar. 13	1600	3,050	16.27
Oct. 21	2200	1,510	15.14	Mar. 26	1015	1,460	15.07
Nov. 5	1515	1,260	14.75	Apr. 4	1915	1,240	14.72
Nov. 15	0530	2,850	16.18	May 8	1945	2,460	15.98
Dec. 10	0530	1,060	14.36	May 25	1945	3,480	16.43

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.35	22	7.1	17	10	1.9	30	5.4	98	.04	1.1	.00
2	.18	14	5.7	11	8.7	2.1	19	4.5	52	.05	.63	.00
3	.15	11	5.4	9.3	7.5	1.9	13	5.4	25	.03	.19	.00
4	3.2	11	5.5	9.1	6.3	1.9	847	38	8.8	.01	.07	.00
5	1.7	947	5.6	7.9	4.8	2.0	703	36	4.1	.05	.17	.00
6	.89	413	5.3	7.5	4.1	2.2	492	179	2.2	.07	.47	.00
7	251	193	5.0	7.6	3.5	6.9	193	64	1.5	.10	.06	.00
8	597	108	57	6.6	3.7	9.0	131	1530	.99	.07	.03	.00
9	104	290	534	5.8	2.8	4.3	71	990	.63	.03	.01	.00
10	56	283	871	5.2	2.5	3.1	39	400	1.1	.01	.01	.00
11	19	110	339	5.0	6.0	2.5	59	321	141	.01	.00	.00
12	6.9	65	179	5.4	15	2.5	36	184	99	.00	.00	.00
13	3.8	39	106	18	10	1750	22	121	50	.00	.00	.00
14	2.6	480	68	16	8.3	923	14	71	21	.00	.00	.00
15	2.4	2130	51	10	7.5	489	10	45	9.6	.00	.00	.00
16	2.5	629	37	7.6	7.0	438	8.1	26	5.0	.00	.00	.00
17	2.2	410	28	30	5.9	350	7.0	21	2.5	.00	.00	.00
18	4.8	372	20	179	4.5	229	12	19	1.4	.00	.00	.73
19	10	322	15	370	3.7	166	82	9.1	.88	.00	.00	.79
20	633	575	12	137	3.2	104	284	4.9	.53	.00	.00	.53
21	1080	552	10	79	2.8	58	71	2.8	.33	.08	.00	.60
22	548	230	8.6	63	2.3	36	32	1.8	.19	.21	.00	.14
23	179	159	7.2	70	2.1	21	17	1.4	.08	.08	.00	.03
24	337	100	6.2	36	1.9	14	11	2.9	.07	.02	.00	.01
25	918	69	5.3	23	1.8	124	7.0	1710	.02	.00	.00	.18
26	538	50	4.6	21	1.7	1100	4.9	1720	.01	.00	.00	.31
27	232	31	4.2	54	1.7	425	4.0	419	.01	.00	.00	.51
28	156	20	4.7	34	1.7	253	3.2	264	.02	.00	.00	.24
29	120	14	7.8	21	---	144	2.9	207	.05	.00	.00	.04
30	85	10	9.5	16	---	87	7.3	165	.06	.00	.00	.01
31	50	---	9.1	13	---	53	---	133	---	.00	.00	---
TOTAL	5944.67	8659	2433.8	1295.0	141.0	6804.3	3232.4	8701.2	526.07	0.86	2.74	4.12
MEAN	192	289	78.5	41.8	5.04	219	108	281	17.5	.028	.088	.14
MAX	1080	2130	871	370	15	1750	847	1720	141	.21	1.1	.79
MIN	.15	10	4.2	5.0	1.7	1.9	2.9	1.4	.01	.00	.00	.00
AC-FT	11790	17180	4830	2570	280	13500	6410	17260	1040	1.7	5.4	8.2

08052700 LITTLE ELM CREEK NEAR AUBREY, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1995h, BY WATER YEAR (WY)

MEAN	63.3	56.4	47.1	21.9	54.2	49.1	71.5	134	53.5	21.0	2.29	33.3
MAX	641	332	398	108	315	251	677	897	286	540	28.5	258
(WY)	1982	1975	1992	1992	1986	1990	1957	1982	1989	1994	1966	1964
MIN	.000	.000	.000	.000	.000	.026	.10	.000	.000	.000	.000	.000
(WY)	1957	1959	1959	1959	1959	1963	1959	1959	1956	1956	1956	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1956 - 1995h	
ANNUAL TOTAL	42789.71		37745.16			
ANNUAL MEAN	117		103		50.8	
HIGHEST ANNUAL MEAN					178	1982
LOWEST ANNUAL MEAN					2.24	1959
HIGHEST DAILY MEAN	11600	Jul 11	2130	Nov 15	11600	Jul 11 1994
LOWEST DAILY MEAN	.00	Jul 3	.00	Jul 12	.00	Jun 1 1956
ANNUAL SEVEN-DAY MINIMUM	.01	Jul 1	.00	Jul 12	.00	Jun 1 1956
INSTANTANEOUS PEAK FLOW			3480	May 25	36200	Jul 11 1994
INSTANTANEOUS PEAK STAGE			16.43	May 25	18.27	Jul 11 1994
ANNUAL RUNOFF (AC-FT)	84870		74870		36800	
10 PERCENT EXCEEDS	253		328		81	
50 PERCENT EXCEEDS	4.5		6.6		.60	
90 PERCENT EXCEEDS	.52		.00		.00	

h See PERIOD of record paragraph.

08052700 LITTLE ELM CREEK NEAR AUBREY, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: June 1962 to June 1963, June 1965 to January 1968. Chemical and biochemical analyses: October 1984 to current year. Sediment analyses: April 1966 to October 1974.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1966 to June 1975.
WATER TEMPERATURES: February 1966 to June 1975.
SUSPENDED SEDIMENT DISCHARGE: February 1966 to September 1975.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,380 microsiemens Jan. 24, Feb. 25, 1967; minimum daily, 195 microsiemens June 4, 1968.
WATER TEMPERATURE: Maximum daily, 33.0°C June 16, 1968; minimum daily, 0.0°C Feb. 22, 1968.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 4,750 mg/L Aug. 13, 1966; minimum daily mean, no flow on many days.
SEDIMENT LOADS: Maximum daily, 17,900 tons May 31, 1967; minimum daily, 0 tons on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (NTU)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	OXYGEN DEMAND, BIOCHEMICAL, 5 DAY (MG/L)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLVED AS CACO3 (MG/L)
OCT												
07...	1030	0.83	484	7.7	22.0	48	23	5.2	61	1.5	130	11
NOV												
22...	1415	216	245	7.8	13.0	100	130	9.3	89	2.0	96	18
JAN												
12...	0945	5.0	597	8.1	14.5	30	6.5	9.1	91	0.9	200	55
MAR												
02...	1630	2.1	811	8.2	4.0	16	19	12.8	99	0.7	230	26
APR												
20...	1245	215	315	7.7	16.0	80	210	8.4	87	3.8	120	31
JUN												
13...	1200	47	328	7.6	23.0	380	170	7.3	87	2.3	120	50

DATE	CALCIUM DISSOLVED (MG/L AS CA)	MAGNESIUM, DISSOLVED (MG/L AS MG)	SODIUM, DISSOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, DISSOLVED (MG/L AS F)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L)
OCT												
07...	45	4.8	52	2	5.8	120	99	16	0.5	4.0	300	44
NOV												
22...	34	2.6	8.8	0.4	4.6	78	26	4.6	0.2	13	142	194
JAN												
12...	72	5.7	43	1	4.9	150	120	15	0.2	0.27	354	11
MAR												
02...	80	6.6	80	2	5.2	200	160	26	0.4	0.3	487	24
APR												
20...	43	3.2	14	0.6	3.4	90	52	5.2	0.2	7.6	189	396
JUN												
13...	44	3.3	15	0.6	4.7	74	41	7.6	0.3	10	205	284

DATE	RESIDUE VOLATILE, SUSPENDED (MG/L)	RESIDUE FIXED NON FILTERABLE (MG/L)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)
OCT											
07...	8	36	0.150	0.150	0.0	0.170	0.17	0.0	0.59	0.6	0.0
NOV											
22...	44	150	0.190	0.190	0.0	0.200	0.20	0.0	0.47	0.5	0.23
JAN											
12...	4	7	0.500	--	<0.010	0.500	0.50	0.0	0.38	0.4	0.1
MAR											
02...	4	20	1.67	1.67	0.0	1.70	1.7	0.0	0.46	0.5	0.26
APR											
20...	38	358	1.23	1.23	0.1	1.30	1.3	0.1	0.51	0.6	0.0
JUN											
13...	40	244	7.25	7.25	0.35	7.60	7.6	0.17	0.73	0.9	0.11

08052700 LITTLE ELM CREEK NEAR AUBREY, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT 07...	0.0	0.03	9.3	--	--	--	--	--	--	--	--
NOV 22...	0.19	0.58	12	--	--	--	--	--	--	--	--
JAN 12...	0.1	0.18	11	1	46	<0.5	2	<5	<3	<10	24
MAR 02...	0.22	0.67	8.0	--	--	--	--	--	--	--	--
APR 20...	0.1	0.18	19	3	27	<0.5	2	<5	<3	<10	53
JUN 13...	0.11	0.34	14	3	38	<0.5	<1	<5	<3	<10	58

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 07...	--	--	--	--	--	--	--	--	--	--	--
NOV 22...	--	--	--	--	--	--	--	--	--	--	--
JAN 12...	40	11	4	<0.1	<10	<10	<1	<1	570	<6	3
MAR 02...	--	--	--	--	--	--	--	--	--	--	--
APR 20...	<10	7	2	<0.1	<10	<10	<1	1	330	<6	10
JUN 13...	30	6	<1	<0.1	<10	<10	<1	<1	310	<6	<3

08052730 PECAN CREEK NEAR AUBREY, TX

LOCATION.--Lat 33°17'50", long 96°55'06", Denton County, Hydrologic Unit 12030103, at Farm Road 428 bridge, over center of channel at downstream side of bridge, 1.1 mi downstream from unnamed tributary on right bank, 2.2 mi upstream from unnamed tributary on right bank, and 4.0 mi east of Aubrey.

DRAINAGE AREA.--32.2 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: December 1985 to September 1995 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
OCT												
06...	1530	2.3	324	7.4	22.5	120	18	7.2	85	2.0	110	59
NOV												
22...	0745	25	375	7.3	12.5	100	52	9.0	85	2.0	130	55
JAN												
12...	1245	3.1	1130	7.6	14.0	15	3.2	10.0	100	0.6	400	230
MAR												
02...	1330	1.9	1480	7.6	5.0	24	4.2	11.5	91	0.4	520	320
APR												
20...	1400	35	520	7.5	17.0	100	94	8.2	87	5.1	170	100
JUN												
13...	1500	4.4	425	7.3	21.5	230	37	7.4	85	2.2	140	71

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
OCT												
06...	32	8.3	17	0.7	7.0	55	78	13	0.3	9.6	199	24
NOV												
22...	36	8.9	21	0.8	5.2	72	75	17	0.2	12	219	46
JAN												
12...	110	29	80	2	4.3	170	300	75	0.5	3.4	714	9
MAR												
02...	140	41	110	2	4.0	200	410	100	0.7	5.6	931	<1
APR												
20...	49	12	32	1	5.5	72	120	29	0.4	8.0	310	154
JUN												
13...	40	10	27	1	6.7	70	85	26	0.3	10	252	35

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
OCT											
06...	20	4	0.110	0.110	0.0	0.120	0.12	0.0	0.79	0.8	0.19
NOV											
22...	26	20	0.130	--	<0.010	0.130	0.13	0.0	0.68	0.7	0.1
JAN											
12...	<1	--	1.86	1.86	0.0	1.90	1.9	0.0	0.38	0.4	0.16
MAR											
02...	5	--	--	--	0.0	--	<0.050	0.0	0.28	0.3	<0.010
APR											
20...	20	134	2.10	2.10	0.1	2.20	2.2	0.49	0.71	1.2	0.1
JUN											
13...	7	28	0.900	0.900	0.1	0.960	0.96	0.1	0.61	0.7	0.10

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
06...	0.18	0.55	14	--	--	--	--	--	--	--	--
NOV											
22...	0.0	0.15	12	--	--	--	--	--	--	--	--
JAN											
12...	0.18	0.55	5.6	<1	78	<0.5	1	<5	<3	<10	130
MAR											
02...	<0.010	--	5.4	--	--	--	--	--	--	--	--
APR											
20...	0.1	0.18	15	1	56	<0.5	2	<5	<3	<10	210
JUN											
13...	0.1	0.31	12	2	53	<0.5	2	<5	<3	<10	220

08052730 PECAN CREEK NEAR AUBREY, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT											
06...	--	--	--	--	--	--	--	--	--	--	--
NOV											
22...	--	--	--	--	--	--	--	--	--	--	--
JAN											
12...	10	41	750	<0.1	<10	<10	<1	<1	780	<6	4
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
APR											
20...	<10	37	220	<0.1	<10	10	<1	<1	290	<6	17
JUN											
13...	20	18	76	<0.1	<10	<10	<1	2	260	<6	<3

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 mi upstream from bridge on State Highway 121, 2.4 mi northeast of Lewisville, 12 mi upstream from Denton Creek, and 30.0 mi upstream from mouth.

DRAINAGE AREA.--1,660 mi².

WATER-CONTENT RECORDS

PERIOD OF RECORD.--November 1954 to current year. Prior to October 1970, published as Garza-Little Elm Reservoir near Lewisville.

REVISED RECORDS.--WSP 1922: Drainage area.

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

REMARKS.--The lake is formed by a rolled earthfill dam 32,888 ft long, including a 560-foot uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 1, 1954, and the dam was completed in August 1955. The controlled low-flow outlet works consist of a 16.0-foot-diameter conduit that is controlled by three 6.5- by 13.0-foot broome-type gates and two 60-inch steel pipes with service valves. The lake was built for flood control and water conservation. The city of Dallas obtains most of its municipal water supply from this lake. The capacity table is based on a survey made in 1965. Inflow is affected at times by discharge from the flood-detention pools of 118 floodwater-retarding structures with a combined detention capacity of 81,670 acre-ft. These structures control runoff from 298 mi² 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. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	560.0	-
Crest of spillway	532.0	981,800
Top of conservation pool	515.0	457,600
Lowest intakes to wet wells (invert)	481.0	42,560
Invert of three broome-type gates	448.0	0

COOPERATION.--Records furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,181,000 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, 743,400 acre-ft Nov. 21 (elevation, 525.33 ft); minimum 560,700 acre-ft Sept. 30 (elevation, 519.16 ft).

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

518.0	530,800	524.0	701,600	529.0	869,000
520.0	583,500	526.0	765,100	530.0	905,500
522.0	641,000	528.0	833,100	531.0	943,100

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	631300	672500	695700	645100	656800	644800	680100	651700	674600	639200	616400	585700
2	630400	665800	690500	644500	655900	645700	677000	649600	670000	638000	616100	584300
3	629500	660700	685600	644200	655300	646000	677300	650200	665800	635400	616400	582600
4	629500	663100	680100	642200	654100	646900	699100	648100	662200	635700	616700	581000
5	627800	672500	675200	640700	653200	648100	720900	655000	658000	636900	616700	579300
6	626300	674300	670000	642500	652600	648400	724400	667900	653200	636900	615600	577900
7	636300	671200	664600	641900	651400	649300	719300	674300	650800	636300	613800	577700
8	640100	662800	662800	642500	649600	647200	710900	719300	648700	635400	612700	576000
9	639200	663400	668800	642500	648400	645700	702800	735400	648400	634200	612100	574400
10	638600	659200	676100	642800	648100	644800	707500	739300	652600	633600	610900	573000
11	637700	651700	673100	643100	648400	644200	704100	736700	658600	632700	609800	571900
12	636900	644800	669700	645700	647200	645400	699100	730700	657700	631600	608400	573500
13	636600	640700	667600	646900	646600	698200	692600	726000	655300	629800	606600	575200
14	636000	669100	668200	646000	645100	717500	687100	720600	652300	628600	605200	574900
15	635700	720900	666700	646000	646000	721500	683400	714300	651400	627800	604100	573500
16	635700	726900	665200	645700	645100	719000	679500	706500	651100	626900	602900	572500
17	635100	726900	663700	647200	643900	714300	675200	703100	650200	625700	601800	571600
18	643100	723100	661600	651700	643700	708100	673400	696900	649300	626000	600700	571600
19	643700	719700	659200	654400	643400	699700	674600	690500	648400	624500	599500	572500
20	661300	735800	657100	655300	643100	696000	674000	683700	647200	624000	599200	571400
21	706200	743400	654100	655900	642800	689200	672500	677300	646600	622500	598400	571600
22	710300	741800	652000	658000	642500	683700	670600	670000	645400	621300	597300	568400
23	706200	736700	650800	658600	642800	679500	666700	665500	644500	621300	595600	566800
24	708100	732000	649000	658600	641900	674600	663700	665500	644200	620200	594400	566000
25	718700	727500	647500	659200	641300	677300	659500	681300	642800	618700	593600	565700
26	718100	721900	646300	660400	641300	690800	659200	698200	642500	617300	592400	564900
27	712500	718100	646000	660700	642800	690800	656500	698200	641900	616100	591300	563900
28	704400	713100	646000	660700	644200	689600	653800	695100	641000	615000	590200	563100
29	696900	707200	645400	659800	---	686500	653800	690800	641000	613200	589100	561500
30	688300	701600	644800	658000	---	684700	652600	684700	640700	612100	587900	561500
31	681000	---	646900	657700	---	681900	---	681000	---	613200	586800	---
MAX	718700	743400	695700	660700	656800	721500	724400	739300	674600	639200	616700	585700
MIN	626300	640700	644800	640700	641300	644200	652600	648100	640700	612100	586800	561500
(+)	523.33	524.00	522.20	522.56	522.11	523.36	522.39	523.33	521.99	521.05	520.12	519.19
(@)	+49100	+20600	-54700	+10800	-13500	+37700	-29300	+28400	-40300	-27500	-26400	-25300

CAL YR 1994 MAX 789600 MIN 620800 (@) +5900
WTR YR 1995 MAX 743400 MIN 561500 (@) -70400

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

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: March 1962 to July 1964, December 1969 to current year.

REVISED RECORDS.--TX-93-1 Phytoplankton.

330419096575401 - LEWISVILLE LAKE SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
FEB										
22...	1054	642000	1.00	283	8.2	10.0	0.80	10.3	93	K2
22...	1057	--	10.0	280	8.1	9.5	--	10.1	90	--
22...	1100	--	20.0	281	8.1	9.5	--	10.0	89	--
22...	1103	--	30.0	281	8.0	9.5	--	9.8	87	--
22...	1106	--	40.0	281	7.9	9.5	--	9.4	84	--
22...	1110	--	50.0	281	7.9	9.5	--	9.3	83	--
22...	1113	--	60.0	281	7.8	9.5	--	9.2	82	--
22...	1117	--	66.0	283	7.6	9.5	--	9.0	80	--
MAY										
23...	1600	667000	1.00	320	8.0	22.5	0.91	6.9	82	<1
23...	1604	--	10.0	320	7.9	22.5	--	6.4	76	--
23...	1608	--	20.0	323	7.9	22.0	--	6.3	74	--
23...	1612	--	30.0	321	7.8	21.5	--	5.9	68	--
23...	1615	--	40.0	322	7.6	21.5	--	5.0	58	--
23...	1619	--	50.0	322	7.6	21.0	--	4.6	53	--
23...	1624	--	60.0	326	7.4	20.5	--	3.4	39	--
23...	1629	--	65.0	329	7.4	20.0	--	2.8	32	--
AUG										
09...	1456	612000	1.00	288	8.1	30.0	1.34	6.8	92	K3
09...	1500	--	10.0	289	7.8	29.0	--	5.8	77	--
09...	1504	--	20.0	300	7.3	28.0	--	2.4	31	--
09...	1508	--	30.0	303	7.3	28.0	--	1.4	18	--
09...	1512	--	40.0	320	7.2	26.5	--	0.3	4	--
09...	1516	--	50.0	348	7.2	24.5	--	0.3	4	--
09...	1520	--	63.0	358	7.3	24.0	--	0.3	4	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)
FEB									
22...	K7	110	11	39	3.5	15	0.6	4.0	100
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	110	9	39	3.6	15	0.6	4.1	100
MAY									
23...	K6	120	11	43	3.8	17	0.7	3.8	110
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	130	13	44	3.9	17	0.7	3.5	110
AUG									
09...	<1	95	0	32	3.6	18	0.8	4.0	100
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	130	0	46	4.0	17	0.6	4.1	140

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330419096575401 - LEWISVILLE LAKE SITE AC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
FEB									
22...	25	12	0.20	6.4	168	0.460	--	<0.010	0.460
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	25	12	0.20	6.7	170	0.450	0.450	0.010	0.460
MAY									
23...	17	15	0.20	0.90	170	0.550	--	<0.010	0.550
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	29	13	0.20	3.1	185	0.660	0.660	0.010	0.670
AUG									
09...	27	14	0.20	2.7	162	--	--	<0.010	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	0.100	--	<0.010	0.100
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	18	13	0.20	8.9	197	--	--	<0.010	--

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB									
22...	0.460	<0.015	--	0.20	<0.010	0.020	0.06	6	3
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	0.460	0.080	0.22	0.30	0.020	0.020	0.06	16	18
MAY									
23...	0.550	0.020	--	<0.20	<0.010	<0.010	--	<3	1
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	0.670	0.030	--	<0.20	<0.010	0.020	0.06	<3	11
AUG									
09...	<0.050	<0.015	--	0.30	0.020	0.020	0.06	<3	11
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	0.100	0.050	0.25	0.30	<0.010	0.020	0.06	20	310
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	<0.050	1.00	0.30	1.3	0.170	0.180	0.55	600	1400

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330410096584501 - LEWISVILLE LAKE SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
22...	1125	1.00	281	8.2	10.0	10.3	93
22...	1128	10.0	283	8.2	10.0	10.3	93
22...	1131	20.0	281	8.1	9.5	10.1	90
22...	1134	30.0	281	8.1	9.5	10.0	89
22...	1137	40.0	282	8.1	9.5	9.8	87
22...	1140	55.0	282	8.0	9.5	9.9	88
MAY							
23...	1642	1.00	322	8.0	22.5	6.6	78
23...	1645	10.0	323	7.9	22.0	6.5	76
23...	1648	20.0	321	7.8	22.0	5.8	68
23...	1652	30.0	318	7.8	21.5	5.8	67
23...	1655	40.0	321	7.6	21.0	4.6	53
23...	1659	50.0	322	7.5	20.5	4.2	48
23...	1703	56.0	328	7.4	20.5	3.4	39
AUG							
09...	1526	1.00	286	8.1	29.5	7.0	94
09...	1529	10.0	290	7.8	28.5	5.6	74
09...	1532	20.0	297	7.4	28.0	2.8	37
09...	1535	30.0	301	7.3	27.5	1.5	19
09...	1538	40.0	313	7.3	27.0	0.3	4
09...	1541	52.0	349	7.4	24.5	0.3	4

330450096560501 - LEWISVILLE LAKE SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
22...	1152	1.00	297	8.5	11.0	11.5	106
22...	1155	10.0	296	8.5	11.0	11.5	106
22...	1157	20.0	297	8.4	10.5	11.0	100
22...	1200	30.0	337	8.4	10.0	10.7	96
22...	1203	36.0	350	8.3	9.5	10.0	89
MAY							
23...	1527	1.00	344	8.0	23.5	7.0	84
23...	1530	10.0	342	8.0	23.5	6.9	83
23...	1533	20.0	342	8.0	23.0	6.8	81
23...	1536	30.0	326	8.0	23.0	7.0	84
23...	1541	36.0	323	7.8	22.5	5.9	70
AUG							
09...	1431	1.00	289	8.2	30.0	7.0	95
09...	1434	10.0	310	8.0	29.5	6.7	90
09...	1437	20.0	299	7.4	28.0	2.4	31
09...	1440	30.0	331	7.4	28.0	0.4	5
09...	1443	35.0	347	7.6	28.0	0.6	8

330606097025601 - LEWISVILLE LAKE SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB							
22...	1513	1.00	314	8.3	11.0	10.8	100
22...	1517	10.0	312	8.2	11.0	10.4	96
22...	1519	20.0	309	8.0	10.0	9.3	84
22...	1521	28.0	310	8.0	10.5	8.9	81
MAY							
23...	1732	1.00	291	7.9	24.5	6.4	79
23...	1735	10.0	293	7.8	24.0	5.9	72
23...	1738	20.0	295	7.7	24.0	5.6	68
23...	1742	28.0	300	7.3	23.0	0.7	8
AUG							
09...	1605	1.00	278	8.2	30.5	7.0	96
09...	1608	10.0	277	7.9	30.0	6.0	81
09...	1611	20.0	302	7.3	29.0	0.6	8
09...	1614	25.0	315	7.4	28.5	0.5	7

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330755096572001 - LEWISVILLE LAKE SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB										
22...	1254	1.00	289	8.5	10.0	11.6	104	0.360	--	<0.010
22...	1256	10.0	287	8.2	9.5	10.3	92	--	--	--
22...	1259	20.0	298	8.0	9.0	9.3	82	--	--	--
22...	1302	30.0	304	8.0	9.0	9.3	82	--	--	--
22...	1306	39.0	307	8.1	9.0	9.2	81	0.420	0.420	0.010
MAY										
23...	1415	1.00	314	8.2	24.0	7.2	88	0.700	0.700	0.020
23...	1419	10.0	313	8.2	24.0	7.2	88	--	--	--
23...	1423	20.0	312	8.2	24.0	7.1	86	--	--	--
23...	1427	30.0	315	8.2	24.0	6.9	84	--	--	--
23...	1430	43.0	313	8.1	24.0	6.7	82	0.680	0.680	0.020
AUG										
09...	1252	1.00	278	8.2	30.0	6.9	94	--	--	<0.010
09...	1256	10.0	279	8.1	30.0	6.2	84	--	--	--
09...	1300	20.0	281	8.1	29.5	6.0	81	--	--	--
09...	1304	31.0	282	8.0	29.5	5.9	79	--	--	<0.010

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB										
22...	0.360	0.360	<0.015	--	0.20	0.010	<0.010	--	<10	20
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	0.430	0.430	0.060	0.24	0.30	<0.010	0.010	0.03	10	40
MAY										
23...	0.720	0.720	0.020	0.18	0.20	<0.010	<0.010	--	40	<10
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	0.700	0.700	0.040	0.16	0.20	0.010	<0.010	--	<10	<10
AUG										
09...	--	<0.050	<0.015	--	0.20	<0.010	<0.010	--	<10	<10
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	<0.050	0.020	0.28	0.30	<0.010	<0.010	--	30	<10

330959096565301 - LEWISVILLE LAKE SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARDNESS TOTAL (MG/L AS CACO3)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
22...	1321	1.00	317	8.5	10.5	0.55	11.7	107	K3	K2	120	14
22...	1323	10.0	322	8.3	10.0	--	10.8	97	--	--	--	--
22...	1326	20.0	331	8.0	9.5	--	9.1	81	--	--	--	--
22...	1330	27.0	331	8.0	9.5	--	9.3	83	--	--	130	22
MAY												
23...	1444	1.00	308	7.9	24.5	0.27	6.6	81	K14	K13	120	23
23...	1449	10.0	306	7.9	24.5	--	6.5	80	--	--	--	--
23...	1455	20.0	308	7.9	24.5	--	6.3	77	--	--	--	--
23...	1501	27.0	309	7.8	24.5	--	5.9	73	--	--	120	20
AUG												
09...	1319	1.00	275	8.1	30.5	0.34	6.0	82	K6	K2	89	10
09...	1324	10.0	275	8.0	30.0	--	5.8	79	--	--	--	--
09...	1329	24.0	275	8.0	30.0	--	5.7	77	--	--	87	12

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330959096565301 - LEWISVILLE LAKE SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
FEB												
22...	43	4.0	17	0.7	4.1	110	38	12	0.20	5.8	192	0.340
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	47	4.2	16	0.6	4.1	110	41	12	0.20	6.2	200	0.400
MAY												
23...	41	3.6	14	0.6	3.9	94	33	10	0.20	3.5	175	2.10
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	41	3.6	15	0.6	4.0	97	32	10	0.20	3.5	176	1.89
AUG												
09...	30	3.5	17	0.8	4.3	79	27	14	0.20	3.3	147	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	29	3.6	17	0.8	4.0	75	26	14	0.20	3.1	142	--

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB												
22...	0.340	0.010	0.350	0.350	0.020	0.28	0.30	<0.010	0.010	0.03	4	2
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	0.400	0.010	0.410	0.410	0.050	0.25	0.30	<0.010	<0.010	--	6	7
MAY												
23...	--	<0.010	2.10	2.10	0.020	0.28	0.30	0.010	0.020	0.06	<3	1
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	1.89	0.010	1.90	1.90	0.040	0.26	0.30	<0.010	0.020	0.06	5	5
AUG												
09...	--	<0.010	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	<3	<1
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	<0.010	--	<0.050	0.030	0.27	0.30	<0.010	<0.010	--	4	5

330722096592201 - LEWISVILLE LAKE SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
FEB										
22...	1229	1.00	311	8.8	10.5	13.0	118	0.170	0.170	0.010
22...	1231	10.0	296	8.4	10.0	11.2	101	--	--	--
22...	1234	20.0	297	8.4	10.0	10.9	98	--	--	--
22...	1236	30.0	309	8.3	9.5	10.2	91	--	--	--
22...	1239	46.0	306	8.3	10.0	10.5	95	0.300	0.300	0.010
MAY										
23...	1250	1.00	316	7.9	23.5	6.4	77	0.400	0.400	0.040
23...	1254	10.0	313	7.7	23.0	5.7	68	--	--	--
23...	1300	20.0	316	7.6	23.5	5.6	68	--	--	--
23...	1305	30.0	312	7.6	23.5	5.4	65	--	--	--
23...	1307	45.0	313	7.5	23.5	4.4	53	0.190	0.190	0.080
AUG										
09...	1214	1.00	286	8.0	29.5	6.5	87	--	--	<0.010
09...	1218	10.0	288	7.9	29.0	5.7	76	--	--	--
09...	1222	20.0	294	7.7	29.0	5.1	68	--	--	--
09...	1226	30.0	296	7.5	29.0	4.6	61	--	--	--
09...	1230	43.0	301	7.5	29.0	3.3	44	0.080	0.080	0.030

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330722096592201 - LEWISVILLE LAKE SITE FC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB										
22...	0.180	0.180	<0.015	--	0.30	<0.010	<0.010	--	20	<10
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	0.310	0.310	0.030	0.27	0.30	<0.010	<0.010	--	40	<10
MAY										
23...	0.440	0.440	0.020	0.18	0.20	<0.010	<0.010	--	20	<10
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--	--
23...	0.270	0.270	0.020	0.28	0.30	0.020	0.030	0.09	60	<10
AUG										
09...	--	<0.050	<0.015	--	0.30	<0.010	<0.010	--	20	10
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	0.110	0.110	<0.015	--	0.30	0.040	0.020	0.06	20	<10

330944097003601 - LEWISVILLE LAKE SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB												
22...	1403	1.00	321	8.7	11.0	14.0	129	K5	K2	130	0	43
22...	1408	10.0	321	8.7	10.5	12.9	118	--	--	--	--	--
22...	1413	19.0	320	8.4	10.0	10.5	95	--	--	130	2	44
MAY												
23...	1331	1.00	311	8.2	24.5	7.4	91	K17	K14	120	6	43
23...	1336	10.0	312	8.2	24.5	7.3	90	--	--	--	--	--
23...	1342	20.0	312	8.1	24.5	6.9	85	--	--	120	6	43
AUG												
09...	1358	1.00	285	8.3	30.5	7.2	99	K5	K9	93	0	31
09...	1402	10.0	287	8.0	30.0	5.8	79	--	--	--	--	--
09...	1407	18.0	290	7.8	29.5	4.7	63	--	--	93	4	31

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB												
22...	4.3	19	0.7	4.0	120	23	16	0.20	0.70	186	0.100	0.100
22...	--	--	--	--	--	--	--	--	--	--	--	--
22...	4.2	18	0.7	4.0	120	23	15	0.20	2.7	187	0.240	--
MAY												
23...	3.9	15	0.6	3.8	120	18	15	0.20	1.9	171	0.060	0.060
23...	--	--	--	--	--	--	--	--	--	--	--	--
23...	3.9	15	0.6	3.8	120	17	16	0.20	2.1	172	0.080	0.080
AUG												
09...	3.8	18	0.8	4.3	100	20	18	0.20	3.8	160	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--
09...	3.8	18	0.8	4.2	89	20	18	0.20	4.2	153	--	--

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

330944097003601 - LEWISVILLE LAKE SITE GC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
FEB											
22...	0.010	0.110	0.110	<0.015	--	0.20	<0.010	<0.010	--	<3	<1
22...	--	--	--	--	--	--	--	--	--	--	--
22...	<0.010	0.240	0.240	0.020	0.28	0.30	<0.010	<0.010	--	<3	1
MAY											
23...	0.030	0.090	0.090	<0.015	--	0.30	<0.010	<0.010	--	<3	<1
23...	--	--	--	--	--	--	--	--	--	--	--
23...	0.030	0.110	0.110	0.020	0.18	0.20	<0.010	<0.010	--	<3	3
AUG											
09...	<0.010	--	<0.050	<0.015	--	0.30	<0.010	0.010	0.03	<3	<1
09...	--	--	--	--	--	--	--	--	--	--	--
09...	<0.010	--	<0.050	0.040	0.26	0.30	<0.010	0.020	0.06	<3	16

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site AC (330419096575401)

Phytoplankton Analyses October 1994 to September 1995

Date	2-22-95
Time	1056
TOTAL CELLS/mL	10,468
NUMBER OF SPECIES	7
DEPTH COLLECTED (ft.)	1.3

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	416
CHLOROPHYTA	
Ankistrodesmus falcatus	595
Chlamydomonas sp.	119
Staurastrum sp.	59
CYANOPHYTA	
Aphanocapsa delicatissima	8,922
EUGLENOPHYTA	
Trachelomonas sp.	238
CRYPTOPHYTA	
Cryptomonas erosa	119

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site GC (330944097003601)

Phytoplankton Analyses October 1994 to September 1995

Date	2-22-95
Time	1405
TOTAL CELLS/mL	16,031
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft.)	0.8

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	3,438
Stephanodiscus astraea	1,410
Order Pennales	
Nitzschia denticula	119
CHLOROPHYTA	
Ankistrodesmus falcatus	1,190
Chlamydomonas sp.	149
Pediastrum duplex	30
Scenedesmus opoliensis	59
Selenastrum Westii	30
Staurastrum sp.	30
CYANOPHYTA	
Aphanocapsa delicatissima	7,138
Chroococcus limneticus	1,903
EUGLENOPHYTA	
Trachelomonas sp.	297
CRYPTOPHYTA	
Cryptomonas erosa	238

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site AC (330419096575401)

Phytoplankton Analyses October 1994 to September 1995

Date	5-23-95
Time	1600
TOTAL CELLS/mL	13,799
NUMBER OF SPECIES	9
DEPTH COLLECTED (ft.)	1.50

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	208
CHLOROPHYTA	
Ankistrodesmus falcatus	89
Chlamydomonas sp.	208
Scenedesmus opoliensis	59
CYANOPHYTA	
Aphanocapsa delicatissima	10,112
Chroococcus limneticus	833
Merismopedia tenuissima	1,903
EUGLENOPHYTA	
Trachelomonas sp.	268
CRYPTOPHYTA	
Cryptomonas erosa	119

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site GC (330944097003601)

Phytoplankton Analyses October 1994 to September 1995

Date	5-23-95
Time	1331
TOTAL CELLS/mL	18,856
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft.)	0.60

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	714
CHLOROPHYTA	
Ankistrodesmus falcatus	59
Chlamydomonas sp.	119
Oocystis sp.	30
Scenedesmus bijuga	30
Scenedesmus opoliensis	297
Selenastrum Westii	59
CYANOPHYTA	
Aphanocapsa delicatissima	12,491
Aphanocapsa elachista	1,190
Chroococcus limneticus	119
Merismopedia tenuissima	3,331
EUGLENOPHYTA	
Trachelomonas sp.	387
CRYPTOPHYTA	
Cryptomonas erosa	30

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site AC (330419096575401)

Phytoplankton Analyses October 1994 to September 1995

Date	8-9-95
Time	1456
TOTAL CELLS/mL	67,627
NUMBER OF SPECIES	13
DEPTH COLLECTED (ft.)	2.2

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	297
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	760
Synedra ulana var. *ulna*	132
CHLOROPHYTA	
Chlamydomonas sp.	178
Scenedesmus opoliensis	59
Staurastrum sp.	30
CYANOPHYTA	
Aphanizomenon flos-aquae	2,082
Aphanocapsa delicatissima	30,335
Aphanocapsa elachista	4,758
Chroococcus limneticus	595
Merismopedia tenuissima	4,758
Oscillatoria sp.	23,197
EUGLENOPHYTA	
Trachelomonas sp.	446

08052800 LEWISVILLE LAKE NEAR LEWISVILLE, TX--Continued

Lewisville Lake Site GC (330944097003601)

Phytoplankton Analyses October 1994 to September 1995

Date	8-9-95
Time	1358
TOTAL CELLS/mL	37,976
NUMBER OF SPECIES	16
DEPTH COLLECTED (ft.)	0.70

Organisms	Cells/mL
BACILLARIOPHYTA	
Order Centrales	
Cyclotella ocellata	714
Order Pennales	
Fragilaria crotonensis var. *crotonensis*	208
CHLOROPHYTA	
Ankistrodesmus falcatus	297
Chlamydomonas sp.	327
Cosmarium sp.	30
Pediastrum duplex	30
Scenedesmus bijuga	59
Scenedesmus opoliensis	119
Selenastrum Westii	327
Staurastrum sp.	59
CYANOPHYTA	
Anabaena spiroides	892
Aphanocapsa delicatissima	16,654
Chroococcus limneticus	595
Merismopedia tenuissima	12,372
Oscillatoria sp.	4,758
EUGLENOPHYTA	
Trachelomonas sp.	535

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 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1922: Drainage area.

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

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow regulated by Lewisville Lake (station 08052800) 1.9 mi upstream since November 1954. Most of low flow is used by the city of Dallas for municipal supply (see station 08055500). Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1950-54) prior to regulation, 402 ft³/s (291,200 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1950-54).--Maximum discharge, 21,700 ft³/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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	263	e3480	2900	585	543	32	3870	1630	3740	279	421	418
2	263	e2900	2900	578	547	35	3880	1620	3740	274	324	421
3	256	e2510	2900	1000	546	41	3880	1660	3730	279	410	419
4	245	e2490	2900	1730	548	35	3790	1630	3720	378	409	416
5	245	e1130	2890	1050	546	32	2550	1650	3720	406	410	420
6	207	e69	2890	59	549	79	1490	1690	3720	309	408	419
7	367	e1580	2880	42	542	501	2780	631	3710	266	410	419
8	309	e4040	2840	36	545	536	4160	1440	3720	284	407	414
9	231	e2760	2400	32	549	536	4250	213	3330	302	404	407
10	245	e2470	2410	30	552	534	3800	614	2430	280	402	400
11	208	e3550	2490	26	555	492	3380	2300	2530	287	403	207
12	146	e3160	2840	27	553	409	3420	3890	2660	317	402	35
13	143	e2130	2100	34	551	1670	3820	4390	3250	345	402	52
14	143	e400	626	22	551	314	3960	4450	3310	348	402	111
15	143	e20	1380	20	549	1060	3970	4420	2660	337	400	410
16	144	e680	2770	21	549	2930	3980	4270	558	339	401	481
17	159	e2240	2860	20	550	3510	3980	4220	501	338	400	392
18	609	e3040	2860	46	548	3880	4060	4200	496	340	401	463
19	146	e2950	2860	37	551	3910	4110	4180	520	340	397	498
20	98	e1830	2860	22	553	3920	4240	4180	550	329	398	378
21	1150	e1510	2870	18	552	3920	4060	4170	549	314	406	411
22	674	e2500	2400	29	549	3920	4010	4160	517	357	405	313
23	1230	e2500	1120	27	551	3910	3990	4150	334	455	404	310
24	1290	e2510	1090	21	549	3900	3990	4090	336	406	406	311
25	1060	e2500	1090	20	548	3960	3980	3860	380	390	407	295
26	519	e2500	1080	111	549	3540	3780	3780	333	378	404	269
27	1590	e2500	947	546	280	1480	3250	3760	247	379	403	268
28	2310	e2500	807	544	34	2900	2870	3770	314	421	402	313
29	2420	e2500	803	542	---	3740	1690	3770	306	460	411	364
30	2420	e2500	687	540	---	3870	1650	3750	286	460	454	369
31	2340	---	599	543	---	3880	---	3740	---	463	530	---
TOTAL	21573	67449	65049	8358	14589	63476	106640	96278	56197	10860	12643	10403
MEAN	696	2248	2098	270	521	2048	3555	3106	1873	350	408	347
MAX	2420	4040	2900	1730	555	3960	4250	4450	3740	463	530	498
MIN	98	20	599	18	34	32	1490	213	247	266	324	35
AC-FT	42790	133800	129000	16580	28940	125900	211500	191000	111500	21540	25080	20630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1995#, BY WATER YEAR (WY)

MEAN	428	686	699	529	630	789	715	1370	1450	880	493	338
MAX	3628	6300	4681	5267	4611	3871	3555	8391	5222	4479	4101	2480
(WY)	1982	1982	1982	1992	1992	1992	1995	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

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1955 - 1995#	
ANNUAL TOTAL	434565		533515			
ANNUAL MEAN	1191		1462		751	
HIGHEST ANNUAL MEAN					3062	1982
LOWEST ANNUAL MEAN					94.2	1955
HIGHEST DAILY MEAN	5250	Jul 15	4450	May 14	19000	May 4 1990
LOWEST DAILY MEAN	15	Jan 27	18	Jan 21	.00	Oct 20 1993
ANNUAL SEVEN-DAY MINIMUM	52	Apr 20	24	Jan 11	.29	Nov 3 1983
INSTANTANEOUS PEAK FLOW			4480	May 14	19600	May 4 1990
INSTANTANEOUS PEAK STAGE			20.62	May 14	30.15	May 4 1990
ANNUAL RUNOFF (AC-FT)	862000		1058000		544000	
10 PERCENT EXCEEDS	3410		3880		3160	
50 PERCENT EXCEEDS	364		549		206	
90 PERCENT EXCEEDS	145		143		75	

e Estimated
Period of regulated streamflow.

08053000 ELM FORK TRINITY RIVER NEAR LEWISVILLE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to September 1990.
WATER TEMPERATURE: November 1976 to September 1990.

INSTRUMENTATION.--From November 1976 to October 1981, water temperature was continuously recorded at this station.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,050 microsiemens Feb. 5, 8, 1989; minimum daily, 200 microsiemens May 13, 1982.
WATER TEMPERATURE: Maximum, 33.5°C July 16, Aug. 18, 1988, Sept. 14, 15, 1989; minimum, 0.0°C Jan. 31, Feb. 9, 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
FEB												
22...	1128	539	315	8.0	10.5	--	--	11.9	108	1.6	120	10
APR												
24...	1530	4090	326	8.0	18.0	23	13	10.3	110	0.6	120	16
MAY												
23...	1345	4070	325	7.8	21.0	14	9.2	9.2	105	0.7	120	12
JUN												
08...	1400	3610	324	7.7	23.5	27	11	8.4	101	0.4	120	13
JUL												
26...	1430	380	335	7.6	27.5	15	3.8	4.8	62	1.3	120	6
AUG												
09...	1345	405	320	7.6	28.0	15	3.0	4.5	59	1.8	110	9

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
FEB												
22...	40	3.6	18	0.7	4.4	100	29	14	0.2	6.4	182	--
APR												
24...	43	3.7	16	0.6	3.8	110	31	13	0.2	2.4	180	13
MAY												
23...	42	3.6	17	0.7	3.8	110	30	14	0.3	1.2	180	9
JUN												
08...	42	3.8	17	0.7	3.8	110	29	14	0.2	2.1	180	10
JUL												
26...	40	3.9	21	0.8	4.5	110	31	16	0.30	3.5	188	19
AUG												
09...	39	3.9	20	0.8	4.3	100	29	16	0.3	3.6	181	7

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
FEB											
22...	--	--	0.710	0.710	0.020	0.730	0.730	0.050	0.35	0.40	0.050
APR											
24...	4	9	0.660	0.660	0.0	0.670	0.67	0.0	0.38	0.4	0.0
MAY											
23...	<1	--	0.690	--	<0.010	0.690	0.690	0.020	0.28	0.30	<0.010
JUN											
08...	6	4	0.770	--	<0.010	0.770	0.770	0.030	0.27	0.30	<0.010
JUL											
26...	7	12	0.400	0.400	0.010	0.410	0.410	0.100	0.30	0.40	<0.010
AUG											
09...	<1	--	0.340	--	<0.010	0.340	0.340	0.080	0.32	0.40	0.040

08053000 ELM FORK TRINITY RIVER NEAR LEWISVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
FEB											
22...	0.050	0.15	--	2	41	<0.5	<1	<5	<3	<10	8
APR											
24...	0.0	0.06	5.8	--	--	--	--	--	--	--	--
MAY											
23...	0.020	0.06	4.0	1	43	<0.5	2	<5	5	<10	15
JUN											
08...	0.020	0.06	6.8	--	--	--	--	--	--	--	--
JUL											
26...	0.020	0.06	17	--	--	--	--	--	--	--	--
AUG											
09...	0.040	0.12	7.2	4	37	<0.5	<1	<5	4	<10	17

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
FEB											
22...	<10	<4	6	<0.1	20	<10	<1	<1	240	<6	<3
APR											
24...	--	--	--	--	--	--	--	--	--	--	--
MAY											
23...	30	<4	2	<0.1	<10	<10	<1	<1	230	<6	3
JUN											
08...	--	--	--	--	--	--	--	--	--	--	--
JUL											
26...	--	--	--	--	--	--	--	--	--	--	--
AUG											
09...	<10	<4	97	0.2	<10	<10	<1	1	250	<6	55

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 mi².

PERIOD OF RECORD.--October 1949 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1980 to September 1982.

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

GAGE.--Water-stage recorder. Datum of gage is 606.66 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. There are several small diversions above station. Flow is affected at times by discharge from the flood-detention pools of 84 floodwater-retarding structures with a combined detention capacity of 52,750 acre-ft. These structures control runoff from 197 mi² in the Denton Creek watershed. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--31 years (water years 1950-80), 77.4 ft³/s (56,080 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1950-80).--Maximum discharge, 29,800 ft³/s May 24, 1957 (gage height, 17.64 ft); no flow at times in 1949-65, 1967-74, 1976-80.

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 resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	68	159	129	46	14	66	83	132	42	34	9.5
2	12	63	152	116	45	14	60	78	113	40	343	8.6
3	12	62	158	115	43	15	54	81	100	38	961	7.8
4	12	62	157	124	39	17	922	133	92	36	495	7.2
5	16	155	147	118	39	18	889	204	84	177	191	6.2
6	13	115	137	119	37	18	617	1400	78	195	98	5.5
7	157	81	134	116	36	32	351	706	73	62	65	5.0
8	299	72	129	108	35	33	254	4190	69	39	41	4.5
9	82	113	536	105	34	20	204	3530	65	28	32	4.4
10	37	183	937	104	36	17	179	1400	62	23	27	4.4
11	25	113	454	104	47	15	453	912	115	19	24	5.9
12	20	92	302	102	77	16	265	634	130	18	21	10
13	18	84	240	100	46	1620	187	433	96	18	21	17
14	17	2390	222	96	35	1460	154	301	75	17	20	15
15	18	5210	220	91	31	749	136	232	66	16	18	12
16	21	1470	223	90	27	481	122	193	59	15	17	11
17	22	1020	211	98	23	316	117	171	55	16	16	10
18	27	759	187	131	20	229	340	149	52	17	14	10
19	40	574	172	159	19	170	258	127	50	26	13	17
20	632	2760	163	127	17	135	377	115	48	27	13	18
21	1620	2710	153	108	17	106	339	108	47	24	14	23
22	643	1130	142	104	16	92	191	101	46	19	16	19
23	287	720	135	111	16	81	144	93	44	16	13	16
24	509	470	133	102	21	68	124	103	43	15	12	14
25	697	365	129	98	18	84	111	307	41	14	11	13
26	299	319	126	102	16	435	102	1430	39	15	11	17
27	180	281	123	120	16	237	113	687	38	13	11	15
28	132	232	127	111	16	130	101	390	39	12	11	14
29	106	196	156	83	---	98	91	228	39	11	10	12
30	88	173	155	65	---	83	87	165	39	10	10	11
31	77	---	139	52	---	74	---	140	---	10	12	---
TOTAL	6130	22042	6558	3308	868	6877	7408	18824	2029	1028	2595	343.0
MEAN	198	735	212	107	31.0	222	247	607	67.6	33.2	83.7	11.4
MAX	1620	5210	937	159	77	1620	922	4190	132	195	961	23
MIN	12	62	123	52	16	14	54	78	38	10	10	4.4
AC-FT	12160	43720	13010	6560	1720	13640	14690	37340	4020	2040	5150	680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1995#, BY WATER YEAR (WY)

MEAN	284	116	160	89.6	155	196	227	518	338	52.1	13.7	32.4
MAX	2828	735	1321	437	497	522	2095	2036	1815	260	83.7	242
(WY)	1982	1995	1992	1992	1993	1990	1990	1982	1989	1982	1995	1986
MIN	.000	.29	3.84	4.30	14.1	29.5	20.4	8.24	14.4	.000	.000	.000
(WY)	1989	1981	1981	1981	1981	1986	1981	1984	1988	1984	1981	1983

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1981 - 1995#	
ANNUAL TOTAL	69971.3		78010.0			
ANNUAL MEAN	192		214		182	
HIGHEST ANNUAL MEAN					577	1982
LOWEST ANNUAL MEAN					21.9	1983
HIGHEST DAILY MEAN	5210	Nov 15	5210	Nov 15	18600	Oct 14 1981
LOWEST DAILY MEAN	1.4	Aug 30	4.4	Sep 9	.00	Oct 9 1980
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 24	5.1	Sep 5	.00	Oct 9 1980
INSTANTANEOUS PEAK FLOW			7970	Nov 15	34700	Oct 13 1981
INSTANTANEOUS PEAK STAGE			15.32	Nov 15	18.68	Oct 13 1981
ANNUAL RUNOFF (AC-FT)	138800		154700		131800	
10 PERCENT EXCEEDS	358		460		286	
50 PERCENT EXCEEDS	62		83		31	
90 PERCENT EXCEEDS	9.6		13		.64	

Period of regulated streamflow.

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 mi².

PERIOD OF RECORD.--July 1952 to current year. Prior to October 1970, published as Grapevine Reservoir.
Water-quality records.--Chemical and biochemical analyses: October 1969 to August 1986.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 16, 1953, nonrecording gage at site 1,000 ft upstream at present datum.

REMARKS.--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-foot-diameter concrete conduit that is controlled by two 6.5- by 13.0-foot broome-type gates and two 30-inch steel pipes with service valves. The capacity table, used since April 1972, is based on a survey made in October 1966. The lake was built for flood control, navigation, and water conservation. 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 mi² in the Denton Creek watershed. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	588.0	-
Crest of spillway	560.0	425,500
Top of conservation pool	535.0	181,100
Lowest intake to wet wells (invert)	500.5	22,140
Invert of two broome-type gates	475.0	100

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 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, 248,100 acre-ft Nov. 22 (elevation, 543.33 ft); minimum, 169,000 acre-ft Sep. 30 (elevation, 533.33 ft).

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

531.0	153,300	542.0	236,500	549.0	302,000
535.0	181,100	545.0	263,300	551.0	322,400
539.0	211,500	547.0	282,300	553.0	343,800

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174500	202100	225500	183400	180200	180500	190300	188400	212500	180700	177700	178000
2	174100	201000	222500	183100	180300	180300	189200	187500	210400	180500	178500	177800
3	173800	200000	219600	183000	180300	179900	188300	187000	208300	180000	180500	177600
4	173400	200000	216800	182700	180300	179700	192900	186500	206300	179800	181800	177200
5	173000	201700	213800	182300	180300	179400	199700	188700	203700	181300	182300	176900
6	172500	202100	210800	181900	180300	179200	202100	203400	201800	181600	182400	176600
7	173900	202100	207800	181300	180300	179500	202000	206800	199700	181500	182400	176500
8	175000	202200	205700	180700	180200	179500	201400	229100	197500	181300	182300	176100
9	175000	203500	206000	180100	180200	179500	200500	238600	195300	181000	182200	175800
10	174700	204200	208300	179500	180200	179600	202300	242200	194900	180700	182100	175600
11	174400	204500	206700	179100	180500	179700	202000	243300	195600	180500	181900	174600
12	174100	204500	204800	178900	180500	180600	201500	242700	194300	180100	181800	173500
13	173800	203800	203500	178300	180700	193200	200600	241500	192200	179700	181600	173300
14	173500	208400	202900	177700	180700	201000	199500	240100	189900	179400	181300	172600
15	173300	228900	202100	177300	181000	203600	198600	238400	188100	179100	181200	172200
16	173000	233100	201400	177200	181200	203800	197500	236600	186700	178800	180900	172000
17	173100	234100	200600	177300	181100	203000	196900	235000	185600	178500	180700	171800
18	177200	233600	199600	178000	181100	201900	196300	233300	184900	178300	180500	171800
19	177700	232600	198500	178700	181100	200700	197200	231500	184400	178000	180400	172000
20	181500	242900	197600	178700	181000	199200	197000	229600	184000	177800	180200	171800
21	193100	247800	196500	178600	181000	197800	196500	227800	183500	177500	179900	171600
22	195300	247900	195100	178900	181000	196200	195800	225800	183200	177300	179700	171100
23	195200	246700	193400	179000	181000	194800	194400	224000	182900	178100	179500	170700
24	197100	245100	191700	179100	181000	193200	193300	222400	182800	177800	179300	170400
25	205900	242900	189900	179000	181000	192700	192300	221000	182300	177600	179100	170300
26	207200	240300	188100	179300	181000	194700	191500	221800	182100	177400	179000	170000
27	207000	237700	186400	179700	181000	195200	190500	221400	181900	177200	178900	169800
28	206300	234800	185100	180000	180800	194400	189600	220200	181500	177000	178600	169600
29	205400	231800	183800	180100	---	193500	189400	218400	181300	176700	178400	169300
30	204400	228700	183400	180100	---	192500	189200	216500	181000	176500	178400	169100
31	203400	---	183700	180200	---	191400	---	214700	---	176900	178100	---
MAX	207200	247900	225500	183400	181200	203800	202300	243300	212500	181600	182400	178000
MIN	172500	200000	183400	177200	180200	179200	188300	186500	181000	176500	177700	169100
(+)	537.97	541.09	535.35	534.87	534.96	536.40	536.10	539.40	534.98	534.42	534.58	533.32
(@)	+28600	+25300	-45000	-3500	+600	+10600	-2200	+25500	-33700	-4100	+1200	-9000

CAL YR 1994 MAX 247900 MIN 172500 (@) +1300
WTR YR 1995 MAX 247900 MIN 169100 (@) -5700

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

08055500 ELM FORK TRINITY RIVER NEAR CARROLLTON, TX

LOCATION.--Lat 32°57'57", long 96°56'39", Dallas County, Hydrologic Unit 12030103, 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 mi².

PERIOD OF RECORD.--January 1907 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to November 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 sea level. Prior to November 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.

REMARKS.--No estimated daily discharges. Records good. Flow largely regulated by Lewisville Lake (station 08052800) since November 1954, and by Grapevine Lake (station 08054500) since July 1952. The city of Dallas diverts water from the pool at gage and from the river 14 mi downstream for municipal use. A water treatment plant returns water to the river below the station. In addition, Dallas Power and Light Co. diverts water from the pool at gage into North Lake for cooling water at their electric generating plant. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--47 years (water years 1908-54), 818 ft³/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 ft³/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 ft³/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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	4930	5090	812	591	105	4920	2130	4790	104	477	158
2	149	4680	5060	744	598	96	4900	2070	4780	98	155	155
3	124	3930	5130	1020	578	135	4910	2260	4770	103	154	168
4	152	3780	5050	2020	611	120	6030	2120	4760	235	128	145
5	130	5030	4970	1530	577	92	5030	2360	4720	857	125	204
6	106	642	4990	393	601	99	2320	4460	4710	265	111	131
7	760	984	4980	382	607	630	3580	854	4680	120	170	161
8	599	4270	5340	333	586	399	5130	5160	4660	107	161	132
9	179	5230	4590	341	608	380	5430	753	4500	125	154	161
10	135	3140	4630	312	569	364	5380	491	3660	106	156	144
11	116	4300	4280	333	564	364	5000	2410	4270	91	147	130
12	61	4500	4870	182	535	299	4540	4450	3260	112	152	387
13	33	3870	3940	302	479	5750	4940	5470	4190	137	169	242
14	59	3600	1380	341	504	1150	5120	5430	4310	131	140	177
15	90	4250	1820	173	513	1040	5150	5410	3940	120	157	306
16	99	1140	3810	128	543	4260	5150	5260	1180	134	152	304
17	64	3400	4060	154	526	4820	5150	5190	907	137	154	168
18	2630	5270	4060	216	515	5240	5380	5060	592	135	124	230
19	564	5590	4050	188	505	5280	5670	5020	525	149	166	372
20	132	5790	4070	87	486	5250	6000	5020	445	131	174	120
21	3690	2970	4060	158	464	5250	5320	5030	441	101	185	164
22	1310	4770	3840	143	463	5240	5200	5030	421	108	157	102
23	3130	4940	2270	88	475	5210	5200	5040	152	578	157	100
24	3370	4880	2160	58	448	5180	5120	5080	107	283	161	100
25	3970	4910	2150	75	503	5580	5080	5120	160	171	156	100
26	1550	5130	2110	341	497	5960	4990	4940	143	129	171	100
27	3520	5130	2030	679	297	1810	4350	4860	101	125	162	99
28	4850	5150	1920	595	119	3820	3930	4830	143	141	143	98
29	5270	5190	1810	552	---	4720	2300	4800	140	178	156	122
30	5320	5190	1280	541	---	4920	2250	4830	141	183	214	208
31	5230	---	856	557	---	4930	---	4790	---	236	342	---
TOTAL	47526	126586	110656	13778	14362	88493	143470	125728	71598	5630	5330	5188
MEAN	1533	4220	3570	444	513	2855	4782	4056	2387	182	172	173
MAX	5320	5790	5340	2020	611	5960	6030	5470	4790	857	477	387
MIN	33	642	856	58	119	92	2250	491	101	91	111	98
AC-FT	94270	251100	219500	27330	28490	175500	284600	249400	142000	11170	10570	10290

08055500 ELM FORK TRINITY RIVER NEAR CARROLLTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1955 - 1995#, BY WATER YEAR (WY)

MEAN	447	806	871	637	753	929	938	1618	1751	1015	562	308
MAX	3554	8830	6785	6614	5868	4858	4782	10920	6757	6224	6003	3406
(WY)	1982	1982	1982	1992	1992	1992	1995	1990	1990	1989	1982	1962
MIN	27.8	4.21	.78	.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

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1955 - 1995#	
ANNUAL TOTAL	652589		758345			
ANNUAL MEAN	1788		2078		887	
HIGHEST ANNUAL MEAN					4289	1982
LOWEST ANNUAL MEAN					76.0	1978
HIGHEST DAILY MEAN	7520	Jul 11	6030	Apr 4	25300	May 5 1990
LOWEST DAILY MEAN	33	Oct 13	33	Oct 13	.00	Dec 2 1954
ANNUAL SEVEN-DAY MINIMUM	75	Oct 11	75	Oct 11	.00	Jan 7 1959
INSTANTANEOUS PEAK FLOW			7880	Mar 13	33000	Sep 21 1964
INSTANTANEOUS PEAK STAGE			8.54	Mar 13	13.48	May 5 1990
ANNUAL RUNOFF (AC-FT)	1294000		1504000		642300	
10 PERCENT EXCEEDS	5100		5150		3910	
50 PERCENT EXCEEDS	572		599		147	
90 PERCENT EXCEEDS	132		120		35	

Period of regulated streamflow.

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 mi².

PERIOD OF RECORD.--October 1898 to December 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: 1903-6 (monthly and annual means). WSP 1732: 1937(M). WSP 1922: Drainage area. WDR TX-73-1: 1972.

GAGE.--Water-stage recorder. Datum of gage is 368.02 ft above sea level. Oct. 1, 1898, to Dec. 31, 1899, nonrecording gage at site 2 mi upstream at different datum. July 1, 1903, to July 20, 1930, non-recording 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.

REMARKS.--Records good except those for estimated daily discharges, which are poor. At times, flow is affected by storage in seven major upstream reservoirs, with a combined capacity of 1,703,000 acre-ft of which 846,200 acre-ft is for flood control. 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). Sewage 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 sewage effluent into the river upstream from this station. For additional information on diversions and effluent returns for this station, see stations 08048000, 08049200, and 08049500. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--31 years (water years 1903-33) prior to regulation by upstream reservoirs, 1,330 ft³/s (963,500 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1903-33).--Maximum discharge, 184,000 ft³/s May 25, 1908 (gage height, 52.6 ft), from rating curve extended above 109,000 ft³/s. Maximum stage since at least 1840, that of May 25, 1908.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	4870	5750	e3060	1700	848	4660	3560	6680	541	4970	480
2	437	5450	5520	e2120	1670	856	4730	2720	5910	580	4210	396
3	447	5710	5250	1740	1570	991	5290	3380	5230	614	3100	e413
4	444	4960	5130	e2400	1410	945	6500	3690	4910	537	2250	e391
5	448	13800	5010	e2780	1390	885	9270	3590	4700	3290	2210	402
6	438	11300	4910	e2520	1350	899	12000	16400	4580	3550	2430	389
7	1640	3700	4880	e1640	1200	3410	9330	23400	4530	1040	2380	e404
8	4550	2780	5450	e1280	1360	2070	7160	24100	4420	638	2130	383
9	1500	5510	6880	e1150	1790	1130	7840	27000	4350	547	1640	400
10	693	7860	8210	1060	1180	1080	8760	18600	4260	524	1440	400
11	576	4750	6440	e997	1860	1040	10500	9860	7600	493	1370	416
12	527	4360	5120	919	1400	1280	9990	8970	8500	487	1230	439
13	484	4260	5290	872	1230	15500	7540	9800	5770	484	863	3660
14	468	4620	4710	e1090	1150	22300	6620	10400	6080	490	657	3500
15	501	14100	3350	e1210	1170	9990	5800	10900	5870	504	565	768
16	904	14000	4100	e1040	1240	6730	5820	11000	4360	485	504	695
17	1360	7760	4820	1770	1460	8020	5090	10900	2460	492	465	602
18	5730	8720	4880	2020	1360	9050	6600	10600	1290	486	439	619
19	11300	9210	4820	2990	1320	8840	6660	10100	1000	510	416	2000
20	4880	9450	4710	1610	1210	8450	11500	9400	925	525	548	1930
21	12600	13100	4470	e1280	1170	8160	10900	7870	829	473	1080	750
22	14500	9450	4160	e1220	1100	8070	7410	7240	819	454	541	713
23	6610	7910	3600	1430	1070	8120	6290	7650	728	577	460	768
24	4860	7970	2580	1130	1070	7710	5820	7600	535	1440	425	492
25	8690	8190	2400	1380	1030	7430	6000	7060	512	733	445	499
26	10800	8160	2360	2620	1060	10200	5630	6380	535	552	439	485
27	6030	7780	2360	3300	1060	10600	4860	6270	528	500	441	464
28	5340	7170	e3110	2120	864	5600	4320	5720	804	455	431	436
29	5240	6590	4120	1700	---	5320	3600	5900	735	440	420	428
30	5130	6150	2690	1560	---	5160	3740	5950	593	435	419	410
31	5020	---	e2480	1590	---	4780	---	5640	---	770	492	---
TOTAL	122571	229640	139560	53598	36444	185464	210230	301650	100043	23646	39410	24132
MEAN	3954	7655	4502	1729	1302	5983	7008	9731	3335	763	1271	804
MAX	14500	14100	8210	3300	1860	22300	12000	27000	8500	3550	4970	3660
MIN	424	2780	2360	872	864	848	3600	2720	512	435	416	383
AC-FT	243100	455500	276800	106300	72290	367900	417000	598300	198400	46900	78170	47870

08057000 TRINITY RIVER AT DALLAS, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1995#, BY WATER YEAR (WY)

MEAN	1210	1368	1438	1191	1830	2052	2518	4104	3212	1284	730	799
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

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1934 - 1995#	
ANNUAL TOTAL	1153298		1466388			
ANNUAL MEAN	3160		4018		1809	
HIGHEST ANNUAL MEAN					7154	1982
LOWEST ANNUAL MEAN					115	1956
HIGHEST DAILY MEAN	14500	Oct 22	27000	May 9	103000	Apr 26 1942
LOWEST DAILY MEAN	424	Oct 1	383	Sep 8	10	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	440	Sep 30	396	Sep 4	26	Apr 12 1935
INSTANTANEOUS PEAK FLOW			30500	May 9	111000	Apr 26 1942
INSTANTANEOUS PEAK STAGE			38.98	May 9	47.10	May 3 1990
ANNUAL RUNOFF (AC-FT)	2288000		2909000		1311000	
10 PERCENT EXCEEDS	7880		9290		5210	
50 PERCENT EXCEEDS	1540		2480		392	
90 PERCENT EXCEEDS	506		467		105	

e Estimated
Period of regulated streamflow.

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 Blvd. 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 and biochemical analyses: February 1984 to September 1993.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1984 to current year.
pH: February 1984 to current year.
WATER TEMPERATURES: February 1984 to current year.
DISSOLVED OXYGEN: February 1984 to current year.

INSTRUMENTATION.--Since February 1984, a four-parameter water-quality monitor records temperature, DO, pH, and specific conductance continuously at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request. Records of discharge are given for gaging station 08057000. No appreciable inflow between the two stations.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,030 microsiemens Feb. 12, 1988; minimum, 93 microsiemens Oct. 20, 1984.
pH: Maximum, 8.7 units Mar 13, 1995; minimum, 6.8 units Sept. 6, 1988.
WATER TEMPERATURE: Maximum, 33.5°C Aug. 12, 1987; minimum, 5.0°C Feb. 7, 8, 1989.
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, 853 microsiemens June 28; minimum, 139 microsiemens May 5.
pH: Maximum, 8.7 units Mar. 13; minimum, 7.0 units on several days.
WATER TEMPERATURE: Maximum, 32.0°C on July 29, Aug. 18, 28, and Sept. 3; minimum, 9.0°C Jan. 4, 5, 6.
DISSOLVED OXYGEN: Maximum, 12.1 mg/L Jan. 5; minimum, 2.4 mg/L Aug. 1.

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	122571	333	190	62800	18	6060	41	13500	120
NOV.	1994	229640	358	204	126000	20	12200	44	27200	130
DEC.	1994	139560	404	229	86200	24	9140	49	18600	140
JAN.	1995	53598	562	313	45300	43	6200	67	9760	170
FEB.	1995	36444	579	323	31700	45	4420	69	6830	170
MAR.	1995	185464	403	228	114000	25	12300	49	24600	140
APR.	1995	210230	403	228	130000	24	13700	49	27900	140
MAY	1995	301650	399	226	184000	24	19500	49	39600	140
JUNE	1995	100043	433	244	66000	28	7530	53	14200	140
JULY	1995	23646	612	339	21700	51	3280	73	4660	170
AUG.	1995	39410	489	274	29200	35	3720	59	6280	150
SEPT	1995	24132	600	333	21700	49	3200	72	4670	170
TOTAL		1466388	**	**	919000	**	101000	**	198000	**
WTD.AVG.		4018	411	232	**	26	**	50	**	140

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	758	768	716	388	327	336	368	362	366	575	550	562
2	765	781	695	344	321	336	370	363	367	568	544	553
3	763	748	695	399	316	351	372	363	367	579	557	568
4	753	729	738	366	246	345	373	363	367	568	474	509
5	743	730	737	325	256	297	371	362	367	486	463	471
6	749	723	734	362	295	321	370	364	367	620	470	566
7	753	180	546	455	347	407	375	368	371	621	598	612
8	401	271	349	452	349	392	428	373	392	623	601	614
9	457	342	401	375	338	354	413	377	388	624	605	615
10	539	444	499	379	352	363	403	379	391	639	617	628
11	565	535	555	362	349	353	397	383	388	659	628	652
12	624	561	593	352	338	345	402	390	396	698	653	679
13	652	623	635	355	342	352	403	375	393	731	678	714
14	677	649	661	389	303	355	467	390	428	726	687	699
15	676	656	662	369	300	319	490	463	481	693	643	658
16	658	353	555	406	304	344	482	398	428	654	594	632
17	497	391	441	---	---	e360	403	390	393	653	544	591
18	510	223	342	---	---	e390	392	384	389	559	512	530
19	299	248	269	---	---	e395	387	383	385	524	511	516
20	327	286	307	---	---	e385	388	383	386	585	517	547
21	309	223	255	---	---	e375	389	380	385	598	578	587
22	300	256	270	390	370	380	388	378	382	619	590	605
23	340	291	317	377	372	374	451	385	420	645	608	622
24	360	332	343	378	374	376	454	437	444	682	645	657
25	332	293	315	377	372	374	453	437	448	713	579	650
26	349	299	319	375	368	372	450	443	447	589	312	462
27	378	341	365	372	366	369	464	446	456	485	433	474
28	371	351	360	373	367	369	514	450	488	533	477	506
29	354	338	342	376	367	373	524	495	509	541	524	534
30	340	327	332	374	365	368	521	503	510	537	526	532
31	336	326	331	---	---	---	562	507	539	535	524	530
MONTH	765	180	474	455	246	361	562	362	414	731	312	583

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	529	518	522	688	667	681	417	408	414	---	---	e447
2	518	508	512	692	684	689	447	417	426	---	---	e445
3	516	508	511	697	688	693	439	423	436	---	---	e444
4	521	510	517	696	689	693	442	393	423	---	---	e443
5	530	515	526	696	689	693	431	339	373	481	139	443
6	539	530	535	697	581	674	362	332	345	314	213	281
7	551	530	543	601	502	524	411	362	391	380	295	328
8	579	536	553	584	518	548	416	407	411	368	295	324
9	585	536	553	641	584	609	417	408	411	353	294	316
10	613	581	599	668	639	659	430	403	410	427	353	392
11	615	571	587	650	622	641	421	373	390	479	427	459
12	636	612	629	650	356	592	413	379	395	480	452	469
13	632	610	623	386	217	296	422	413	418	452	434	442
14	618	605	614	340	304	322	---	---	e416	439	432	436
15	623	603	613	433	328	372	---	---	e418	442	432	439
16	627	616	621	447	433	440	---	---	e419	448	440	445
17	626	605	619	451	410	425	---	---	e420	454	446	451
18	607	586	594	411	406	409	---	---	e410	453	448	450
19	591	572	585	412	407	409	435	377	401	451	437	446
20	582	572	578	414	406	409	394	325	349	437	427	434
21	606	575	587	415	412	413	400	363	383	427	416	422
22	603	591	597	421	413	416	410	382	394	419	415	417
23	631	603	609	422	418	419	414	382	406	430	417	427
24	631	612	620	424	417	421	434	414	423	440	422	427
25	616	612	615	418	307	400	463	430	438	440	418	427
26	616	608	613	401	369	383	434	417	427	440	426	431
27	622	606	613	397	351	369	440	423	430	433	416	423
28	672	619	645	423	397	414	446	431	439	431	424	428
29	---	---	---	416	408	413	507	429	452	442	427	435
30	---	---	---	408	391	398	---	---	e450	438	425	429
31	---	---	---	408	392	399	---	---	---	439	425	427
MONTH	672	508	583	697	217	491	507	325	411	481	139	420

e Estimated

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	449	406	434	---	---	e715	672	302	405	707	624	654
2	---	---	e431	---	---	e700	364	287	321	744	707	735
3	---	---	e428	---	---	e665	390	318	356	767	742	753
4	---	---	e421	---	---	e695	404	338	385	768	740	756
5	---	---	e415	---	---	e483	489	373	425	765	736	744
6	---	---	e410	---	---	e398	492	476	487	774	732	752
7	---	---	e405	---	---	e420	476	468	473	742	720	733
8	---	---	e400	623	516	573	491	465	473	742	725	732
9	398	395	397	684	623	664	523	491	505	758	742	750
10	431	342	406	725	678	709	529	514	521	760	751	756
11	430	332	389	---	---	e729	530	513	524	761	732	745
12	396	345	360	---	---	e740	537	514	530	744	723	732
13	403	365	396	---	---	e765	564	537	547	---	---	e496
14	416	367	407	797	767	788	610	564	594	468	352	416
15	---	---	e405	790	709	763	646	585	617	582	494	554
16	---	---	e420	794	691	765	681	646	657	599	581	593
17	---	---	e495	---	---	e766	709	681	698	646	592	623
18	---	---	e545	---	---	e766	747	709	732	677	602	655
19	---	---	e580	795	685	767	772	743	756	667	480	609
20	612	590	598	769	723	743	796	768	781	508	468	483
21	---	---	e610	793	769	784	799	456	604	574	508	549
22	---	---	e620	826	783	797	583	532	568	664	574	610
23	---	---	e610	---	---	e720	662	581	619	696	586	625
24	---	---	e680	---	---	e598	721	662	695	742	696	729
25	---	---	e720	604	578	589	735	717	727	748	722	736
26	---	---	e772	---	---	e590	741	704	726	755	745	751
27	---	---	e817	---	---	e608	739	699	720	765	746	758
28	853	770	821	---	---	e678	745	730	739	781	754	764
29	779	735	762	774	739	757	768	738	749	783	753	774
30	---	---	e720	802	767	780	770	739	757	787	781	784
31	---	---	---	802	620	718	757	643	724	---	---	---
MONTH	853	332	529	826	516	685	799	287	594	787	352	678
YEAR	853	139	518									

e Estimated

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.7	7.5	7.6	7.8	7.7	7.8	7.8	7.7	7.8
2	---	---	---	7.7	7.5	7.6	7.8	7.7	7.8	7.8	7.8	7.8
3	---	---	---	7.7	7.4	7.5	7.8	7.7	7.8	7.8	7.7	7.8
4	---	---	---	7.7	7.4	7.5	7.8	7.7	7.8	7.9	7.7	7.8
5	---	---	---	7.7	7.3	7.5	7.8	7.7	7.7	7.9	7.8	7.8
6	---	---	---	7.6	7.0	7.2	7.8	7.7	7.7	7.9	7.8	7.8
7	---	---	---	7.1	7.0	7.0	7.8	7.6	7.7	7.8	7.8	7.8
8	---	---	---	7.2	7.0	7.1	7.8	7.6	7.7	7.8	7.8	7.8
9	---	---	---	7.6	7.2	7.4	7.8	7.6	7.7	7.9	7.8	7.8
10	---	---	---	7.5	7.2	7.3	7.8	7.6	7.7	7.9	7.8	7.8
11	---	---	---	7.3	7.1	7.3	7.8	7.6	7.7	7.9	7.8	7.8
12	---	---	---	7.4	7.2	7.3	7.8	7.6	7.7	7.9	7.7	7.8
13	---	---	---	7.4	7.2	7.3	7.8	7.7	7.7	7.9	7.8	7.8
14	---	---	---	7.6	7.2	7.3	7.8	7.6	7.7	8.0	7.8	7.9
15	---	---	---	7.5	7.0	7.2	7.7	7.6	7.6	8.2	7.9	8.1
16	---	---	---	7.2	7.0	7.2	7.8	7.7	7.7	8.2	8.0	8.1
17	---	---	---	---	---	---	7.8	7.7	7.8	8.1	7.9	8.0
18	---	---	---	---	---	---	7.8	7.7	7.8	8.0	7.9	7.9
19	---	---	---	---	---	---	7.8	7.7	7.7	7.9	7.8	7.8
20	---	---	---	---	---	---	7.8	7.7	7.8	7.9	7.8	7.8
21	---	---	---	7.7	7.5	7.6	7.8	7.7	7.8	7.9	7.9	7.9
22	---	---	---	7.8	7.6	7.7	7.8	7.7	7.8	8.0	7.9	7.9
23	---	---	---	7.9	7.6	7.7	7.8	7.7	7.8	8.0	7.8	7.9
24	---	---	---	7.9	7.6	7.8	7.8	7.7	7.7	7.9	7.8	7.9
25	---	---	---	7.9	7.6	7.7	7.8	7.7	7.8	8.0	7.8	7.9
26	---	---	---	7.8	7.7	7.7	7.8	7.7	7.8	8.1	7.8	7.9
27	---	---	---	7.9	7.7	7.8	7.8	7.7	7.8	7.8	7.8	7.8
28	7.7	7.5	7.6	7.9	7.7	7.8	7.9	7.7	7.8	7.9	7.8	7.9
29	7.6	7.4	7.5	7.9	7.7	7.8	7.9	7.7	7.8	7.9	7.9	7.9
30	7.7	7.4	7.5	7.9	7.7	7.8	7.8	7.7	7.8	7.9	7.8	7.8
31	7.7	7.4	7.6	---	---	---	7.8	7.7	7.7	7.9	7.8	7.8
MONTH	7.7	7.4	7.6	7.9	7.0	7.5	7.9	7.6	7.7	8.2	7.7	7.9

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.9	7.8	7.9	7.9	7.8	7.8	---	---	---	---	---	---
2	7.9	7.9	7.9	7.9	7.8	7.9	---	---	---	---	---	---
3	8.0	7.9	8.0	8.0	7.9	7.9	---	---	---	---	---	---
4	8.0	7.9	8.0	8.0	7.9	7.9	---	---	---	---	---	---
5	8.1	7.9	8.0	7.9	7.8	7.9	---	---	---	---	---	---
6	8.1	7.9	8.0	8.1	7.8	7.9	---	---	---	---	---	---
7	8.1	7.9	8.0	8.0	7.9	7.9	---	---	---	---	---	---
8	8.1	8.0	8.0	8.0	7.8	7.9	---	---	---	---	---	---
9	8.1	8.0	8.1	8.0	7.9	7.9	---	---	---	---	---	---
10	8.2	8.0	8.1	7.9	7.8	7.8	---	---	---	---	---	---
11	8.1	8.0	8.1	7.9	7.8	7.9	---	---	---	---	---	---
12	8.0	7.9	8.0	8.2	7.8	7.9	---	---	---	---	---	---
13	7.9	7.9	7.9	8.7	7.9	8.2	8.5	8.1	8.2	---	---	---
14	7.9	7.8	7.9	8.2	7.8	8.0	---	---	---	---	---	---
15	7.9	7.8	7.9	7.9	7.2	7.6	---	---	---	---	---	---
16	8.0	7.9	7.9	7.8	7.3	7.5	---	---	---	---	---	---
17	8.0	7.9	7.9	7.8	7.3	7.6	---	---	---	---	---	---
18	8.1	7.9	8.0	7.9	7.4	7.7	---	---	---	---	---	---
19	8.1	7.9	8.0	8.0	7.4	7.8	---	---	---	---	---	---
20	8.2	8.0	8.1	8.0	7.6	7.9	---	---	---	---	---	---
21	8.2	8.0	8.1	8.1	7.7	7.9	---	---	---	---	---	---
22	8.2	8.0	8.1	8.1	7.8	8.0	---	---	---	---	---	---
23	8.2	8.0	8.1	8.2	7.9	8.1	---	---	---	---	---	---
24	8.3	8.0	8.2	8.2	8.0	8.1	---	---	---	---	---	---
25	8.2	8.0	8.1	8.2	7.9	8.1	---	---	---	---	---	---
26	8.0	7.8	7.9	---	---	---	---	---	---	---	---	---
27	8.0	7.8	7.9	---	---	---	---	---	---	---	---	---
28	8.0	7.8	7.9	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	8.3	7.8	8.0	8.7	7.2	7.9	8.5	8.1	8.2	---	---	---

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

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	23.5	24.0	---	---	---	28.5	26.5	27.0	31.0	30.0	30.5
2	---	---	---	---	---	---	28.0	26.5	27.0	31.5	29.5	30.5
3	---	---	---	---	---	---	28.5	27.0	28.0	32.0	30.0	31.0
4	---	---	---	---	---	---	29.5	27.5	28.5	31.0	30.0	30.5
5	---	---	---	---	---	---	30.5	28.0	29.5	30.5	29.0	29.5
6	---	---	---	---	---	---	31.0	29.5	30.0	30.5	29.0	30.0
7	---	---	---	---	---	---	31.0	29.5	30.5	30.0	29.0	29.5
8	25.5	25.0	25.0	30.5	28.5	29.0	31.0	29.5	30.5	29.5	28.0	28.5
9	25.5	25.0	25.5	31.0	29.0	30.0	31.0	29.0	30.0	28.5	27.0	27.5
10	25.5	24.5	25.5	31.5	29.5	30.5	30.5	29.0	30.0	28.0	26.5	27.5
11	25.0	24.5	24.5	31.5	30.0	31.0	30.5	29.5	30.0	28.5	27.0	27.5
12	25.0	23.5	24.5	---	---	---	31.0	29.5	30.5	28.0	27.5	27.5
13	25.5	24.5	25.0	---	---	---	31.5	30.0	30.5	27.5	22.5	25.0
14	26.0	25.0	25.5	31.5	30.0	31.0	31.5	29.5	30.5	26.0	24.0	25.0
15	---	---	---	31.0	30.0	30.5	31.0	29.5	30.0	27.5	26.0	27.0
16	---	---	---	30.0	29.0	29.5	31.5	29.5	30.5	29.0	27.0	28.0
17	---	---	---	30.5	29.0	30.0	31.5	29.5	30.5	29.0	28.0	28.5
18	---	---	---	31.0	30.0	30.5	32.0	30.0	31.0	28.5	27.5	28.0
19	---	---	---	31.5	29.5	30.5	31.5	30.5	31.0	27.5	25.5	27.0
20	28.5	26.0	27.5	31.0	30.0	30.5	31.5	30.0	30.5	27.0	26.0	26.0
21	---	---	---	---	---	---	31.0	27.5	29.5	26.0	23.5	25.0
22	---	---	---	---	---	---	31.5	30.0	30.5	23.5	21.5	22.5
23	---	---	---	---	---	---	31.5	29.5	30.5	22.5	21.5	22.0
24	---	---	---	---	---	---	30.5	29.5	30.0	24.0	21.5	22.5
25	---	---	---	31.0	29.0	30.0	31.0	29.5	30.0	24.0	22.5	23.5
26	---	---	---	---	---	---	31.5	29.5	30.5	24.5	23.0	23.5
27	---	---	---	---	---	---	31.5	30.0	31.0	26.0	23.5	24.5
28	28.5	26.5	27.5	---	---	---	32.0	30.0	31.0	27.0	25.0	26.0
29	28.0	27.5	28.0	32.0	31.0	31.5	31.5	30.5	30.5	28.0	26.0	27.0
30	28.5	27.5	28.0	31.5	30.5	30.5	31.0	29.5	30.5	28.0	26.0	27.0
31	---	---	---	30.5	28.0	29.0	31.0	29.5	30.0	---	---	---
MONTH	28.5	23.5	26.0	32.0	28.0	30.0	32.0	26.5	30.0	32.0	21.5	27.0
YEAR	32.0	9.0	19.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.0	5.1	6.7	9.6	9.4	9.5	10.3	10.2	10.3	10.1	9.2	9.7
2	8.0	5.8	6.8	9.7	9.1	9.5	10.4	10.1	10.3	10.5	9.7	10.2
3	7.7	5.3	6.5	9.5	8.5	9.0	10.2	10.0	10.1	10.7	9.9	10.3
4	7.4	5.3	6.3	9.4	8.0	8.8	10.2	10.0	10.1	11.8	10.2	11.2
5	7.3	5.9	6.5	9.1	7.9	8.3	10.3	10.0	10.1	12.1	11.4	11.7
6	6.9	5.1	6.1	8.0	7.6	7.8	10.3	10.1	10.2	11.7	10.7	11.2
7	7.2	5.3	6.0	7.8	7.3	7.6	10.4	10.0	10.2	11.5	10.7	11.1
8	6.0	5.5	5.7	8.3	7.3	8.0	10.3	10.0	10.2	11.1	10.7	10.9
9	6.3	5.2	5.7	8.8	7.9	8.5	10.4	10.0	10.2	10.9	10.2	10.6
10	6.6	5.3	6.3	8.7	8.2	8.3	10.7	10.3	10.5	10.5	9.5	10.0
11	6.9	5.9	6.5	8.7	8.2	8.5	11.1	10.5	10.9	9.8	9.1	9.5
12	7.0	5.8	6.4	8.9	8.6	8.7	11.1	10.8	11.0	9.4	7.4	8.5
13	6.9	5.0	6.2	8.8	8.3	8.5	11.2	11.0	11.1	8.3	7.8	8.0
14	6.9	5.2	6.3	8.4	7.8	8.1	11.1	10.3	10.7	9.2	8.1	8.7
15	7.0	6.2	6.6	8.3	7.3	7.5	10.4	10.0	10.2	9.7	8.6	9.2
16	7.6	6.8	6.9	7.8	7.3	7.5	10.6	10.1	10.4	9.9	8.8	9.4
17	7.0	6.5	6.7	8.3	7.6	8.1	10.8	10.2	10.6	9.4	8.6	8.9
18	8.1	5.9	6.9	---	---	---	10.8	10.2	10.4	9.4	8.3	8.8
19	6.1	5.7	5.9	---	---	---	10.8	10.2	10.4	9.7	9.2	9.4
20	7.0	5.7	6.3	---	---	---	10.8	10.0	10.3	10.0	9.4	9.7
21	7.4	6.0	6.6	---	---	---	10.8	9.8	10.3	10.0	9.2	9.7
22	6.2	5.5	5.8	9.2	8.2	8.8	10.2	9.9	10.0	10.2	9.3	9.8
23	7.7	5.6	6.8	9.6	9.1	9.3	10.2	9.7	10.0	10.7	9.7	10.3
24	7.9	7.5	7.8	9.5	9.3	9.4	10.1	9.6	9.9	11.0	10.1	10.6
25	8.1	7.7	7.9	9.5	9.3	9.4	10.3	9.6	10.1	10.9	10.0	10.4
26	8.5	7.8	8.0	9.5	9.3	9.4	10.5	9.9	10.2	11.0	9.5	10.2
27	9.3	6.9	8.6	9.4	9.2	9.3	10.5	9.7	10.1	10.0	9.4	9.7
28	9.4	9.1	9.3	9.9	9.3	9.5	10.4	9.6	9.9	9.8	9.5	9.7
29	9.4	9.3	9.3	10.2	9.6	10.0	10.2	9.6	10.0	10.2	9.7	9.9
30	9.4	9.3	9.3	10.3	10.1	10.2	10.1	9.6	9.9	10.7	10.0	10.3
31	9.4	9.2	9.3	---	---	---	10.0	9.2	9.6	11.0	10.2	10.6
MONTH	9.4	5.0	7.0	10.3	7.3	8.7	11.2	9.2	10.3	12.1	7.4	9.9

08057055 TRINITY RIVER AT CEDAR CREST BOULEVARD, DALLAS, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.9	10.3	10.6	---	---	---	10.4	10.3	10.4	---	---	---
2	10.7	10.2	10.5	---	---	---	10.5	10.2	10.3	---	---	---
3	10.6	10.0	10.3	---	---	---	10.5	10.2	10.3	---	---	---
4	10.8	9.9	10.3	---	---	---	10.5	9.2	9.8	---	---	---
5	10.9	9.9	10.4	---	---	---	9.2	8.6	9.0	7.9	7.2	7.7
6	11.0	10.0	10.5	---	---	---	8.6	8.2	8.3	7.4	5.1	5.7
7	10.9	9.8	10.4	---	---	---	8.9	8.2	8.5	5.7	4.9	5.1
8	11.4	9.8	10.7	---	---	---	9.5	8.9	9.1	6.3	5.7	6.0
9	11.0	9.5	10.5	---	---	---	9.5	9.1	9.3	5.7	5.4	5.6
10	10.9	9.3	10.0	---	---	---	9.1	8.5	9.0	5.7	5.4	5.6
11	10.4	9.5	9.7	---	---	---	9.4	8.2	8.7	6.8	5.6	6.1
12	10.4	9.2	9.7	---	---	---	9.3	8.4	9.0	7.3	6.8	7.1
13	10.0	9.1	9.4	---	---	---	9.7	9.2	9.4	7.3	7.2	7.2
14	10.4	9.1	9.8	---	---	---	---	---	---	7.2	6.7	7.0
15	10.4	9.4	9.8	8.7	8.1	8.4	---	---	---	6.8	6.6	6.7
16	10.6	9.1	9.9	9.8	8.7	9.3	---	---	---	6.8	6.5	6.6
17	10.9	9.4	10.1	10.4	9.8	10.1	---	---	---	6.8	6.5	6.6
18	10.7	9.5	10.0	10.3	10.1	10.2	---	---	---	7.0	6.6	6.8
19	10.7	9.2	9.9	10.3	10.0	10.2	9.2	8.6	9.0	7.4	6.9	7.0
20	10.3	8.5	9.5	10.2	9.9	10.0	8.7	8.0	8.3	7.4	6.9	7.1
21	---	---	---	10.3	10.0	10.1	9.5	8.1	8.6	7.2	7.0	7.1
22	---	---	---	10.1	9.8	9.9	9.8	9.1	9.4	7.4	7.0	7.2
23	---	---	---	10.2	9.7	9.9	10.5	9.4	10.0	7.2	6.8	7.0
24	---	---	---	10.0	9.8	9.9	10.9	10.3	10.6	7.3	7.0	7.1
25	---	---	---	9.9	8.6	9.7	11.8	10.7	11.1	7.3	6.7	7.1
26	---	---	---	8.6	7.3	7.9	10.9	10.3	10.7	7.6	7.1	7.4
27	---	---	---	8.1	7.7	7.9	11.0	10.6	10.8	7.5	7.2	7.3
28	---	---	---	9.3	8.0	8.6	11.0	10.5	10.8	7.8	7.3	7.6
29	---	---	---	10.2	9.3	9.8	10.8	9.8	10.5	8.3	7.7	8.0
30	---	---	---	10.4	10.1	10.2	---	---	---	8.6	8.0	8.3
31	---	---	---	10.4	10.2	10.3	---	---	---	8.6	8.2	8.3
MONTH	11.4	8.5	10.1	10.4	7.3	9.6	11.8	8.0	9.6	8.6	4.9	6.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.3	7.8	8.0	---	---	---	3.8	2.4	3.1	7.1	5.9	6.6
2	---	---	---	---	---	---	3.5	3.3	3.4	7.4	6.1	6.7
3	---	---	---	---	---	---	3.5	3.0	3.2	7.5	6.0	6.6
4	---	---	---	---	---	---	3.6	3.0	3.4	7.1	5.5	6.1
5	---	---	---	---	---	---	4.3	3.5	3.9	7.3	5.4	6.2
6	---	---	---	---	---	---	4.1	3.8	3.9	7.5	5.5	6.4
7	---	---	---	---	---	---	3.9	3.5	3.7	6.6	4.7	5.5
8	---	---	---	6.5	5.3	5.9	3.8	3.4	3.6	6.6	4.4	5.4
9	8.9	8.5	8.7	8.0	5.6	6.6	4.1	3.5	3.8	7.5	5.5	6.4
10	8.8	7.4	8.6	8.6	5.7	7.1	4.4	3.7	4.0	7.6	6.4	7.0
11	8.5	7.4	7.9	8.5	5.5	7.1	4.5	3.7	4.0	8.9	6.6	7.6
12	---	---	---	---	---	---	4.3	3.5	3.9	8.0	6.8	7.4
13	---	---	---	---	---	---	4.4	3.3	3.8	7.3	4.5	6.1
14	---	---	---	6.4	4.3	5.2	4.3	2.8	3.5	5.2	4.1	4.7
15	---	---	---	5.8	4.3	5.0	6.5	3.4	4.7	6.0	4.0	4.9
16	---	---	---	5.4	4.3	4.9	8.2	5.2	6.6	7.4	5.8	6.6
17	---	---	---	5.2	3.9	4.6	9.4	6.5	7.8	7.3	6.4	7.0
18	---	---	---	7.0	4.6	5.7	10.4	7.5	8.8	7.1	6.3	6.8
19	---	---	---	6.7	5.1	5.9	9.6	7.3	8.4	6.8	6.2	6.5
20	8.7	7.1	7.9	6.6	4.0	5.3	8.2	6.8	7.6	6.6	5.9	6.2
21	---	---	---	7.7	5.3	6.4	8.1	4.0	5.9	6.9	6.5	6.7
22	---	---	---	8.3	6.0	7.0	5.7	4.4	4.9	7.9	6.7	7.3
23	---	---	---	---	---	---	---	---	---	8.4	7.7	8.0
24	---	---	---	---	---	---	---	---	---	8.3	7.4	7.8
25	---	---	---	5.8	4.0	4.8	---	---	---	8.1	6.9	7.5
26	---	---	---	---	---	---	---	---	---	9.1	6.5	7.8
27	---	---	---	---	---	---	---	---	---	10.0	8.0	8.9
28	7.6	6.9	7.2	---	---	---	---	---	---	9.9	7.3	8.4
29	7.9	6.6	7.3	7.3	4.4	6.0	7.9	6.9	7.4	10.8	6.6	8.4
30	8.4	6.8	7.7	7.1	5.1	6.0	8.1	6.4	7.2	9.2	6.4	7.6
31	---	---	---	6.1	3.8	4.5	7.8	6.6	7.2	---	---	---
MONTH	8.9	6.6	7.9	8.6	3.8	5.8	10.4	2.4	5.1	10.8	4.0	6.8
YEAR	12.1	2.4	8.2									

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 mi².

PERIOD OF RECORD.--August 1961 to September 1980, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Oct. 24, 1961, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good except those for estimated daily discharges, which are poor. There is some regulation of low flow by diversions from small dams upstream from station. Several observations of water temperature were made during the year. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base discharge of 2,900 ft³/s:

Date	Time	Discharge (ft³/s)	Elevation (ft)	Date	Time	Discharge (ft³/s)	Elevation (ft)
Oct. 7	1730	15,800	487.53	Mar. 13	0315	25,300	489.13
Oct. 16	2100	2,960	482.26	Mar. 25	2115	15,500	487.46
Oct. 18	1215	13,300	486.96	Apr. 4	0515	7,150	485.06
Oct. 21	0900	28,900	489.55	Apr. 5	1200	7,070	485.03
Oct. 25	1045	3,080	482.44	May 5	2300	23,500	488.89
Nov. 5	0015	16,400	487.65	May 8	0115	17,600	487.88
Nov. 14	1745	8,880	485.70				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	48	50	64	67	73	24	20	71	18	337	7.7
2	9.6	44	50	53	65	101	22	13	27	16	179	7.6
3	11	261	50	61	61	94	20	136	25	15	74	7.1
4	7.5	556	50	50	58	64	1410	33	21	12	57	6.7
5	8.8	3240	43	45	55	55	1890	1950	18	700	38	5.9
6	7.1	138	38	79	52	99	157	3040	18	65	44	5.5
7	1810	94	42	49	52	608	76	130	16	39	30	18
8	145	79	256	43	50	100	60	6830	15	29	23	19
9	37	524	319	41	51	80	49	163	14	23	18	7.7
10	28	152	271	42	50	70	337	83	136	18	13	9.5
11	23	97	91	41	153	65	101	62	723	17	15	10
12	22	80	76	190	69	1520	50	55	49	15	11	12
13	20	72	68	91	55	8350	41	50	35	18	11	233
14	19	1860	91	52	55	250	36	44	34	17	11	29
15	43	1180	87	46	54	142	33	39	30	15	14	21
16	402	200	143	43	83	130	30	35	29	14	9.1	19
17	138	136	69	364	54	64	37	34	21	20	9.2	61
18	2340	107	62	311	47	53	192	32	20	116	6.5	48
19	123	424	58	149	46	48	263	29	20	109	6.0	125
20	256	692	56	91	45	41	143	26	19	28	9.9	46
21	6090	176	51	82	43	37	42	26	17	23	25	29
22	283	115	46	145	42	33	162	23	16	20	12	23
23	55	93	45	98	40	29	51	20	15	95	8.8	16
24	558	90	43	73	40	26	33	123	14	29	6.5	14
25	988	80	41	68	38	2240	29	427	14	16	21	13
26	175	73	41	335	41	323	26	160	13	12	36	20
27	98	69	62	156	40	57	22	169	20	12	14	14
28	77	60	216	96	88	40	21	41	33	10	9.0	11
29	66	57	92	81	---	36	20	34	19	9.1	12	11
30	56	54	61	74	---	30	22	32	21	7.3	10	6.9
31	52	---	89	71	---	28	---	32	---	122	13	---
MEAN	450	362	88.9	103	56.9	480	180	448	50.8	53.5	34.9	28.6
MAX	6090	3240	319	364	153	8350	1890	6830	723	700	337	233
MIN	7.1	44	38	41	38	26	20	13	13	7.3	6.0	5.5

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1995h, BY WATER YEAR (WY)

MEAN	88.2	57.8	78.3	44.2	82.8	108	126	161	88.1	39.4	25.6	62.0
MAX	450	362	627	131	330	480	690	460	800	252	108	624
(WY)	1995	1995	1992	1992	1990	1995	1966	1990	1989	1962	1994	1964
MIN	.83	2.96	4.35	5.85	6.19	12.0	16.6	15.8	7.25	.78	1.26	.92
(WY)	1964	1964	1964	1976	1967	1971	1971	1972	1980	1964	1963	1963

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1961 - 1995h	
ANNUAL MEAN	169		196		81.2	
HIGHEST ANNUAL MEAN					196	1995
LOWEST ANNUAL MEAN					20.8	1971
HIGHEST DAILY MEAN	6090	Oct 21	8350	Mar 13	14700	Sep 21 1964
LOWEST DAILY MEAN	3.5	Aug 30	5.5	Sep 6	.01	Jul 8 1970
ANNUAL SEVEN-DAY MINIMUM	7.5	Aug 24	7.6	Aug 31	.21	Aug 21 1961
INSTANTANEOUS PEAK FLOW			28900	Oct 21	39200	May 2 1990
INSTANTANEOUS PEAK STAGE			489.55	Oct 21	490.59	May 2 1990
10 PERCENT EXCEEDS	270		258		109	
50 PERCENT EXCEEDS	41		46		19	
90 PERCENT EXCEEDS	17		12		3.6	

h See PERIOD OF RECORD paragraph.

08057410 TRINITY RIVER BELOW DALLAS, TX

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1956 to current year.

REVISED RECORDS.--WDR TX-94-1: 1989.

GAGE.--Water-stage recorder. Datum of gage is 365.89 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow affected at times by eight upstream reservoirs with a combined capacity of 1,714,400 acre-ft, of which 846,200 acre-ft is for flood control. Several cities within the Dallas-Fort Worth metroplex divert water for municipal use and return it to the river as sewage effluents above this station. Low flows are sustained by sewage effluents. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 25, 1908, reached a stage of 41.1 ft, from information by U.S. Army Corps of Engineers, and is the highest since that date. Floods in 1866 and 1908 reached about the same stage at Dallas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	473	4880	6280	2650	1850	958	5500	3980	6780	744	4440	680
2	488	5140	6020	2310	1830	970	5450	3170	6620	736	5310	558
3	512	5430	5800	2120	1740	1090	5940	3590	6010	878	3640	525
4	523	5330	5670	2640	1510	1080	7080	4420	5680	721	2600	516
5	522	9880	5560	3180	1460	1000	10100	3630	5490	3320	2500	557
6	516	13500	5460	2490	1400	976	14000	18500	5390	5020	2570	554
7	1510	7490	5410	1640	1260	3960	13200	26100	5360	1780	2550	571
8	6050	3550	5640	1330	1300	3400	9960	27300	5110	971	2350	552
9	3170	5230	7010	1260	2070	1650	8940	29400	4970	797	1900	547
10	1320	8140	8450	1140	1200	1440	9020	24600	4900	745	1670	539
11	910	6300	8010	1040	2090	1320	11400	14800	7900	695	1580	560
12	790	5000	6080	992	1600	1450	12200	10100	9320	680	1470	582
13	661	4760	5790	1210	1400	12700	10100	9940	7300	668	1110	4020
14	618	4770	5680	1380	1260	25000	8350	10600	6560	660	885	4680
15	713	10900	4090	1450	1270	17800	6870	11100	6490	699	773	1340
16	1040	15400	4460	1300	1350	10600	6670	11200	5370	691	693	961
17	2670	11300	5420	1990	1600	9350	5980	11100	2920	674	645	892
18	4370	9720	5500	2800	1480	9630	6720	10800	1620	684	610	883
19	11300	9550	5420	3640	1410	9680	7560	10300	1230	698	574	1980
20	8230	9770	5300	2260	1290	9480	10200	9750	1170	761	622	2700
21	10900	11400	5040	1630	1260	9170	11700	9070	1040	685	1300	1240
22	19500	11300	4600	1660	1190	8860	10200	8040	1030	635	758	1040
23	11600	9570	4060	1860	1160	8820	8160	7680	988	712	633	1150
24	6890	8560	2950	1450	1150	8580	6900	7800	762	1610	572	728
25	7350	8360	2570	1390	1100	7990	6780	7590	710	1030	596	738
26	10300	8330	2490	2990	1120	11100	6540	7090	739	770	584	724
27	7780	8100	2440	4520	1140	12900	5790	6870	735	694	614	695
28	5800	7640	3430	2800	993	9060	5140	6380	950	630	626	656
29	5290	7130	5500	2020	---	6750	4180	6080	1010	601	587	642
30	5140	6710	3680	1780	---	6110	3990	6460	813	584	590	616
31	5030	---	2670	1730	---	5680	---	6180	---	830	637	---
TOTAL	141966	243140	156480	62652	39483	218554	244620	333620	114967	31403	45989	32426
MEAN	4580	8105	5048	2021	1410	7050	8154	10760	3832	1013	1484	1081
MAX	19500	15400	8450	4520	2090	25000	14000	29400	9320	5020	5310	4680
MIN	473	3550	2440	992	958	3990	3170	710	584	572	516	
AC-FT	281600	482300	310400	124300	78310	433500	485200	661700	228000	62290	91220	64320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1995#, BY WATER YEAR (WY)

MEAN	1741	1974	1988	1647	2046	2550	2724	5120	3933	1772	1082	1093
MAX	10220	14350	14010	15370	11750	9859	10010	29980	17720	9145	5963	7521
(WY)	1982	1982	1992	1992	1992	1992	1990	1990	1989	1989	1982	1962
MIN	268	231	228	178	265	316	373	432	316	330	228	259
(WY)	1964	1957	1957	1957	1957	1959	1959	1961	1960	1964	1959	1959

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1957 - 1995#	
ANNUAL TOTAL	1285884		1665300			
ANNUAL MEAN	3523		4562		2308	
HIGHEST ANNUAL MEAN					7319	1982
LOWEST ANNUAL MEAN					383	1959
HIGHEST DAILY MEAN	19500	Oct 22	29400	May 9	79200	May 4 1990
LOWEST DAILY MEAN	473	Oct 1	473	Oct 1	131	Dec 9 1956
ANNUAL SEVEN-DAY MINIMUM	501	Sep 27	546	Sep 3	147	Dec 7 1956
INSTANTANEOUS PEAK FLOW			30000	May 9	87000	May 4 1990
INSTANTANEOUS PEAK STAGE			28.60	May 9	34.79	May 4 1990
ANNUAL RUNOFF (AC-FT)	2551000		3303000		1672000	
10 PERCENT EXCEEDS	8600		10100		6340	
50 PERCENT EXCEEDS	1820		2920		713	
90 PERCENT EXCEEDS	617		644		345	

Period of regulated streamflow.

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

(National water-quality assessment program)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1967 to current year. Pesticide analyses: October 1970 to July 1981. Sediment analyses: April 1972 to April 1975.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1992, April 1993 to current year.
pH: January 1977 to September 1992, April 1993 to current year.
WATER TEMPERATURE: October 1967 to September 1992, April 1993 to current year.
DISSOLVED OXYGEN: January 1977 to September 1992, April 1993 to current year.

INSTRUMENTATION.--A four-parameter water-quality monitor continuously records specific conductance, pH, water temperature, and dissolved oxygen at this station.

REMARKS.--Interruptions in the record were due to malfunctions of the instrument and pump, plugged intake, and pump failures. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance with the exception of the 1993 water year. Regression equations developed for this station may be obtained from the U. S. Geological Survey District office upon request. National water-quality assessment program data are included in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,130 microsiemens Dec. 17, 1977; minimum, 112 microsiemens Oct. 20, 1984.
pH: Maximum, 8.8 units Jan. 23, 1980; minimum, 6.7 units Mar. 25, 1991 and Oct. 12, 1993.
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.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 800 microsiemens June 26; minimum, 188 microsiemens Mar. 13.
pH: Maximum, 8.7 units Apr. 16, 17; minimum, 6.8 units on several days.
WATER TEMPERATURE: Maximum, 32.0°C on several days; 9.0°C Jan. 5.
DISSOLVED OXYGEN: Maximum, 13.1 mg/L Feb. 21; minimum, 3.8 mg/L Aug. 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
19...	1109	11800	275	7.6	20.5	5.7	64	100	23	35	3.0	16
NOV												
28...	1145	7350	390	7.8	15.5	9.4	95	130	20	44	5.5	24
DEC												
13...	1420	5380	408	7.8	12.0	10.8	101	150	25	51	4.9	25
JAN												
17...	1157	1850	626	7.7	15.0	9.0	90	200	54	68	7.8	51
MAR												
09...	1325	1530	586	7.5	12.0	9.9	91	190	66	67	6.2	45
30...	1235	5860	420	7.8	15.0	9.5	94	150	26	52	5.4	26
APR												
27...	1130	5630	421	7.8	18.5	9.0	96	150	30	52	5.0	26
JUN												
01...	1047	6840	395	7.8	23.5	7.4	88	140	29	48	5.4	25
29...	1020	988	709	7.5	27.0	5.5	70	180	49	61	7.6	67
JUL												
27...	1015	672	638	7.3	30.0	6.2	83	160	45	52	6.2	67
AUG												
30...	1435	580	719	7.30	30.5	6.20	84	170	57	55	7.1	79
SEP												
20...	1340	2570	395	7.4	26.0	5.4	67	120	29	42	4.4	30

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
19...	0.7	4.3	0	94	77	76	29	13	0.3	6.3	141	158
NOV												
28...	0.9	4.8	0	137	112	110	34	25	0.3	7.3	240	219
DEC												
13...	0.9	5.9	0	149	122	120	40	22	0.3	8.0	248	239
JAN												
17...	2	6.4	0	180	148	150	74	54	0.6	7.4	385	384
MAR												
09...	1	7.3	0	155	127	120	80	42	0.6	6.1	363	353
30...	0.9	4.7	0	154	126	120	42	23	0.3	4.6	255	241
APR												
27...	0.9	4.5	0	147	120	120	44	23	0.3	3.8	258	239
JUN												
01...	0.9	4.4	0	138	113	110	40	23	0.40	3.9	235	225
29...	2	9.6	0	164	134	130	85	70	0.9	8.4	458	430
JUL												
27...	2	10	0	134	110	110	78	62	1.0	8.1	409	394
AUG												
30...	3	13	0	133	109	107	84	75	1.3	8.6	455	443
SEP												
20...	1	5.9	0	115	95	93	46	28	0.4	6.8	241	234

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
OCT												
19...	0.970	0.970	0.0	1.00	1.0	0.1	1.7	0.62	0.32	0.4	0.7	0.57
NOV												
28...	1.30	--	<0.010	1.30	1.3	0.0	1.7	0.36	0.36	0.4	0.4	0.18
DEC												
13...	1.80	--	<0.010	1.80	1.8	0.0	2.2	0.37	0.27	0.3	0.4	0.21
JAN												
17...	5.49	5.49	0.0	5.50	5.5	0.1	6.5	0.94	0.54	0.6	1	0.85
MAR												
09...	4.57	4.57	0.0	4.60	4.6	0.1	5.4	0.71	0.51	0.6	0.8	0.66
30...	1.36	1.36	0.0	1.40	1.4	0.1	1.8	0.31	0.41	0.5	0.4	0.17
APR												
27...	1.68	1.68	0.0	1.70	1.7	0.0	2.2	0.47	0.37	0.4	0.5	0.22
JUN												
01...	1.39	1.39	0.0	1.40	1.4	0.0	1.8	0.35	0.25	0.3	0.4	0.15
29...	8.27	8.27	0.0	8.30	8.3	0.12	9.2	0.78	0.88	1	0.9	1.1
JUL												
27...	8.87	8.87	0.030	8.90	8.90	0.050	9.9	0.95	0.75	0.80	1.0	1.50
AUG												
30...	11.0	11.0	0.050	11.0	11.0	0.370	12	1.0	1.0	1.4	1.4	2.00
SEP												
20...	2.66	2.66	0.040	2.70	2.70	0.180	4.0	1.1	0.42	0.60	1.3	0.690

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	PROP-CHLOR, WATER, DISS, REC (UG/L)	BUTYL-ATE, WATER, DISS, REC (UG/L)	BRO-MACIL, WATER, DISS, REC (UG/L)	SI-MAZINE, WATER, DISS, REC (UG/L)	PRO-METON, WATER, DISS, REC (UG/L)
OCT												
19...	0.14	0.15	0.46	4.7	>5.0	110	4	<0.02	<0.0	<0.05	1.2	0.04
NOV												
28...	0.15	0.16	0.49	4.4	1.2	12	3	<0.02	<0.0	<0.05	0.10	0.02
DEC												
13...	0.19	0.20	0.61	4.7	0.9	12	6	<0.02	<0.0	<0.05	0.12	<0.0
JAN												
17...	0.68	0.72	2.2	5.5	1.3	20	24	<0.02	<0.0	<0.05	0.08	0.02
MAR												
09...	0.60	0.60	1.8	5.5	1.2	22	24	<0.02	<0.0	<0.05	0.79	0.31
30...	0.18	0.18	0.55	4.3	1.0	22	7	<0.02	<0.0	<0.05	0.17	0.02
APR												
27...	0.21	0.21	0.64	4.6	1.0	7	4	<0.02	<0.0	<0.05	0.14	0.02
JUN												
01...	0.14	0.15	0.46	4.5	2.4	22	2	E0.0	<0.0	<0.01	0.08	0.02
29...	1.0	1.0	3.1	6.8	1.2	28	9	<0.0	<0.0	<0.01	0.06	0.03
JUL												
27...	1.40	1.40	4.3	6.4	1.1	22	10	<0.007	<0.002	<0.01	0.03	0.03
AUG												
30...	1.90	1.90	5.8	6.9	0.9	19	12	<0.007	<0.002	<0.03	0.03	0.02
SEP												
20...	0.420	0.430	1.3	5.5	--	32	2	--	--	--	--	--

DATE	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	FONOFOS WATER DISS REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	P,P' DDE DISSOLV (UG/L)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L)
OCT												
19...	E0.0	<0.01	0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV												
28...	E0.02	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC												
13...	E0.02	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN												
17...	E0.01	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	0.23	<0.05	<0.05
MAR												
09...	E0.02	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
30...	E0.03	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
APR												
27...	E0.05	E0.0	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN												
01...	E0.05	<0.01	<0.0	<0.0	<0.01	<0.02	<0.0	<0.02	<0.02	<0.03	<0.0	<0.02
29...	E0.04	<0.0	<0.0	<0.0	<0.0	<0.02	<0.0	<0.02	<0.02	<0.03	<0.0	<0.02
JUL												
27...	E0.03	<0.004	<0.003	<0.002	<0.006	<0.01	<0.006	<0.01	<0.01	<0.03	<0.008	<0.01
AUG												
30...	E0.07	<0.004	<0.003	<0.002	E0.001	--	<0.02	--	--	<0.03	<0.03	--
SEP												
20...	--	--	--	--	--	--	--	--	--	--	--	--

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	LINDANE DIS-SOLVED (UG/L)	DI-ELDRIN DIS-SOLVED (UG/L)	METO-LACHLOR WATER DISSOLV (UG/L)	MALA-THION, DIS-SOLVED (UG/L)	PARA-THION, DIS-SOLVED (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	2,4-D, DIS-SOLVED (UG/L)
OCT 19...	<0.05	<0.05	<0.05	0.02	<0.01	<0.0	E0.0	0.02	<0.02	0.34	0.10	<0.05
NOV 28...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	0.02	<0.01	<0.02	0.02	0.27	<0.05
DEC 13...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	0.02	<0.01	<0.02	0.03	0.23	<0.05
JAN 17...	<0.05	<0.05	<0.05	<0.0	0.02	<0.0	E0.0	<0.01	<0.02	0.03	0.12	<0.05
MAR 09...	<0.05	<0.05	<0.05	0.0	<0.01	<0.0	0.03	<0.01	<0.02	0.07	0.36	<0.05
30...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	0.37	<0.01	<0.02	0.04	0.64	<0.05
APR 27...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	0.55	<0.01	<0.02	0.03	1.0	<0.05
JUN 01...	<0.02	<0.01	<0.02	0.02	<0.01	<0.0	0.50	<0.01	<0.02	0.05	1.0	<0.06
29...	<0.02	<0.01	<0.02	<0.0	0.02	<0.0	0.11	0.02	<0.0	0.08	0.43	<0.06
JUL 27...	<0.01	<0.01	<0.02	<0.004	0.02	<0.001	0.06	<0.005	<0.004	0.02	0.31	<0.01
AUG 30...	--	<0.03	<0.02	0.01	<0.03	<0.001	0.07	<0.005	<0.004	0.07	0.49	--
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	2,4,5-T DIS-SOLVED (UG/L)	SILVEX, DIS-SOLVED (UG/L)	ALA-CHLOR, WATER, DISS, REC, (UG/L)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L)	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L)	ACETO-CHLOR, WATER FLTRD REC (UG/L)	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L)	ORY-ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L)	NEB-URON, WATER, FLTRD, GF 0.7U REC (UG/L)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L)
OCT 19...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV 28...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC 13...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN 17...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAR 09...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
30...	<0.05	<0.05	0.02	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
APR 27...	<0.05	<0.05	0.03	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN 01...	<0.01	<0.02	0.04	<0.07	<0.01	0.04	<0.03	<0.02	<0.02	<0.02	<0.0	<0.02
29...	<0.01	<0.02	<0.0	<0.07	<0.01	<0.0	<0.03	<0.02	<0.02	<0.02	<0.0	<0.02
JUL 27...	<0.01	<0.02	<0.002	<0.05	<0.01	<0.002	<0.05	<0.02	<0.02	<0.02	<0.007	<0.02
AUG 30...	--	--	<0.002	--	<0.03	<0.002	--	<0.02	<0.02	<0.02	<0.007	<0.02
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L)	OCRESOL 4,6-DINITRO WAT,FLT GF 0.7U REC (UG/L)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L)	AMIBEN, WATER, FLTRD, GF 0.7U REC (UG/L)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L)
OCT 19...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV 28...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC 13...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN 17...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAR 09...	<0.05	<0.05	<0.05	0.27	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
30...	<0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
APR 27...	<0.05	<0.05	<0.05	0.04	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN 01...	<0.01	<0.02	<0.0	E0.08	<0.01	<0.03	<0.02	<0.02	<0.06	<0.0	<0.01	<0.01
29...	<0.01	<0.02	<0.0	<0.02	<0.01	<0.03	<0.02	<0.02	<0.06	<0.0	<0.01	<0.01
JUL 27...	<0.01	<0.02	<0.006	<0.02	<0.01	<0.03	<0.02	<0.02	<0.05	<0.007	<0.01	<0.01
AUG 30...	<0.01	<0.02	--	<0.02	--	--	<0.02	--	--	<0.03	<0.01	<0.01
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L)
OCT 19...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
NOV 28...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
DEC 13...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	E0.0	<0.0	<0.01	<0.01	<0.01
JAN 17...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
MAR 09...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.04	<0.0	<0.01	<0.01	<0.01
30...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
APR 27...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
JUN 01...	<0.03	<0.0	<0.02	<0.02	<0.02	<0.02	<0.01	<0.01	<0.0	<0.01	<0.01	<0.01
29...	<0.03	<0.0	<0.02	<0.02	<0.02	<0.02	<0.01	<0.0	<0.0	<0.0	<0.0	<0.0
JUL 27...	<0.03	<0.008	<0.01	<0.02	<0.02	<0.02	<0.008	<0.004	<0.003	<0.002	<0.004	<0.002
AUG 30...	<0.03	<0.008	--	<0.02	<0.02	<0.02	--	<0.004	<0.003	<0.002	<0.004	<0.002
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L)
OCT 19...	<0.03	<0.04	<0.03	<0.0	<0.0	0.03	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
NOV 28...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.01	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
DEC 13...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.01	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
JAN 17...	<0.03	<0.04	<0.03	<0.0	<0.0	0.02	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
MAR 09...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.01	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
30...	<0.03	<0.04	<0.03	<0.0	<0.0	0.02	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
APR 27...	<0.03	<0.04	<0.03	<0.0	<0.0	0.04	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
JUN 01...	<0.03	<0.04	<0.03	<0.0	<0.0	0.04	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
29...	<0.0	<0.0	<0.0	<0.0	<0.0	0.06	<0.0	<0.0	<0.0	<0.0	<0.01	<0.02
JUL 27...	<0.007	<0.002	<0.006	<0.002	<0.004	0.05	<0.004	<0.003	<0.002	<0.003	<0.01	<0.02
AUG 30...	<0.007	<0.002	<0.006	<0.002	<0.004	0.06	<0.02	<0.003	<0.002	<0.003	<0.01	<0.02
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 19...	<0.0	<0.02	E0.09	<0.0	0.0	<0.02	<0.01	<0.0	<0.04	<0.02	464	95
NOV 28...	<0.0	<0.02	<0.05	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	91	97
DEC 13...	<0.0	<0.02	E0.01	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	43	98
JAN 17...	<0.0	<0.02	E0.02	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	88	95
MAR 09...	<0.0	<0.02	E0.05	<0.0	E0.0	0.02	<0.01	<0.0	<0.04	<0.02	63	97
30...	<0.0	<0.02	E0.02	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	88	95
APR 27...	<0.0	<0.02	<0.05	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	68	96
JUN 01...	<0.0	<0.02	<0.05	<0.0	<0.0	<0.02	<0.01	<0.0	<0.04	<0.02	307	82
29...	<0.0	<0.0	E0.06	<0.0	<0.0	<0.0	<0.0	<0.01	<0.0	<0.0	110	99
JUL 27...	<0.001	<0.004	E0.01	<0.002	<0.002	<0.004	<0.003	<0.01	<0.001	<0.005	67	100
AUG 30...	<0.001	<0.004	<0.003	<0.002	E0.001	<0.004	<0.003	<0.01	<0.001	<0.005	35	100
SEP 20...	--	--	--	--	--	--	--	--	--	--	--	--

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	141966	330	187	71700	20	7490	35	13300	120
NOV.	1994	243140	365	207	136000	22	14500	39	25400	130
DEC.	1994	156480	403	227	96100	26	11000	43	18400	140
JAN.	1995	62652	569	316	53500	47	7900	66	11100	160
FEB.	1995	39483	583	324	34500	49	5180	68	7230	160
MAR.	1995	218554	400	226	133000	26	15400	43	25500	140
APR.	1995	244620	371	210	139000	23	15000	39	26100	130
MAY	1995	333620	388	219	197000	25	22300	42	37500	130
JUNE	1995	114967	460	258	80100	33	10300	51	15900	150
JULY	1995	31403	575	319	27000	49	4130	67	5700	160
AUG.	1995	45989	510	284	35300	40	4970	58	7220	150
SEPT	1995	32426	587	325	28500	51	4440	69	6050	160
TOTAL		1665300	**	**	1032000	**	123000	**	199000	**
WTD.AVG.		4562	407	230	**	27	**	44	**	140

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	734	706	720	---	---	e330	378	369	375	---	---	e539
2	726	701	714	388	336	350	379	371	376	535	525	529
3	713	680	700	---	---	e351	---	---	e375	---	---	e543
4	706	674	686	369	344	365	---	---	e374	---	---	e523
5	704	677	690	---	---	e314	376	371	373	479	469	473
6	701	675	688	330	305	317	376	371	374	589	470	525
7	---	---	e585	400	330	363	379	372	375	611	589	603
8	---	---	e350	440	375	417	399	360	374	612	597	606
9	439	334	377	381	346	363	388	361	372	618	587	605
10	532	439	486	384	351	367	386	362	376	616	588	607
11	571	532	551	373	364	368	380	367	371	---	---	e631
12	600	562	575	367	356	363	385	378	381	670	633	650
13	608	598	603	370	355	363	388	380	384	653	601	631
14	619	608	615	399	331	371	449	381	413	669	641	654
15	---	---	e660	386	310	335	487	449	472	669	628	649
16	---	---	e568	357	312	325	488	417	452	635	602	619
17	---	---	e467	---	---	e389	---	---	e407	623	556	595
18	---	---	e362	415	387	400	406	396	402	---	---	e548
19	---	---	e287	---	---	e384	---	---	e397	---	---	e521
20	---	---	e310	385	377	380	400	393	397	580	518	540
21	---	---	e270	379	353	361	400	392	398	611	580	598
22	260	235	252	393	362	386	394	389	392	622	580	605
23	280	257	265	387	382	384	440	391	410	625	588	608
24	338	280	305	391	387	389	456	440	452	628	599	617
25	340	291	315	391	384	387	456	440	448	670	587	652
26	331	313	321	385	383	384	---	---	e445	588	356	530
27	353	318	338	383	379	381	---	---	e450	544	488	526
28	---	---	e353	381	378	379	516	441	467	589	520	556
29	---	---	e342	382	376	380	501	458	487	627	589	612
30	336	324	328	382	376	378	500	489	495	628	610	618
31	332	325	328	---	---	---	---	---	e509	629	609	621
MONTH	734	235	465	440	305	367	516	360	412	670	356	585

e Estimated

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	619	598	610	684	666	678	373	368	370	483	450	471
2	602	553	573	684	677	680	400	363	371	476	465	473
3	565	555	560	696	684	690	378	367	374	489	463	479
4	578	556	566	693	685	690	389	319	358	503	471	491
5	578	562	571	696	688	692	369	312	337	497	352	489
6	579	552	568	713	687	698	316	300	306	352	270	292
7	570	548	561	700	428	505	---	---	e337	317	286	302
8	604	558	568	550	489	516	---	---	e350	---	---	e303
9	617	522	539	615	550	581	---	---	e350	---	---	e294
10	599	566	590	650	611	636	353	339	347	---	---	e359
11	624	527	558	643	628	634	---	---	e332	438	393	417
12	610	577	602	633	372	612	---	---	e394	452	434	442
13	610	594	600	394	188	297	---	---	e409	453	425	434
14	606	583	596	332	315	323	348	337	345	426	421	424
15	612	588	598	362	317	335	346	332	340	436	423	430
16	612	594	605	418	362	395	---	---	e408	444	436	441
17	616	596	612	435	413	417	---	---	e409	450	443	446
18	596	578	587	414	389	401	---	---	e410	449	444	447
19	583	562	577	402	397	400	---	---	e408	447	437	445
20	576	557	566	401	395	398	---	---	e362	438	430	434
21	586	561	574	400	398	399	---	---	e386	430	418	423
22	596	571	583	---	---	e421	---	---	e397	418	412	414
23	606	593	599	---	---	e422	---	---	e362	427	416	423
24	609	595	603	---	---	e422	---	---	e371	426	420	424
25	609	600	605	411	364	395	---	---	e384	432	418	424
26	610	595	603	---	---	e414	---	---	e390	434	420	426
27	605	581	594	---	---	e406	424	411	417	428	413	420
28	666	602	624	376	350	366	433	422	428	428	417	425
29	---	---	---	385	373	380	463	421	435	443	424	434
30	---	---	---	---	---	e413	480	406	454	438	412	426
31	---	---	---	---	---	e411	---	---	---	433	424	427
MONTH	666	522	585	713	188	485	480	300	378	503	270	419

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	446	409	436	697	671	685	629	338	448	732	657	680
2	428	414	417	726	630	700	---	---	e352	745	700	728
3	419	413	416	697	597	652	---	---	e365	762	738	747
4	423	416	420	713	670	687	413	363	394	761	730	748
5	429	416	424	715	316	480	482	374	418	759	728	736
6	444	423	434	429	367	391	499	482	495	777	733	754
7	444	441	443	477	389	433	495	481	486	760	737	746
8	---	---	e441	558	477	507	499	477	486	764	736	748
9	445	437	441	621	558	590	531	499	516	776	750	765
10	498	438	460	647	618	630	546	530	538	794	762	778
11	486	371	426	672	646	655	554	536	547	787	750	771
12	---	---	e382	683	671	674	563	542	553	---	---	e710
13	441	395	428	687	681	685	576	562	569	---	---	e498
14	---	---	e450	706	687	699	623	573	603	---	---	e382
15	463	436	455	707	646	694	649	606	620	---	---	e513
16	490	433	450	689	626	665	669	649	660	---	---	e583
17	541	490	522	711	652	691	702	669	688	---	---	e600
18	603	540	569	695	655	678	717	697	705	---	---	e650
19	627	603	617	715	663	698	721	716	718	---	---	e598
20	653	627	641	663	604	641	754	721	734	---	---	e494
21	675	653	665	682	654	669	779	502	644	---	---	e530
22	684	651	670	695	681	687	620	582	602	---	---	e598
23	679	650	658	717	640	680	651	610	624	---	---	e610
24	749	679	713	741	484	577	688	651	671	---	---	e690
25	799	749	782	564	518	553	718	688	704	---	---	e698
26	800	737	767	594	552	572	723	701	715	718	702	708
27	760	743	751	642	594	620	722	698	707	721	708	714
28	789	741	762	664	637	648	717	698	708	721	696	714
29	741	690	709	680	662	670	746	712	729	718	694	702
30	708	673	683	695	680	687	764	730	749	736	718	727
31	---	---	---	703	577	671	760	732	751	---	---	---
MONTH	800	371	548	741	316	631	779	338	597	794	657	664
YEAR	800	188	511									

e Estimated

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.3	7.1	7.2	7.8	7.7	7.8	---	---	---	---	---	---
2	7.3	7.1	7.2	8.0	7.7	7.8	---	---	---	---	---	---
3	7.3	7.1	7.2	7.9	7.7	7.8	---	---	---	---	---	---
4	7.3	7.1	7.2	7.7	7.4	7.6	---	---	---	---	---	---
5	7.2	7.1	7.1	7.8	7.4	7.6	---	---	---	---	---	---
6	7.2	7.1	7.1	7.7	7.5	7.6	---	---	---	---	---	---
7	---	---	---	7.6	7.1	7.3	---	---	---	---	---	---
8	---	---	---	7.2	7.0	7.1	---	---	---	---	---	---
9	7.5	7.4	7.5	7.4	7.2	7.3	---	---	---	---	---	---
10	7.4	7.3	7.4	7.4	7.2	7.3	---	---	---	7.6	7.5	7.6
11	7.4	7.2	7.3	7.8	7.2	7.3	---	---	---	7.6	7.5	7.6
12	7.3	7.2	7.2	7.7	7.6	7.7	---	---	---	7.6	7.5	7.6
13	7.4	7.2	7.3	7.7	7.6	7.6	---	---	---	7.6	7.4	7.6
14	7.5	7.1	7.3	7.7	7.5	7.6	---	---	---	7.7	7.6	7.7
15	---	---	---	7.6	7.3	7.5	---	---	---	7.7	7.6	7.7
16	---	---	---	7.5	7.3	7.4	---	---	---	7.7	7.6	7.6
17	---	---	---	7.5	7.3	7.4	---	---	---	7.7	7.6	7.6
18	---	---	---	7.4	7.3	7.3	---	---	---	7.7	7.6	7.6
19	7.7	7.4	7.6	7.9	7.3	7.8	---	---	---	7.6	7.6	7.6
20	---	---	---	7.9	7.7	7.8	---	---	---	7.6	7.5	7.5
21	---	---	---	7.8	7.7	7.7	---	---	---	7.6	7.5	7.5
22	7.6	7.4	7.5	7.9	7.8	7.9	---	---	---	7.6	7.5	7.6
23	7.4	7.3	7.4	8.0	7.9	8.0	---	---	---	7.6	7.6	7.6
24	7.5	7.3	7.4	8.0	8.0	8.0	---	---	---	7.6	7.5	7.5
25	7.5	7.4	7.5	8.0	7.9	8.0	---	---	---	7.6	7.4	7.5
26	7.5	7.4	7.5	8.1	7.9	8.0	---	---	---	7.7	7.4	7.6
27	---	---	---	8.0	7.9	8.0	---	---	---	7.5	7.4	7.5
28	---	---	---	8.0	7.9	8.0	---	---	---	7.6	7.5	7.5
29	---	---	---	7.9	7.8	7.8	---	---	---	7.6	7.5	7.6
30	---	---	---	---	---	---	---	---	---	7.6	7.5	7.6
31	7.8	7.5	7.7	---	---	---	---	---	---	7.5	7.4	7.5
MONTH	7.8	7.1	7.3	8.1	7.0	7.7	---	---	---	7.7	7.4	7.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.5	7.4	7.4	7.5	7.4	7.4	8.0	7.9	7.9	---	---	---
2	7.5	7.4	7.4	7.5	7.4	7.4	8.0	7.8	7.9	---	---	---
3	7.5	7.4	7.5	7.5	7.4	7.4	8.1	8.0	8.0	---	---	---
4	7.5	7.4	7.5	7.5	7.4	7.5	8.1	7.9	8.0	---	---	---
5	7.5	7.4	7.5	7.5	7.4	7.4	7.9	7.8	7.9	---	---	---
6	7.5	7.4	7.5	---	---	---	7.8	7.7	7.8	---	---	---
7	7.5	7.4	7.4	7.8	7.5	7.7	---	---	---	---	---	---
8	7.5	7.4	7.4	7.7	7.6	7.6	---	---	---	---	---	---
9	7.6	7.4	7.5	7.6	7.5	7.5	---	---	---	---	---	---
10	7.5	7.4	7.4	7.6	7.5	7.5	8.4	8.3	8.4	---	---	---
11	7.6	7.4	7.5	7.6	7.5	7.6	8.3	8.1	8.2	7.5	7.2	7.4
12	7.5	7.4	7.4	7.6	7.6	7.6	8.2	8.1	8.2	7.7	7.5	7.6
13	7.5	7.4	7.4	8.0	7.6	7.8	---	---	---	7.8	7.6	7.7
14	7.5	7.3	7.4	7.7	7.6	7.6	8.4	8.3	8.3	7.8	7.6	7.7
15	7.4	7.3	7.4	7.7	7.5	7.6	8.4	8.2	8.3	7.8	7.7	7.7
16	7.5	7.4	7.4	7.8	7.7	7.8	8.7	8.3	8.4	7.8	7.7	7.7
17	7.5	7.4	7.4	8.0	7.8	7.9	8.7	7.8	8.2	7.8	7.7	7.7
18	7.5	7.4	7.5	8.1	7.9	8.0	7.9	7.7	7.8	7.9	7.7	7.8
19	7.5	7.4	7.5	8.2	8.1	8.1	---	---	---	7.9	7.7	7.8
20	7.5	7.5	7.5	8.2	8.1	8.1	---	---	---	7.9	7.8	7.8
21	7.6	7.4	7.5	8.1	8.0	8.1	7.1	6.9	7.0	7.9	7.8	7.8
22	7.5	7.4	7.5	---	---	---	7.1	7.0	7.1	7.9	7.8	7.8
23	7.5	7.4	7.5	---	---	---	---	---	---	7.8	7.7	7.8
24	7.5	7.4	7.5	---	---	---	7.3	7.1	7.1	7.9	7.6	7.8
25	7.5	7.4	7.5	8.1	7.9	8.1	7.2	7.1	7.1	7.8	7.6	7.6
26	7.5	7.4	7.5	---	---	---	7.3	7.1	7.2	7.6	7.6	7.6
27	7.6	7.5	7.5	---	---	---	7.2	7.1	7.2	7.7	7.6	7.6
28	7.5	7.4	7.4	7.7	7.7	7.7	7.2	7.1	7.1	7.8	7.6	7.7
29	---	---	---	8.0	7.7	7.8	---	---	---	7.8	7.7	7.7
30	---	---	---	---	---	---	---	---	---	7.9	7.7	7.8
31	---	---	---	8.0	7.9	7.9	---	---	---	7.9	7.8	7.8
MONTH	7.6	7.3	7.5	8.2	7.4	7.7	8.7	6.9	7.8	7.9	7.2	7.7

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.9	7.7	7.7	7.3	7.1	7.2	7.5	7.2	7.4	7.1	6.9	7.0
2	7.7	7.6	7.7	7.3	7.2	7.2	7.6	7.4	7.5	7.1	6.9	6.9
3	7.7	7.7	7.7	7.3	7.2	7.2	7.5	7.2	7.4	7.1	6.9	7.0
4	7.7	7.6	7.7	7.5	7.2	7.4	7.4	7.4	7.4	7.1	6.9	7.0
5	7.7	7.7	7.7	7.7	7.3	7.4	7.5	7.4	7.4	7.1	6.9	7.0
6	7.7	7.7	7.7	7.6	7.4	7.5	7.6	7.5	7.6	7.0	6.9	6.9
7	7.7	7.7	7.7	7.4	7.2	7.3	7.6	7.5	7.6	7.0	6.9	6.9
8	7.7	7.6	7.7	7.4	7.2	7.3	7.7	7.6	7.6	6.9	6.8	6.8
9	7.7	7.6	7.7	7.4	7.2	7.3	7.6	7.5	7.6	7.0	6.8	6.9
10	7.8	7.6	7.7	7.4	7.2	7.3	7.6	7.2	7.4	7.0	6.8	6.9
11	7.7	7.4	7.5	7.3	7.2	7.2	7.4	7.2	7.2	7.0	6.8	6.9
12	7.6	7.5	7.6	7.3	7.1	7.2	7.4	7.2	7.3	7.0	6.9	6.9
13	7.7	7.6	7.6	7.2	7.1	7.1	7.5	7.2	7.3	---	---	---
14	7.8	7.6	7.7	7.2	7.1	7.2	7.4	7.2	7.3	---	---	---
15	7.8	7.8	7.8	7.2	7.1	7.1	7.4	7.2	7.3	---	---	---
16	7.8	7.6	7.7	7.2	7.0	7.1	7.3	7.1	7.2	---	---	---
17	7.6	7.5	7.5	7.2	7.1	7.1	7.2	7.1	7.2	---	---	---
18	7.6	7.3	7.4	7.1	7.0	7.1	7.1	7.0	7.1	---	---	---
19	7.4	7.3	7.3	7.1	7.0	7.0	7.2	7.0	7.1	---	---	---
20	7.4	7.3	7.3	7.1	6.9	7.0	7.2	7.0	7.1	---	---	---
21	7.4	7.2	7.3	7.0	6.9	7.0	7.2	7.0	7.1	---	---	---
22	7.3	7.2	7.3	7.1	6.9	7.0	7.1	6.9	7.0	---	---	---
23	7.4	7.2	7.3	7.1	6.9	7.0	7.0	6.9	6.9	---	---	---
24	7.2	7.1	7.2	7.4	7.0	7.3	7.1	7.0	7.1	---	---	---
25	7.3	7.1	7.2	7.3	7.1	7.2	7.2	7.0	7.1	---	---	---
26	7.3	7.2	7.2	7.1	7.0	7.1	7.2	6.9	7.0	7.5	7.3	7.4
27	7.2	7.1	7.2	7.0	6.9	7.0	7.1	6.9	7.0	7.4	7.3	7.4
28	7.4	7.1	7.2	7.1	6.9	7.0	7.1	7.0	7.0	7.3	7.2	7.3
29	7.3	7.2	7.3	7.1	6.9	7.0	7.2	7.0	7.0	7.7	7.3	7.5
30	7.3	7.1	7.2	7.1	6.9	7.0	7.1	6.9	7.0	7.8	7.6	7.6
31	---	---	---	7.3	6.8	6.9	7.1	6.9	7.0	---	---	---
MONTH	7.9	7.1	7.5	7.7	6.8	7.2	7.7	6.9	7.2	7.8	6.8	7.1
YEAR	8.7	6.8	7.5									

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.0	12.0	12.5	15.5	13.5	14.5	16.0	15.0	15.5	20.5	20.0	20.5
2	13.5	12.0	13.0	13.5	12.5	13.0	16.5	15.5	16.0	20.5	19.5	19.5
3	14.0	13.0	13.5	12.5	11.5	12.0	16.5	16.0	16.0	19.5	18.5	19.0
4	14.0	12.5	13.5	12.5	11.5	12.0	17.0	15.5	16.0	19.5	19.0	19.0
5	14.0	13.0	13.5	13.5	12.5	13.0	17.0	16.0	16.5	20.5	19.5	20.0
6	14.0	12.5	13.5	15.0	13.5	14.0	17.0	15.5	16.5	20.0	19.5	20.0
7	13.5	12.5	13.0	15.5	11.0	13.0	18.5	17.0	17.5	21.0	20.0	20.5
8	13.0	11.5	12.5	11.5	10.0	10.5	---	---	---	21.0	20.0	20.5
9	13.0	11.5	12.0	13.0	11.0	12.0	---	---	---	21.0	20.0	20.5
10	14.0	12.5	13.5	14.0	12.0	13.0	19.0	18.5	19.0	22.0	21.0	21.5
11	14.0	12.0	13.0	14.5	13.0	14.0	18.5	17.0	17.5	22.0	21.5	21.5
12	12.0	11.0	11.5	16.5	14.5	15.0	17.5	16.5	17.0	21.5	21.0	21.5
13	12.0	11.0	11.5	16.5	14.5	15.0	18.5	17.0	17.5	22.5	21.0	21.5
14	11.5	10.5	11.0	14.5	14.0	14.0	19.0	18.0	18.5	24.0	22.5	23.0
15	13.0	11.5	12.0	15.0	14.5	14.5	19.0	18.0	18.5	24.5	23.5	24.0
16	13.0	12.0	12.5	15.5	14.5	15.0	20.0	19.0	19.0	24.5	24.0	24.0
17	13.0	11.5	12.5	15.0	14.0	14.5	19.0	18.5	19.0	24.0	23.5	23.5
18	13.0	12.0	12.5	15.0	14.0	14.5	20.0	18.5	19.5	23.5	23.0	23.0
19	14.0	12.5	13.0	15.5	14.5	15.0	---	---	---	23.0	22.0	22.5
20	14.5	13.0	14.0	16.0	15.0	15.5	---	---	---	23.0	22.0	22.5
21	15.5	13.5	14.5	16.0	15.0	15.5	20.0	19.0	19.5	23.0	22.0	22.5
22	15.5	14.0	15.0	---	---	---	20.0	18.5	19.5	23.5	22.5	23.0
23	17.0	15.0	16.0	---	---	---	---	---	---	23.5	23.0	23.5
24	17.0	16.0	16.5	---	---	---	18.0	17.0	17.5	23.5	23.0	23.0
25	16.5	15.5	16.0	17.5	16.5	17.0	18.5	17.5	18.0	23.0	23.0	23.0
26	16.5	15.0	15.5	---	---	---	18.5	18.0	18.5	23.5	23.0	23.0
27	17.5	16.0	16.5	---	---	---	19.0	18.0	18.5	24.0	23.5	24.0
28	17.0	15.5	16.5	17.5	16.0	17.0	19.5	18.5	19.0	24.5	24.0	24.0
29	---	---	---	16.0	15.0	15.5	20.5	19.0	19.5	24.5	24.0	24.5
30	---	---	---	15.5	15.0	15.0	20.5	20.0	20.0	24.5	24.0	24.5
31	---	---	---	15.5	15.0	15.5	---	---	---	24.5	24.0	24.5
MONTH	17.5	10.5	13.5	17.5	10.0	14.0	20.5	15.0	18.0	24.5	18.5	22.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	23.5	24.0	28.5	27.0	27.5	28.5	27.0	27.5	31.0	29.5	30.5
2	25.0	24.5	24.5	28.5	27.0	27.5	28.0	26.5	27.0	31.5	29.5	30.5
3	25.0	25.0	25.0	29.0	27.5	28.0	28.5	27.0	28.0	31.5	30.0	30.5
4	25.5	24.5	25.0	29.0	27.5	28.5	29.0	28.0	28.5	31.0	30.0	30.5
5	25.5	24.5	25.0	28.5	23.5	26.0	30.5	28.5	29.0	30.5	29.0	30.0
6	25.5	24.5	25.0	27.0	25.5	26.0	30.5	29.0	30.0	30.5	29.0	29.5
7	26.0	25.0	25.5	29.0	26.5	27.5	31.0	29.5	30.0	30.0	29.0	29.5
8	26.0	25.0	25.5	30.0	28.0	29.0	30.5	29.5	30.0	29.5	28.0	29.0
9	26.0	25.5	25.5	30.5	29.0	30.0	30.5	29.0	30.0	29.0	27.0	28.0
10	26.0	25.5	25.5	31.0	29.0	30.0	30.5	29.5	30.0	28.0	27.0	27.5
11	25.5	24.5	25.0	31.5	29.5	30.5	30.5	30.0	30.5	28.5	27.0	27.5
12	25.0	24.0	24.5	32.0	30.0	31.0	30.5	30.0	30.5	---	---	---
13	25.5	24.5	25.0	32.0	30.0	31.0	31.5	30.0	30.5	---	---	---
14	26.5	25.0	25.5	31.5	30.0	31.0	31.0	30.0	30.5	---	---	---
15	26.0	25.5	26.0	31.0	30.0	30.5	30.5	29.5	30.0	---	---	---
16	27.0	25.5	26.0	30.5	29.0	30.0	31.0	29.5	30.5	---	---	---
17	27.5	26.5	27.0	30.5	29.0	30.0	31.5	29.5	30.5	---	---	---
18	28.0	26.0	27.0	31.0	29.5	30.0	31.5	30.0	30.5	---	---	---
19	28.0	26.5	27.5	31.5	29.5	30.5	31.5	30.5	31.0	---	---	---
20	28.5	26.5	27.5	31.0	30.0	30.5	31.5	30.0	31.0	---	---	---
21	28.5	27.5	28.0	31.0	29.5	30.5	31.0	28.0	30.0	---	---	---
22	29.0	28.0	28.5	31.5	29.5	30.5	31.5	30.0	30.5	---	---	---
23	29.0	28.0	28.5	31.0	29.5	30.0	31.5	30.0	30.5	---	---	---
24	29.5	28.0	29.0	30.5	29.0	29.5	31.0	29.5	30.5	---	---	---
25	29.5	28.0	29.0	31.0	29.5	30.0	31.5	30.0	30.5	---	---	---
26	29.5	27.5	28.5	31.5	29.5	30.5	31.5	30.0	30.5	24.5	23.0	24.0
27	29.0	28.0	28.5	31.5	30.0	31.0	32.0	30.0	31.0	26.0	24.0	25.0
28	28.5	27.0	28.0	32.0	30.0	31.0	31.5	30.0	31.0	27.0	25.5	26.0
29	28.5	27.5	28.0	32.0	30.5	31.5	31.5	30.5	31.0	27.5	26.0	26.5
30	28.5	27.5	28.0	31.5	30.0	31.0	30.5	29.5	30.0	27.5	26.0	27.0
31	---	---	---	31.0	28.5	29.5	31.0	29.5	30.0	---	---	---
MONTH	29.5	23.5	26.5	32.0	23.5	29.5	32.0	26.5	30.0	31.5	23.0	28.0
YEAR	32.0	9.0	20.5									

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	8.2	6.8	7.4	9.0	8.4	8.8	10.4	9.6	9.9	9.5	8.9	9.2
2	8.4	6.9	7.5	9.0	8.4	8.9	10.7	9.4	10.0	9.7	9.4	9.6
3	7.8	6.5	7.1	8.8	7.6	8.2	10.8	10.1	10.5	9.7	9.5	9.6
4	7.2	6.1	6.7	7.8	7.3	7.7	10.4	9.3	9.9	10.8	9.3	10.2
5	7.3	6.3	6.8	8.7	6.8	7.7	10.8	8.9	9.9	11.1	10.8	10.9
6	7.1	6.2	6.7	7.0	6.1	6.7	10.8	10.4	10.6	11.0	10.1	10.5
7	---	---	---	7.2	6.0	6.5	10.6	10.3	10.4	10.2	10.0	10.1
8	---	---	---	8.9	6.5	7.9	10.6	10.0	10.3	10.3	10.0	10.2
9	5.8	4.6	5.0	9.1	8.3	8.8	10.1	9.9	10.0	10.1	9.5	9.9
10	6.6	5.7	6.2	9.0	8.6	8.8	10.6	10.1	10.4	9.6	9.2	9.5
11	6.9	6.6	6.7	9.4	8.4	8.8	10.8	10.6	10.6	9.2	8.8	9.0
12	7.1	6.8	7.0	9.7	9.4	9.5	10.9	10.7	10.8	8.9	7.8	8.7
13	7.1	6.7	6.9	9.7	9.6	9.6	10.9	10.8	10.8	8.6	7.2	8.2
14	7.2	6.6	6.8	9.6	8.8	9.3	10.8	10.1	10.5	9.1	8.5	8.8
15	---	---	---	8.8	7.7	8.3	10.1	9.6	9.9	9.3	9.0	9.2
16	---	---	---	8.0	7.4	7.8	10.2	9.8	10.0	9.6	9.2	9.4
17	8.5	7.1	7.9	8.6	7.3	7.8	10.5	10.2	10.4	9.3	8.3	9.0
18	---	---	---	9.5	8.5	8.9	10.7	10.4	10.6	9.1	8.5	8.8
19	6.5	4.9	5.6	---	---	---	10.7	10.5	10.6	9.6	9.1	9.4
20	---	---	---	9.3	8.9	9.1	10.6	10.5	10.5	9.8	9.5	9.6
21	---	---	---	9.0	7.9	8.5	10.6	10.5	10.5	9.8	9.5	9.6
22	5.1	4.1	4.5	9.1	8.1	8.6	10.8	10.6	10.7	9.6	9.2	9.5
23	5.3	3.9	4.4	9.7	8.7	9.1	10.8	10.4	10.7	10.3	9.5	9.9
24	7.7	5.3	6.5	10.3	9.2	9.6	10.5	10.2	10.3	10.2	9.9	10.1
25	8.3	7.6	8.0	10.3	9.4	9.9	10.4	10.3	10.4	10.2	9.6	9.8
26	8.0	7.3	7.9	10.3	9.7	10.1	10.6	10.3	10.5	10.2	9.0	9.9
27	8.7	7.2	7.6	10.2	9.4	9.9	10.4	10.2	10.3	9.7	9.1	9.4
28	9.3	7.5	8.2	10.2	9.1	9.7	10.2	9.6	9.8	9.6	9.1	9.4
29	9.1	8.1	8.7	10.4	9.6	9.9	9.9	9.5	9.8	10.2	9.6	9.9
30	9.0	7.9	8.6	10.4	8.9	9.9	9.6	9.5	9.5	10.8	10.0	10.4
31	9.0	7.8	8.5	---	---	---	9.5	8.9	9.2	10.6	9.9	10.5
MONTH	9.3	3.9	7.0	10.4	6.0	8.8	10.9	8.9	10.3	11.1	7.2	9.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.5	10.1	10.4	9.0	7.7	8.4	9.1	8.5	8.8	8.9	8.1	8.6
2	10.6	10.0	10.4	9.5	8.5	9.0	9.9	8.3	9.0	9.1	8.5	8.8
3	10.6	10.3	10.5	10.0	9.2	9.6	9.9	9.1	9.6	9.2	7.9	8.8
4	10.8	10.6	10.7	10.0	9.3	9.6	10.4	8.7	9.6	9.0	8.2	8.5
5	11.0	10.5	10.8	10.4	9.4	9.9	9.4	8.7	9.1	8.7	8.2	8.6
6	11.1	10.9	11.0	10.0	8.3	9.5	9.1	7.9	8.6	8.6	5.8	6.9
7	11.2	10.9	11.1	10.2	7.9	9.4	8.4	7.7	8.0	5.8	5.5	5.7
8	12.1	11.2	11.5	10.3	9.8	10.1	---	---	---	6.4	5.8	6.3
9	12.0	11.4	11.7	10.2	9.7	10.0	---	---	---	6.2	5.7	6.0
10	11.4	11.1	11.3	10.0	9.8	9.9	8.9	8.3	8.7	5.8	5.4	5.6
11	11.7	10.8	11.2	10.0	9.4	9.8	8.3	7.9	8.1	6.2	5.6	5.8
12	11.5	10.5	11.2	9.6	7.8	9.2	8.6	7.8	8.3	7.2	6.2	6.8
13	11.6	11.2	11.4	9.3	8.0	8.7	8.9	8.4	8.6	7.4	7.2	7.3
14	11.7	11.4	11.5	8.3	7.9	8.1	8.9	8.4	8.7	7.3	7.0	7.2
15	11.7	11.3	11.5	8.1	7.8	8.0	9.0	8.6	8.8	7.3	6.9	7.1
16	11.8	11.0	11.5	9.1	7.7	8.3	9.1	8.2	8.6	7.1	6.8	6.9
17	12.3	11.6	11.8	10.1	9.0	9.5	8.3	7.8	8.1	6.9	6.8	6.8
18	12.4	11.7	12.1	10.2	9.5	9.9	8.2	7.4	7.8	6.9	6.4	6.7
19	12.5	11.2	12.0	10.1	9.6	9.9	---	---	---	6.9	6.4	6.6
20	12.3	11.7	11.9	10.0	9.4	9.8	---	---	---	7.0	6.5	6.7
21	11.9	11.3	11.6	10.0	9.4	9.8	---	---	---	7.0	6.6	6.8
22	11.5	10.7	11.0	---	---	---	---	---	---	7.1	6.8	6.9
23	10.8	9.5	10.2	---	---	---	---	---	---	7.0	6.8	6.9
24	9.8	9.1	9.4	---	---	---	---	---	---	7.1	6.8	6.9
25	9.4	8.5	9.0	9.8	9.1	9.4	---	---	---	6.8	6.4	6.6
26	8.6	7.5	8.2	---	---	---	10.6	10.0	10.1	6.8	6.3	6.6
27	8.1	7.1	7.7	---	---	---	10.1	9.9	10.0	7.5	6.5	6.8
28	8.1	7.3	7.8	8.3	6.8	7.4	10.1	9.8	9.9	7.6	7.2	7.4
29	---	---	---	9.8	8.3	8.9	9.9	9.5	9.7	7.9	7.5	7.7
30	---	---	---	9.7	8.8	9.3	9.5	7.9	8.4	8.3	7.8	8.0
31	---	---	---	9.4	8.5	9.0	---	---	---	8.5	8.1	8.3
MONTH	12.5	7.1	10.7	10.4	6.8	9.2	10.6	7.4	8.9	9.2	5.4	7.1

08057410 TRINITY RIVER BELOW DALLAS, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.5	8.2	8.4	6.9	6.0	6.3	5.2	3.5	4.6	7.5	6.5	6.9
2	8.5	8.2	8.4	7.5	5.2	6.9	---	---	---	7.1	5.9	6.4
3	8.6	8.3	8.4	6.7	4.6	5.7	5.6	5.3	5.4	6.6	5.0	5.7
4	8.6	8.4	8.5	7.0	6.1	6.5	5.5	5.0	5.4	6.6	4.7	5.5
5	8.7	8.5	8.6	7.0	4.6	6.0	5.5	5.1	5.4	7.7	5.5	6.4
6	8.6	8.5	8.5	5.9	5.1	5.5	5.5	5.3	5.4	8.1	6.0	6.8
7	8.6	8.3	8.4	5.8	5.5	5.6	5.5	5.3	5.4	7.2	6.2	6.5
8	8.5	8.2	8.4	5.8	4.9	5.3	5.7	5.3	5.5	6.5	5.2	5.8
9	8.3	8.1	8.2	6.6	5.5	6.0	5.9	5.7	5.8	6.4	5.4	5.8
10	8.2	7.3	7.9	7.3	5.7	6.5	7.1	5.8	6.5	5.7	4.8	5.2
11	7.8	6.5	7.1	7.9	6.1	6.9	7.2	6.1	6.7	6.2	5.0	5.5
12	6.9	6.6	6.7	7.3	5.7	6.6	6.9	6.0	6.4	5.6	4.9	5.3
13	7.7	6.8	7.1	6.7	5.4	6.1	6.8	5.8	6.3	---	---	---
14	8.0	7.2	7.7	7.3	5.5	6.3	6.0	4.7	5.3	---	---	---
15	8.5	7.7	8.1	6.7	4.8	6.0	5.1	4.0	4.6	---	---	---
16	8.5	7.8	8.2	6.0	4.3	5.1	6.4	4.5	5.3	---	---	---
17	7.8	6.7	7.1	6.7	4.9	5.9	5.7	4.5	5.1	---	---	---
18	7.3	6.1	6.5	6.5	5.4	5.9	5.3	4.1	4.7	---	---	---
19	6.7	6.0	6.3	6.5	5.6	6.0	4.8	3.9	4.3	---	---	---
20	6.5	5.7	6.1	6.1	5.0	5.6	4.5	3.5	3.9	---	---	---
21	6.7	5.5	6.0	6.4	5.4	5.9	3.7	1.3	2.3	---	---	---
22	6.7	5.3	6.0	7.0	5.6	6.2	3.4	2.3	3.0	---	---	---
23	6.7	5.5	6.1	6.4	5.2	5.7	4.0	2.9	3.3	---	---	---
24	6.3	4.4	5.6	5.8	4.9	5.3	5.8	4.0	4.8	---	---	---
25	6.8	4.4	5.6	6.0	5.1	5.5	7.0	5.4	6.1	---	---	---
26	6.8	5.1	5.9	7.2	5.6	6.3	7.3	6.0	6.6	6.1	3.4	4.9
27	6.7	5.4	6.0	8.0	6.0	6.9	7.6	6.2	6.8	8.2	5.7	7.0
28	6.6	5.4	5.9	8.4	6.1	7.3	7.4	6.5	6.8	7.7	5.7	6.5
29	5.9	4.8	5.3	8.2	6.3	7.2	7.1	6.3	6.7	7.5	4.7	6.4
30	6.3	5.7	6.0	8.2	6.1	7.0	7.0	6.3	6.6	6.9	5.8	6.3
31	---	---	---	7.1	4.9	6.0	7.9	6.2	7.0	---	---	---
MONTH	8.7	4.4	7.1	8.4	4.3	6.1	7.9	1.3	5.4	8.2	3.4	6.1
YEAR	12.5	1.3	8.1									

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 mi².

PERIOD OF RECORD.--October 1975 to September 1980, April 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 390.00 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	1100	2,400	23.37	May 6	0015	2,940	24.56
Mar. 13	0900	950	18.13	May 8	0215	2,050	22.54
Apr. 19	2400	908	17.87				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.06	2.4	e2.1	11	2.7	1.4	.69	1.2	12	.70	2.4	.06
2	e.06	2.8	e3.4	5.9	2.3	2.6	.69	.41	2.0	.61	4.4	.14
3	.04	55	e3.0	7.7	2.2	4.0	1.3	19	1.3	1.5	1.3	.14
4	.04	44	e2.6	3.3	2.3	2.6	45	2.5	1.0	1.6	.22	.06
5	.04	210	e2.4	4.7	2.7	1.8	112	190	.98	30	.11	.05
6	.04	6.5	e2.7	12	2.9	1.6	9.7	304	1.2	1.5	.06	.03
7	152	3.6	e3.4	7.7	2.8	50	3.5	11	1.5	1.3	.04	.04
8	e8.7	3.2	e43	6.3	2.6	2.9	2.6	620	1.3	.65	.09	.04
9	e.01	98	e72	6.4	2.2	2.0	2.1	3.8	1.2	.37	.07	.01
10	e.00	9.1	e66	6.7	2.0	1.5	40	1.9	27	.31	.04	.02
11	e.00	3.5	e24	7.1	4.8	.65	6.3	1.5	140	.54	.01	.02
12	e.00	3.2	e17	22	3.7	1.1	2.1	1.4	1.4	.15	.01	.03
13	e.00	3.3	e14	34	2.1	355	1.4	1.4	.58	.04	.01	108
14	e3.0	e253	e17	8.1	2.1	27	1.3	1.4	.38	.04	.00	.78
15	e2.3	e208	19	6.1	2.6	5.7	1.3	1.1	.40	.07	.00	.42
16	e67	e17	72	5.9	4.3	5.5	1.3	1.0	.52	.09	.00	.07
17	75	e9.7	9.8	10	3.2	2.7	1.4	1.3	.52	.10	.00	.04
18	207	e9.1	7.8	34	1.9	1.7	6.1	1.6	.36	.14	.00	.01
19	47	e132	6.5	12	1.7	1.0	118	1.3	.43	.10	.00	13
20	97	e181	6.5	5.4	1.8	2.0	111	1.1	.38	.14	.00	1.7
21	512	e16	6.4	4.4	1.5	1.4	3.5	.99	.35	.09	.06	8.3
22	e27	3.2	6.0	24	1.4	.97	2.0	.94	.35	.10	.13	.94
23	e11	2.3	5.6	7.6	2.2	1.0	1.6	.70	.38	7.1	.12	.29
24	9.5	2.6	5.6	4.5	1.8	1.2	.51	.71	.44	1.0	.43	.19
25	189	3.2	5.2	3.2	1.3	52	.29	2.1	.42	.47	.10	.24
26	11	3.2	5.2	90	1.2	39	.47	1.7	.71	.15	.37	.22
27	4.1	e2.7	5.8	51	1.1	2.9	.79	1.3	.65	.25	.19	.16
28	3.3	e2.4	37	5.7	1.5	1.3	1.6	.90	.66	.17	.04	.20
29	3.0	e2.1	25	3.3	---	2.4	1.7	.94	.73	.17	.05	.23
30	2.6	e1.7	11	2.2	---	2.0	3.9	.86	.75	.08	.11	.29
31	2.6	---	13	2.6	---	1.3	---	1.0	---	.08	.10	---
MEAN	46.3	43.1	16.8	13.4	2.32	18.7	16.1	38.0	6.66	1.60	.34	4.52
MAX	512	253	72	90	4.8	355	118	620	140	30	4.4	108
MIN	.00	1.7	2.1	2.2	1.1	.65	.29	.41	.35	.04	.00	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1995h, BY WATER YEAR (WY)

MEAN	13.0	8.56	10.5	6.80	11.2	11.2	13.2	19.0	8.28	3.56	1.16	3.13
MAX	46.3	43.1	37.2	19.8	34.0	26.6	42.1	72.4	35.5	24.9	5.51	8.30
(WY)	1995	1995	1992	1990	1993	1977	1990	1989	1989	1994	1979	1980
MIN	.000	.33	.42	.12	.34	1.33	.66	.64	.32	.000	.000	.005
(WY)	1976	1990	1978	1976	1976	1986	1978	1977	1978	1980	1980	1984

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1976 - 1995h	
ANNUAL MEAN	18.6		17.4		9.34	
HIGHEST ANNUAL MEAN					17.4	1995
LOWEST ANNUAL MEAN					1.61	1978
HIGHEST DAILY MEAN	720	Jul 11	620	May 8	1150	May 17 1989
LOWEST DAILY MEAN	.00	Sep 18	.00	Oct 10	.00	Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	.01	Sep 17	.00	Aug 14	.00	Oct 1 1975
INSTANTANEOUS PEAK FLOW			2940	May 6	5660	May 17 1989
INSTANTANEOUS PEAK STAGE			24.56	May 6	29.21	May 17 1989
10 PERCENT EXCEEDS	44		38		11	
50 PERCENT EXCEEDS	2.6		1.8		.92	
90 PERCENT EXCEEDS	.09		.06		.01	

e Estimated
h See PERIOD OF RECORD paragraph.

08058900 EAST FORK TRINITY RIVER AT MCKINNEY, TX

LOCATION.--Lat 33°14'38", long 96°36'31", 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 528.74 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Flow from 89.1 mi² above this station is affected at times by discharge from the flood- detention pools of 49 floodwater-retarding structures with a combined detention capacity of 26,000 acre-ft. Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1913, about 28 ft in April 1942 (discharge not determined), from information by Texas Department of Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	155	117	195	100	44	167	211	405	21	2.6	.02
2	5.1	136	110	153	92	39	140	156	306	20	3.2	.02
3	4.6	134	113	143	84	47	122	429	256	19	3.8	.02
4	18	156	111	140	72	45	2250	383	222	17	3.7	.02
5	12	3570	103	124	69	45	1630	281	190	18	4.1	.02
6	9.5	1130	98	134	64	43	967	922	145	21	5.3	.03
7	278	578	94	127	61	101	547	396	117	19	3.5	.51
8	431	396	216	e110	57	64	410	5080	90	16	3.2	.08
9	171	849	764	104	51	46	332	2490	74	15	1.6	.04
10	67	793	1300	101	51	41	300	979	74	14	.56	.05
11	34	457	574	101	82	38	462	641	417	13	.27	.06
12	25	358	395	98	99	44	269	432	184	12	.13	.41
13	20	296	325	192	70	6530	221	366	106	11	.07	.50
14	18	3590	294	138	66	2830	193	304	78	10	.04	.34
15	17	e12300	294	109	70	1380	171	249	62	9.1	.03	.20
16	20	e1540	266	98	66	1150	155	210	53	9.1	.02	.20
17	41	e835	231	181	56	839	148	198	46	8.4	.01	1.9
18	240	e727	202	354	51	646	229	184	44	8.1	.01	4.3
19	121	e665	183	699	49	523	252	149	42	16	.01	3.0
20	1190	e1240	168	310	46	428	536	129	40	20	.04	2.8
21	2300	e1320	157	209	42	361	253	117	38	13	.19	2.5
22	1070	e537	145	197	40	305	184	111	35	11	.16	.99
23	498	e430	136	218	40	263	168	100	33	11	.03	2.8
24	779	e320	130	158	38	207	140	137	32	8.5	.03	1.7
25	1510	e255	120	139	36	345	123	6300	31	8.5	.02	1.6
26	982	e216	116	181	36	1720	112	3860	28	7.3	.02	1.7
27	508	e185	117	259	37	675	102	1260	27	6.1	.02	1.9
28	365	e159	149	180	41	404	96	936	26	4.6	.02	1.4
29	286	e137	197	133	---	307	97	746	24	2.9	.02	.88
30	233	e126	169	117	---	258	173	633	22	2.2	.02	.47
31	194	---	164	107	---	199	---	613	---	2.0	.02	---
TOTAL	11452.7	33590	7558	5509	1666	19967	10949	29002	3247	373.8	32.74	30.46
MEAN	369	1120	244	178	59.5	644	365	936	108	12.1	1.06	1.02
MAX	2300	12300	1300	699	100	6530	2250	6300	417	21	5.3	4.3
MIN	4.6	126	94	98	36	38	96	100	22	2.0	.01	.02
AC-FT	22720	66630	14990	10930	3300	39600	21720	57530	6440	741	65	60

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1995, BY WATER YEAR (WY)

MEAN	105	114	136	73.8	161	220	145	309	152	26.7	3.63	7.50
MAX	1022	1120	1160	369	562	644	804	1704	737	213	19.0	64.0
(WY)	1982	1995	1992	1992	1986	1995	1990	1982	1989	1994	1990	1994
MIN	.000	.000	.000	.000	1.37	2.30	4.08	6.08	1.28	.000	.000	.000
(WY)	1978	1978	1978	1978	1976	1976	1980	1988	1984	1984	1980	1977

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1976 - 1995	
ANNUAL TOTAL	80865.44		123377.70			
ANNUAL MEAN	222		338		121	
HIGHEST ANNUAL MEAN					373	1982
LOWEST ANNUAL MEAN					4.65	1980
HIGHEST DAILY MEAN	12300	Nov 15	12300	Nov 15	26800	May 13 1982
LOWEST DAILY MEAN	.84	Jul 7	.01	Aug 17	.00	Aug 18 1976
ANNUAL SEVEN-DAY MINIMUM	3.4	Jul 1	.02	Aug 25	.00	Aug 18 1976
INSTANTANEOUS PEAK FLOW			14900	Nov 15	61800	May 13 1982
INSTANTANEOUS PEAK STAGE			20.39	Nov 15	22.17	May 13 1982
ANNUAL RUNOFF (AC-FT)	160400		244700		87700	
10 PERCENT EXCEEDS	490		735		241	
50 PERCENT EXCEEDS	41		110		14	
90 PERCENT EXCEEDS	11		.49		.00	

e Estimated

08058900 EAST FORK TRINITY RIVER AT MCKINNEY, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1980 to September 1982, October 1985 to July 1987, April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
18...	1226	421	269	7.8	20.0	7.6	85	120	9	46	1.4	5.2
NOV												
22...	1100	530	386	7.8	13.5	9.5	91	190	12	71	1.9	8.2
DEC												
13...	0948	332	446	7.9	7.5	11.3	95	220	19	84	2.2	10
JAN												
12...	1055	97	569	7.9	14.5	9.3	93	260	11	100	2.9	16
FEB												
22...	1058	39	605	8.1	11.5	10.0	93	290	27	110	3.3	19
MAR												
28...	1153	394	406	7.7	15.5	8.7	88	190	23	72	2.0	10
APR												
25...	1102	123	547	7.8	14.0	9.1	89	260	34	100	2.7	15
MAY												
30...	1013	638	277	7.7	22.5	7.4	86	130	14	51	1.3	5.6
JUL												
13...	1000	11	584	7.7	26.5	4.7	59	260	8	97	3.2	24
AUG												
01...	1000	2.4	503	7.6	25.5	3.5	44	220	21	85	2.9	20
29...	0955	0.02	381	7.2	26.0	1.70	21	170	11	62	2.5	14

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
18...	0.2	3.8	0	136	112	110	13	3.5	0.2	12	167	157
NOV												
22...	0.3	3.1	0	211	173	170	20	4.4	0.3	13	248	228
DEC												
13...	0.3	2.5	0	244	200	200	27	5.4	0.2	12	281	266
JAN												
12...	0.4	2.0	0	306	251	250	46	7.9	0.3	5.8	341	333
FEB												
22...	0.5	1.7	0	318	260	260	54	9.5	0.4	5.8	366	362
MAR												
28...	0.3	2.3	0	201	165	170	27	5.2	0.3	9.7	257	235
APR												
25...	0.4	2.0	0	277	227	230	43	7.6	0.3	8.7	348	323
MAY												
30...	0.2	2.4	0	145	119	120	12	2.8	0.30	9.4	170	163
JUL												
13...	0.7	2.2	0	302	247	240	55	10	0.40	9.9	353	352
AUG												
01...	0.6	2.4	0	248	204	200	43	9.9	0.4	11	319	298
29...	0.5	3.3	0	188	154	152	20	12	0.60	9.0	227	217

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT											
18...	0.960	0.960	0.0	0.970	0.97	<0.015	1.6	0.60	--	0.4	0.6
NOV											
22...	0.470	--	<0.010	0.470	0.47	0.0	0.77	0.28	0.28	0.3	0.3
DEC											
13...	0.600	--	<0.010	0.600	0.60	0.0	0.90	0.27	0.17	0.2	0.3
JAN											
12...	0.430	--	<0.010	0.430	0.43	<0.015	--	--	--	<0.20	<0.20
FEB											
22...	0.390	0.390	0.040	0.430	0.430	<0.015	0.63	0.20	--	<0.20	0.20
MAR											
28...	1.61	1.61	0.1	1.70	1.7	0.13	2.7	0.87	0.77	0.9	1
APR											
25...	1.68	1.68	0.0	1.70	1.7	0.0	2.0	0.28	0.28	0.3	0.3
MAY											
30...	1.46	1.46	0.0	1.50	1.5	0.0	1.8	0.26	0.26	0.3	0.3
JUL											
13...	0.260	0.260	0.020	0.280	0.280	0.070	0.58	0.23	0.23	0.30	0.30
AUG											
01...	0.290	0.290	0.0	0.320	0.32	0.0	0.62	0.28	0.28	0.3	0.3
29...	--	--	<0.010	--	<0.050	0.090	0.50	0.41	0.31	0.40	0.50

08058900 EAST FORK TRINITY RIVER AT MCKINNEY, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
18...	0.15	0.1	0.1	0.31	7.0	>5.0	1530	1740	98	26	13
NOV											
22...	0.1	0.0	0.0	0.09	4.5	2.3	101	145	97	32	19
DEC											
13...	0.0	0.0	0.0	0.09	4.1	0.8	97	87	91	13	25
JAN											
12...	<0.010	<0.010	<0.010	--	2.9	0.3	67	18	31	7	52
FEB											
22...	<0.010	<0.010	<0.010	--	2.6	0.4	--	--	--	6	82
MAR											
28...	0.0	0.0	0.0	0.09	5.4	2.4	207	220	96	25	8
APR											
25...	0.0	<0.010	0.0	0.03	3.4	0.5	93	31	62	3	41
MAY											
30...	0.0	0.0	0.0	0.06	4.1	3.1	188	324	93	24	3
JUL											
13...	<0.010	0.020	0.010	0.03	3.0	0.5	119	3.5	35	<3	85
AUG											
01...	<0.010	<0.010	<0.010	--	4.0	0.1	42	0.27	76	14	100
29...	0.030	<0.010	<0.010	--	4.3	0.5	5	0.00	94	160	730

08059400 SISTER GROVE CREEK NEAR BLUE RIDGE, TX

LOCATION.--Lat 33°17'40", long 96°28'58", Collin County, Hydrologic Unit 12030106, on left bank at upstream side of highway embankment of bridge on Farm Road 545, 3.5 mi upstream from Hatler Branch, 4.8 mi west of Blue Ridge, 7.4 mi upstream from Stiff Creek, 14.7 mi upstream from mouth, and 24.7 mi upstream from Lavon Dam.

DRAINAGE AREA.--83.1 mi².

PERIOD OF RECORD.--July 1975 to current year.
Water-quality records.--Chemical and biochemical analyses: November 1985 to June 1987.

GAGE.--Water-stage recorder. Datum of gage is 526.29 ft above sea level. Prior to June 29, 1988, at datum 10.00 ft higher at same site.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow is affected at times by discharge from the flood-detention pools of 34 floodwater-retarding structures with a combined detention capacity of 12,710 acre-ft. These structures control runoff from 47.4 mi². Several observations of water temperature were made during the year. Rain gage at station. Satellite telemeter at station.

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 discontinued station 08059500, located 9.7 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	e111	e103	79	86	43	135	105	290	4.1	2.6	.03
2	.90	e108	88	72	76	45	108	91	237	3.6	3.3	.02
3	.85	105	96	76	69	50	89	126	197	3.2	3.6	.01
4	.71	101	91	70	64	51	1120	167	169	2.4	3.1	.01
5	.92	e596	89	68	57	e48	863	79	147	4.8	2.7	.02
6	1.1	e383	84	69	57	e48	774	210	121	7.7	2.2	.00
7	3.3	e260	80	50	58	e90	469	200	107	5.0	3.1	.01
8	19	e200	112	46	67	49	320	1550	93	4.0	3.1	.01
9	9.8	e428	335	43	68	42	215	930	80	3.3	1.9	.00
10	4.5	e452	594	43	72	41	172	513	90	2.6	1.5	.00
11	3.2	e292	292	40	94	38	208	397	389	2.3	1.3	.02
12	2.8	e200	188	56	73	54	170	323	188	1.6	.88	.00
13	2.5	e146	144	55	69	2060	139	266	126	1.4	1.7	.00
14	2.5	e435	143	40	73	1520	116	197	81	1.5	8.4	.00
15	2.9	e870	136	47	72	954	101	163	59	1.7	6.6	.00
16	5.0	e662	130	98	67	818	88	129	51	2.0	5.8	.00
17	14	e547	120	137	61	626	89	110	43	2.3	4.7	.00
18	175	441	99	346	54	477	126	106	35	2.8	3.8	.00
19	95	423	90	174	49	361	253	80	25	3.6	2.7	.04
20	240	e605	82	131	46	267	409	61	24	5.9	1.6	1.8
21	536	460	75	125	42	202	184	49	17	4.7	.94	2.2
22	294	326	66	139	40	163	110	42	8.9	4.0	.44	.77
23	195	e257	60	107	38	139	80	39	8.4	4.0	.36	.40
24	235	e221	56	102	36	122	68	41	7.6	3.7	.15	.16
25	598	e192	52	117	36	352	62	2360	7.3	4.2	.19	.16
26	413	e166	48	149	40	1090	58	1180	4.4	3.5	.22	.17
27	255	e147	49	121	42	580	49	740	4.0	2.8	.17	.56
28	197	e130	77	103	45	385	42	581	5.3	2.3	.15	1.1
29	165	e120	95	97	---	283	45	492	5.0	2.3	.08	.28
30	131	e110	75	94	---	222	51	402	4.3	2.2	.12	.14
31	115	---	87	93	---	180	---	397	---	2.2	.04	---
TOTAL	3718.79	9494	3836	2987	1651	11400	6713	12126	2624.2	101.7	67.44	7.91
MEAN	120	316	124	96.4	59.0	368	224	391	87.5	3.28	2.18	.26
MAX	598	870	594	346	94	2060	1120	2360	389	7.7	8.4	2.2
MIN	.71	101	48	40	36	38	42	39	4.0	1.4	.04	.00
AC-FT	7380	18830	7610	5920	3270	22610	13320	24050	5210	202	134	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1995, BY WATER YEAR (WY)

MEAN	49.3	51.6	70.5	48.2	95.5	126	93.1	139	81.2	12.6	3.21	3.84
MAX	451	316	493	178	266	368	477	714	348	54.4	24.7	28.2
(WY)	1982	1995	1992	1992	1989	1995	1990	1982	1989	1982	1992	1994
MIN	.000	.000	.000	1.55	1.81	2.92	3.46	6.99	1.22	.000	.000	.000
(WY)	1978	1978	1978	1976	1976	1976	1980	1988	1980	1978	1978	1978

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1975 - 1995	
ANNUAL TOTAL	29617.25		54727.04			
ANNUAL MEAN	81.1		150		64.4	
HIGHEST ANNUAL MEAN					169	1982
LOWEST ANNUAL MEAN					4.22	1980
HIGHEST DAILY MEAN	870	Nov 15	2360	May 25	8560	May 13 1982
LOWEST DAILY MEAN	.45	Aug 30	.00	Sep 6	.00	Oct 14 1975
ANNUAL SEVEN-DAY MINIMUM	.62	Aug 25	.00	Sep 12	.00	Oct 14 1975
INSTANTANEOUS PEAK FLOW			3420	May 25	13300	May 13 1982
INSTANTANEOUS PEAK STAGE			27.64	May 25	32.50	May 13 1982
ANNUAL RUNOFF (AC-FT)	58750		108600		46650	
10 PERCENT EXCEEDS	227		405		147	
50 PERCENT EXCEEDS	23		68		11	
90 PERCENT EXCEEDS	2.9		.65		.00	

e Estimated

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 mi².

PERIOD OF RECORD.--September 1953 to current year. Prior to October 1970, published as Lavon Reservoir.
Water-quality records.--Chemical analyses: October 1969 to September 1974, October 1975 to September 1982.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Jan. 20, 1954, non-recording gage in the approach channel at same datum.

REMARKS.--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 December 1975. Deliberate impoundment began Sept. 14, 1953, and the dam was completed in October 1953. Low-flow outlets consist of five 36-inch-diameter controlled sluice gates. Capacity Table No. 9, is based on a sedimentation survey completed in 1970. Lake was designed for flood control and water conservation. Water for municipal supply can be released down to elevation 453.0 ft. Flow is affected at times by discharge from the flood-detention pools of 149 floodwater-retarding structures with a combined detention capacity of 69,170 acre-ft. These structures control runoff from 242 mi² in the East Fork Trinity River, Pilot Grove, and Sister Grove Creek drainage basins. Satellite telemeter at station. Figures given herein represent total contents. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	514.0	-
Design flood	509.0	921,200
Top of tainter gates	503.5	748,200
Top of conservation pool	492.0	456,500
Crest of spillway (sill of tainter gates)	475.5	178,300
Lowest gated outlet (invert)	453.0	12,700

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 791,000 acre-ft May 3, 1990 (elevation, 504.93 ft); minimum since lake first filled in 1957, 80,150 acre-ft Apr. 17, 1976 (elevation, 465.96 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 688,100 acre-ft Nov. 22 (elevation, 501.41 ft); minimum, 438,000 acre-ft Nov. 23 (elevation, 491.12 ft).

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

486.0	339,200	492.0	456,500	498.0	597,000
487.0	357,500	494.0	500,600	500.0	649,400
488.0	376,200	496.0	547,400	502.0	704,700
490.0	415,200				

08060500 LAVON LAKE NEAR LAVON, TX--Continued

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	442200	532200	662900	606000	558800	464000	559800	567400	665100	535500	450400	419200
2	441500	529100	659100	601300	555400	461900	557100	564200	661300	530300	449500	418000
3	440900	529100	655900	598300	551500	459300	553200	562300	656100	523900	448900	416600
4	440700	533300	652600	593200	547700	458500	567900	561500	651300	519500	448500	415000
5	439700	558100	649400	587900	543600	458900	593200	563200	645600	520400	447800	413600
6	438600	572900	645600	585400	539800	459700	605700	574600	640500	517900	446600	412400
7	443200	578600	642400	581600	536000	463600	608500	582300	634700	513500	445100	412600
8	445300	579300	641600	578600	531400	463000	607200	620700	628300	508400	444300	411600
9	445100	586600	645600	576600	527400	461200	605400	644300	622600	503800	443600	410000
10	444500	592900	656400	574600	524200	460200	605700	651300	622300	498800	443000	408800
11	443800	597300	659700	571100	521300	460200	605700	654800	631000	494100	441700	407400
12	443200	597300	659900	570100	517400	462300	606700	656400	632800	489100	440700	408000
13	442800	594700	656400	570900	513700	504300	603400	656100	631500	484400	439500	409600
14	442200	606700	653400	571100	509500	532600	599000	653100	627300	479800	439500	408800
15	442200	638900	650400	568900	507500	544800	595700	649600	622000	474700	437200	408000
16	444300	656100	650200	564500	504000	551500	592400	645300	616800	470600	436100	407400
17	444500	661800	651800	564200	499500	555700	588600	641600	611600	467100	435100	409200
18	449500	663500	651000	565500	495400	556200	586100	637300	606200	464300	434100	408600
19	453800	668400	647500	568700	492000	553500	591200	632500	600600	462100	433000	409200
20	465800	678600	644300	569900	488700	552800	598000	627800	594200	460600	431800	408200
21	496300	686700	640800	567200	485100	550600	600100	623100	588400	459300	431200	408600
22	513200	688100	636800	566400	481100	548400	601300	618100	582600	458000	430000	406000
23	517600	685600	633100	565200	481300	546200	598800	614000	577300	458000	428700	404900
24	521300	683900	628600	562800	479600	544800	594200	610100	572100	457000	427300	403900
25	532200	681700	624600	558300	475600	548400	589600	629400	566200	455900	426300	403900
26	542200	678900	620700	560800	471900	562500	586100	657200	561000	455000	425500	403300
27	546200	677200	617300	565000	468800	568900	580600	664800	555900	453800	424000	402500
28	546000	674200	615300	567200	466400	570600	576100	665900	551100	452700	423200	401700
29	543800	670600	614200	567900	---	569900	573900	665900	546200	451600	422200	400900
30	539500	667000	613200	565900	---	566900	570100	668700	541200	450400	421000	400700
31	536200	---	610100	562500	---	564500	---	668100	---	450800	420000	---
MAX	546200	688100	662900	606000	558800	570600	608500	668700	665100	535500	450400	419200
MIN	438600	529100	610100	558300	466400	458500	553200	561500	541200	450400	420000	400700
(+)	495.53	500.65	498.51	496.62	492.46	496.70	496.92	500.69	495.74	491.73	490.24	489.27
(@)	+93400	+130800	-56900	-47600	-96100	+98100	+5600	+98000	-126900	-90400	-30800	-19300

CAL YR 1994 MAX 688100 MIN 437600 (@) +153600
WTR YR 1995 MAX 688100 MIN 400700 (@) -42100

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

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. Prior to Aug. 25, 1993, at site on left bank 150 ft downstream.

DRAINAGE AREA.--120 mi².

PERIOD OF RECORD.--March 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 450.00 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. There are no known diversions above station. The North Texas Municipal Water District returns sewage effluent into a tributary above this station. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1942, 35.4 ft in 1942, from information by Texas Department of Transportation.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges above base discharge of 4,500 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 21	1230	16,000	26.62	Apr. 4	0630	5,290	21.37
Nov. 5	0345	7,100	23.67	Apr. 5	1415	5,630	21.89
Nov. 15	0030	5,270	21.34	May 6	0315	9,380	24.92
Mar. 13	1115	16,300	26.67	May 8	0945	11,200	25.47
Mar. 25	2300	5,710	22.01				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	157	179	158	74	82	107	138	104	40	374	7.3
2	58	150	180	139	72	92	103	121	85	39	91	8.2
3	40	373	182	141	70	114	101	260	84	36	87	9.5
4	33	283	182	136	65	79	2180	149	78	26	187	7.1
5	39	3470	176	138	63	75	2470	259	72	730	60	5.7
6	28	321	173	169	62	82	800	3050	69	86	36	5.3
7	950	251	169	148	62	717	194	207	63	58	27	29
8	299	218	347	144	60	119	159	5640	63	45	19	51
9	105	1150	445	143	59	96	140	359	60	35	14	7.5
10	84	332	568	142	60	87	300	186	515	34	10	5.2
11	76	245	203	142	113	81	174	157	1610	39	11	5.3
12	69	212	180	318	68	358	130	145	136	30	11	9.4
13	66	200	168	241	60	7450	124	139	103	31	8.6	220
14	67	1690	182	169	63	661	116	122	90	31	7.6	64
15	96	3020	196	165	65	266	112	110	79	30	8.3	47
16	210	430	226	165	74	308	108	103	72	74	8.8	41
17	300	335	170	495	61	182	108	106	67	65	8.0	169
18	1150	299	160	383	56	160	262	101	60	69	7.9	83
19	189	836	157	178	55	145	427	91	58	52	8.5	121
20	582	1220	154	122	54	136	281	85	55	42	6.6	75
21	6580	372	150	108	53	130	127	83	50	26	13	53
22	662	288	147	144	51	126	181	79	58	17	8.1	46
23	234	260	145	124	50	123	151	76	53	88	5.9	43
24	844	250	144	97	50	119	112	118	47	56	4.7	41
25	1400	227	142	93	49	861	108	639	48	32	4.6	55
26	380	217	142	362	50	1430	104	1090	41	25	8.0	50
27	219	209	141	156	49	170	101	189	43	9.0	6.6	42
28	191	196	250	106	163	139	98	109	61	15	4.9	38
29	179	188	197	91	---	131	118	91	43	12	5.1	28
30	169	183	150	85	---	120	308	86	43	7.9	33	25
31	164	---	166	81	---	114	---	114	---	85	29	---
TOTAL	15511	17582	6171	5283	1831	14753	9804	14202	4010	1964.9	1114.2	1391.5
MEAN	500	586	199	170	65.4	476	327	458	134	63.4	35.9	46.4
MAX	6580	3470	568	495	163	7450	2470	5640	1610	730	374	220
MIN	28	150	141	81	49	75	98	76	41	7.9	4.6	5.2
AC-FT	30770	34870	12240	10480	3630	29260	19450	28170	7950	3900	2210	2760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	126	101	144	91.3	141	181	159	235	140	47.8	30.2	51.0
MAX	610	586	898	343	425	476	573	1039	566	241	86.4	180
(WY)	1982	1995	1992	1992	1993	1995	1990	1982	1981	1994	1994	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	75264		93617.6			
ANNUAL MEAN	206		256		120	
HIGHEST ANNUAL MEAN					265	1992
LOWEST ANNUAL MEAN					22.2	1971
HIGHEST DAILY MEAN	6580	Oct 21	7450	Mar 13	14900	May 13 1982
LOWEST DAILY MEAN	18	Feb 18	4.6	Aug 25	.00	Aug 24 1969
ANNUAL SEVEN-DAY MINIMUM	20	Feb 13	5.7	Aug 23	.00	Aug 24 1969
INSTANTANEOUS PEAK FLOW			16300	Mar 13	31900	May 17 1989
INSTANTANEOUS PEAK STAGE			26.67	Mar 13	29.62	May 17 1989
ANNUAL RUNOFF (AC-FT)	149300		185700		87070	
10 PERCENT EXCEEDS	357		373		190	
50 PERCENT EXCEEDS	76		108		42	
90 PERCENT EXCEEDS	39		18		7.4	

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 mi², of which 1,071 mi² is above Lake Ray Hubbard.

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 374.86 ft above sea level. Prior to Aug. 26, 1975, recording gage at 3 ft higher datum located at site 126 ft upstream and 868 ft to left. 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.

REMARKS.--Records fair. Flow is regulated by Lake Ray Hubbard(489,900 acre-ft), 1.9 mi upstream. Low flow is sustained by sewage effluent discharge from the city of Garland into Duck Creek, which enters the East Fork Trinity River 0.2 mi upstream from this station. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e46	2460	2350	2390	1230	1910	2250	2390	2580	2200	381	47
2	e47	2460	2350	2350	2340	1910	2240	2390	2550	2190	126	45
3	e44	2710	2380	2370	2340	1820	2250	2500	2540	2190	127	40
4	e46	2720	2360	2370	2330	1290	3940	2420	2540	2190	86	35
5	e50	7700	2360	2360	2320	207	4760	2650	2540	2980	235	38
6	46	4470	2350	2400	2310	506	4210	13800	2550	1640	81	42
7	130	2840	2350	2350	2300	1970	3430	7430	2550	1090	66	42
8	1100	1860	2420	2330	2310	1250	2250	13000	2550	2160	62	43
9	185	2480	2540	2330	2300	1500	2220	9930	2550	2160	64	46
10	86	2290	2810	2320	2310	1220	2490	4570	2630	2150	62	42
11	72	2180	2470	2320	2360	184	3110	744	3380	2150	59	41
12	62	2530	2410	2340	2340	134	1110	972	2650	1960	51	45
13	58	2520	2390	2690	2320	9300	2360	1690	1230	823	54	505
14	49	3030	2530	2410	2310	8890	2680	2410	1560	792	57	208
15	60	9140	2510	2340	2320	4270	2680	2790	1960	1490	56	80
16	91	6880	2620	2320	2330	2510	2640	2970	1930	1320	53	60
17	566	2630	2450	2470	2330	703	2320	2970	2090	1130	53	56
18	1620	2410	2390	2500	2310	1780	2420	2980	2190	1080	50	81
19	2550	2500	2370	2500	2310	1910	2680	2960	2180	715	46	165
20	1220	2580	2360	2370	1760	2100	3620	2950	2190	640	48	256
21	6070	2470	2350	2340	1270	2280	2890	2950	2190	118	49	78
22	9800	2410	2340	2400	1920	2300	2200	2260	2190	64	46	69
23	4380	2400	2340	2380	997	2330	2200	1540	2190	87	46	52
24	2700	2390	2340	2330	107	2320	2150	1530	2190	91	43	52
25	1970	2380	2340	2320	954	2450	2140	2080	2190	72	42	60
26	2310	2370	2330	2650	1890	7120	2140	2570	2190	65	45	53
27	2110	2370	2350	2590	1890	2060	2140	2600	2190	57	46	45
28	2070	2400	2480	2390	1900	711	2140	2560	2210	53	43	46
29	2060	2360	2500	2350	---	1630	2140	2550	2180	53	44	48
30	2050	2350	2400	1210	---	2280	2200	2550	2200	59	45	48
31	2250	---	2390	191	---	2260	---	2550	---	64	51	---
TOTAL	45898	92290	74930	70981	55708	73105	78000	110256	68860	33833	2317	2468
MEAN	1481	3076	2417	2290	1990	2358	2600	3557	2295	1091	74.7	82.3
MAX	9800	9140	2810	2690	2360	9300	4760	13800	3380	2980	381	505
MIN	44	1860	2330	191	107	134	1110	744	1230	53	42	35
AC-FT	91040	183100	148600	140800	110500	145000	154700	218700	136600	67110	4600	4900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1995#, BY WATER YEAR (WY)

MEAN	443	623	648	501	793	965	1019	1656	1179	473	143	182
MAX	3975	3076	3276	2421	2652	2510	2864	8008	5436	2207	1246	1583
(WY)	1974	1995	1992	1992	1975	1992	1985	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1974 - 1995#	
ANNUAL TOTAL	416235		708646			
ANNUAL MEAN	1140		1941		718	
HIGHEST ANNUAL MEAN					1941	1995
LOWEST ANNUAL MEAN					37.6	1978
HIGHEST DAILY MEAN	9800	Oct 22	13800	May 6	50700	May 4 1990
LOWEST DAILY MEAN	36	Jul 4	35	Sep 4	8.0	Jun 23 1979
ANNUAL SEVEN-DAY MINIMUM	41	Feb 13	41	Sep 2	15	Sep 30 1977
INSTANTANEOUS PEAK FLOW			19400	May 8	53000	May 3 1990
INSTANTANEOUS PEAK STAGE			18.19	May 8	22.01	May 3 1990
ANNUAL RUNOFF (AC-FT)	825600		1406000		520000	
10 PERCENT EXCEEDS	2500		2710		2290	
50 PERCENT EXCEEDS	294		2220		57	
90 PERCENT EXCEEDS	45		51		25	

e Estimated
Period of regulated streamflow.

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX

LOCATION.--Lat 32°39'53", long 96°31'26", Dallas County, Hydrologic Unit 12030106, on right bank at downstream side of bridge on Malloy Bridge Road, 1.3 mi north of intersection of U. S. Highway 175 and Malloy Bridge Road in Seagoville, and 3.5 mi downstream from South Mesquite Creek.

PERIOD OF RECORD.-- Chemical and biochemical analyses: April 1987 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1987 to current year.
pH: March 1987 to current year.
WATER TEMPERATURE: March 1987 to current year.
DISSOLVED OXYGEN: March 1987 to current year.

INSTRUMENTATION.--Since March 1987, a four-parameter water-quality monitor continuously records specific conductance, pH, water temperature, and dissolved oxygen at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 920 microsiemens Sep. 26, 1995; minimum, 123 microsiemens Oct. 22, 1994
pH: Maximum, 9.4 units Oct. 30, 1989; minimum, 6.7 units Mar. 7, 1988.
WATER TEMPERATURE: Maximum, 32.5°C July 29-31, 1993; minimum, 3.5°C Jan. 8, 1988, Feb. 5, 1989.
DISSOLVED OXYGEN: Maximum, 15.5 mg/L Feb. 9, 1992; minimum, 0.0 mg/L Nov. 23, 1988, Aug. 10, 12, 1991.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 920 microsiemens Sep. 26; minimum, 123 microsiemens Oct. 22.
pH: Maximum, 8.8 units Feb. 20; minimum, 7.1 units Oct. 23 and July 20.
WATER TEMPERATURE: Maximum, 32.0°C July 28; minimum, 6.5°C Jan. 6.
DISSOLVED OXYGEN: Maximum, 13.6 mg/L Jan. 24; minimum, 3.7 mg/L Sep. 28.

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	45898	262	146	18100	9.9	1230	22	2720	98
NOV.	1994	92290	262	146	36500	9.3	2320	22	5450	100
DEC.	1994	74930	272	152	30700	10	2030	23	4590	100
JAN.	1995	70981	291	162	31100	12	2230	24	4690	110
FEB.	1995	55708	297	165	24900	13	1880	25	3770	110
MAR.	1995	73105	317	176	34800	14	2830	27	5310	110
APR.	1995	78000	301	167	35200	13	2650	25	5330	110
MAY	1995	110256	281	157	46700	11	3270	24	7030	100
JUNE	1995	68860	300	167	31000	12	2320	25	4690	110
JULY	1995	33833	299	166	15200	13	1180	25	2300	110
AUG.	1995	2317	564	307	1920	48	303	51	320	150
SEPT	1995	2468	537	293	1950	46	305	49	324	150
TOTAL		708646	**	**	308000	**	22500	**	46500	**
WTD.AVG.		1941	289	161	**	12	**	24	**	110

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	697	669	681	332	270	307	273	247	259	293	281	285
2	707	675	686	311	273	292	---	---	e260	291	280	283
3	685	658	671	361	277	299	---	---	e270	292	286	290
4	669	647	655	310	288	301	---	---	e270	292	285	288
5	654	630	639	307	241	264	---	---	e270	328	288	296
6	672	638	655	274	235	258	---	---	e260	300	290	295
7	667	266	634	308	265	282	---	---	e260	294	290	292
8	283	155	222	299	266	272	---	---	e260	295	291	292
9	409	275	346	329	229	268	---	---	e250	295	292	293
10	510	409	456	256	249	252	---	---	e250	---	---	e280
11	575	510	552	271	255	262	266	244	255	---	---	e280
12	642	573	610	271	263	266	272	261	266	312	275	294
13	680	631	645	267	264	266	275	269	271	293	270	284
14	706	680	693	308	248	266	295	264	273	291	280	287
15	714	649	697	248	225	234	274	265	267	296	290	294
16	668	632	654	246	226	238	282	263	270	294	291	293
17	632	231	329	269	246	254	272	268	270	320	289	301
18	412	153	294	319	269	284	278	272	275	304	284	293
19	268	219	239	295	270	280	278	275	276	298	286	292
20	302	268	281	295	273	281	281	275	279	295	288	292
21	344	152	229	277	261	269	283	278	280	299	295	297
22	256	123	192	262	259	260	282	279	281	329	292	300
23	301	236	282	262	259	260	282	279	280	310	287	297
24	304	264	275	261	255	258	283	279	281	292	287	289
25	341	237	281	258	254	256	281	277	279	294	289	291
26	295	253	270	255	252	253	280	276	278	327	270	291
27	312	269	280	255	250	253	318	274	282	287	270	277
28	307	272	288	251	246	248	304	286	295	291	281	289
29	309	273	290	249	244	247	290	284	286	294	289	292
30	317	286	302	249	244	246	285	283	284	352	291	298
31	330	296	316	---	---	---	297	285	293	513	352	436
MONTH	714	123	440	361	225	266	318	244	272	513	270	296

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	582	285	514	300	293	296	369	296	342	326	317	320
2	289	282	286	303	295	299	297	294	296	317	305	310
3	288	284	286	310	301	304	297	293	295	332	301	308
4	286	285	285	320	305	308	350	278	298	346	305	318
5	285	284	285	488	320	398	282	272	275	323	305	309
6	285	281	282	591	325	508	283	263	272	311	125	235
7	282	277	279	428	283	306	299	282	295	283	205	252
8	284	280	282	316	294	309	314	299	310	291	177	257
9	285	279	282	308	299	303	314	309	312	269	174	233
10	285	280	282	312	301	304	339	271	303	292	269	286
11	306	282	292	487	312	394	294	272	288	322	290	297
12	306	287	292	636	487	565	438	294	321	345	304	329
13	290	287	288	638	190	304	485	303	321	377	310	324
14	288	284	286	271	234	255	313	302	306	324	307	315
15	292	285	287	284	271	279	324	306	319	316	307	310
16	295	289	291	294	284	289	332	309	315	365	304	316
17	294	287	291	481	294	388	318	308	313	310	304	306
18	288	286	287	495	328	387	331	303	317	310	295	302
19	288	286	287	378	301	321	331	291	309	341	299	310
20	316	283	292	384	356	370	298	214	232	310	299	302
21	316	288	311	361	338	351	308	240	279	371	300	311
22	293	283	288	363	291	310	308	295	304	349	300	305
23	409	290	323	365	294	326	318	306	310	317	312	315
24	556	409	474	373	292	340	321	305	310	318	312	314
25	647	292	501	384	354	368	395	304	314	317	303	312
26	294	291	293	420	268	343	313	309	311	308	304	306
27	296	292	294	346	269	287	343	308	314	312	302	305
28	294	289	291	512	291	383	401	310	324	316	299	308
29	---	---	---	434	299	370	312	307	311	299	287	294
30	---	---	---	377	299	350	371	307	316	290	281	285
31	---	---	---	372	291	346	---	---	---	310	290	295
MONTH	647	277	312	638	190	344	485	214	304	377	125	300

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	318	293	301	268	259	262	607	302	483	681	662	670
2	319	283	303	265	257	261	499	304	410	684	663	677
3	400	294	314	272	263	268	530	452	491	678	655	666
4	371	293	318	278	269	273	648	463	540	688	651	670
5	321	293	303	296	255	276	608	545	575	655	632	643
6	316	294	303	283	243	257	545	441	481	641	606	622
7	415	295	320	422	273	340	584	487	538	656	626	641
8	351	294	309	283	260	264	605	533	574	672	651	661
9	398	293	313	335	263	276	687	580	614	673	655	662
10	316	253	299	283	263	270	648	580	609	676	660	670
11	314	219	262	305	257	266	679	611	630	681	652	664
12	300	262	282	278	261	265	663	618	635	652	625	632
13	390	288	321	376	269	311	665	624	641	626	251	461
14	356	298	312	536	279	426	659	624	640	---	---	e400
15	374	292	311	393	279	342	641	592	617	---	---	e420
16	342	296	316	382	304	364	638	583	607	---	---	e420
17	352	286	312	385	329	360	631	601	614	---	---	e430
18	367	290	322	408	270	355	626	608	615	---	---	e450
19	331	286	311	391	314	365	635	613	622	---	---	e480
20	357	295	323	401	313	349	647	610	621	---	---	e450
21	350	274	313	506	319	424	635	608	620	---	---	e460
22	338	273	300	635	437	532	624	603	612	---	---	e510
23	362	286	321	699	453	605	611	592	601	---	---	e520
24	374	289	335	690	492	605	666	592	630	---	---	e560
25	297	241	259	673	588	622	629	608	619	---	---	e670
26	254	228	237	636	555	589	635	606	622	920	855	899
27	292	251	265	626	604	612	637	613	624	877	749	842
28	308	267	277	639	617	629	673	615	644	770	751	763
29	286	276	283	658	631	641	646	603	631	789	762	781
30	276	268	271	685	637	655	632	584	610	794	782	791
31	---	---	---	665	607	631	668	627	644	---	---	---
MONTH	415	219	301	699	243	410	687	302	594	920	251	606
YEAR	920	123	371									

e Estimated

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	8.2	7.9	8.1	8.3	8.1	8.2
2	---	---	---	---	---	---	8.1	7.9	8.0	8.4	8.0	8.2
3	---	---	---	---	---	---	8.0	8.0	8.0	8.4	8.0	8.1
4	---	---	---	---	---	---	8.1	7.9	8.0	8.4	8.1	8.2
5	---	---	---	---	---	---	8.0	7.9	8.0	8.3	8.0	8.2
6	---	---	---	---	---	---	8.1	7.9	8.0	8.4	8.1	8.2
7	---	---	---	---	---	---	8.0	7.8	7.9	8.4	8.1	8.2
8	---	---	---	8.0	7.8	7.9	7.9	7.8	7.9	8.4	7.9	8.2
9	7.6	7.4	7.5	8.0	7.8	7.9	8.0	7.8	7.9	8.2	7.7	7.9
10	7.4	7.2	7.3	---	---	---	7.9	7.8	7.9	---	---	---
11	---	---	---	---	---	---	8.0	7.8	7.9	---	---	---
12	---	---	---	---	---	---	8.0	7.8	7.9	8.1	7.7	7.8
13	---	---	---	---	---	---	8.3	7.8	8.1	7.8	7.6	7.7
14	---	---	---	---	---	---	8.2	8.1	8.2	8.2	7.7	8.0
15	---	---	---	---	---	---	8.2	8.1	8.1	8.4	8.1	8.2
16	---	---	---	---	---	---	8.1	8.1	8.1	8.4	8.0	8.2
17	---	---	---	---	---	---	8.2	7.5	7.9	8.3	8.0	8.2
18	---	---	---	8.0	7.8	7.9	8.3	7.6	8.0	8.2	8.0	8.1
19	---	---	---	7.9	7.8	7.9	8.3	8.0	8.2	8.3	8.1	8.2
20	---	---	---	7.9	7.8	7.8	8.2	8.1	8.2	8.5	8.2	8.4
21	---	---	---	8.0	7.8	7.9	8.3	8.1	8.2	8.5	8.2	8.3
22	---	---	---	8.0	7.8	7.9	8.4	8.2	8.3	8.4	8.2	8.3
23	7.7	7.1	7.5	8.0	7.9	7.9	8.4	8.2	8.3	8.6	8.1	8.4
24	7.7	7.3	7.5	8.0	7.8	7.9	8.4	8.2	8.3	8.7	8.3	8.5
25	7.9	7.2	7.5	8.0	7.8	7.9	8.4	8.2	8.3	8.7	8.3	8.5
26	7.8	7.3	7.7	8.0	7.8	7.9	8.4	8.1	8.3	8.6	8.3	8.4
27	8.0	7.3	7.7	8.0	7.8	7.9	8.4	8.0	8.2	8.5	8.2	8.4
28	---	---	---	8.1	7.9	8.0	8.1	8.0	8.1	8.7	8.3	8.5
29	---	---	---	8.1	7.9	8.0	8.1	8.0	8.1	---	---	---
30	---	---	---	8.2	7.9	8.0	8.3	8.0	8.2	---	---	---
31	---	---	---	---	---	---	8.2	8.0	8.1	---	---	---
MONTH	8.0	7.1	7.5	8.2	7.8	7.9	8.4	7.5	8.1	8.7	7.6	8.2

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	26.0	24.0	25.0	18.0	16.5	17.5	13.5	12.0	13.0	9.5	8.0	9.0
2	26.0	24.0	25.0	19.0	17.0	18.0	13.5	13.0	13.5	9.5	8.0	8.5
3	26.5	24.5	25.5	20.0	18.5	19.5	14.5	13.5	14.0	8.5	7.0	8.0
4	27.0	25.0	26.0	21.0	20.0	20.5	15.0	14.0	14.5	8.0	7.0	7.5
5	26.5	24.5	25.5	20.5	17.5	18.5	15.0	13.5	14.5	9.0	7.5	8.0
6	26.0	24.5	25.5	18.5	17.0	17.5	15.5	14.0	15.0	9.0	6.5	7.5
7	26.0	23.0	25.0	18.5	17.0	18.0	15.0	14.0	14.5	9.0	7.0	8.0
8	23.0	21.0	22.0	19.5	18.0	18.5	14.0	13.0	13.5	9.5	7.5	9.0
9	21.0	20.0	20.5	19.5	16.5	18.5	13.0	10.0	11.5	11.0	9.0	10.0
10	20.5	19.5	20.0	16.5	15.5	15.5	10.0	9.0	9.5	---	---	---
11	20.5	18.5	19.5	17.0	15.5	16.5	10.0	9.0	9.5	---	---	---
12	20.5	19.0	19.5	16.5	15.5	16.0	11.0	9.0	10.0	13.0	11.0	11.5
13	21.0	20.0	20.5	18.0	16.5	17.0	11.0	10.0	11.0	13.0	11.0	12.0
14	21.0	20.5	20.5	18.0	17.5	18.0	11.0	10.0	10.5	11.0	9.0	10.0
15	21.0	20.5	20.5	18.0	16.5	17.0	11.0	10.5	10.5	10.5	8.5	9.5
16	22.0	20.5	21.0	16.5	15.5	16.0	11.5	11.0	11.0	10.5	9.0	10.0
17	22.0	21.0	22.0	16.0	15.5	16.0	11.5	10.0	10.5	10.5	10.5	10.5
18	22.0	19.5	21.0	16.5	15.5	16.0	11.5	10.0	11.0	10.5	9.0	10.0
19	20.0	16.0	18.5	17.0	16.5	16.5	11.5	10.0	11.0	9.5	7.5	8.5
20	21.5	16.0	19.0	17.0	16.0	16.5	11.5	10.5	11.0	10.0	8.0	9.0
21	21.5	20.0	21.0	16.0	14.5	15.5	11.5	10.5	11.0	10.0	9.0	9.5
22	21.0	19.5	20.0	16.5	15.0	15.5	11.0	10.0	10.5	10.0	8.0	9.0
23	21.5	20.5	21.0	16.0	14.5	15.0	11.0	9.5	10.5	9.0	7.0	8.0
24	21.5	20.5	20.5	14.5	14.0	14.5	10.0	9.0	10.0	9.5	7.5	8.5
25	20.5	16.5	18.5	15.0	14.5	14.5	10.5	9.0	10.0	9.5	8.5	9.0
26	17.5	15.5	16.5	16.0	15.0	15.5	11.0	9.0	10.0	11.0	9.5	10.0
27	18.5	17.0	17.5	16.5	15.5	16.5	11.0	9.5	10.5	12.0	11.0	11.5
28	19.0	17.5	18.5	15.5	13.5	14.5	10.5	10.0	10.5	12.0	10.0	10.5
29	19.5	18.0	18.5	14.5	13.5	14.0	10.5	9.5	10.0	10.0	8.5	9.0
30	20.0	18.0	19.0	14.0	12.5	13.5	11.0	9.5	10.5	9.5	7.5	8.5
31	19.5	18.0	19.0	---	---	---	11.0	9.5	10.5	11.0	8.5	9.5
MONTH	27.0	15.5	21.0	21.0	12.5	16.5	15.5	9.0	11.5	13.0	6.5	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	9.5	11.0	10.5	9.0	9.5	16.5	13.5	15.0	18.5	17.5	18.0
2	11.0	8.5	10.0	9.0	8.5	9.0	17.0	14.5	16.0	18.5	17.0	17.5
3	11.0	9.0	10.0	9.0	8.5	9.0	16.5	14.5	15.5	18.0	17.0	17.5
4	11.0	9.0	10.0	9.5	9.0	9.0	16.0	14.5	15.5	17.5	17.0	17.5
5	10.5	9.0	10.0	11.5	9.5	10.5	16.0	14.5	15.0	18.5	17.5	18.0
6	11.0	8.5	10.0	14.0	11.0	12.0	17.0	14.0	15.5	19.5	18.0	18.5
7	10.0	8.5	9.5	12.0	7.5	10.5	18.5	15.5	17.0	18.5	18.0	18.5
8	10.0	8.0	9.0	9.0	7.0	8.5	18.5	16.5	18.0	19.0	18.0	18.5
9	10.0	9.0	9.5	---	---	---	19.0	16.5	17.5	19.0	18.0	18.5
10	11.5	9.0	10.5	10.5	8.0	9.5	18.5	16.5	17.5	19.5	19.0	19.5
11	10.0	8.5	9.0	13.5	10.0	11.5	16.5	14.5	15.5	20.0	18.5	19.5
12	9.5	8.0	8.5	16.0	13.0	14.5	17.5	15.0	16.0	19.5	18.5	19.5
13	8.5	7.5	8.0	16.0	11.0	14.0	18.0	15.0	17.0	20.5	19.5	19.5
14	8.5	7.5	8.0	11.0	10.5	11.0	---	---	---	21.5	20.5	21.0
15	10.5	8.5	9.5	12.0	10.5	11.0	---	---	---	22.0	20.5	21.5
16	9.0	8.0	8.5	13.5	11.0	12.0	---	---	---	22.0	21.0	21.5
17	10.0	8.0	9.0	17.5	13.5	15.5	---	---	---	21.5	20.5	21.0
18	10.0	7.5	9.0	17.5	13.5	15.0	---	---	---	20.5	19.5	20.0
19	11.0	8.0	9.5	15.5	13.0	14.5	19.0	17.5	18.5	22.0	19.5	21.0
20	12.0	8.5	10.5	15.0	12.5	13.5	18.0	17.0	17.5	22.5	20.5	21.5
21	12.0	10.5	11.0	16.0	12.5	14.0	19.0	17.5	18.0	23.0	21.0	22.0
22	11.5	10.0	10.5	17.0	14.0	15.5	19.5	17.5	18.5	23.5	21.5	22.5
23	13.0	9.5	11.5	17.5	14.0	15.5	17.5	16.5	17.0	23.5	22.0	23.0
24	15.5	12.5	14.0	17.5	15.0	16.5	17.0	15.5	16.0	23.0	22.0	22.5
25	15.0	10.0	13.0	17.0	15.0	15.5	17.5	15.5	16.5	23.5	22.5	23.0
26	11.0	9.5	10.5	16.0	15.0	15.5	18.0	15.0	16.5	24.5	22.5	23.5
27	12.5	10.5	11.5	17.5	14.0	15.5	16.5	11.0	14.5	24.5	22.5	23.5
28	11.0	10.5	11.0	17.0	15.0	16.0	17.5	16.0	17.0	25.0	23.0	24.0
29	---	---	---	15.5	14.5	15.0	18.5	17.0	18.0	25.0	23.5	24.0
30	---	---	---	15.5	14.0	15.0	18.5	17.0	17.5	25.0	24.0	24.5
31	---	---	---	16.0	14.0	15.0	---	---	---	25.0	23.0	24.0
MONTH	15.5	7.5	10.0	17.5	7.0	13.0	19.5	11.0	16.5	25.0	17.0	21.0

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	23.0	24.0	28.5	26.5	27.5	28.0	27.0	27.5	30.5	28.0	29.5
2	25.5	24.0	24.5	28.5	27.0	28.0	28.0	27.0	27.5	31.0	28.0	29.5
3	25.5	24.0	24.5	29.0	27.0	28.0	29.5	27.0	28.0	31.0	28.5	29.5
4	25.5	23.5	24.5	28.5	27.0	28.0	30.0	28.0	29.0	30.5	28.5	29.5
5	25.5	24.0	25.0	---	---	---	30.5	28.0	29.5	30.0	26.0	28.5
6	26.0	24.0	25.0	---	---	---	31.0	28.5	30.0	29.5	27.5	29.0
7	25.5	24.5	25.0	---	---	---	30.5	29.0	30.0	29.0	27.5	28.5
8	26.0	24.5	25.5	---	---	---	31.0	29.0	30.0	28.0	26.5	27.5
9	26.5	25.0	25.5	---	---	---	31.0	28.5	29.5	---	---	---
10	26.0	24.5	25.5	---	---	---	30.5	27.0	29.0	---	---	---
11	24.5	23.0	23.5	---	---	---	30.5	28.0	29.5	---	---	---
12	25.0	23.0	24.0	---	---	---	30.5	28.0	29.5	---	---	---
13	26.0	23.5	24.5	29.0	26.0	27.5	31.0	28.5	29.5	---	---	---
14	26.0	25.0	25.5	29.0	26.0	27.5	30.5	28.5	29.5	---	---	---
15	26.0	24.5	25.5	26.5	24.5	26.0	30.0	28.0	29.0	---	---	---
16	26.0	24.5	25.5	27.0	24.0	25.5	30.5	28.0	29.5	---	---	---
17	26.0	24.5	25.5	28.0	25.5	27.0	30.5	28.0	29.5	---	---	---
18	26.5	24.5	25.5	29.0	27.0	28.0	31.0	28.0	29.5	---	---	---
19	26.5	24.5	25.5	29.0	27.0	28.0	31.0	28.5	30.0	---	---	---
20	27.0	25.0	26.0	28.5	27.0	28.0	30.5	28.5	30.0	---	---	---
21	27.5	25.5	26.5	30.5	27.5	28.5	31.0	28.5	30.0	---	---	---
22	27.5	26.0	27.0	31.0	28.0	29.5	30.5	28.5	30.0	---	---	---
23	27.5	25.5	27.0	30.5	28.0	29.5	30.5	28.5	29.5	---	---	---
24	27.5	25.5	26.5	30.5	28.0	29.5	30.0	28.0	29.0	---	---	---
25	28.5	26.5	27.5	31.5	28.5	30.0	30.5	28.0	29.5	---	---	---
26	29.0	27.0	28.0	31.0	29.0	30.0	30.5	28.5	29.5	23.0	21.0	21.5
27	28.5	26.5	27.0	31.5	28.5	30.0	31.0	28.5	30.0	25.0	21.5	23.0
28	28.0	26.0	27.0	32.0	28.5	30.5	31.0	28.5	30.0	26.0	23.5	24.5
29	27.5	26.0	26.5	31.5	29.5	30.5	30.5	28.5	29.5	26.5	24.5	25.5
30	27.5	26.0	27.0	30.5	28.5	30.0	30.0	28.5	29.0	26.5	24.5	26.0
31	---	---	---	30.0	28.0	28.5	30.0	27.5	28.5	---	---	---
MONTH	29.0	23.0	25.5	32.0	24.0	28.5	31.0	27.0	29.5	31.0	21.0	27.0
YEAR	32.0	6.5	18.5									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.4	4.9	5.5	8.5	7.4	7.8	10.8	9.2	9.9	12.6	11.1	11.7
2	5.9	4.6	5.2	8.3	7.2	7.6	9.7	9.2	9.4	12.6	11.1	11.6
3	5.8	4.7	5.2	7.3	6.2	6.9	9.6	8.9	9.2	13.0	11.3	11.8
4	5.6	4.3	4.8	6.3	5.8	6.1	10.3	8.8	9.4	12.9	11.7	12.3
5	5.0	4.1	4.5	6.9	6.0	6.4	10.5	8.9	9.5	12.6	11.4	11.9
6	4.6	4.2	4.4	8.0	6.7	7.2	10.0	8.8	9.3	13.0	11.2	12.0
7	5.9	4.0	4.5	7.9	6.5	7.1	10.3	8.6	9.3	13.1	11.5	12.2
8	5.9	4.0	4.6	7.5	6.0	6.9	9.7	9.2	9.4	13.0	11.3	12.0
9	5.7	4.2	5.0	7.5	5.7	6.9	10.0	9.0	9.4	12.7	11.0	11.8
10	6.0	5.7	5.9	7.5	6.5	7.0	10.4	10.0	10.2	---	---	---
11	6.0	5.9	6.0	8.6	7.3	7.9	11.0	9.9	10.4	---	---	---
12	5.9	5.2	5.7	9.1	7.9	8.3	11.2	10.2	10.6	12.7	10.4	11.4
13	5.3	5.0	5.2	8.8	7.6	8.0	11.1	10.1	10.6	10.4	9.5	9.9
14	5.0	4.9	5.0	8.0	7.0	7.6	10.3	9.8	10.1	12.4	10.1	11.1
15	5.5	4.8	4.9	7.5	6.5	6.9	10.2	9.8	10.0	13.0	10.9	11.8
16	5.8	5.4	5.6	8.5	7.5	8.0	10.1	9.7	9.8	12.9	11.1	11.8
17	6.6	5.4	6.0	8.1	7.4	7.8	10.9	9.7	10.2	11.9	10.7	11.2
18	6.8	5.6	6.1	8.9	6.6	7.9	11.1	10.1	10.5	11.5	10.7	11.1
19	6.1	5.5	5.7	8.3	7.8	8.0	11.3	10.2	10.7	12.6	10.9	11.6
20	7.0	5.5	6.1	8.2	7.5	7.8	10.9	10.1	10.5	13.1	11.2	12.0
21	7.0	5.8	6.5	8.9	7.7	8.2	11.4	10.3	10.8	13.0	11.2	12.0
22	6.2	5.7	5.9	9.4	8.1	8.6	11.8	10.4	11.0	12.1	11.1	11.5
23	6.4	5.7	6.0	9.5	8.4	8.9	12.0	10.5	11.2	13.5	11.3	12.2
24	6.2	5.4	5.8	9.3	8.5	8.9	12.1	10.5	11.2	13.6	11.6	12.4
25	6.7	4.8	5.7	9.4	8.5	8.9	12.2	10.7	11.3	12.9	11.4	12.0
26	7.0	6.2	6.6	9.3	8.4	8.8	12.3	10.6	11.3	12.2	10.7	11.3
27	7.7	6.7	7.1	9.4	8.1	8.7	12.1	10.3	11.2	11.0	9.8	10.4
28	7.9	7.1	7.4	10.0	8.5	9.1	10.8	10.1	10.5	12.3	10.3	11.1
29	8.1	7.2	7.6	10.3	8.8	9.4	11.0	10.2	10.6	12.3	10.8	11.5
30	8.3	7.3	7.7	10.7	9.1	9.8	12.0	10.3	11.0	13.4	11.3	12.1
31	8.2	7.3	7.7	---	---	---	11.8	10.4	10.8	11.7	9.5	10.3
MONTH	8.3	4.0	5.8	10.7	5.7	7.9	12.3	8.6	10.3	13.6	9.5	11.6

08061980 EAST FORK TRINITY RIVER AT SEAGOVILLE, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.5	8.7	9.0	12.1	10.4	11.2	10.1	8.8	9.4	7.7	7.0	7.3
2	10.8	9.3	9.9	12.5	10.9	11.6	10.4	8.6	9.4	8.0	7.6	7.7
3	11.0	9.2	9.9	13.1	11.0	11.9	10.2	9.0	9.4	8.2	7.6	7.9
4	11.3	9.3	10.1	11.9	11.0	11.5	9.4	8.2	8.9	8.2	7.3	7.6
5	11.6	9.2	10.2	11.0	8.7	10.1	8.7	7.9	8.3	8.0	7.6	7.8
6	11.9	9.4	10.4	10.7	6.9	8.4	9.1	8.2	8.6	8.5	6.1	7.3
7	12.1	9.4	10.6	11.4	9.4	10.6	10.4	8.1	9.0	7.8	6.6	7.2
8	12.9	9.3	10.9	11.6	10.2	11.1	10.2	8.0	8.9	8.3	6.9	7.5
9	11.6	9.0	10.2	12.2	10.9	11.6	10.2	8.5	9.1	7.3	6.5	6.9
10	12.4	9.2	10.6	12.3	11.2	11.7	9.0	7.8	8.4	7.2	6.9	7.1
11	10.7	9.1	9.8	11.5	9.3	10.4	8.9	7.8	8.6	7.2	6.9	7.1
12	12.7	9.5	10.9	9.3	7.3	8.1	9.2	7.7	8.4	7.1	6.8	6.9
13	11.5	9.7	10.5	9.8	7.2	8.6	9.6	7.8	9.0	7.4	6.8	7.2
14	11.7	9.9	10.6	11.1	9.8	10.4	9.3	8.0	8.6	7.4	7.2	7.3
15	12.6	9.7	10.8	10.8	10.0	10.4	8.5	7.7	8.0	7.5	7.2	7.4
16	12.4	9.6	10.8	11.6	9.6	10.5	8.1	7.6	7.8	7.6	7.3	7.5
17	12.9	9.8	11.1	10.3	7.3	8.2	7.8	7.4	7.6	7.6	7.2	7.4
18	12.9	9.8	11.2	11.4	7.2	9.9	7.7	7.1	7.4	7.5	7.3	7.4
19	12.9	9.8	11.1	11.9	9.8	10.8	8.4	7.6	7.9	8.7	7.4	7.9
20	13.0	9.7	11.0	12.2	10.1	11.0	8.4	7.2	7.5	8.5	7.2	7.8
21	10.7	9.5	10.2	12.0	9.9	10.8	7.5	7.2	7.3	8.4	7.2	7.7
22	10.8	9.2	10.1	12.4	9.6	10.8	7.3	6.5	6.7	8.6	7.0	7.8
23	10.9	7.9	9.6	12.4	9.6	10.8	6.8	6.5	6.7	8.3	6.9	7.4
24	7.9	6.2	7.0	10.9	9.4	10.1	6.7	6.1	6.3	7.4	7.0	7.2
25	10.9	4.9	7.3	11.1	9.3	10.0	6.2	5.7	5.9	7.8	7.1	7.4
26	11.8	10.2	11.1	9.8	8.3	8.6	5.9	5.2	5.5	7.8	7.0	7.4
27	12.4	10.5	11.3	9.5	8.2	8.8	5.6	5.2	5.4	7.8	6.8	7.2
28	11.3	10.3	10.7	8.5	6.7	7.2	6.5	5.4	5.7	7.8	6.8	7.2
29	---	---	---	9.5	8.1	9.0	6.8	5.9	6.3	7.9	6.7	7.2
30	---	---	---	10.5	9.3	9.7	7.1	6.6	6.9	7.9	6.5	7.2
31	---	---	---	10.5	9.1	9.6	---	---	---	7.5	6.7	7.0
MONTH	13.0	4.9	10.2	13.1	6.7	10.1	10.4	5.2	7.8	8.7	6.1	7.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	6.5	7.0	7.0	6.0	6.4	5.8	4.7	5.1	---	---	---
2	7.4	6.5	6.9	6.7	5.9	6.3	5.5	4.8	5.1	---	---	---
3	7.3	6.5	6.9	6.7	5.9	6.2	5.9	5.1	5.4	---	---	---
4	7.2	6.6	6.9	6.4	5.9	6.1	5.6	4.6	5.3	---	---	---
5	7.2	6.5	6.8	6.6	5.9	6.1	5.8	4.3	4.9	---	---	---
6	7.2	6.5	6.8	6.7	5.8	6.1	6.0	4.5	5.1	---	---	---
7	7.0	6.2	6.5	6.3	4.0	4.8	5.8	4.9	5.3	6.8	4.8	5.6
8	6.9	6.2	6.5	7.0	6.2	6.5	5.8	4.5	5.1	6.4	4.8	5.6
9	7.0	6.2	6.6	7.0	6.1	6.5	5.9	4.7	5.2	7.1	5.2	6.0
10	7.1	6.6	6.8	7.2	6.1	6.5	6.0	5.0	5.4	6.8	5.7	6.2
11	7.7	6.3	6.5	7.0	6.0	6.4	6.3	4.7	5.3	---	---	---
12	8.1	6.3	7.2	7.0	6.0	6.4	6.1	4.5	5.2	---	---	---
13	7.3	6.4	6.7	6.3	5.5	5.8	6.3	4.4	5.2	---	---	---
14	7.5	6.5	7.0	5.7	4.0	4.7	6.5	4.4	5.2	---	---	---
15	7.6	6.9	7.2	6.7	5.7	6.1	6.4	4.6	5.2	---	---	---
16	7.7	6.8	7.2	6.4	5.9	6.1	6.2	4.6	5.3	---	---	---
17	7.8	7.0	7.3	6.2	5.5	5.9	5.9	4.6	5.2	---	---	---
18	7.9	7.1	7.4	6.1	5.7	5.8	6.0	4.4	5.1	---	---	---
19	8.0	7.1	7.5	5.7	5.2	5.4	6.0	4.1	5.0	---	---	---
20	8.3	7.0	7.5	---	---	---	5.8	4.4	5.0	---	---	---
21	8.4	6.8	7.5	---	---	---	7.0	4.4	5.5	---	---	---
22	8.3	7.0	7.5	---	---	---	7.2	4.6	5.5	---	---	---
23	8.3	6.8	7.4	5.4	4.3	5.0	6.7	4.7	5.4	---	---	---
24	8.0	6.7	7.3	5.4	4.5	5.1	7.6	4.9	5.9	---	---	---
25	7.8	6.5	7.1	5.6	5.3	5.4	7.7	4.9	5.8	---	---	---
26	7.6	6.6	7.0	5.5	4.9	5.3	7.0	4.6	5.5	5.3	4.8	5.2
27	7.1	6.3	6.7	5.4	4.6	5.0	5.6	4.2	4.9	4.9	4.2	4.7
28	7.1	6.4	6.7	5.5	4.5	4.9	6.2	4.5	5.3	5.0	3.7	4.4
29	6.8	6.1	6.4	5.7	4.6	5.0	---	---	---	5.2	4.1	4.6
30	7.0	6.2	6.6	5.7	4.7	5.1	---	---	---	4.9	4.2	4.5
31	---	---	---	5.5	4.9	5.2	---	---	---	---	---	---
MONTH	8.4	6.1	7.0	7.2	4.0	5.7	7.7	4.1	5.3	7.1	3.7	5.2
YEAR	13.6	3.7	8.0									

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 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1922: Drainage area. WDR TX-75-1: 1974.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 338.69 ft above sea level. Prior to Feb. 21, 1983, at datum 5.00 ft higher.

REMARKS.--Records fair. Flow largely regulated by Lavon Lake (station 08060500) since September 1953, and by Lake Ray Hubbard(489,900 acre-ft) since Mar. 22, 1970. The city of Forney discharges sewage effluent into a tributary below Lake Ray Hubbard and above this station. The North Texas Municipal Water District discharges sewage effluent into tributaries above this station from their Mesquite and Changler's Landing sewage treatment plants. Flow is also affected at times by discharge from the flood-detention pools of 20 floodwater-retarding structures with a combined detention capacity of 11,760 acre-ft. These structures control runoff from a 39.2 mi² area above this station. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--4 years (water years 1950-53) prior to regulation by Lavon Lake, 652 ft³/s (472,400 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS, 1950-53).--Maximum discharge, 16,400 ft³/s May 2, 1953 (gage height, 19.87 ft); no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	2110	2340	2590	372	1860	2580	2470	2660	2300	239	91
2	e65	2330	2340	2530	1980	1890	2580	2600	2680	2300	205	89
3	e63	2470	2410	2490	2360	1920	2560	2770	2620	2310	113	92
4	e68	2780	2420	2490	2380	1580	2830	2920	2610	2310	118	91
5	71	4330	2390	2470	2380	588	4460	2800	2600	e2490	141	86
6	90	7560	2380	2520	2370	142	5860	7030	2590	e5040	123	107
7	e80	4760	2360	2680	2350	1420	5170	10500	2590	e3660	95	95
8	e350	3050	2490	2540	2350	1780	4080	12400	2580	e813	85	88
9	e1300	2300	3000	2450	2350	1340	2820	15900	2590	e1940	89	91
10	e400	3130	4490	2440	2350	1430	2950	10800	2800	e2290	93	97
11	e180	2650	3800	2450	2350	440	4140	6170	5760	2310	88	95
12	e90	2220	2950	2500	2420	122	3470	1310	4590	2310	82	96
13	e80	2360	2600	3420	2390	3700	2120	1700	2720	e1840	75	357
14	e73	2420	2950	3320	2360	11100	2950	2020	e599	783	74	442
15	e67	5170	3690	2680	2350	8730	3270	2530	1840	1320	74	211
16	e85	9540	3650	2450	2350	5730	3300	2940	1970	1240	82	122
17	e470	6920	3490	2410	2370	2070	3210	3240	e2150	e892	77	99
18	870	3120	2920	2680	2350	1330	3020	3390	e2310	e970	78	89
19	1990	2420	2600	3090	2330	1850	3430	3200	e2310	737	73	168
20	2000	2600	2510	2840	2310	1910	6320	3150	e2310	447	72	267
21	2390	2770	2480	2520	1260	2170	5330	3130	2300	183	77	148
22	13200	2610	2430	2450	1520	2320	3870	3110	2300	e86	71	108
23	10500	2460	2410	2710	1660	2330	2840	2050	2300	e92	71	84
24	5580	2430	2410	2530	227	2340	2580	1460	2300	e101	69	79
25	3580	2410	2410	2400	229	2340	2440	1520	2300	e93	69	79
26	3150	2400	2400	2660	1640	3330	2380	2290	2300	e90	73	80
27	2670	2380	2400	3690	1850	6140	2350	2600	2300	94	77	78
28	2160	2360	2570	3210	1850	1870	2350	2690	2310	92	74	74
29	2020	2370	2990	2590	---	1290	2350	2650	2310	86	72	74
30	1980	2350	2910	2310	---	2180	2410	2620	2300	82	91	75
31	1950	---	2650	431	---	2540	---	2640	---	83	90	---
TOTAL	57636	98780	85840	80541	55058	79782	100020	126600	75899	39384	2910	3752
MEAN	1859	3293	2769	2598	1966	2574	3334	4084	2530	1270	93.9	125
MAX	13200	9540	4490	3690	2420	11100	6320	15900	5760	5040	239	442
MIN	63	2110	2340	431	227	122	2120	1310	599	82	69	74
AC-FT	114300	195900	170300	159800	109200	158200	198400	251100	150500	78120	5770	7440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1995#, BY WATER YEAR (WY)

MEAN	404	506	681	537	752	866	1023	1793	1094	460	162	208
MAX	4116	3293	4401	3083	3043	2714	3425	9586	5718	2026	1459	1560
(WY)	1974	1995	1972	1972	1975	1992	1985	1957	1989	1982	1989	1974
MIN	1.58	3.78	3.57	7.77	23.1	10.6	7.47	42.1	17.8	3.84	.000	.000
(WY)	1957	1956	1955	1957	1957	1956	1956	1959	1954	1956	1956	1954

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1954 - 1995#	
ANNUAL TOTAL	471755		806202			
ANNUAL MEAN	1292		2209		707	
HIGHEST ANNUAL MEAN					2209	1995
LOWEST ANNUAL MEAN					38.4	1955
HIGHEST DAILY MEAN	13200	Oct 22	15900	May 9	48800	May 5 1990
LOWEST DAILY MEAN	61	Aug 23	63	Oct 3	.00	Oct 1 1953
ANNUAL SEVEN-DAY MINIMUM	63	Aug 23	72	Oct 1	.00	Oct 1 1953
INSTANTANEOUS PEAK FLOW			16900	May 9	59900	May 5 1990
INSTANTANEOUS PEAK STAGE			18.84	May 9	27.17	May 5 1990
ANNUAL RUNOFF (AC-FT)	935700		1599000		512000	
10 PERCENT EXCEEDS	2910		3650		2130	
50 PERCENT EXCEEDS	470		2350		90	
90 PERCENT EXCEEDS	69		84		17	

e Estimated
Period of regulated streamflow.

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: January to April 1964, May 1966 to September 1981, June 1986 to current year. Pesticide analyses: March 1977 to July 1981. Sediment analyses: April to September 1964.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1967 to September 1981, May 1986 to current year.
pH: March to September 1977, May 1986 to current year.
WATER TEMPERATURE: October 1967 to September 1981, May 1986 to current year.
DISSOLVED OXYGEN: March to September 1977, May 1986 to current year.

INSTRUMENTATION.--From March to November 1977, a four-parameter water-quality monitor continuously recorded specific conductance, pH, water temperature, and dissolved oxygen at this station. Since May 1986, a four-parameter water-quality monitor continuously records specific conductance, pH, water temperature, and dissolved oxygen at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,010 microsiemens Nov. 23, 1968; minimum, 100 microsiemens May 17, 1989.
pH: Maximum, 9.5 units Oct. 30, 1989; minimum, 6.7 units on several days during 1988 and 1991.
WATER TEMPERATURE: Maximum, 34.0°C June 26, July 1, Aug. 16, 17, 1980; minimum, 1.0°C Jan. 3, 1979.
DISSOLVED OXYGEN: Maximum, 15.0 mg/L Mar. 14, 1993; minimum, 0.0 mg/L on many days during 1977 and 1991.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 697 microsiemens Oct. 2; minimum, 161 microsiemens Oct. 8.
pH: Maximum, 8.5 units Jan. 11, 16, and 20; minimum, 7.1 units Mar. 16, July 17.
WATER TEMPERATURE: Maximum, 32.5°C July 28; minimum, 6.5°C Jan. 5.
DISSOLVED OXYGEN: Maximum, 13.7 mg/L Feb. 12, 17, and 18; minimum, 2.5 mg/L Sep. 9.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC											
01...	1200	2330	274	7.8	12.5	9.7	91	0.9	100	6	38
FEB											
01...	1215	177	490	7.8	10.5	9.8	89	2.3	190	18	70
APR											
07...	1115	5150	301	7.8	16.0	8.4	86	2.0	130	10	49
MAY											
25...	1345	1460	330	7.8	23.0	7.6	90	1.2	130	8	49
JUN											
29...	1330	2310	298	7.7	26.0	6.9	86	1.2	110	5	41
JUL											
19...	1315	695	302	7.4	29.5	5.5	73	0.9	110	8	39

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC											
01...	2.3	13	0.6	3.9	98	21	12	0.30	6.1	159	0.680
FEB											
01...	3.8	33	1	5.6	170	43	26	0.5	10	311	2.82
APR											
07...	2.5	11	0.4	4.0	120	20	9.2	0.3	2.0	174	0.320
MAY											
25...	2.5	13	0.5	3.9	120	20	11	0.3	3.7	184	1.08
JUN											
29...	2.4	12	0.5	3.7	110	17	9.1	0.3	4.0	156	0.470
JUL											
19...	2.5	16	0.7	4.0	100	20	14	0.30	5.0	167	1.18

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
DEC										
01...	0.680	0.0	0.700	0.70	0.0	0.46	0.5	0.10	0.10	0.31
FEB										
01...	2.82	0.18	3.00	3.0	0.50	0.60	1.1	0.54	0.55	1.7
APR										
07...	0.320	0.0	0.350	0.35	0.1	0.52	0.6	0.1	0.1	0.18
MAY										
25...	1.08	0.020	1.10	1.10	0.040	0.26	0.30	0.170	0.180	0.55
JUN										
29...	0.470	0.0	0.490	0.49	0.16	0.14	0.3	0.1	0.1	0.28
JUL										
19...	1.18	0.020	1.20	1.20	0.070	0.33	0.40	0.230	0.230	0.71

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	57636	252	141	21900	10	1550	21	3230	97
NOV.	1994	98780	252	141	37600	9.5	2520	21	5480	98
DEC.	1994	85840	270	151	35000	11	2520	22	5160	100
JAN.	1995	80541	305	171	37100	14	3030	26	5590	110
FEB.	1995	55058	295	165	24600	13	1950	25	3680	110
MAR.	1995	79782	305	171	36800	14	3070	26	5560	110
APR.	1995	100020	302	169	45700	14	3710	25	6870	110
MAY	1995	126600	300	168	57300	14	4680	25	8620	110
JUNE	1995	75899	271	152	31200	11	2270	22	4600	100
JULY	1995	39384	283	159	16900	12	1310	24	2520	110
AUG.	1995	2910	576	322	2530	51	401	56	443	150
SEPT	1995	3752	536	300	3030	45	454	52	523	150
TOTAL		806202	**	**	350000	**	27500	**	52300	**
WTD.AVG.		2209	287	161	**	13	**	24	**	110

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	692	666	676	235	231	233	275	260	263	301	290	297
2	697	671	684	237	235	236	266	262	264	291	286	289
3	688	648	663	282	236	246	279	263	273	296	287	291
4	655	643	647	254	242	247	269	262	264	298	291	295
5	645	618	631	242	220	227	264	261	262	297	294	296
6	658	621	637	233	220	225	263	257	260	326	296	303
7	654	297	623	249	233	243	261	258	260	309	294	302
8	297	161	218	264	249	253	291	255	265	296	292	294
9	395	271	339	300	231	259	280	255	273	297	292	294
10	503	394	451	254	237	249	255	241	246	296	292	293
11	551	503	536	262	254	259	263	247	256	296	289	293
12	615	551	586	261	256	259	266	263	265	324	286	296
13	648	612	624	262	256	259	277	265	271	314	293	304
14	657	648	654	291	256	261	289	266	273	311	303	308
15	669	596	644	263	230	236	272	264	266	315	309	312
16	624	595	610	246	230	238	271	260	265	311	306	309
17	595	252	322	260	246	254	267	266	266	342	307	324
18	382	186	299	303	260	278	271	267	269	333	311	319
19	258	217	230	289	268	275	272	270	271	322	311	316
20	309	258	278	291	277	282	276	271	273	318	312	315
21	---	---	e210	279	266	273	277	273	275	320	316	318
22	---	---	e220	266	263	264	277	273	275	344	314	320
23	---	---	e250	266	263	265	279	276	277	331	309	319
24	---	---	e250	268	263	265	279	275	277	311	307	309
25	---	---	e260	266	263	265	278	273	275	311	308	309
26	---	---	e250	266	261	263	275	271	273	318	286	305
27	---	---	e250	268	261	264	277	273	275	299	286	292
28	239	235	237	266	261	264	308	272	289	304	293	301
29	238	236	237	266	261	264	297	287	291	308	304	306
30	237	233	235	264	260	262	289	285	288	332	304	309
31	234	232	233	---	---	---	298	285	289	442	332	400
MONTH	697	161	419	303	220	256	308	241	271	442	286	308

e Estimated

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	570	336	497	287	279	283	---	---	e270	324	318	321
2	336	302	306	288	284	286	---	---	e260	321	318	320
3	304	298	302	296	287	291	286	282	284	349	310	324
4	300	292	298	300	292	296	365	281	315	343	319	326
5	293	291	292	367	294	320	310	294	299	325	270	319
6	293	288	290	513	367	431	298	282	289	278	167	225
7	290	285	288	538	274	352	304	292	301	295	250	273
8	291	287	289	308	274	288	317	304	313	294	212	244
9	292	287	289	310	288	301	320	313	317	279	229	261
10	292	286	289	320	309	312	315	268	305	295	279	289
11	307	288	294	412	320	362	299	273	290	317	295	304
12	314	295	304	569	412	492	372	299	317	345	308	315
13	297	295	296	---	---	e450	388	309	322	362	309	319
14	297	292	294	---	---	e270	313	309	312	329	321	325
15	295	291	293	---	---	e260	316	313	315	324	319	322
16	298	293	297	---	---	e270	317	316	316	322	319	320
17	302	293	298	---	---	e350	358	316	318	370	320	350
18	295	292	294	---	---	e420	358	311	325	375	360	370
19	296	291	293	---	---	e350	330	235	295	377	372	375
20	298	286	291	---	---	e340	256	223	234	376	372	374
21	316	297	302	---	---	e360	303	256	286	376	371	374
22	300	272	281	---	---	e330	313	303	310	377	324	356
23	317	278	285	323	307	314	329	310	320	342	327	336
24	409	317	377	311	300	306	326	319	322	349	332	338
25	601	380	479	304	300	302	325	315	322	341	321	333
26	380	281	286	305	253	283	329	324	326	327	321	324
27	284	281	283	280	270	275	329	324	326	323	321	322
28	284	279	281	455	280	347	327	324	325	331	315	325
29	---	---	---	461	301	344	326	323	324	315	300	309
30	---	---	---	302	293	296	336	316	326	300	290	296
31	---	---	---	---	---	e310	---	---	---	317	277	296
MONTH	601	272	310	569	253	329	388	223	306	377	167	319

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	297	276	282	---	---	e260	621	440	566	631	606	621
2	280	272	275	---	---	e260	569	322	378	642	631	637
3	278	273	276	---	---	e260	491	388	450	640	618	631
4	281	276	279	---	---	e270	517	470	493	625	614	620
5	277	273	276	---	---	e270	577	490	548	632	608	620
6	275	273	274	273	252	260	589	458	542	611	583	599
7	279	274	277	405	268	317	504	442	467	588	575	581
8	279	276	277	313	261	265	546	504	528	608	586	593
9	277	275	276	269	262	265	580	546	562	619	608	615
10	276	209	268	267	263	265	600	580	589	637	618	626
11	239	167	203	265	260	262	628	600	619	641	629	636
12	277	239	263	266	259	262	647	627	638	641	619	633
13	306	277	296	345	260	322	660	630	646	619	332	527
14	307	289	303	445	335	354	678	647	661	---	---	e420
15	301	287	297	445	272	286	685	656	668	---	---	e410
16	304	294	299	285	272	278	661	622	640	---	---	e420
17	296	292	294	302	276	284	634	614	621	---	---	e420
18	293	288	291	313	255	286	663	634	648	---	---	e430
19	291	285	289	308	247	286	644	636	639	578	470	566
20	286	276	282	328	308	313	655	635	642	---	---	e460
21	280	274	277	352	325	337	649	629	640	449	347	e450
22	278	274	275	454	352	401	652	629	637	---	---	e480
23	284	278	281	596	454	515	630	615	621	---	---	e510
24	286	280	284	616	433	524	620	599	610	---	---	e520
25	283	245	265	622	565	598	628	605	618	---	---	e610
26	248	233	239	591	548	565	635	625	629	---	---	e730
27	---	---	e260	587	548	560	641	635	638	---	---	e810
28	---	---	e270	603	574	587	645	633	638	612	603	607
29	---	---	e280	628	594	611	638	618	630	632	612	621
30	---	---	e270	638	617	627	618	585	600	654	632	646
31	---	---	---	651	620	636	606	580	593	---	---	---
MONTH	307	167	276	651	247	374	685	322	594	654	332	568
YEAR	697	161	361									

e Estimated

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.9	7.5	7.7	8.4	7.7	8.0	8.2	7.9	8.0
2	---	---	---	7.8	7.5	7.6	8.0	7.7	7.9	8.3	7.9	8.1
3	---	---	---	7.8	7.4	7.6	7.9	7.7	7.8	8.1	7.9	8.0
4	---	---	---	7.6	7.4	7.5	8.1	7.7	7.8	8.3	7.9	8.0
5	---	---	---	7.6	7.2	7.4	8.1	7.7	7.9	8.3	8.0	8.1
6	---	---	---	7.6	7.3	7.4	8.0	7.7	7.8	8.2	7.9	8.1
7	---	---	---	7.8	7.3	7.6	8.1	7.7	7.9	8.2	8.0	8.1
8	---	---	---	8.0	7.6	7.8	8.1	7.8	7.9	8.3	8.0	8.1
9	---	---	---	8.0	7.6	7.8	7.9	7.7	7.8	8.2	8.0	8.1
10	---	---	---	8.2	7.5	7.8	7.9	7.7	7.8	8.3	8.0	8.1
11	---	---	---	8.4	7.7	8.0	8.0	7.7	7.9	8.5	8.0	8.2
12	---	---	---	8.4	7.6	8.1	8.1	7.7	7.8	8.3	7.7	8.1
13	---	---	---	8.4	7.5	8.1	8.1	7.7	7.9	7.9	7.5	7.7
14	---	---	---	8.3	7.4	8.1	8.0	7.7	7.8	8.2	7.6	7.9
15	---	---	---	8.1	7.3	7.5	7.9	7.7	7.7	8.4	7.9	8.1
16	---	---	---	8.2	7.4	7.7	7.9	7.7	7.8	8.5	7.9	8.2
17	---	---	---	---	---	---	7.9	7.8	7.8	8.4	7.9	8.1
18	---	---	---	---	---	---	8.0	7.8	7.9	8.2	7.9	8.0
19	---	---	---	---	---	---	8.0	7.8	8.0	8.3	7.8	8.0
20	---	---	---	---	---	---	8.0	7.9	8.0	8.5	7.9	8.1
21	---	---	---	8.1	7.8	7.9	8.1	7.9	8.0	8.4	7.9	8.1
22	---	---	---	8.3	7.8	8.1	8.1	7.9	8.0	8.3	7.9	8.1
23	---	---	---	8.3	7.9	8.1	8.1	7.9	8.0	8.3	7.9	8.1
24	---	---	---	8.2	7.9	8.0	8.1	7.9	8.0	8.4	7.9	8.2
25	---	---	---	8.2	7.8	8.0	8.1	7.9	8.0	8.3	7.9	8.1
26	---	---	---	8.2	7.9	8.0	8.2	7.9	8.0	8.2	7.8	7.9
27	---	---	---	8.3	7.8	8.0	8.2	7.9	8.0	7.9	7.6	7.7
28	7.8	7.5	7.7	8.3	7.8	8.0	8.2	7.9	8.0	8.2	7.7	7.9
29	7.8	7.5	7.7	8.2	7.8	8.0	8.2	7.9	8.1	8.2	7.8	8.0
30	7.8	7.4	7.7	8.4	7.9	8.1	8.3	7.9	8.1	8.3	7.8	8.0
31	7.9	7.6	7.8	---	---	---	8.2	7.9	8.0	8.2	7.8	7.9
MONTH	7.9	7.4	7.7	8.4	7.2	7.8	8.4	7.7	7.9	8.5	7.5	8.0

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

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.5	23.0	24.0	18.5	17.0	17.5	13.5	12.0	13.0	11.0	9.0	10.0
2	26.0	22.5	24.0	19.0	17.0	17.5	13.5	12.5	13.0	9.5	8.0	8.5
3	25.5	22.5	24.0	20.0	19.0	19.5	14.5	13.5	14.0	9.5	8.5	8.5
4	26.0	22.5	24.0	21.0	20.0	20.5	15.5	14.0	14.5	8.5	7.0	7.5
5	26.5	22.5	24.0	20.5	17.5	18.5	15.0	14.0	14.5	8.0	6.5	7.5
6	26.0	23.0	24.0	18.0	17.0	17.5	16.0	14.5	15.0	9.0	7.5	8.0
7	26.0	23.0	24.0	18.5	17.0	18.0	15.5	14.0	14.5	9.0	7.0	7.5
8	23.5	20.5	22.0	19.5	18.0	18.5	14.0	13.0	13.5	9.5	7.0	8.0
9	22.0	20.0	21.0	19.5	17.0	19.0	13.0	10.0	11.5	10.0	8.0	9.0
10	20.5	19.0	20.0	17.0	15.5	15.5	10.0	9.0	9.5	11.5	9.5	10.5
11	20.5	18.5	19.5	17.0	15.5	16.0	9.5	8.5	9.0	12.5	10.5	11.5
12	20.5	18.5	19.5	16.5	15.5	16.0	10.5	8.5	9.5	13.0	11.5	12.0
13	21.0	19.0	20.0	18.0	16.5	17.0	11.5	10.0	10.5	13.0	11.5	12.5
14	22.5	19.5	21.0	18.0	18.0	18.0	11.0	10.5	10.5	11.5	9.5	10.5
15	21.0	19.5	20.0	18.0	16.5	17.5	11.0	10.5	10.5	10.5	9.0	10.0
16	22.5	20.0	21.0	16.5	15.5	16.0	11.5	11.0	11.0	11.0	9.5	10.0
17	22.5	20.0	21.0	16.0	15.5	15.5	11.0	10.0	10.5	11.0	11.0	11.0
18	23.0	20.5	21.5	16.5	15.0	16.0	11.5	10.0	11.0	11.0	9.0	10.0
19	23.0	19.0	21.0	17.0	16.5	16.5	11.5	10.0	11.0	9.5	8.0	8.5
20	22.0	18.0	20.5	17.0	16.0	16.5	11.5	11.0	11.0	10.0	8.0	9.0
21	22.0	20.5	21.5	16.0	14.5	15.5	12.0	10.5	11.5	10.5	9.0	10.0
22	21.0	20.0	20.5	16.0	15.0	15.5	12.0	10.0	11.0	10.0	8.0	9.0
23	21.5	21.0	21.5	16.0	14.5	15.0	11.0	10.0	10.5	9.0	7.0	8.0
24	21.5	20.5	21.0	14.5	14.0	14.0	11.0	9.5	10.0	9.5	7.5	8.5
25	20.5	16.5	19.0	15.0	14.0	14.5	10.5	9.0	10.0	10.0	9.0	9.5
26	17.0	15.5	16.5	16.0	15.0	15.5	11.0	9.0	10.0	11.0	10.0	10.5
27	18.0	16.5	17.0	17.0	16.0	16.5	11.0	9.5	10.5	13.0	11.0	12.0
28	19.0	17.5	18.0	16.0	13.5	14.5	11.0	10.5	11.0	12.5	10.5	11.0
29	19.5	18.0	18.5	14.5	13.0	14.0	10.5	10.0	10.5	10.5	9.0	9.5
30	19.5	18.0	19.0	14.0	12.5	13.0	11.0	9.5	10.5	9.5	8.0	8.5
31	19.5	18.5	19.0	---	---	---	11.0	10.5	11.0	10.0	8.5	9.5
MONTH	26.5	15.5	21.0	21.0	12.5	16.5	16.0	8.5	11.5	13.0	6.5	9.5

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.5	10.0	11.0	11.0	10.0	10.5	---	---	---	19.5	18.5	19.0
2	11.5	9.0	10.0	10.0	9.0	9.5	---	---	---	19.0	17.5	18.0
3	11.5	9.5	10.5	9.5	9.0	9.0	17.5	15.0	16.0	18.5	17.5	18.0
4	11.0	9.5	10.5	9.5	9.0	9.5	16.5	15.0	16.0	19.0	18.0	18.0
5	11.0	9.5	10.5	10.5	9.5	10.0	16.5	15.5	16.0	20.0	18.5	19.0
6	11.0	9.0	10.0	13.0	10.5	11.5	17.0	15.0	16.0	20.0	19.0	19.5
7	11.0	9.5	9.5	14.0	10.0	11.5	18.5	16.0	17.0	20.0	20.0	20.0
8	10.0	8.0	9.0	10.0	8.0	8.5	19.0	17.0	18.0	20.0	19.0	19.5
9	10.0	9.0	9.5	10.5	8.5	9.0	19.0	17.0	18.0	21.0	19.5	20.0
10	11.5	9.5	10.5	10.5	9.0	10.0	19.0	16.5	17.5	21.5	20.5	21.0
11	11.5	9.0	10.0	12.5	10.5	11.5	16.5	14.5	15.5	21.5	19.5	20.5
12	9.0	8.0	8.5	15.0	12.5	14.0	17.5	15.0	16.0	21.0	20.0	20.5
13	9.0	8.0	8.0	---	---	---	18.5	16.5	17.5	22.5	21.0	21.5
14	8.0	7.5	8.0	---	---	---	19.0	16.5	17.5	23.0	21.5	22.5
15	10.5	8.0	9.0	---	---	---	19.0	17.0	18.0	23.5	22.0	23.0
16	10.5	9.0	9.5	---	---	---	18.5	17.5	18.0	23.5	22.5	23.0
17	10.5	8.5	9.0	---	---	---	18.5	17.5	18.0	22.5	22.0	22.0
18	10.5	8.0	9.5	---	---	---	19.5	17.5	18.0	22.0	21.0	21.5
19	11.0	8.5	10.0	---	---	---	19.5	18.0	18.0	21.5	20.0	21.0
20	12.5	9.0	10.5	---	---	---	18.5	17.5	18.0	22.5	20.5	21.5
21	12.5	11.0	12.0	---	---	---	19.5	18.0	18.5	23.0	21.0	22.0
22	12.0	10.5	11.0	---	---	---	19.5	17.5	18.5	23.5	21.5	22.5
23	13.0	10.0	11.0	---	---	---	17.5	16.5	17.0	23.5	22.5	23.0
24	14.5	13.0	13.5	17.5	15.5	16.5	18.0	15.5	16.5	23.5	22.0	22.5
25	15.0	14.0	14.5	17.0	15.5	16.0	18.5	16.5	17.5	23.5	22.5	23.0
26	15.0	10.0	11.0	16.5	15.5	16.0	18.5	17.0	18.0	24.5	23.0	23.5
27	12.5	11.0	11.5	17.0	14.5	16.0	18.5	17.0	18.0	24.5	23.0	24.0
28	12.5	11.0	11.5	17.0	15.5	16.0	19.0	17.5	18.0	25.0	23.5	24.0
29	---	---	---	15.5	15.0	15.5	19.0	18.0	18.5	25.0	24.0	24.5
30	---	---	---	16.0	14.5	15.5	19.5	18.0	19.0	25.0	24.0	24.5
31	---	---	---	---	---	---	---	---	---	25.0	23.5	24.5
MONTH	15.0	7.5	10.5	17.5	8.0	12.5	19.5	14.5	17.5	25.0	17.5	21.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	23.0	24.0	---	---	---	28.5	27.5	28.0	30.5	29.0	29.5
2	25.5	24.0	25.0	---	---	---	28.0	27.0	27.5	31.0	29.0	30.0
3	25.5	24.5	25.0	---	---	---	29.0	27.0	28.0	31.0	29.0	30.0
4	25.5	24.0	25.0	---	---	---	30.0	28.5	29.0	30.5	29.0	30.0
5	26.0	24.5	25.0	---	---	---	30.5	29.0	30.0	30.0	28.5	29.5
6	26.0	24.5	25.0	27.0	25.5	26.0	30.5	29.5	30.0	29.5	28.5	29.0
7	26.0	25.0	25.5	29.0	26.5	27.5	31.0	29.5	30.5	29.5	28.5	29.0
8	26.5	25.0	26.0	28.5	27.0	27.5	31.0	29.5	30.5	28.5	27.5	28.0
9	26.5	25.5	26.0	28.5	27.0	28.0	31.0	29.5	30.5	27.5	26.5	27.0
10	26.5	24.0	25.5	29.0	27.0	28.0	31.0	29.0	30.0	27.0	25.5	26.0
11	24.0	23.0	23.5	29.5	27.5	28.5	31.0	29.0	30.0	26.5	25.0	26.0
12	24.5	22.5	23.5	29.5	27.5	28.5	31.5	29.5	30.5	26.5	25.5	26.0
13	25.5	23.5	24.5	29.5	28.5	29.0	31.5	29.5	30.5	26.5	24.5	25.5
14	26.0	25.0	25.5	30.0	29.0	29.5	31.0	29.5	30.5	---	---	---
15	26.0	24.5	25.5	30.0	27.5	28.0	31.0	29.0	30.0	---	---	---
16	26.0	24.5	25.5	28.5	27.5	28.0	31.0	29.5	30.0	---	---	---
17	26.0	25.0	25.5	29.0	28.5	28.5	31.0	29.5	30.0	---	---	---
18	26.5	24.5	25.5	29.5	28.5	29.0	31.5	29.5	30.5	---	---	---
19	26.5	25.0	25.5	30.0	29.0	29.5	31.5	29.5	30.5	27.0	26.5	27.0
20	27.0	25.0	26.0	29.5	28.5	29.0	31.0	30.0	30.5	27.0	26.0	26.5
21	27.5	25.5	26.5	30.0	28.0	29.0	31.5	29.5	30.5	26.0	23.5	25.0
22	27.5	26.0	27.0	31.0	29.0	30.0	31.0	30.0	30.5	---	---	---
23	27.5	26.0	27.0	30.5	29.5	30.0	31.0	29.5	30.5	---	---	---
24	27.5	25.5	26.5	30.0	28.5	29.5	30.5	29.0	30.0	---	---	---
25	28.0	26.5	27.0	31.0	29.0	30.0	30.5	29.0	30.0	---	---	---
26	28.5	27.0	28.0	31.5	29.5	30.5	31.0	29.0	30.0	---	---	---
27	---	---	---	32.0	30.0	31.0	31.0	29.5	30.5	---	---	---
28	---	---	---	32.5	30.0	31.0	31.5	29.5	30.5	25.5	23.5	24.5
29	---	---	---	32.0	30.5	31.5	31.0	29.5	30.5	---	---	---
30	---	---	---	31.5	30.0	30.5	30.5	29.5	30.0	26.5	25.0	25.5
31	---	---	---	30.5	28.5	29.5	30.5	28.5	29.5	---	---	---
MONTH	28.5	22.5	25.5	32.5	25.5	29.0	31.5	27.0	30.0	31.0	23.5	27.5
YEAR	32.5	6.5	19.0									

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.2	5.9	6.0	8.5	7.7	8.0	10.9	9.4	10.1	12.0	10.4	11.1
2	6.2	5.8	6.0	8.1	7.4	7.7	10.0	9.4	9.7	12.4	11.1	11.7
3	6.1	5.8	6.0	7.5	6.4	7.0	9.8	9.2	9.4	11.8	11.0	11.4
4	6.1	5.7	5.9	6.4	6.0	6.2	10.3	9.1	9.6	12.8	11.3	12.0
5	6.1	5.7	5.9	6.7	6.2	6.5	10.4	9.1	9.7	12.7	11.7	12.2
6	6.1	5.6	5.9	7.5	6.6	7.0	10.1	9.0	9.5	12.3	11.3	11.8
7	6.1	5.6	5.8	7.7	6.7	7.2	10.4	8.9	9.6	12.6	11.1	11.9
8	6.1	5.6	5.9	7.5	6.6	7.0	10.0	9.0	9.5	12.6	11.4	12.0
9	6.2	5.7	6.0	7.6	6.1	7.1	10.2	9.1	9.5	12.6	11.2	11.9
10	6.2	5.7	6.0	7.7	7.0	7.4	10.6	10.1	10.4	12.2	11.0	11.6
11	6.1	5.6	5.8	8.7	7.7	8.1	11.0	10.2	10.6	12.3	10.5	11.3
12	5.9	5.5	5.6	9.3	8.2	8.7	11.1	10.4	10.7	11.8	10.1	10.9
13	6.1	5.4	5.8	8.9	8.0	8.4	11.0	10.3	10.6	10.1	9.2	9.5
14	6.0	5.4	5.7	8.2	7.4	7.8	10.6	10.1	10.2	11.6	9.7	10.5
15	---	---	---	7.4	6.8	7.0	10.1	9.9	10.0	12.3	10.7	11.4
16	---	---	---	8.1	7.2	7.8	10.1	9.8	10.0	12.2	10.7	11.4
17	---	---	---	7.9	7.5	7.7	10.7	9.8	10.2	11.4	10.4	10.9
18	---	---	---	8.5	6.8	7.8	11.0	10.1	10.5	11.2	10.4	10.7
19	---	---	---	8.3	7.8	8.0	11.1	10.3	10.6	12.0	10.7	11.2
20	---	---	---	8.1	7.6	7.8	10.8	10.1	10.5	12.5	10.9	11.6
21	---	---	---	8.8	7.8	8.2	11.2	10.3	10.7	12.4	10.8	11.5
22	---	---	---	9.3	8.1	8.6	11.5	10.4	10.9	11.7	10.7	11.2
23	---	---	---	9.5	8.4	9.0	11.7	10.6	11.1	12.9	11.2	11.9
24	---	---	---	9.5	8.9	9.1	11.9	10.6	11.2	13.0	11.4	12.1
25	---	---	---	9.5	8.8	9.1	11.9	10.9	11.4	12.4	11.1	11.7
26	---	---	---	9.5	8.6	8.9	11.9	10.8	11.4	11.8	10.4	11.0
27	---	---	---	9.4	8.3	8.8	11.8	10.7	11.2	10.4	9.7	10.1
28	8.2	7.3	7.8	10.0	8.8	9.3	11.4	10.4	10.7	11.7	10.0	10.7
29	8.2	7.6	7.8	10.4	9.0	9.6	10.7	10.1	10.4	12.0	10.8	11.4
30	8.2	7.6	7.9	10.7	9.4	10.0	11.8	10.4	10.9	12.9	11.3	12.0
31	8.2	7.3	7.7	---	---	---	11.1	10.2	10.7	12.0	10.3	10.8
MONTH	8.2	5.4	6.3	10.7	6.0	8.0	11.9	8.9	10.4	13.0	9.2	11.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.2	9.0	9.8	12.1	10.9	11.4	---	---	---	8.4	7.6	8.0
2	12.2	11.2	11.6	12.4	11.3	11.8	---	---	---	8.7	8.0	8.3
3	12.2	10.9	11.5	12.7	11.4	12.0	10.2	9.2	9.6	8.3	8.0	8.1
4	12.5	11.0	11.6	12.3	11.4	11.7	9.7	8.6	9.2	8.2	7.7	7.9
5	12.7	10.9	11.7	11.8	10.5	11.2	8.9	8.2	8.5	8.6	7.9	8.2
6	12.9	11.1	11.9	10.5	9.0	9.9	9.0	8.5	8.7	8.0	6.5	6.9
7	13.1	11.0	11.9	11.3	8.3	10.1	9.8	8.3	9.0	7.3	6.7	7.0
8	13.5	11.4	12.4	11.8	11.3	11.6	10.0	8.2	9.0	7.5	6.8	7.1
9	13.1	11.2	12.1	11.8	11.6	11.7	10.2	8.7	9.3	7.1	7.0	7.0
10	13.2	11.0	12.0	12.1	11.3	11.7	9.4	8.2	8.9	7.3	6.9	7.1
11	12.1	10.7	11.4	11.8	10.2	11.1	9.2	8.2	8.9	7.1	6.4	6.9
12	13.7	11.3	12.3	10.2	8.3	9.3	9.5	8.4	9.1	6.5	5.9	6.3
13	12.7	11.4	12.0	---	---	---	10.0	8.4	9.5	7.2	6.3	7.1
14	12.9	11.4	12.1	---	---	---	9.9	9.0	9.4	7.7	7.2	7.5
15	13.4	11.3	12.2	---	---	---	9.6	8.7	9.2	7.8	7.3	7.5
16	13.4	11.2	12.2	---	---	---	9.2	8.8	9.0	7.6	7.2	7.4
17	13.7	11.5	12.4	---	---	---	9.2	8.8	9.0	7.4	7.0	7.3
18	13.7	11.5	12.5	---	---	---	9.3	8.7	8.9	8.0	7.0	7.5
19	13.6	11.4	12.4	---	---	---	8.7	8.0	8.4	8.4	7.5	7.9
20	13.5	11.2	12.1	---	---	---	8.1	7.1	7.4	8.5	7.4	7.9
21	11.9	10.8	11.2	---	---	---	7.9	7.1	7.5	8.6	7.3	7.9
22	12.3	11.1	11.6	---	---	---	7.9	7.2	7.5	8.2	7.3	7.7
23	12.3	11.1	11.6	---	---	---	8.4	7.8	8.1	7.6	7.1	7.3
24	11.3	9.3	10.2	10.4	9.2	9.8	8.6	8.1	8.4	7.6	7.2	7.4
25	10.1	7.7	8.8	10.6	9.1	9.7	8.3	7.9	8.1	8.0	7.3	7.6
26	11.8	10.1	11.4	9.7	8.2	8.5	8.1	7.9	8.0	7.9	7.2	7.6
27	12.0	10.9	11.4	9.2	8.2	8.7	8.3	7.7	7.9	7.8	7.0	7.4
28	11.5	10.8	11.1	8.6	7.4	7.7	8.1	7.7	7.9	7.8	7.0	7.3
29	---	---	---	9.5	7.6	9.0	8.0	7.6	7.8	7.8	6.9	7.3
30	---	---	---	10.4	9.4	9.8	8.1	7.7	7.9	7.8	6.8	7.2
31	---	---	---	---	---	---	---	---	---	7.6	6.8	7.1
MONTH	13.7	7.7	11.6	12.7	7.4	10.4	10.2	7.1	8.6	8.7	5.9	7.4

08062000 EAST FORK TRINITY RIVER NEAR CRANDALL, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.6	6.8	7.1	---	---	---	5.6	5.0	5.3	3.5	3.0	3.3
2	7.5	6.7	7.0	---	---	---	5.4	5.0	5.1	3.4	2.8	3.0
3	7.4	6.6	7.0	---	---	---	5.7	4.9	5.2	3.1	2.8	3.0
4	7.3	6.7	7.0	---	---	---	5.9	4.6	5.1	3.7	3.0	3.2
5	7.3	6.6	6.9	---	---	---	5.4	4.2	4.7	3.9	3.0	3.3
6	7.1	6.5	6.8	6.3	5.7	6.0	4.9	4.0	4.4	3.3	3.0	3.1
7	---	---	---	6.0	4.6	5.2	5.5	4.1	4.7	3.1	2.7	2.9
8	---	---	---	6.5	5.3	6.1	5.1	4.1	4.5	3.0	2.6	2.8
9	---	---	---	6.4	5.9	6.1	4.7	3.9	4.2	2.8	2.5	2.6
10	---	---	---	6.5	5.9	6.1	4.5	3.8	4.1	2.9	2.6	2.7
11	---	---	---	6.3	5.8	6.1	4.5	3.9	4.1	3.5	2.9	3.2
12	---	---	---	6.4	5.8	6.1	4.2	3.6	3.9	3.7	3.3	3.5
13	---	---	---	6.1	5.5	5.7	4.3	3.2	3.8	3.8	2.8	3.4
14	---	---	---	5.5	4.5	5.0	4.3	3.6	3.9	---	---	---
15	---	---	---	5.9	4.5	5.6	4.3	3.2	3.7	---	---	---
16	---	---	---	6.0	5.7	5.9	4.1	3.3	3.6	---	---	---
17	7.9	7.3	7.6	5.9	5.6	5.7	3.8	3.1	3.4	---	---	---
18	8.0	7.4	7.6	5.7	5.6	5.6	3.7	3.2	3.4	---	---	---
19	8.1	7.4	7.7	5.6	5.4	5.5	3.6	3.0	3.2	3.8	3.5	3.7
20	8.3	7.3	7.7	5.6	5.3	5.4	3.3	2.9	3.0	3.9	3.3	3.7
21	8.3	7.2	7.7	5.5	4.8	5.4	3.4	2.8	3.0	3.8	3.4	3.6
22	8.1	7.1	7.6	4.9	4.2	4.7	4.0	3.1	3.5	---	---	---
23	8.2	7.0	7.6	4.4	3.0	3.8	3.9	3.1	3.4	---	---	---
24	8.2	7.1	7.5	4.4	3.3	3.8	3.5	2.8	3.1	---	---	---
25	7.9	6.9	7.4	4.6	3.4	4.1	---	---	---	---	---	---
26	7.7	6.8	7.2	4.9	4.2	4.5	---	---	---	---	---	---
27	---	---	---	4.9	4.2	4.4	---	---	---	---	---	---
28	---	---	---	4.9	4.0	4.4	---	---	---	---	---	---
29	---	---	---	5.0	4.2	4.6	---	---	---	---	---	---
30	---	---	---	5.2	4.6	4.8	---	---	---	6.7	5.7	6.2
31	---	---	---	5.1	4.7	4.9	---	---	---	---	---	---
MONTH	8.3	6.5	7.3	6.5	3.0	5.2	5.9	2.8	4.0	6.7	2.5	3.4
YEAR	13.7	2.5	8.1									

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1924 to September 1925, October 1938 to current year. Monthly discharge only for some periods, are published in WSP 1312.

REVISED RECORDS.--WDR TX-77-1: 1942(M), drainage area. WDR TX-89-1: 1988. WDR TX-92-1: 1991.

GAGE.--Water-stage recorder. Datum of gage is 297.65 ft above sea level. Oct. 1938 to Sept. 1994 at present site and datum 5.00 ft higher. July 25, 1924, to Sept. 30, 1925, nonrecording gage at abandoned lock and dam No. 7, 1.7 mi upstream from present site at datum 11.94 ft higher.

REMARKS.--No estimated daily discharges. Records good. At times, flow is affected by storage in 15 upstream reservoirs having a combined capacity of 3,572,000 acre-ft, of which 1,138,000 acre-ft is for flood control. 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 sewage effluent that sustains low flows at this site. Flow may also be affected at times by discharge from the flood-detention pools of 38 floodwater-retarding structures with a combined detention capacity of 22,600 acre-ft. These structures control runoff from 76.7 mi² above this station. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1908 reached a stage of about 38 ft (present site and datum), from information by U.S. Army Corps of Engineers (discharge believed to have been about the same as that of Apr. 23, 1942.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	729	7480	9090	5640	2710	2990	8300	7420	10300	3440	2670	1020
2	689	7620	8710	5470	3850	3030	8040	7040	10700	3370	6540	972
3	713	8200	8520	5040	4500	3120	8150	6610	10100	3450	5260	850
4	741	8870	8290	5080	4380	3100	9290	8160	9250	3420	3790	801
5	717	13100	8080	5530	4240	2350	12600	7500	8810	3840	3290	813
6	727	17800	7920	5560	4140	1560	17900	15700	8550	7890	3120	852
7	752	17800	7770	5010	4060	3160	17600	23900	8430	5970	3170	845
8	4720	11700	7850	4520	3900	6560	16900	36400	8330	3250	3030	869
9	5970	7940	9310	4260	4290	4140	13900	53700	8200	3380	2750	836
10	2360	12000	16200	4100	4280	3290	12600	42900	8130	3240	2350	829
11	1280	11800	15300	3950	4090	2700	18800	33800	14500	3180	2200	829
12	1020	8950	12000	3910	4560	2010	17000	25800	17800	3130	2120	864
13	907	7940	9450	7440	4190	10100	14600	18900	14700	2860	1910	2270
14	842	7590	9710	6330	3960	25100	13300	15300	10500	1610	1510	6000
15	824	12800	13900	5090	3890	28900	11800	15200	9630	2050	1270	3600
16	948	19200	14400	4590	3910	27300	10500	15700	9320	2460	1150	1560
17	2430	20200	12400	4350	4080	20200	10000	16100	7370	2170	1050	1370
18	3050	17300	10200	5930	4150	13300	9810	16500	5500	2050	997	1220
19	9160	13400	9120	7770	4010	12400	10800	15900	4550	1850	957	1480
20	11600	12700	8550	7080	3910	12300	18500	15300	4280	1620	913	3640
21	11900	13000	8240	5190	3260	12100	19200	14500	4130	1510	1340	2440
22	18600	13600	7800	4760	2820	12000	16800	13300	3970	1120	1580	2130
23	22900	13400	7370	5570	3180	11700	14400	11800	3900	1040	1090	1640
24	21100	12200	6530	5040	2140	11600	11800	10600	3730	1640	962	1280
25	14000	11300	5670	4440	1620	11300	10200	10600	3490	2050	907	1030
26	12800	11000	5440	5370	2570	11600	9860	10600	3430	1400	918	1020
27	13000	10900	5370	9830	3160	15500	9300	10600	3440	1170	920	996
28	10500	10500	5840	8580	3150	15100	8450	10400	3450	1070	924	940
29	8480	10000	7990	5940	---	10800	7730	9850	3810	996	916	900
30	7870	9540	8000	5030	---	9010	7520	9890	3610	966	923	879
31	7600	---	6300	3470	---	8700	---	9960	---	990	909	---
TOTAL	198929	359830	281320	169870	103000	317020	375650	519930	225910	78182	61436	44775
MEAN	6417	11990	9075	5480	3679	10230	12520	16770	7530	2522	1982	1492
MAX	22900	20200	16200	9830	4560	28900	19200	53700	17800	7890	6540	6000
MIN	689	7480	5370	3470	1620	1560	7520	6610	3430	966	907	801
AC-FT	394600	713700	558000	336900	204300	628800	745100	1031000	448100	155100	121900	88810

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1995b#, BY WATER YEAR (WY)

MEAN	1869	2339	2660	2129	3190	3589	4416	6777	5354	2075	1106	1179
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

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1925 - 1995b#	
ANNUAL TOTAL	1949948		2735852			
ANNUAL MEAN	5342		7495		3056	
HIGHEST ANNUAL MEAN					9702	1992
LOWEST ANNUAL MEAN					280	1956
HIGHEST DAILY MEAN	22900	Oct 23	53700	May 9	133000	Apr 23 1942
LOWEST DAILY MEAN	684	Sep 30	689	Oct 2	32	Oct 4 1924
ANNUAL SEVEN-DAY MINIMUM	710	Sep 27	724	Oct 1	32	Oct 14 1924
INSTANTANEOUS PEAK FLOW			56800	May 9	150000	Apr 23 1942
INSTANTANEOUS PEAK STAGE			39.61	May 9	41.55	Apr 22 1942
ANNUAL RUNOFF (AC-FT)	3868000		5427000		2214000	
10 PERCENT EXCEEDS	12800		15300		8530	
50 PERCENT EXCEEDS	3110		5670		872	
90 PERCENT EXCEEDS	845		983		202	

b Break in record.
Period of regulated streamflow.

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1954 to current year. Chemical and biochemical analyses: January 1968 to current year. Pesticide analyses: January 1968 to July 1981. Sediment analyses: October 1963 to September 1964, April 1972 to April 1975.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1954 to current year.
pH: March 1977 to current year.
WATER TEMPERATURE: October 1954 to current year.
DISSOLVED OXYGEN: March 1977 to current year.

INSTRUMENTATION.--Since March 1977, a four-parameter water-quality monitor records water temperature, DO, pH, and specific conductance continuously at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,990 microsiemens Oct. 13, 1956; minimum, 122 microsiemens Sept. 30, 1981.
pH: Maximum, 9.9 units July 12, 1982; minimum, 6.8 units Oct. 3, 19, 20, Nov. 19, 1980.
WATER TEMPERATURE: Maximum, 36.0°C July 1, 1955; minimum, 1.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.1 mg/L Dec. 6, 1992; minimum, 0.0 mg/L on several days during 1979-81.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 855 microsiemens Aug. 31; minimum, 205 microsiemens Oct. 22.
pH: Maximum, 8.4 units Feb. 21; minimum, 7.1 units on several days.
WATER TEMPERATURE: Maximum, 32.0°C on several days; minimum, 8.0°C Jan. 5, 6, and 8.
DISSOLVED OXYGEN: Maximum, 11.4 mg/L Jan. 6 and 15; minimum, 3.7 mg/L Aug. 2.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
DEC											
01...	0915	9150	354	7.8	13.5	9.7	93	1.0	130	7	44
JAN											
31...	1430	3030	528	7.6	10.5	10.3	93	1.2	190	34	67
APR											
06...	1415	10400	332	7.7	16.0	8.1	83	3.1	130	28	47
MAY											
26...	0830	10100	409	7.7	23.0	7.2	85	2.3	150	21	53
JUN											
29...	0810	3470	452	7.6	27.5	6.4	82	1.1	140	23	49
JUL											
20...	0815	1330	569	7.6	30.0	6.2	83	1.2	150	37	53

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
DEC											
01...	4.4	22	0.8	4.7	120	33	21	0.40	7.4	216	1.28
JAN											
31...	5.1	34	1	5.3	150	60	28	0.5	7.8	314	2.97
APR											
06...	3.3	17	0.6	4.1	100	34	15	0.3	5.0	195	1.45
MAY											
26...	4.6	22	0.8	4.6	130	36	20	0.4	3.7	230	1.48
JUN											
29...	3.9	32	1	5.8	120	42	29	0.5	5.2	255	3.76
JUL											
20...	4.9	51	2	7.7	120	58	46	0.80	7.3	329	6.26

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)
DEC										
01...	1.28	0.0	1.30	1.3	0.1	0.43	0.5	0.16	0.16	0.49
JAN										
31...	2.97	0.0	3.00	3.0	0.1	0.41	0.5	0.27	0.28	0.86
APR										
06...	1.45	0.0	1.50	1.5	0.1	0.41	0.5	0.12	0.12	0.37
MAY										
26...	1.48	0.020	1.50	1.50	0.090	0.41	0.50	0.190	0.170	0.52
JUN										
29...	3.76	0.0	3.80	3.8	0.1	0.44	0.5	0.41	0.43	1.3
JUL										
20...	6.26	0.040	6.30	6.30	0.070	0.63	0.70	0.850	0.890	2.7

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	198929	373	200	107000	22	11600	36	19500	130
NOV.	1994	359830	353	189	183000	18	17800	33	32200	130
DEC.	1994	281320	364	195	148000	19	14800	35	26200	130
JAN.	1995	169870	389	208	95300	22	10200	38	17300	130
FEB.	1995	103000	472	253	70400	32	8920	49	13600	150
MAR.	1995	317020	388	208	178000	22	19000	38	32200	130
APR.	1995	375650	369	197	200000	20	20500	35	35700	130
MAY	1995	519930	342	183	256000	18	25000	32	45100	120
JUNE	1995	225910	372	199	121000	20	12400	36	21700	130
JULY	1995	78182	470	252	53300	33	6970	49	10400	150
AUG.	1995	61436	523	281	46600	41	6750	57	9490	150
SEPT	1995	44775	527	283	34200	41	5000	58	6990	150
TOTAL		2735852	**	**	1494000	**	159000	**	270000	**
WTD.AVG.		7495	378	202	**	22	**	37	**	130

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	709	683	697	352	344	349	366	363	365	429	410	420
2	708	689	701	359	344	348	365	359	363	436	427	432
3	716	703	711	371	348	355	369	360	365	427	418	421
4	739	703	719	357	344	351	369	359	362	438	422	432
5	737	709	717	357	272	323	361	356	359	444	416	434
6	713	697	706	313	299	308	358	354	356	418	408	411
7	---	---	e710	334	308	320	358	356	357	430	407	415
8	---	---	e480	368	334	350	357	355	356	446	430	440
9	---	---	e480	405	349	384	381	350	367	445	440	442
10	---	---	e470	360	328	347	350	304	320	444	435	440
11	---	---	e495	367	356	359	347	325	342	442	435	437
12	---	---	e525	365	358	362	367	347	357	---	---	e435
13	---	---	e560	361	352	358	372	367	368	---	---	e350
14	---	---	e590	360	352	357	378	355	371	---	---	e260
15	---	---	e615	384	301	339	355	322	329	---	---	e280
16	---	---	e645	322	308	313	335	324	331	---	---	e300
17	---	---	e550	343	312	325	367	334	357	---	---	e340
18	---	---	e545	392	343	368	372	361	367	---	---	e360
19	---	---	e405	389	377	382	379	372	376	---	---	e345
20	---	---	e445	382	375	378	378	375	377	---	---	e350
21	---	---	e470	379	363	374	379	376	378	---	---	e355
22	436	205	300	372	352	357	379	374	378	---	---	e375
23	284	254	272	379	372	376	375	370	372	---	---	e395
24	305	284	293	376	373	374	393	370	381	---	---	e415
25	352	303	327	378	373	376	398	392	395	---	---	e440
26	348	315	334	374	368	372	392	385	389	---	---	e425
27	348	329	335	371	365	369	389	385	387	---	---	e355
28	374	347	363	369	366	367	416	385	396	---	---	e370
29	375	365	371	367	365	366	420	397	406	---	---	e390
30	367	354	360	368	364	366	423	410	416	---	---	e450
31	355	349	352	---	---	---	416	412	414	---	---	e535
MONTH	739	205	501	405	272	356	423	304	370	446	407	395

e Estimated

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	613	590	599	456	450	453	---	---	e420	---	---	e455
2	613	473	543	485	455	470	---	---	e425	---	---	e465
3	473	459	466	497	484	492	459	430	436	---	---	e470
4	459	450	455	527	497	508	458	435	443	---	---	e475
5	452	449	450	597	527	549	450	387	418	---	---	e485
6	456	449	452	---	---	e650	387	327	343	---	---	e250
7	452	443	448	---	---	e500	342	323	329	---	---	e205
8	446	433	441	---	---	e380	380	342	362	---	---	e225
9	474	434	453	---	---	e465	396	380	389	---	---	e255
10	483	424	448	---	---	e500	538	361	402	---	---	e295
11	483	424	442	---	---	e505	367	318	338	---	---	e325
12	498	445	472	---	---	e530	377	365	368	367	342	360
13	468	444	458	---	---	e390	403	377	392	395	366	383
14	466	453	461	---	---	e335	402	399	401	395	387	392
15	456	449	454	---	---	e310	401	383	394	388	386	387
16	460	449	456	---	---	e340	399	380	387	390	386	389
17	473	453	466	398	346	368	389	380	385	398	390	395
18	476	469	472	416	398	411	382	375	379	404	395	398
19	471	453	463	406	397	402	416	381	403	397	394	395
20	456	443	450	401	397	399	---	---	e270	394	386	392
21	498	442	466	401	396	398	---	---	e265	386	378	383
22	513	453	494	401	395	397	---	---	e280	378	368	373
23	462	453	458	403	399	402	---	---	e345	383	367	373
24	602	453	528	403	400	401	---	---	e375	---	---	e380
25	631	602	621	404	399	401	---	---	e390	---	---	e390
26	648	469	564	403	356	388	---	---	e395	---	---	e380
27	476	466	471	373	347	356	---	---	e410	386	376	379
28	472	455	467	---	---	e365	---	---	e420	380	373	377
29	---	---	---	---	---	e430	---	---	e435	379	372	375
30	---	---	---	---	---	e445	---	---	e415	386	374	381
31	---	---	---	---	---	e425	---	---	---	382	378	379
MONTH	648	424	479	597	346	431	538	318	380	404	342	373

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	394	379	385	425	405	417	720	566	692	656	634	644
2	395	372	386	405	387	398	566	339	409	662	654	657
3	373	370	371	428	385	405	377	330	353	661	615	647
4	374	370	372	423	399	417	395	361	378	628	603	611
5	375	367	372	545	392	417	434	395	418	659	628	649
6	373	367	370	597	321	418	483	398	427	668	659	663
7	374	366	370	477	378	397	516	483	507	678	656	668
8	376	370	373	434	360	393	516	498	504	666	655	660
9	373	367	370	371	359	366	510	496	501	687	664	676
10	370	362	368	380	366	373	527	510	518	681	670	675
11	362	246	303	382	368	377	545	526	539	683	673	678
12	336	286	316	437	377	390	553	537	548	699	681	693
13	362	324	335	472	395	418	560	542	554	705	465	675
14	382	362	373	608	436	513	571	554	562	468	254	358
15	397	373	391	654	444	552	582	571	577	443	304	361
16	391	382	387	663	440	529	618	581	596	439	383	408
17	404	381	391	653	511	581	621	608	614	514	439	479
18	414	403	409	576	484	518	647	614	635	548	514	528
19	403	394	397	572	492	532	672	647	656	582	548	559
20	410	397	406	598	561	574	688	672	684	581	394	519
21	409	402	406	644	595	609	702	687	693	486	405	427
22	406	402	405	665	638	649	761	697	730	463	423	448
23	417	404	412	682	665	675	757	525	607	522	370	438
24	415	399	410	717	682	698	611	573	594	591	522	551
25	401	379	394	756	567	684	606	573	597	597	540	561
26	379	374	377	598	546	573	648	605	624	665	563	619
27	409	375	398	617	587	611	688	648	668	670	649	660
28	423	409	418	623	609	614	706	688	698	662	654	660
29	471	413	454	669	623	646	707	700	704	665	660	663
30	466	425	452	686	669	680	851	693	759	674	663	669
31	---	---	---	713	686	701	855	633	722	---	---	---
MONTH	471	246	386	756	321	520	855	330	583	705	254	583
YEAR	855	205	446									

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.5	24.0	24.0	27.5	27.0	27.0	29.0	27.5	28.5	31.0	30.0	30.5
2	25.5	24.0	24.5	28.0	27.0	27.5	27.5	26.5	27.0	31.0	30.0	30.5
3	26.0	25.0	25.5	28.5	27.5	28.0	28.5	26.5	27.5	31.5	30.0	30.5
4	25.5	25.0	25.5	28.0	27.5	27.5	29.0	28.0	28.5	31.0	30.0	30.5
5	25.5	25.0	25.5	27.5	26.5	27.0	29.5	28.5	29.0	30.5	29.5	30.0
6	25.5	25.0	25.5	27.5	25.0	26.0	30.0	29.0	29.5	30.0	29.0	29.5
7	26.0	25.0	25.5	28.0	26.0	27.0	30.5	30.0	30.0	30.0	29.0	29.5
8	26.5	25.5	26.0	29.0	27.5	28.5	30.5	30.0	30.0	29.5	28.5	29.0
9	26.5	25.5	26.0	29.5	28.0	28.5	30.5	29.5	30.0	28.5	27.5	28.0
10	26.5	25.5	26.0	29.5	28.5	29.0	30.5	29.5	30.0	28.0	26.5	27.0
11	25.5	23.0	24.0	30.5	29.0	29.5	31.0	30.0	30.5	27.5	26.0	26.5
12	24.0	23.5	24.0	30.5	29.5	30.0	31.5	30.0	30.5	27.5	27.0	27.0
13	25.0	24.0	24.0	30.5	29.5	30.0	31.5	30.5	31.0	27.5	25.5	27.0
14	26.0	24.5	25.0	31.0	30.0	30.5	31.5	30.5	30.5	26.0	24.0	25.0
15	26.5	25.0	25.5	31.0	29.5	30.5	30.5	30.0	30.5	26.5	25.0	26.0
16	26.5	25.5	26.0	30.0	28.5	29.5	31.0	30.0	30.5	27.5	26.5	27.0
17	26.5	25.5	26.0	30.5	28.5	29.5	31.5	30.0	30.5	28.0	27.5	28.0
18	27.0	26.0	26.5	30.5	29.5	30.0	31.5	30.0	31.0	28.0	27.5	27.5
19	27.0	26.0	26.5	30.5	29.5	30.0	32.0	30.5	31.5	28.0	27.5	28.0
20	27.5	26.0	26.5	31.0	29.5	30.0	32.0	30.5	31.0	28.0	26.5	27.0
21	27.5	26.5	27.0	30.5	30.0	30.5	32.0	30.5	31.0	27.0	24.0	25.5
22	28.0	27.0	27.5	31.0	30.5	30.5	31.5	30.5	31.0	24.0	21.5	23.0
23	28.0	27.0	27.5	31.0	30.0	30.5	31.0	30.0	30.5	21.5	20.0	20.5
24	28.0	27.5	27.5	30.5	29.5	30.0	31.0	30.0	30.5	21.5	20.5	21.0
25	28.0	27.0	27.5	30.5	29.5	30.0	31.5	30.0	30.5	22.0	21.5	21.5
26	28.5	27.5	28.0	30.5	29.5	30.0	31.5	30.0	31.0	23.0	21.5	22.0
27	28.5	27.0	28.0	31.0	30.5	31.0	31.5	30.5	31.0	24.0	22.5	23.5
28	27.5	26.5	27.0	32.0	30.5	31.5	32.0	30.5	31.5	25.5	24.0	24.5
29	27.5	27.0	27.5	32.0	31.0	31.5	32.0	30.5	31.0	26.0	25.0	25.5
30	27.5	26.5	27.0	31.5	30.5	31.0	31.5	30.5	31.0	26.5	25.5	26.0
31	---	---	---	30.5	29.0	30.0	31.0	29.5	30.0	---	---	---
MONTH	28.5	23.0	26.0	32.0	25.0	29.5	32.0	26.5	30.0	31.5	20.0	26.5
YEAR	32.0	8.0	20.5									

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.4	8.7	9.0	8.5	8.3	8.4	9.6	9.3	9.5	10.4	10.2	10.3
2	8.8	8.3	8.5	8.4	8.1	8.3	9.6	9.4	9.5	10.9	10.4	10.7
3	8.4	7.7	8.1	8.2	7.5	8.0	9.4	9.2	9.3	11.0	10.8	10.9
4	7.8	7.3	7.5	7.6	6.9	7.3	9.3	9.2	9.2	11.2	10.8	10.9
5	7.6	7.3	7.5	7.1	6.7	6.9	9.3	9.1	9.2	11.3	11.2	11.3
6	7.6	7.1	7.3	7.0	6.7	6.9	9.4	9.2	9.2	11.4	11.1	11.2
7	7.5	7.0	7.3	6.9	6.5	6.7	9.4	9.2	9.3	11.2	11.0	11.1
8	7.4	4.1	5.9	7.0	6.6	6.7	9.5	9.4	9.5	11.3	11.1	11.2
9	6.6	5.6	6.1	7.7	6.8	7.3	9.8	9.4	9.5	11.2	10.9	11.0
10	7.6	6.6	7.3	7.8	7.5	7.6	10.1	9.8	10.0	11.0	10.6	10.8
11	8.1	7.6	7.8	7.9	7.8	7.8	10.2	10.0	10.1	10.8	10.1	10.5
12	8.3	8.0	8.1	8.4	7.9	8.1	10.4	10.2	10.3	10.3	9.7	10.0
13	8.3	7.9	8.0	8.4	8.3	8.3	10.5	10.3	10.4	10.1	9.0	9.4
14	8.8	7.8	8.2	8.4	8.1	8.2	10.4	10.2	10.3	10.6	9.2	9.9
15	8.5	8.3	8.4	8.2	7.2	7.6	10.2	9.9	10.0	11.4	10.4	10.9
16	8.3	8.2	8.2	7.3	7.1	7.2	9.9	9.7	9.8	11.3	10.1	10.7
17	8.2	6.6	7.6	7.3	7.1	7.2	10.2	9.7	9.9	10.8	9.1	9.8
18	7.4	6.4	7.1	7.7	7.2	7.3	10.3	10.2	10.2	9.9	8.9	9.2
19	7.1	6.1	6.7	8.1	7.7	8.0	10.4	10.3	10.4	10.1	9.2	9.7
20	---	---	---	8.2	8.1	8.1	10.5	10.3	10.4	10.4	9.4	9.7
21	---	---	---	8.1	8.0	8.1	10.4	10.3	10.3	9.8	9.5	9.6
22	---	---	---	8.1	7.9	8.0	10.5	10.4	10.4	9.8	9.1	9.5
23	5.7	5.6	5.6	8.4	8.0	8.2	10.6	10.5	10.6	10.1	9.6	9.9
24	6.1	5.6	5.8	8.8	8.4	8.7	10.7	10.5	10.6	9.9	9.5	9.7
25	7.5	6.1	6.8	9.0	8.8	8.9	10.7	10.5	10.6	9.6	8.9	9.2
26	7.9	7.4	7.7	9.0	8.9	8.9	10.7	10.6	10.6	8.9	7.7	8.3
27	7.8	7.6	7.7	8.9	8.7	8.8	10.8	10.6	10.7	7.8	6.9	7.3
28	8.2	7.7	8.0	8.9	8.7	8.8	10.7	10.3	10.5	9.6	7.1	8.1
29	8.7	8.2	8.4	9.2	8.9	9.0	10.3	10.1	10.1	---	---	---
30	8.7	8.4	8.6	9.4	9.2	9.3	10.3	10.2	10.3	---	---	---
31	8.7	8.3	8.5	---	---	---	10.4	10.2	10.3	---	---	---
MONTH	9.4	4.1	7.6	9.4	6.5	8.0	10.8	9.1	10.0	11.4	6.9	10.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.7	9.6	9.7	10.4	10.0	10.1	---	---	---	---	---	---
2	10.0	9.2	9.7	10.7	10.4	10.6	---	---	---	---	---	---
3	10.0	9.7	9.9	10.9	10.7	10.8	---	---	---	---	---	---
4	10.2	9.9	10.1	11.0	10.7	10.8	9.1	8.7	8.9	---	---	---
5	10.3	10.0	10.1	10.7	10.4	10.6	8.8	8.0	8.3	---	---	---
6	10.5	10.2	10.3	10.4	9.8	10.0	---	---	---	---	---	---
7	10.5	10.2	10.4	9.8	8.5	9.4	---	---	---	---	---	---
8	11.0	10.5	10.8	---	---	---	---	---	---	---	---	---
9	11.1	10.4	10.7	---	---	---	---	---	---	---	---	---
10	10.6	10.3	10.5	---	---	---	---	---	---	---	---	---
11	10.7	10.0	10.3	---	---	---	---	---	---	---	---	---
12	10.8	10.0	10.4	---	---	---	---	---	---	5.9	5.5	5.7
13	10.9	10.5	10.7	---	---	---	---	---	---	6.6	5.5	5.9
14	10.9	10.7	10.8	---	---	---	---	---	---	6.8	6.6	6.7
15	11.0	10.6	10.8	---	---	---	---	---	---	6.8	6.6	6.7
16	10.9	10.5	10.7	---	---	---	---	---	---	6.7	6.6	6.6
17	11.0	10.7	10.8	8.4	8.1	8.3	---	---	---	6.7	6.6	6.6
18	11.0	10.7	10.9	9.2	8.4	8.8	---	---	---	6.9	6.6	6.8
19	11.1	10.7	10.9	9.3	9.2	9.3	---	---	---	7.3	6.9	7.2
20	11.0	10.6	10.8	9.5	9.1	9.2	---	---	---	7.6	7.3	7.5
21	10.9	10.3	10.5	9.4	9.2	9.3	---	---	---	7.5	7.4	7.5
22	10.5	9.8	10.1	9.4	9.0	9.2	---	---	---	7.5	7.3	7.4
23	10.5	10.1	10.3	9.1	9.0	9.0	---	---	---	7.4	7.3	7.4
24	10.5	9.7	10.0	9.2	8.9	9.0	---	---	---	7.4	7.2	7.2
25	9.7	9.4	9.6	8.9	8.7	8.8	---	---	---	7.3	6.8	7.2
26	10.2	8.8	9.7	8.9	7.4	8.3	---	---	---	7.6	6.8	7.2
27	10.2	9.9	10.1	7.4	7.2	7.3	---	---	---	7.6	7.3	7.4
28	10.1	9.7	9.9	7.5	7.0	7.3	---	---	---	7.7	7.3	7.5
29	---	---	---	8.4	7.0	7.6	---	---	---	7.8	7.4	7.6
30	---	---	---	9.1	8.4	8.9	---	---	---	7.9	7.5	7.7
31	---	---	---	---	---	---	---	---	---	7.9	7.5	7.8
MONTH	11.1	8.8	10.3	11.0	7.0	9.2	9.1	8.0	8.6	7.9	5.5	7.1

08062500 TRINITY RIVER NEAR ROSSER, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.9	7.5	7.6	6.8	6.5	6.7	6.2	4.1	5.9	6.9	6.1	6.5
2	7.7	7.4	7.4	6.9	6.4	6.6	4.8	3.7	4.3	7.3	6.1	6.7
3	7.8	7.4	7.5	6.7	6.4	6.5	5.3	4.8	5.1	7.5	6.4	6.9
4	7.8	7.5	7.7	6.7	6.6	6.7	5.5	5.2	5.3	7.7	6.4	7.0
5	7.8	7.4	7.6	6.7	6.0	6.5	5.8	5.0	5.6	7.7	6.4	7.0
6	7.7	7.3	7.4	6.0	4.9	5.5	5.9	5.0	5.6	7.3	6.0	6.6
7	7.4	7.2	7.3	5.7	5.2	5.5	6.0	5.9	5.9	7.0	6.0	6.5
8	7.3	7.0	7.1	6.0	5.2	5.6	6.2	5.9	6.0	7.2	6.0	6.5
9	7.1	6.8	6.9	6.1	5.9	6.0	6.3	6.1	6.2	7.3	6.3	6.7
10	6.8	6.6	6.7	6.1	5.9	6.0	6.7	6.2	6.4	6.9	6.1	6.5
11	6.8	5.6	6.2	6.0	5.7	5.9	6.8	6.4	6.6	7.3	6.2	6.7
12	5.9	5.5	5.6	6.0	5.8	5.9	6.8	6.4	6.5	7.2	6.4	6.8
13	6.2	5.9	6.0	6.0	5.7	5.8	6.4	6.1	6.3	6.9	4.2	6.3
14	6.6	6.2	6.4	5.8	5.4	5.5	6.2	5.9	6.1	4.9	3.9	4.7
15	6.7	6.5	6.6	6.0	5.4	5.6	6.4	5.9	6.2	5.6	4.5	5.1
16	6.6	6.5	6.6	6.1	6.0	6.1	6.6	6.0	6.3	6.1	5.6	5.8
17	6.6	6.3	6.5	6.2	6.0	6.1	6.9	6.0	6.5	6.4	6.1	6.2
18	6.3	5.9	6.1	6.2	5.9	6.0	7.1	6.1	6.6	6.5	6.3	6.4
19	6.2	5.9	6.0	6.3	6.2	6.3	7.4	6.2	6.7	6.5	6.4	6.5
20	6.3	5.9	6.0	6.4	6.1	6.2	7.7	6.1	6.8	6.5	5.5	6.0
21	6.3	5.9	6.1	6.6	6.2	6.4	7.0	6.2	6.6	6.4	5.9	6.2
22	6.2	5.9	6.0	6.8	6.5	6.6	6.2	5.9	6.0	6.8	6.4	6.6
23	6.2	5.8	6.0	7.1	6.7	6.9	5.9	5.5	5.7	7.3	6.7	7.0
24	6.3	5.9	6.1	7.0	6.6	6.9	6.3	5.9	6.1	7.5	7.3	7.4
25	6.3	6.0	6.1	6.6	5.3	5.9	6.7	6.1	6.3	7.9	7.5	7.7
26	6.3	5.9	6.1	6.5	5.4	5.9	7.4	6.4	6.8	8.0	7.7	7.8
27	6.2	5.9	6.0	6.8	6.5	6.6	8.2	6.9	7.5	8.0	7.5	7.8
28	6.4	6.1	6.2	7.0	6.1	6.8	8.1	6.9	7.5	7.6	6.7	7.2
29	6.8	6.2	6.4	6.6	6.0	6.2	7.4	6.7	7.1	8.1	7.2	7.5
30	6.9	6.5	6.6	6.9	6.2	6.5	7.3	6.7	7.0	7.6	6.7	7.1
31	---	---	---	6.6	6.2	6.3	7.4	6.7	7.0	---	---	---
MONTH	7.9	5.5	6.6	7.1	4.9	6.2	8.2	3.7	6.3	8.1	3.9	6.7
YEAR	11.4	3.7	8.0									

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 mi upstream from Cedar Creek, and at mile 391.2.

DRAINAGE AREA.--8,538 mi², not including 1,007 mi² upstream from Cedar Creek Reservoir.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Records of gage height collected in this vicinity for period October 1913 to September 1915 are contained in reports of U.S. Army Corps of Engineers, and records collected since October 1915 are contained in reports of the National Weather Service.

REVISED RECORDS.-- WDR TX-89-1: 1988. WDR TX-90-1: 1989.

GAGE.--Water-stage recorder. Datum of gage is 239.21 ft above sea level. Prior to May 3, 1967, at site 0.9 mi upstream at datum 1.28 ft higher.

REMARKS.--No estimated daily discharges. Records fair. There are many diversions above station for municipal supply for the cities of Fort Worth, Dallas, and several smaller towns. Low flows are maintained by sewage effluent from the Dallas-Fort Worth metroplex. There are 62 floodwater-retarding structures with a combined detention capacity of 38,690 acre-ft in the drainage basin above this station. These structures control runoff from 126 mi² above this station. For regulation by upstream reservoirs, see Trinity River near Rosser (station 08062500). Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stages since at least 1908, 49.8 ft Apr. 25, 1942 and 48.3 ft date unknown, 1908 (present site and datum), from records of the National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	718	9950	10000	9310	4200	4830	10900	8960	10100	3800	1050	897
2	717	8440	9200	8570	3000	3380	9620	8280	10100	3650	3220	953
3	700	8010	8610	6650	3990	3100	8770	7600	10300	3570	6020	946
4	717	8350	8290	5680	4510	3170	9420	7670	9840	3680	5360	847
5	738	14100	8030	5520	4410	3640	11700	8710	9050	3650	4070	803
6	721	18700	7820	5840	4280	3180	13500	11000	8460	4500	3550	788
7	735	21200	7630	6560	4180	2090	14200	14300	8040	7030	3380	818
8	910	22700	7510	5840	4080	4370	15100	20200	7820	5720	3400	823
9	5110	23200	7950	4730	3950	5900	15800	39900	7690	3750	3230	829
10	5740	22200	13100	4390	4330	4260	16200	53900	7590	3630	2860	813
11	2530	20300	16600	4210	4230	3280	16800	61300	11200	3490	2410	797
12	1210	19200	18800	4180	4210	2520	16300	59000	13700	3420	2220	795
13	1010	17600	20100	10300	4440	6390	16500	51300	14400	3370	2120	815
14	883	13200	20300	14800	4200	15100	17300	42700	15500	2930	1870	2770
15	807	10600	20300	15800	3990	21200	16600	34000	15600	1680	1450	5600
16	793	12500	24400	14500	3910	28500	15300	25900	14000	2100	1220	3730
17	901	13500	35800	11300	3920	32100	13800	20800	11700	2550	1110	1590
18	2580	15300	35100	9650	4070	32200	12700	18600	9050	2220	1030	1290
19	4760	17800	28900	12600	4120	27800	12300	17800	6550	2100	978	1170
20	9000	18800	22600	13700	4010	22500	12400	17300	5110	1870	947	1620
21	11300	18600	19700	13200	3890	18600	14100	16900	4580	1630	912	3790
22	13000	17700	17400	10700	3170	15800	16300	16500	4340	1520	1270	2600
23	13800	16900	12500	9290	2860	14100	20100	15900	4190	1180	1490	2130
24	15200	16100	9760	8580	3090	13100	20600	15000	4110	1080	1060	1620
25	18400	15400	7840	6670	2050	12500	19100	13700	3920	1650	949	1260
26	21100	14500	6500	6470	1560	12000	17100	12300	3670	2060	893	996
27	21600	13600	5850	9440	2620	12500	15000	11400	3610	1440	890	984
28	20600	12600	6210	12600	3500	12700	13300	11000	3630	1210	892	957
29	19500	11700	9190	13700	---	13300	11000	10700	3660	1120	901	916
30	17800	10800	10900	12000	---	13500	9380	10300	3980	1040	894	871
31	13400	---	10800	7970	---	12600	---	10100	---	1020	903	---
TOTAL	226980	463550	447690	284750	104770	380210	431190	673020	245490	83660	62549	44818
MEAN	7322	15450	14440	9185	3742	12260	14370	21710	8183	2699	2018	1494
MAX	21600	23200	35800	15800	4510	32200	20600	61300	15600	7030	6020	5600
MIN	700	8010	5850	4180	1560	2090	8770	7600	3610	1020	890	788
AC-FT	450200	919500	888000	564800	207800	754100	855300	1335000	486900	165900	124100	88900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1995#, BY WATER YEAR (WY)

MEAN	2740	3985	4549	3447	4913	5892	5613	9872	6811	2652	1404	1219
MAX	11390	20160	24320	20490	20550	20920	16570	47120	26790	11800	6886	3347
(WY)	1974	1975	1992	1992	1992	1992	1990	1990	1989	1982	1982	1974
MIN	417	403	460	415	424	542	798	693	526	394	394	448
(WY)	1976	1967	1967	1967	1967	1967	1978	1971	1972	1972	1967	1972

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1965 - 1995#	
ANNUAL TOTAL	2514832		3448677			
ANNUAL MEAN	6890		9448		4421	
HIGHEST ANNUAL MEAN					11400	1992
LOWEST ANNUAL MEAN					854	1978
HIGHEST DAILY MEAN	35800	Dec 17	61300	May 11	94100	May 7 1990
LOWEST DAILY MEAN	700	Oct 3	700	Oct 3	312	Aug 9 1972
ANNUAL SEVEN-DAY MINIMUM	721	Oct 1	721	Oct 1	326	Jul 7 1972
INSTANTANEOUS PEAK FLOW			61800	May 11	94500	May 7 1990
INSTANTANEOUS PEAK STAGE			43.26	May 11	48.11	May 7 1990
ANNUAL RUNOFF (AC-FT)	4988000		6840000		3203000	
10 PERCENT EXCEEDS	17700		19300		12000	
50 PERCENT EXCEEDS	4090		7630		1280	
90 PERCENT EXCEEDS	853		955		494	

Period of regulated streamflow.

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: May 1966 to June, 1994(discontinued).
Pesticide analyses: November 1977 to June 1982. Sediment analyses: November 1977 to June, 1994(discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1967 to September 1981, May 1986 to current year.
PH: September 1967 to October 1969, May 1986 to current year.
WATER TEMPERATURE: September 1967 to September 1981, May 1986 to current year.
DISSOLVED OXYGEN: September 1967 to October 1969, May 1986 to current year.

INSTRUMENTATION.--From April 1967 to October 1969, a four-parameter water-quality monitor continuously recorded specific conductance, pH, water temperature, and dissolved oxygen. Since May 1986, a four-parameter water-quality monitor continuously records specific conductance, pH, water temperature, and dissolved oxygen at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 1,000 micromsiemens Dec. 28, 1977; minimum daily, 170 micromsiemens May 4, 1990.
pH : Maximum, 8.8 units July 28, 1988, Oct. 17, 1994; minimum, 5.7 units Aug. 13, 1988.
WATER TEMPERATURE: Maximum daily, 34.0°C July 17, 1979, July 9, 13, 1980; minimum daily, 2.5°C Dec. 24, 1989.
DISSOLVED OXYGEN: Maximum, 15.6 mg/L Sept. 15, 1988; minimum, 0.0 mg/L May 3, 1987.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 772 microsiemens Aug. 25 and 26; minimum, 195 microsiemens May 8.
pH: Maximum, 8.8 units Oct. 17; minimum, 7.2 units July 9.
WATER TEMPERATURE: Maximum, 33.0°C July 23; minimum, 8.5°C Jan. 5,6, and 7.
DISSOLVED OXYGEN: Maximum, 11.6 mg/L Jan. 7; minimum, 2.8 mg/L Sep. 15.

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	226980	321	181	111000	18	10800	32	19600	120
NOV.	1994	463550	318	179	224000	17	20800	31	39100	120
DEC.	1994	447690	293	165	200000	15	17600	28	34300	110
JAN.	1995	284750	327	184	141000	17	13500	32	24900	120
FEB.	1995	104770	451	253	71700	30	8560	48	13600	150
MAR.	1995	380210	337	190	195000	19	19200	34	34600	120
APR.	1995	431190	342	192	224000	19	21700	34	39600	120
MAY	1995	673020	311	175	318000	16	30000	31	55800	110
JUNE	1995	245490	371	208	138000	21	14200	38	24900	130
JULY	1995	83660	451	254	57300	31	7080	49	11000	140
AUG.	1995	62549	522	293	49500	41	6860	59	9880	150
SEPT	1995	44818	552	310	37500	45	5460	63	7630	160
TOTAL		3448677	**	**	1766000	**	176000	**	315000	**
WTD.AVG.		9448	337	190	**	19	**	34	**	120

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e700	337	333	336	364	361	363	362	344	355
2	---	---	e700	335	329	332	363	357	359	404	341	354
3	---	---	e700	334	327	330	358	353	356	420	404	415
4	---	---	e710	352	331	338	360	352	356	418	408	412
5	---	---	e710	338	242	276	361	353	357	425	407	415
6	---	---	e720	244	236	241	353	349	352	432	422	427
7	---	---	e700	256	241	248	350	346	348	422	365	377
8	---	---	e700	---	---	e250	348	346	347	406	364	380
9	690	300	570	---	---	e250	347	328	345	437	406	423
10	367	331	352	---	---	e270	328	268	295	439	432	435
11	363	358	359	---	---	e280	268	260	263	435	424	429
12	384	358	369	---	---	e280	282	261	274	426	392	420
13	416	384	398	---	---	e280	288	282	285	392	205	282
14	---	---	e410	---	---	e300	310	286	293	242	207	232
15	---	---	e520	---	---	e310	310	267	286	249	242	247
16	---	---	e580	---	---	e320	267	208	232	301	249	272
17	---	---	e600	---	---	e340	212	201	204	331	301	308
18	637	579	615	315	300	307	233	212	223	351	301	333
19	637	317	449	356	315	337	277	233	253	307	279	293
20	397	291	324	376	356	369	292	277	285	297	294	295
21	291	266	278	378	376	377	295	292	293	317	296	309
22	289	270	281	379	376	378	338	295	305	328	291	312
23	277	223	238	376	344	358	350	338	345	357	291	326
24	253	235	246	379	367	376	356	349	352	362	348	355
25	267	253	260	379	377	378	371	354	359	420	352	396
26	283	267	274	379	376	378	381	371	377	420	335	356
27	302	283	293	376	371	374	378	372	375	345	312	330
28	306	302	304	371	367	370	375	317	354	324	265	293
29	322	306	313	368	365	366	356	317	327	293	281	289
30	343	322	331	365	363	364	366	348	357	340	290	315
31	342	337	339	---	---	---	367	355	361	427	340	381
MONTH	690	223	463	379	236	324	381	201	319	439	205	347

e Estimated

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	457	426	431	391	356	362	394	382	387	389	348	362
2	536	457	509	468	391	450	388	382	385	407	386	398
3	556	454	535	455	445	451	391	386	388	412	394	404
4	454	431	438	481	455	472	389	350	371	407	351	387
5	431	424	427	487	364	445	357	312	326	409	351	384
6	424	421	422	521	366	429	330	305	320	398	290	332
7	428	423	425	544	328	482	326	310	315	290	227	259
8	427	420	425	576	347	485	331	313	316	232	195	208
9	421	418	420	560	386	433	355	331	343	208	196	200
10	438	411	417	446	405	431	375	355	367	210	203	206
11	456	417	442	---	---	e440	364	342	354	233	205	217
12	422	406	410	461	439	449	358	320	340	257	233	242
13	473	422	456	468	236	349	333	320	326	290	257	272
14	448	426	433	288	200	251	369	333	347	322	290	305
15	448	444	446	210	198	203	381	369	377	391	322	339
16	444	436	439	246	210	226	385	381	383	403	347	371
17	446	435	440	278	246	265	385	380	383	433	370	405
18	457	439	446	315	278	297	385	346	366	448	378	411
19	461	455	458	350	315	333	370	341	351	403	384	392
20	458	450	456	357	350	355	386	311	347	403	398	401
21	452	439	447	381	356	374	311	257	274	404	401	402
22	447	435	439	384	381	383	273	268	271	402	395	399
23	503	447	481	385	382	384	298	264	274	395	389	392
24	503	446	465	393	384	388	329	298	318	392	387	390
25	462	456	457	394	392	393	339	329	334	398	390	393
26	586	462	516	395	375	393	350	339	344	404	395	399
27	621	586	610	375	353	361	355	350	353	404	397	399
28	610	361	472	361	342	353	354	347	351	402	393	397
29	---	---	---	364	336	347	384	346	374	398	393	395
30	---	---	---	396	364	380	395	373	389	398	390	395
31	---	---	---	400	394	398	---	---	---	404	390	397
MONTH	621	361	456	576	198	379	395	257	346	448	195	350

e Estimated

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	403	393	397	444	431	437	---	---	e720	721	713	718
2	413	396	402	431	396	410	---	---	e700	721	710	713
3	417	399	409	398	381	390	673	367	476	720	711	715
4	405	391	393	391	379	384	376	342	355	725	712	717
5	394	391	392	420	391	409	396	364	382	737	725	734
6	392	386	390	418	393	410	419	366	388	741	735	738
7	388	385	386	492	359	412	432	401	418	735	678	704
8	386	382	383	392	366	381	504	412	455	723	679	699
9	386	382	384	404	382	397	513	501	508	732	723	729
10	384	377	380	402	354	372	501	495	498	740	729	735
11	379	290	330	368	352	358	508	494	499	738	710	723
12	319	271	296	391	357	372	533	508	519	725	707	714
13	309	277	294	385	380	383	551	533	545	722	704	710
14	332	309	319	393	385	390	560	544	554	719	689	707
15	356	332	346	424	390	406	571	555	563	689	286	420
16	377	352	365	572	424	467	---	---	e570	452	339	376
17	377	370	374	628	445	524	---	---	e580	428	386	407
18	384	366	372	474	446	463	---	---	e600	463	428	445
19	410	384	399	511	468	487	---	---	e610	499	463	480
20	411	406	408	511	485	494	---	---	e620	549	499	526
21	417	405	410	514	491	499	---	---	e640	583	549	568
22	419	416	417	570	514	551	684	649	658	549	478	510
23	419	414	417	---	---	e570	705	684	696	486	460	465
24	416	400	410	---	---	e590	724	705	712	481	466	476
25	416	409	412	---	---	e630	772	724	746	481	423	449
26	414	401	408	705	669	685	772	569	669	515	467	496
27	402	383	394	738	681	701	630	578	615	559	515	535
28	397	385	390	---	---	e710	626	602	612	589	546	566
29	408	397	401	---	---	e720	652	626	633	682	589	640
30	434	400	408	---	---	e730	692	652	671	691	674	684
31	---	---	---	---	---	e750	717	692	705	---	---	---
MONTH	434	271	383	738	352	499	772	342	578	741	286	603
YEAR	772	195	420									

e Estimated

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.8	7.7	7.8	7.9	7.8	7.8	8.1	8.1	8.1
2	---	---	---	7.9	7.8	7.9	7.9	7.8	7.9	8.2	8.1	8.1
3	---	---	---	7.9	7.8	7.9	7.9	7.7	7.8	8.2	8.1	8.2
4	---	---	---	7.8	7.8	7.8	7.8	7.7	7.7	8.1	8.1	8.1
5	---	---	---	7.8	7.7	7.7	7.8	7.7	7.8	8.1	8.1	8.1
6	---	---	---	7.8	7.7	7.8	7.8	7.8	7.8	8.1	8.0	8.1
7	---	---	---	7.7	7.6	7.6	7.8	7.8	7.8	8.1	8.0	8.1
8	---	---	---	---	---	---	7.8	7.8	7.8	8.1	8.0	8.1
9	7.8	7.4	7.6	---	---	---	7.9	7.8	7.8	8.0	7.9	8.0
10	7.7	7.7	7.7	---	---	---	7.9	7.7	7.8	8.1	7.8	8.0
11	7.8	7.7	7.7	---	---	---	7.7	7.7	7.7	8.2	8.1	8.2
12	7.9	7.8	7.8	---	---	---	7.7	7.7	7.7	8.2	8.1	8.1
13	8.0	7.6	7.9	---	---	---	7.8	7.7	7.7	8.3	8.1	8.2
14	---	---	---	---	---	---	8.1	7.8	8.0	8.3	8.2	8.3
15	---	---	---	---	---	---	8.2	8.1	8.1	8.3	8.2	8.3
16	---	---	---	---	---	---	8.2	8.1	8.2	8.4	8.3	8.3
17	8.8	8.4	8.6	---	---	---	8.4	8.2	8.3	8.4	8.3	8.4
18	8.4	8.1	8.2	7.3	7.3	7.3	8.3	8.2	8.2	8.4	8.3	8.3
19	8.1	7.8	7.9	7.4	7.3	7.3	8.2	8.2	8.2	8.3	8.2	8.2
20	7.9	7.7	7.9	7.4	7.3	7.3	8.4	8.2	8.3	8.3	8.1	8.2
21	7.9	7.9	7.9	7.4	7.4	7.4	8.4	8.3	8.3	8.2	8.1	8.1
22	7.9	7.8	7.8	7.5	7.4	7.5	8.4	8.3	8.3	8.1	8.1	8.1
23	7.9	7.8	7.9	7.5	7.5	7.5	8.4	8.3	8.4	8.1	8.0	8.1
24	7.8	7.7	7.8	7.6	7.5	7.6	8.4	8.3	8.4	8.0	8.0	8.0
25	7.7	7.7	7.7	7.7	7.6	7.7	8.4	8.4	8.4	8.0	7.9	7.9
26	7.7	7.6	7.7	7.8	7.6	7.7	8.4	8.3	8.3	8.0	7.8	7.9
27	7.7	7.6	7.7	7.7	7.7	7.7	8.3	8.3	8.3	7.8	7.7	7.8
28	7.7	7.7	7.7	7.8	7.7	7.7	8.4	8.3	8.3	7.7	7.6	7.6
29	7.7	7.7	7.7	7.8	7.8	7.8	8.3	8.2	8.2	7.6	7.5	7.6
30	7.7	7.6	7.7	7.8	7.8	7.8	8.2	8.2	8.2	7.7	7.6	7.7
31	7.7	7.7	7.7	---	---	---	8.2	8.1	8.2	8.1	7.7	7.9
MONTH	8.8	7.4	7.8	7.9	7.3	7.6	8.4	7.7	8.1	8.4	7.5	8.1

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.5	24.5	25.0	28.0	27.5	27.5	---	---	---	31.5	30.0	30.5
2	25.5	25.0	25.0	28.0	27.0	27.5	29.0	28.5	29.0	31.5	30.0	31.0
3	26.0	25.0	25.5	28.5	27.5	28.0	28.5	27.5	28.0	31.5	30.5	31.0
4	26.5	25.5	26.0	28.5	27.5	28.0	28.5	27.5	28.0	31.0	30.5	31.0
5	26.5	26.0	26.0	28.5	27.5	27.5	30.0	28.5	29.0	30.5	29.5	30.0
6	26.5	25.5	26.0	28.0	27.0	27.5	30.5	29.5	30.0	30.5	29.5	30.0
7	26.5	25.5	26.0	27.5	26.0	27.0	31.0	29.5	30.0	30.0	29.5	29.5
8	27.0	26.0	26.5	28.5	27.0	27.5	31.0	30.0	30.5	30.0	28.5	29.5
9	27.0	26.0	26.5	30.0	28.0	28.5	31.0	30.0	30.5	29.0	28.0	28.5
10	27.0	26.5	27.0	30.0	29.0	29.5	31.0	30.0	30.5	28.5	27.5	28.0
11	26.5	25.5	25.5	30.5	29.0	30.0	31.5	30.0	31.0	27.5	26.5	27.0
12	25.5	24.0	24.5	31.0	29.5	30.5	31.5	30.5	31.0	27.5	26.5	27.0
13	25.0	24.0	24.5	31.0	30.0	30.5	31.5	30.5	31.0	27.5	26.0	27.0
14	25.5	24.5	25.0	31.0	30.0	30.5	31.0	30.5	31.0	27.5	27.0	27.0
15	26.0	25.0	25.5	30.5	30.0	30.0	31.5	30.0	30.5	27.0	24.5	25.5
16	26.5	26.0	26.0	31.0	30.0	30.0	31.5	30.0	30.5	26.5	25.5	26.0
17	26.5	26.0	26.5	30.5	30.0	30.0	32.0	28.0	30.0	27.0	26.5	26.5
18	27.0	26.5	26.5	30.5	29.5	30.0	---	---	---	27.5	26.5	27.0
19	27.5	26.5	27.0	31.0	29.5	30.0	---	---	---	28.0	26.5	27.0
20	28.0	27.0	27.5	31.0	30.0	30.5	---	---	---	27.5	27.0	27.0
21	28.0	27.0	27.5	31.5	30.0	30.5	---	---	---	27.0	25.5	26.5
22	28.5	27.5	28.0	32.0	30.0	31.0	32.0	31.0	31.5	25.5	23.5	24.0
23	29.0	28.0	28.5	33.0	28.5	30.5	32.0	31.0	31.5	23.5	22.0	22.5
24	29.0	28.0	28.5	---	---	---	32.0	30.5	31.0	22.0	21.0	21.5
25	29.0	28.0	28.5	---	---	---	31.5	30.5	31.0	21.5	20.5	21.0
26	29.0	27.5	28.5	31.5	30.5	31.0	31.5	30.5	31.0	22.0	20.5	21.0
27	28.5	27.5	28.0	32.0	30.5	31.5	32.0	30.5	31.0	23.0	21.5	22.0
28	29.0	27.5	28.5	32.5	29.5	31.0	32.0	30.5	31.0	24.5	22.5	23.5
29	28.5	27.5	27.5	---	---	---	32.0	31.0	31.5	25.5	24.0	25.0
30	28.0	26.5	27.5	---	---	---	32.0	31.0	31.0	26.0	25.0	25.5
31	---	---	---	---	---	---	31.5	30.5	31.0	---	---	---
MONTH	29.0	24.0	26.5	33.0	26.0	29.5	32.0	27.5	30.5	31.5	20.5	26.5
YEAR	33.0	8.5	20.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	8.2	7.8	8.0	9.7	9.4	9.6	10.5	10.3	10.4
2	---	---	---	8.4	8.1	8.3	9.8	9.7	9.7	10.7	10.5	10.6
3	---	---	---	8.4	8.4	8.4	9.7	9.6	9.7	10.9	10.4	10.7
4	---	---	---	8.4	7.8	8.2	9.6	9.4	9.5	11.2	10.9	11.1
5	---	---	---	8.1	7.6	7.9	9.4	9.2	9.3	11.4	11.1	11.3
6	---	---	---	7.9	7.5	7.7	9.3	9.1	9.2	11.5	11.3	11.4
7	---	---	---	7.5	7.1	7.3	9.2	9.1	9.1	11.6	11.4	11.5
8	---	---	---	---	---	---	9.1	9.0	9.1	11.5	11.3	11.4
9	---	---	---	---	---	---	9.5	9.1	9.3	11.3	11.1	11.3
10	---	---	---	---	---	---	10.1	9.5	9.8	11.2	10.8	11.0
11	---	---	---	---	---	---	10.2	10.1	10.1	10.8	10.3	10.6
12	---	---	---	---	---	---	10.2	10.1	10.2	10.3	9.6	10.0
13	---	---	---	---	---	---	10.2	10.1	10.2	10.2	9.5	9.9
14	9.5	6.6	7.9	---	---	---	10.2	9.6	10.0	10.0	9.8	9.9
15	9.9	8.4	9.2	---	---	---	10.2	9.9	10.1	10.2	10.0	10.1
16	8.8	7.0	8.2	---	---	---	10.3	10.1	10.2	10.3	10.1	10.2
17	7.5	7.0	7.3	---	---	---	10.4	10.1	10.3	10.5	10.2	10.4
18	7.7	6.9	7.4	7.8	7.5	7.6	10.1	9.8	9.9	10.3	10.0	10.2
19	6.9	5.7	6.3	7.5	7.3	7.4	9.8	9.5	9.7	10.6	10.3	10.5
20	6.2	5.7	5.8	7.6	7.4	7.5	9.8	9.5	9.7	10.7	10.5	10.6
21	5.9	5.7	5.8	7.9	7.6	7.7	10.1	9.8	10.0	10.6	10.5	10.6
22	5.9	5.6	5.8	8.2	7.8	8.0	10.3	9.9	10.1	10.8	10.5	10.6
23	5.7	5.2	5.5	8.5	8.2	8.3	10.3	9.9	10.1	10.9	10.8	10.8
24	5.7	5.2	5.5	8.7	8.4	8.5	10.4	10.3	10.4	11.1	10.8	10.9
25	5.6	5.2	5.4	8.9	8.7	8.8	10.5	10.4	10.5	11.0	10.8	10.9
26	6.1	5.6	5.8	9.0	8.9	8.9	10.6	10.4	10.5	11.0	10.7	10.9
27	6.2	6.0	6.1	9.0	8.9	8.9	10.6	10.5	10.6	10.7	10.1	10.4
28	6.6	6.2	6.4	8.9	8.9	8.9	10.7	10.5	10.6	10.1	9.6	9.9
29	7.0	6.6	6.8	9.1	8.9	9.0	10.6	10.4	10.5	10.2	9.8	10.0
30	7.2	6.9	6.9	9.4	9.1	9.3	10.4	10.2	10.2	10.4	10.0	10.2
31	7.8	7.2	7.5	---	---	---	10.4	10.2	10.3	10.7	10.3	10.5
MONTH	9.9	5.2	6.6	9.4	7.1	8.2	10.7	9.0	10.0	11.6	9.5	10.6

08062700 TRINITY RIVER AT TRINIDAD, TX--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.4	10.0	10.2	10.4	10.1	10.3	9.1	9.0	9.1	8.2	7.7	7.9
2	10.0	9.8	9.9	10.3	9.8	10.1	9.1	8.9	9.0	8.0	7.2	7.7
3	9.9	9.4	9.7	10.8	10.3	10.6	9.0	8.9	9.0	8.4	7.7	8.2
4	10.1	9.9	10.0	11.0	10.6	10.8	9.1	8.8	9.0	9.0	8.4	8.5
5	10.1	9.9	10.0	11.1	10.7	10.9	8.9	8.7	8.8	8.7	8.0	8.3
6	10.1	10.0	10.0	11.0	10.4	10.8	8.8	8.3	8.6	8.3	8.0	8.2
7	10.2	10.0	10.1	11.1	10.3	10.6	8.3	8.0	8.1	8.1	6.8	7.5
8	10.4	10.1	10.2	11.1	9.7	10.7	8.1	7.7	7.9	8.2	6.8	7.7
9	10.5	10.2	10.4	10.2	8.7	9.4	7.7	7.4	7.6	7.9	7.3	7.6
10	10.5	10.1	10.3	10.4	10.2	10.3	7.7	7.4	7.5	7.3	6.8	7.0
11	10.2	10.1	10.1	10.6	10.4	10.5	8.7	7.6	8.3	7.0	6.1	6.6
12	10.3	10.1	10.2	10.6	10.2	10.5	8.6	8.2	8.4	6.2	5.6	5.9
13	10.4	10.1	10.2	10.6	9.6	10.0	8.5	8.3	8.4	5.7	5.6	5.6
14	10.5	10.4	10.4	10.4	9.7	10.0	8.6	8.2	8.4	5.6	5.2	5.5
15	10.7	10.3	10.5	10.4	9.4	9.9	8.7	8.3	8.5	5.6	5.2	5.5
16	10.7	10.4	10.6	9.4	8.6	9.0	8.6	8.3	8.4	6.1	5.6	5.8
17	10.7	10.4	10.5	8.6	8.2	8.3	8.5	8.3	8.4	6.3	5.9	6.1
18	10.9	10.4	10.6	8.2	7.9	8.0	8.9	8.5	8.7	7.0	6.3	6.5
19	10.8	10.5	10.6	8.1	7.8	8.0	8.9	8.5	8.7	7.6	6.9	7.2
20	10.8	10.5	10.6	8.6	8.1	8.3	8.9	8.5	8.7	8.0	7.4	7.6
21	10.7	10.4	10.6	8.6	8.2	8.4	8.7	8.0	8.4	8.4	7.8	8.0
22	10.6	10.1	10.4	8.8	8.5	8.6	8.0	7.7	7.8	8.5	7.9	8.2
23	10.2	9.8	10.0	8.8	8.7	8.7	8.6	7.9	8.3	8.4	7.9	8.1
24	10.2	9.6	9.9	8.8	8.5	8.6	8.7	8.4	8.5	8.3	7.8	8.0
25	10.2	9.7	9.9	8.8	8.6	8.7	9.2	8.6	8.8	7.9	7.7	7.8
26	9.9	9.2	9.6	8.8	8.6	8.7	9.3	8.9	9.1	7.9	7.8	7.9
27	9.2	9.0	9.1	9.0	7.7	8.5	9.3	9.0	9.1	---	---	---
28	10.1	8.8	9.5	7.8	7.4	7.6	9.3	9.1	9.2	---	---	---
29	---	---	---	8.0	7.8	7.9	9.1	8.7	8.8	---	---	---
30	---	---	---	8.3	7.8	7.9	8.7	8.2	8.6	---	---	---
31	---	---	---	9.0	8.3	8.6	---	---	---	---	---	---
MONTH	10.9	8.8	10.1	11.1	7.4	9.3	9.3	7.4	8.5	9.0	5.2	7.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	6.0	5.7	5.9	8.8	7.6	8.3	7.0	5.8	6.4
2	---	---	---	6.1	5.9	6.1	8.1	6.0	6.9	7.0	5.6	6.3
3	---	---	---	6.3	5.9	6.1	6.0	4.4	4.9	6.3	4.9	5.5
4	---	---	---	6.9	6.2	6.5	6.3	5.4	5.9	5.0	3.9	4.5
5	---	---	---	8.0	6.9	7.4	6.6	6.2	6.4	5.5	4.1	4.8
6	6.9	6.7	6.8	---	---	---	6.9	6.5	6.7	5.3	4.3	4.8
7	6.8	6.7	6.7	---	---	---	7.0	6.6	6.8	5.4	4.0	4.8
8	6.7	6.7	6.7	---	---	---	7.5	7.0	7.3	5.1	4.3	4.6
9	6.7	6.6	6.7	---	---	---	7.8	7.5	7.6	5.6	4.8	5.2
10	6.7	6.6	6.6	---	---	---	7.9	7.7	7.8	5.8	5.1	5.4
11	6.7	6.5	6.6	---	---	---	7.9	7.7	7.8	5.7	5.0	5.4
12	6.7	5.7	6.1	---	---	---	7.9	7.6	7.8	5.7	5.1	5.4
13	6.0	5.7	5.8	5.8	5.6	5.7	7.8	7.5	7.7	5.6	5.0	5.3
14	6.2	5.9	6.0	6.0	5.7	5.9	7.7	7.2	7.5	5.5	4.2	5.1
15	6.4	6.1	6.2	5.9	5.5	5.7	7.6	6.9	7.3	4.2	2.8	3.4
16	6.4	6.2	6.3	6.0	5.5	5.9	7.6	7.0	7.3	3.9	3.0	3.3
17	6.4	6.0	6.2	6.2	5.8	6.0	9.0	6.9	7.6	4.4	3.9	4.1
18	6.1	5.6	5.8	6.1	5.8	5.9	---	---	---	4.3	3.8	4.1
19	5.6	5.2	5.4	6.0	5.5	5.9	---	---	---	4.8	4.1	4.4
20	5.3	5.0	5.1	5.5	5.3	5.4	---	---	---	5.0	4.7	4.8
21	5.4	5.1	5.3	5.7	4.8	5.2	---	---	---	4.9	3.2	4.1
22	5.5	5.3	5.4	5.3	3.9	4.5	---	---	---	4.5	3.1	3.9
23	5.5	5.2	5.3	6.2	4.4	5.1	8.0	7.4	7.7	5.0	4.5	4.9
24	5.5	5.2	5.4	6.5	5.7	6.0	7.8	7.3	7.5	5.3	4.6	4.9
25	5.5	5.1	5.4	6.4	5.5	5.8	7.8	7.1	7.4	---	---	---
26	5.6	5.2	5.4	6.0	5.8	5.9	7.5	6.9	7.1	---	---	---
27	5.7	5.4	5.6	6.0	5.8	5.9	7.9	7.2	7.5	---	---	---
28	5.8	5.6	5.7	7.0	5.9	6.1	8.1	7.2	7.6	---	---	---
29	5.8	5.5	5.6	8.8	6.8	7.4	8.4	7.4	7.9	8.3	7.5	7.9
30	5.9	5.7	5.8	9.4	6.8	8.0	8.4	7.0	7.7	8.2	7.5	7.9
31	---	---	---	8.6	7.8	8.3	7.6	6.1	6.9	---	---	---
MONTH	6.9	5.0	5.9	9.4	3.9	6.1	9.0	4.4	7.3	8.3	2.8	5.0
YEAR	11.6	2.8	8.1									

TRINITY RIVER BASIN
08063010 CEDAR CREEK RESERVOIR NEAR TRINIDAD, TX

LOCATION.--Lat 32°14'35", long 96°08'26", Henderson County, Hydrologic Unit 12030107, inside pumphouse on lower level, 1,000 ft north of spillway, 5.5 mi upstream from Joe B. Hogsett Dam on Cedar Creek, and 8.0 mi northwest of Trinidad.

DRAINAGE AREA.--1,007 square miles.

PERIOD OF RECORD.--January 1965 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1969 to September 1985.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to May 15, 1972, at unfinished pumphouse at same site and datum. May 16, 1972 to Sept. 8, 1975, at site 0.25 mi north and upstream from pumphouse at same datum.

REMARKS.--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 mi long. Deliberate impoundment began July 2, 1965, and the dam was completed in February 1966. The spillway is 474 ft long and has eight 40- by 24-foot radial gates and two automatically operated 40- by 8.5-foot 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 County Water Control and Improvement District No. 1 and was built for municipal and industrial supply and for recreational purposes. The area and capacity tables were based on a survey during the period 1940-58. 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 Mabank. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	340.0	--
Top of radial gates	325.0	785,100
Top of automatic gates	322.5	696,400
Top of conservation pool	322.0	679,200
Crest of spillway (automatic gates)	314.0	441,000
Crest of spillway (radial gates)	302.0	197,800
Lowest gated outlet (invert)	263.5	430

COOPERATION.--Records of diversions provided by the Tarrant County Water Control and Improvement District No. 1. The area and capacity tables were provided by Freese and Nichols, Consulting Engineers, for Tarrant County Water Control and Improvement District No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 722,000 acre-ft June 4, 1973 (elevation, 323.24 ft); minimum since first appreciable storage in 1966, 332,900 acre-ft Mar. 19, 1967 (elevation, 309.42 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 714,600 acre-ft May 8 at 1500 hours (elevation, 323.03 ft); minimum contents, 618,700 acre-ft Oct. 7 (elevation, 320.15 ft).

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

309.0	323,800	322.0	679,200
315.0	467,300	323.0	713,500
320.0	613,800	324.0	748,800

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	621900	675900	674900	680600	679600	678600	678200	678200	678200	670600	658600	638600
2	622200	675900	676900	678200	679200	679900	677600	677200	677600	668300	658000	637700
3	621600	676900	676900	680600	680300	680300	677200	677900	676200	666600	658000	636700
4	621200	681600	676900	679600	679200	680300	684700	678600	676600	665000	657600	634800
5	620300	706000	677200	678200	679600	679600	685700	684700	675900	668900	657000	634400
6	619000	705300	677600	682000	679600	678600	683000	689900	674900	669600	656000	633500
7	624100	700500	678200	678200	680600	678600	680900	694000	674600	670600	654300	633100
8	626100	693300	679600	678600	679200	676200	678600	712200	672900	669900	654000	632800
9	626100	689200	685700	678600	678200	676200	677900	710800	673300	669900	653700	631200
10	626100	685700	689900	678600	679600	676200	682000	700200	678900	669300	652700	629900
11	625100	683700	691600	679600	679200	675900	679200	690200	682700	668600	652000	629300
12	624100	679600	692900	685700	678600	676200	681300	685700	681300	667600	651300	629300
13	624800	677900	687800	694700	678900	701200	680900	684000	680300	666600	650300	629600
14	624500	679200	685700	696000	678200	707000	678600	682300	678600	665300	649700	629000
15	624100	679200	700200	691600	680600	697800	679200	680600	677900	666300	647700	628300
16	625700	678200	710400	686100	680300	691600	679900	679200	677900	666300	647000	627700
17	627000	680600	699100	683300	679200	685700	677200	680900	677200	665300	646400	628000
18	628000	678600	691600	690200	678900	683000	679200	679600	676600	665600	646400	628000
19	628300	678600	688100	688500	679200	680300	682000	677900	676600	664600	646400	631200
20	633800	678900	684700	686400	678900	678600	686800	677600	675900	663000	646400	631200
21	654700	679600	679600	683300	678900	678200	688500	677600	675600	662300	644700	634400
22	671600	681300	676900	682300	678600	679600	694000	676200	675200	660600	644400	631200
23	683700	677200	677600	679900	678600	680600	691600	676600	673900	660300	642800	629900
24	688500	677600	677900	678200	679200	680300	689900	677900	673600	659600	642800	629600
25	688100	677600	678600	679600	678200	679900	687500	679200	674900	659300	642500	629000
26	687100	675900	678600	682000	680300	680300	685100	676600	673900	658600	642200	628000
27	685100	677600	679600	685400	679900	677900	681600	677600	673600	657600	641200	627400
28	682300	676900	681300	687500	679900	678200	677600	677900	670900	657000	640600	627400
29	679200	677200	681600	682300	---	678200	678600	677600	670600	656300	639300	625400
30	677200	676200	682700	678600	---	678600	677900	678600	672300	654000	638900	626400
31	677900	---	682300	678200	---	678200	---	676600	---	659000	638600	---
MAX	688500	706000	710400	696000	680600	707000	694000	712200	682700	670600	658600	638600
MIN	619000	675900	674900	678200	678200	675900	677200	676200	670600	654000	638600	625400
(+)	321.96	321.91	322.09	321.97	322.02	321.97	321.96	321.92	321.79	321.39	320.77	320.39
(@)	+55700	-1700	+6100	-4100	+1700	-1700	-300	-1300	-4300	-13300	-20400	-12200

CAL YR 1994 MAX 713500 MIN 619000 (@) +7100
WTR YR 1995 MAX 712200 MIN 619000 (@) +4200

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

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 mi².

PERIOD OF RECORD.--August 1962 to current year. Prior to October 1970, published as Navarro Mills Reservoir.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 8, 1962, nonrecording gage in low-water channel at same datum.

REMARKS.--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 September 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 September 1976 is based on survey made in February 1956 by U.S. Army Corps of Engineers. Capacity table after Aug. 31, 1976, is based on a sedimentation survey made in September 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 mi² in the Richland Creek drainage basin. An unknown amount of water is diverted for municipal and industrial uses. Satellite telemeter at station. Figures given herein represent total contents. Data regarding dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	457.0	-
Design flood	451.9	329,500
Top of gates (top of flood-control storage pool)	443.0	206,200
Top of conservation pool	424.5	56,960
Crest of spillway	414.0	18,840
Lowest gated outlet (invert)	400.0	1,150

COOPERATION.--Records of elevations and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 183,300 acre-ft May 18, 1968 (elevation, 440.36 ft); minimum since since initial filling in May 1965, 32,490 acre-ft Dec. 28, 1978 (elevation, 418.89 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 115,400 acre-ft May 15 (elevation, 433.49 ft); minimum, 49,300 acre-ft Oct. 16 (elevation, 422.93 ft).

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

420.0	36,660	429.0	82,620	436.0	136,300
423.0	49,590	432.0	103,800	438.0	154,300
426.0	64,810	434.0	119,500	439.0	163,700

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50020	55850	57770	74730	57370	58230	66010	58700	60820	58030	87210	56210
2	49930	55800	57770	71940	57470	58030	63300	57570	59780	57980	89960	56160
3	49830	55900	57770	68910	57370	57720	61130	57270	58900	57830	88440	55950
4	49740	57770	57830	66120	57370	57470	62610	57110	58390	57620	84860	55800
5	49690	64380	57720	64000	57320	57270	63360	57620	58180	57880	81460	55600
6	49550	65360	57770	62660	57270	57320	62980	73060	58340	57830	77910	55550
7	49740	64870	57720	61290	57270	57620	61660	76180	58340	57770	74190	55700
8	49980	62930	57720	59980	57270	57520	60040	101100	58290	57770	70900	55500
9	49780	61130	60240	58750	57220	57420	58230	107000	58230	57620	68010	55350
10	49740	59260	65140	58130	57220	57420	63250	109400	58180	57470	65140	55250
11	49550	58030	65090	58030	57220	57270	82890	111400	63520	57370	62880	55200
12	49450	57370	64490	59110	57220	57220	84460	112900	64270	57270	61500	55100
13	49450	57220	63730	68230	57170	72120	83610	114200	64710	57110	60040	55150
14	49350	57570	64270	68910	57270	84270	81460	115000	64000	57010	59110	55300
15	49450	61500	69020	68460	57320	86670	78530	114700	62660	56910	58130	55250
16	49640	62770	82490	67620	57370	88440	75150	111800	61340	57470	57770	55150
17	49880	62610	86200	66450	57220	89410	71940	108100	60040	57570	57670	55150
18	50260	62190	87690	69020	57170	89820	69470	104200	59160	57570	57570	55050
19	50260	61760	88650	68800	57110	90170	67670	100300	58850	57670	57470	55000
20	51080	61550	89200	67670	57010	90310	73290	96330	58800	57520	57370	54950
21	52590	61190	89540	66290	57060	90510	74670	92480	58800	57420	57220	55250
22	55050	60560	89820	65030	57170	90580	76800	88650	58750	57270	57170	55000
23	55600	60040	89610	63570	57170	90100	77850	85000	58640	57110	57010	54900
24	56050	59420	89060	62030	57370	87960	76180	81260	58700	56960	56960	54810
25	55950	59050	88510	60560	57420	85130	72590	77720	58490	56810	56960	54760
26	55950	59000	87890	59620	58390	82300	69870	74250	58390	56660	56860	54660
27	56000	58700	85930	59050	58590	79290	67120	71360	58290	56560	56760	54610
28	56000	58390	83940	58640	58540	76490	64710	68740	58390	56410	56660	54560
29	55950	58080	82620	58130	---	74010	62510	66230	58180	56210	56560	54460
30	55950	57880	79990	57470	---	71190	60820	64760	58080	56360	56460	54410
31	55950	---	77410	57270	---	68630	---	62610	---	67840	56360	---
MAX	56050	65360	89820	74730	58590	90580	84460	115000	64710	67840	89960	56210
MIN	49350	55800	57720	57270	57010	57220	58230	57110	58080	56210	56360	54410
(+)	424.30	424.68	428.18	424.56	424.81	426.69	425.25	425.59	424.72	426.55	424.38	423.99
(@)	+5880	+1930	+19530	-20140	+1270	+10090	-7810	+1790	-4530	-9760	-11480	-1950

CAL YR 1994 MAX 89820 MIN 49350 (@) +20040
WTR YR 1995 MAX 115000 MIN 49350 (@) +4340

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

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 mi².

PERIOD OF RECORD.--October 1960 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1980 to September 1982.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 367.52 ft above sea level. Nov. 21, 1960, to Sept. 30, 1982, water-stage recorder at same site and at 3.00 ft higher datum. Prior to Nov. 21, 1960, nonrecording gage at same site and datum.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since Mar. 15, 1963, flow has been regulated by Navarro Mills Lake (station 08063050), 1.7 mi upstream. Flow may be slightly affected at times by discharge from the flood-detention pool of one floodwater-retarding structure with a conservation capacity of 297 acre-ft. This structure controls runoff from a 1.28 mi² area below Navarro Mills Lake and above this station. Several observations of water temperature were made during the year. Satellite telemeter at station.

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1961-63).--Maximum discharge, 25,500 ft³/s July 3, 1961 (gage height, 25.50 ft), from rating curve extended above 14,000 ft³/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1895, about 31 ft June 19, 1929, from information by local residents. Floods in 1946 and 1957 reached a stage of about 26 ft, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.28	e2.2	91	1460	78	215	e1110	896	923	6.9	223	.23
2	e.28	e1.6	91	1440	78	214	e1050	615	548	7.0	212	.19
3	e.28	e.90	91	1410	78	212	e1020	351	516	6.9	1300	.19
4	e.28	88	91	1390	78	201	e990	205	288	6.7	2620	.16
5	e.28	568	92	1210	76	196	e970	85	153	7.1	1780	.14
6	e.28	11	89	764	77	144	e960	345	12	7.0	1710	.14
7	e.28	241	96	753	76	88	e960	114	11	6.9	1660	.21
8	1.7	855	96	745	76	83	e960	735	10	6.8	1430	.30
9	e.30	875	157	740	76	78	e950	96	10	6.4	1200	.16
10	e.30	863	488	516	76	76	e400	32	9.7	6.2	1170	.11
11	e.30	621	762	232	76	76	e290	22	27	6.3	969	.09
12	e.30	344	727	234	75	77	e400	13	14	6.2	610	.09
13	e.30	153	720	284	75	603	e1100	12	9.4	5.8	605	.14
14	e.30	e1.4	738	435	75	286	e1250	12	356	3.3	603	.11
15	e.30	e.77	1120	693	75	133	e1300	268	628	2.9	453	.09
16	1.4	94	977	774	75	106	e1350	1380	623	3.5	146	.06
17	3.9	534	128	822	75	99	e1330	1860	617	4.2	13	.05
18	e.50	530	100	951	75	98	e1270	1850	464	2.7	12	.05
19	2.6	533	94	908	75	97	e1110	1840	186	2.6	12	.06
20	16	537	87	873	75	96	e320	1780	8.2	2.3	12	.05
21	83	535	70	853	42	95	92	1750	7.7	2.2	12	.12
22	98	534	67	852	18	95	127	1710	7.7	2.1	12	.15
23	8.4	534	280	843	18	294	668	1670	7.7	2.1	7.6	.09
24	3.2	528	497	832	18	954	1350	1620	7.4	2.1	1.1	.07
25	e2.0	396	491	822	18	1300	1300	1600	7.3	2.1	.64	.06
26	e1.9	285	488	812	34	1280	1280	1560	7.2	1.8	.94	.05
27	e1.7	288	1040	709	137	1270	1250	1450	7.2	1.6	.82	.05
28	e1.5	288	1560	445	217	1250	1120	1110	6.6	1.5	.60	.06
29	e1.3	287	1590	448	---	1230	926	1090	6.8	1.3	.52	.06
30	e1.2	210	1520	441	---	1210	911	1080	6.7	1.4	.44	.05
31	e1.1	---	1480	250	---	1190	---	1060	---	110	.32	---
TOTAL	233.46	10738.87	15918	23941	2022	13346	28114	28211	5485.6	235.9	16776.98	3.38
MEAN	7.53	358	513	772	72.2	431	937	910	183	7.61	541	.11
MAX	98	875	1590	1460	217	1300	1350	1860	923	110	2620	.30
MIN	.28	.77	67	232	18	76	92	12	6.6	1.3	.32	.05
AC-FT	463	21300	31570	47490	4010	26470	55760	55960	10880	468	33280	6.7

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995#, BY WATER YEAR (WY)

MEAN	46.3	147	153	163	175	200	217	306	365	113	31.3	23.4
MAX	400	1366	1050	1054	1090	971	992	980	1356	773	541	269
(WY)	1974	1968	1975	1992	1992	1970	1992	1980	1975	1968	1995	1974
MIN	.000	.000	.000	.058	.066	.22	.023	.019	.000	.000	.068	.068
(WY)	1964	1964	1964	1964	1964	1971	1964	1964	1964	1970	1981	1968

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995#	
ANNUAL TOTAL	71266.81		145026.19			
ANNUAL MEAN	195		397		161	
HIGHEST ANNUAL MEAN					561	1968
LOWEST ANNUAL MEAN					.20	1964
HIGHEST DAILY MEAN	1590	Dec 29	2620	Aug 4	2620	Aug 4 1995
LOWEST DAILY MEAN	.19	Aug 9	.05	Sep 17	.00	Oct 1 1963
ANNUAL SEVEN-DAY MINIMUM	.19	Aug 9	.06	Sep 24	.00	Oct 1 1963
INSTANTANEOUS PEAK FLOW			3700	Aug 4	3850	Nov 24 1974
INSTANTANEOUS PEAK STAGE			22.16	Aug 4	22.85	Nov 24 1974
ANNUAL RUNOFF (AC-FT)	141400		287700		116800	
10 PERCENT EXCEEDS	772		1260		679	
50 PERCENT EXCEEDS	19		95		2.3	
90 PERCENT EXCEEDS	.25		.29		.03	

e Estimated
Period of regulated streamflow.

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 mi south of Ennis, and 5.6 mi upstream from mouth.

DRAINAGE AREA.--178 mi².

PERIOD OF RECORD.--November 1965 to current year. Prior to October 1970, published as Bardwell Reservoir.

GAGE.--Water-stage recorder. Datum of gage is sea level (U.S. Army Corps of Engineers benchmark). Prior to Apr. 25, 1966, nonrecording gage on intake structure at same datum.

REMARKS.--The lake is formed by a rolled earthfill dam 15,400 ft long, including a 350-foot uncontrolled off-channel concrete-gravity spillway with ogee weir section. Deliberate impoundment began Nov. 20, 1965, and dam was completed Mar. 27, 1966. Controlled low-flow outlet works consists of a 10.0-foot-diameter concrete conduit with two 5.0- by 10.0-foot sluice gates. Lake was built for flood control and water conservation. Capacity table beginning October 1976 is based on a survey completed in 1972. Runoff from 81.4 mi² above Bardwell Lake is modified by Lake Waxahachie, with a capacity of 13,500 acre-ft at spillway elevation. 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 mi² in the Chambers Creek watershed. Satellite telemeter at station. Figures given herein represent total contents. Data regarding the dam and lake are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	460.0	-
Design flood	455.9	-
Crest of spillway (top of flood-control pool)	439.0	137,600
Top of conservation pool	421.0	52,300
Lowest gated outlet (invert)	391.0	690

COOPERATION.--Records of elevation and contents furnished by the U.S. Army Corps of Engineers and reviewed by the U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 112,100 acre-ft May 22, 1990 (elevation, 434.54 ft); minimum since initial filling, 39,720 acre-ft Nov. 10, 1978 (elevation, 417.21 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 83,600 acre-ft May 15 (elevation, 428.73 ft): minimum, 48,400 acre-ft Oct. 14 (elevation, 419.89 ft).

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

419.0	45,390	423.0	59,680	427.0	75,900
420.0	48,780	424.0	63,550	428.0	80,300
421.0	52,290	425.0	67,530	429.0	84,800
422.0	55,920	426.0	71,630		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48880	53830	53620	62260	52900	53150	61330	53870	54600	53180	53910	51900
2	48850	53470	53540	60520	52970	53080	59560	53400	53910	53150	54420	51830
3	48810	53040	53510	59180	53010	52970	57980	53040	53440	52970	54340	51760
4	48810	53180	53400	57340	52930	52900	56960	53010	53080	52830	54020	51620
5	48740	55000	53290	56000	52900	52970	56070	52830	52750	53110	53620	51510
6	48610	55040	53260	55040	52830	52900	54780	56330	52680	53220	53260	51440
7	48810	54850	53220	53830	52750	53150	54120	59110	52680	53220	53010	51510
8	48850	54560	53180	53040	52680	52970	53940	73530	52680	53180	52830	51400
9	48740	55660	53180	52580	52540	52930	53690	77260	52680	53180	52790	51300
10	48610	55810	53180	52610	52540	52860	57380	78930	53400	53110	52750	51190
11	48540	55520	53180	52900	52470	52830	61950	80160	59370	53110	52680	51120
12	48470	55220	58130	54490	52330	52830	62490	81310	60400	53040	52650	51090
13	48470	54930	58350	56780	52400	62100	61870	82300	61020	52970	52500	51160
14	48400	54780	58960	56930	52540	66160	60830	83100	60560	52900	52470	51190
15	48470	56220	62180	56630	52750	67970	59720	83460	59530	52830	52400	51160
16	48670	56330	69190	56110	52900	69390	58430	82210	58430	52900	52330	51120
17	48780	56290	70670	56030	52900	70630	57260	80250	57230	52860	52290	51160
18	50170	56260	71590	56180	52970	71750	57000	78360	56030	53110	52250	51120
19	50450	56150	72260	55890	53080	72590	56930	76210	55150	53040	52250	51160
20	53440	56180	72890	55550	53260	73310	59150	74040	54450	52750	52180	51120
21	56330	56070	73440	55070	53180	74080	60100	71840	53910	52580	52150	51510
22	56550	55920	73780	54890	53110	74770	61250	69680	53470	52500	52110	51400
23	56670	55590	73530	54450	53260	75070	61710	67560	53330	52430	52040	51330
24	56780	55330	72680	53980	53110	74120	61330	65920	53330	52400	51970	51300
25	56930	55070	71880	53540	53110	72590	59980	63980	53330	52330	51940	51300
26	56630	54850	70840	54020	53150	71290	58730	62260	53330	52250	51900	51260
27	56180	54740	69310	54050	53220	69600	57300	60710	53260	52180	51830	51190
28	55740	54490	68210	53760	53260	67890	56110	59110	53180	52150	51760	51190
29	55290	54200	66840	53260	---	66400	55290	57680	53220	52080	51720	51190
30	54850	53910	65240	52720	---	64810	54630	56330	53260	52110	51970	51190
31	54420	---	63980	52650	---	63040	---	55370	---	52580	51900	---
MAX	56930	56330	73780	62260	53260	75070	62490	83460	61020	53220	54420	51900
MIN	48400	53040	53180	52580	52330	52830	53690	52830	52680	52080	51720	51090
(+)	421.59	421.45	424.11	421.10	421.27	423.87	421.65	421.85	421.27	421.08	420.89	420.69
(@)	+5500	-510	+10070	-11330	+610	+9780	-8410	+740	-2110	-680	-680	-710

CAL YR 1994 MAX 73780 MIN 48400 +11300
WTR YR 1995 MAX 83460 MIN 48400 +2270

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

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 mi².

PERIOD OF RECORD.--October 1963 to current year.
Water-quality records.--Chemical and biochemical analyses: October 1980 to September 1982.

GAGE.--Water-stage recorder. Datum of gage is 370.18 ft above sea level (U.S. Army Corps of Engineers benchmark).

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since November 1965, flow regulated by Bardwell Lake (station 08063700) 0.8 mi upstream. Several observations of water temperature were made during the year. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--2 years (water years 1964-65), 32.8 ft³/s (23,720 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1964-65).--Maximum discharge 2,960 ft³/s Feb. 9, 1965 (gage height, 17.55 ft); no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1944, about 23 ft in 1944 and 1945, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	222	170	937	5.5	47	928	517	428	1.4	1.8	e.08
2	.08	221	111	931	58	46	922	345	363	1.2	1.7	e.07
3	.07	222	111	924	95	46	916	217	269	1.2	88	e.06
4	.07	180	111	916	95	46	917	217	216	1.2	218	e.05
5	.07	118	111	795	96	46	908	219	145	1.3	218	e.04
6	.07	113	113	651	96	46	906	88	61	.34	155	e.04
7	.09	157	112	646	98	46	536	10	4.5	.19	118	e.03
8	.15	224	111	513	98	46	214	250	1.8	.16	80	e.03
9	.09	224	115	335	98	46	213	378	1.2	.14	7.6	e.02
10	.06	224	119	103	98	46	222	176	2.3	.11	7.3	e.02
11	.06	221	114	6.8	98	46	399	5.4	137	.12	6.6	e.02
12	.06	220	114	64	98	46	337	2.6	126	.13	6.0	e.02
13	.06	220	114	133	43	109	569	2.3	32	.15	5.5	e.02
14	.06	219	346	169	3.7	325	789	1.9	384	.17	5.5	e.02
15	.07	221	555	294	2.8	124	785	136	683	.16	5.5	e.02
16	.14	221	420	350	1.8	48	780	778	680	.27	5.5	e.02
17	.23	221	118	351	1.3	48	775	1170	674	.27	5.3	e.02
18	.67	220	3.8	351	1.1	49	777	1160	670	.92	4.8	e.01
19	.22	221	2.7	350	1.0	49	791	1150	502	62	4.5	e.01
20	2.1	221	1.7	349	.83	50	456	1140	367	117	4.5	e.01
21	1.2	221	1.4	347	27	50	18	1130	308	44	4.3	e.01
22	.23	220	1.3	344	47	50	7.4	1120	227	.41	3.7	e.01
23	.13	220	283	344	46	153	5.8	1120	91	.33	3.6	e.01
24	.11	220	568	343	47	603	357	1110	2.9	.33	3.6	e.01
25	.11	217	559	343	47	971	810	1100	2.1	.32	3.6	e.01
26	141	217	640	343	47	962	806	937	1.4	.26	3.5	e.01
27	229	219	857	344	47	954	800	816	1.4	.23	3.3	e.01
28	225	218	973	342	47	950	683	810	1.4	.23	3.3	e.01
29	224	216	964	341	---	945	520	805	1.4	.23	3.4	e.01
30	222	215	955	339	---	941	522	801	1.4	.24	3.3	e.01
31	224	---	948	151	---	935	---	638	---	.99	.17	---
TOTAL	1271.28	6293	9722.9	12749.8	1444.03	8869	17669.2	18350.2	6384.8	236.00	984.87	0.71
MEAN	41.0	210	314	411	51.6	286	589	592	213	7.61	31.8	.024
MAX	229	224	973	937	98	971	928	1170	683	117	218	.08
MIN	.06	113	1.3	6.8	.83	46	5.8	1.9	1.2	.11	.17	.01
AC-FT	2520	12480	19290	25290	2860	17590	35050	36400	12660	468	1950	1.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995#, BY WATER YEAR (WY)

MEAN	24.4	87.3	83.1	108	111	153	120	187	206	30.2	5.57	7.33
MAX	299	723	394	892	605	675	590	827	773	370	71.8	178
(WY)	1974	1992	1986	1992	1992	1992	1977	1973	1989	1981	1973	1976
MIN	.000	.014	.018	.022	.022	.024	.19	.12	.004	.000	.000	.000
(WY)	1967	1970	1990	1967	1967	1967	1967	1988	1967	1966	1966	1966

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995#	
ANNUAL TOTAL	47168.59		83975.79			
ANNUAL MEAN	129		230		93.4	
HIGHEST ANNUAL MEAN					318	1992
LOWEST ANNUAL MEAN					.063	1967
HIGHEST DAILY MEAN	973	Dec 28	1170	May 17	1880	Jun 25 1981
LOWEST DAILY MEAN	.03	Sep 18	.01	Sep 18	.00	Oct 4 1965
ANNUAL SEVEN-DAY MINIMUM	.03	Sep 15	.01	Sep 18	.00	Oct 7 1965
INSTANTANEOUS PEAK FLOW			1180	May 16	1960	Jun 25 1981
INSTANTANEOUS PEAK STAGE			11.89	May 16	18.13	Jun 25 1981
ANNUAL RUNOFF (AC-FT)	93560		166600		67640	
10 PERCENT EXCEEDS	524		805		324	
50 PERCENT EXCEEDS	1.8		96		1.4	
90 PERCENT EXCEEDS	.06		.07		.00	

e Estimated
Period of regulated streamflow.

08064100 CHAMBERS CREEK NEAR RICE, TEX.

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 340.00 ft above sea level.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow from 178 mi² above this station is affected by storage in Bardwell Lake on Waxahachie Creek. 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. Rain gage at station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood information for the next downstream station, Chambers Creek near Corsicana, (08064500, discontinued) indicates that the maximum stage since at least 1870 occurred in August 1887, and that other significant floods occurred in December 1913, May 1944, and May 1958. Stages for these floods are unknown, but over the years a levee system has been developed along the main channel to limit cropland flooding.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.12	285	327	1410	219	158	1010	759	727	58	e1180	3.2
2	.12	276	233	1270	223	148	982	645	722	51	1690	2.8
3	.11	274	231	1200	274	150	976	464	484	45	694	2.4
4	.11	313	231	1190	251	152	1930	497	346	35	496	2.3
5	.11	1950	227	1100	235	154	2040	478	287	41	388	2.2
6	.10	2970	223	869	229	152	2240	3070	202	53	321	2.0
7	.10	953	219	852	219	158	1600	5280	139	69	236	2.0
8	.12	646	214	751	214	187	723	7580	115	63	211	2.0
9	.07	599	222	573	210	178	573	14100	90	62	93	2.0
10	.05	1650	4900	359	209	150	829	10100	103	61	e106	1.5
11	.02	1010	5320	210	208	148	8320	5680	5390	44	e110	1.7
12	.02	655	849	526	207	143	8230	2960	6690	36	e56	2.0
13	.02	536	523	6130	187	e1870	3230	1850	5680	23	e26	2.0
14	.02	480	769	2080	133	e9350	1830	1260	1630	6.3	e19	2.0
15	.07	1560	3590	899	136	e7210	1480	928	1460	3.9	e13	2.0
16	.13	4410	8910	802	137	e3460	1290	1180	1110	3.9	11	2.0
17	.15	1770	10100	750	129	1860	1200	1580	952	3.8	9.2	2.0
18	2.3	905	4220	1240	119	1310	1760	1470	858	31	8.2	2.1
19	176	713	1690	1570	113	1000	2030	1380	733	167	7.1	2.2
20	64	685	964	1020	108	799	7280	1320	524	126	6.6	41
21	3140	794	629	785	109	649	6130	1280	478	89	7.4	21
22	4810	653	492	718	150	530	1700	1250	366	5.8	6.7	14
23	2020	524	534	802	148	488	1360	1210	299	3.5	5.4	159
24	590	469	960	678	147	771	1360	1210	151	3.1	4.6	55
25	334	452	962	619	144	1160	1420	1870	134	3.1	4.2	14
26	274	435	1020	838	146	1140	1240	1430	110	e21	3.9	7.0
27	379	418	1130	1250	161	1110	1150	994	79	e19	3.6	4.6
28	333	397	1250	823	166	1090	1040	915	76	e19	3.6	3.6
29	313	370	2180	659	---	1080	795	872	73	e20	3.4	3.0
30	299	351	1840	586	---	1070	792	1130	68	e20	3.3	2.5
31	289	---	1450	462	---	1030	---	969	---	e161	3.5	---
TOTAL	13024.74	27503	56409	33021	4931	38855	66540	75711	30076	1347.4	5730.7	365.1
MEAN	420	917	1820	1065	176	1253	2218	2442	1003	43.5	185	12.2
MAX	4810	4410	10100	6130	274	9350	8320	14100	6690	167	1690	159
MIN	.02	274	214	210	108	143	573	464	68	3.1	3.3	1.5
AC-FT	25830	54550	111900	65500	9780	77070	132000	150200	59660	2670	11370	724

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1995, BY WATER YEAR (WY)

MEAN	412	348	873	519	822	804	523	1018	796	57.7	36.8	26.3
MAX	1499	1811	3579	1984	2130	1819	2218	2932	2560	194	185	149
(WY)	1986	1992	1992	1992	1992	1995	1989	1986	1989	1995	1991	
MIN	.000	1.72	1.45	12.0	107	45.3	92.6	7.86	2.21	.081	.000	.000
(WY)	1989	1989	1989	1984	1984	1986	1987	1988	1984	1988	1988	1985

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1984 - 1995	
ANNUAL TOTAL	207634.82		353513.94			
ANNUAL MEAN	569		969		518	
HIGHEST ANNUAL MEAN					1263	1992
LOWEST ANNUAL MEAN					96.6	1984
HIGHEST DAILY MEAN	10100	Dec 17	14100	May 9	22700	Dec 21 1991
LOWEST DAILY MEAN	.02	Oct 11	.02	Oct 11	.00	Aug 6 1985
ANNUAL SEVEN-DAY MINIMUM	.04	Oct 9	.04	Oct 9	.00	Aug 6 1985
INSTANTANEOUS PEAK FLOW			15800	May 9	43400	Jun 6 1986
INSTANTANEOUS PEAK STAGE			30.23	May 9	32.57	Dec 21 1991
ANNUAL RUNOFF (AC-FT)	411800		701200		375500	
10 PERCENT EXCEEDS	1210		1940		1230	
50 PERCENT EXCEEDS	124		351		61	
90 PERCENT EXCEEDS	.84		2.7		.12	

e Estimated

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical and biochemical analyses: October 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to current year.
WATER TEMPERATURE: October 1983 to current year.

INSTRUMENTATION.--Since January 1994, a two-parameter water-quality monitor records water temperature and specific conductance continuously at this station.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request. National water-quality assessment program data are included in this record. Prior to January 1994, period of daily record consists of daily observer measurements.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (1983-90): Maximum daily, 2,510 microsiemens Nov. 21, 1988; minimum daily, 161 microsiemens June 11, 1995.
WATER TEMPERATURE (1983-89): Maximum daily, 38.0°C Aug. 16, 1987; minimum daily, 0.0°C Feb. 7, 1989.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,200 microsiemens Sept. 20, minimum, 161 microsiemens June 11.
WATER TEMPERATURE: Maximum, 31.5°C July 12 and 13: minimum, 7.0°C Dec. 12, Jan. 5, 6, Feb. 14, 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
27...	1252	373	306	7.9	17.5	8.3	87	100	9	38	2.3	20
NOV												
29...	1138	375	401	8.2	14.0	9.6	93	160	14	59	2.6	19
DEC												
15...	1115	3590	345	7.8	10.5	10.4	93	140	17	53	2.6	15
JAN												
19...	1230	1550	364	8.1	9.5	10.9	95	160	19	59	2.7	16
FEB												
23...	1340	148	584	8.0	13.5	9.2	89	230	55	84	4.5	36
MAR												
16...	1321	3380	370	7.6	15.0	8.9	89	150	37	55	2.8	16
29...	1117	1030	390	8.2	16.5	9.5	97	160	5	58	2.8	18
APR												
10...	1300	467	496	7.6	20.5	7.8	89	190	15	70	3.8	26
26...	1405	1230	393	7.7	18.0	9.0	96	170	16	62	2.7	16
MAY												
11...	0900	6030	312	7.9	20.5	7.7	87	130	20	47	2.4	11
JUN												
06...	1420	210	468	7.9	27.0	6.6	84	190	42	70	3.7	26
22...	0800	367	373	7.8	25.5	6.4	80	140	21	53	3.0	18
28...	1220	77	628	7.8	27.5	6.0	76	220	60	80	5.4	43
AUG												
17...	1410	9.0	547	7.8	29.5	6.6	87	180	38	67	4.1	42
SEP												
05...	1050	2.2	830	7.5	27.5	4.6	59	250	79	90	6.3	85
21...	1000	19	807	7.8	25.5	6.0	74	250	84	91	6.2	75

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT												
27...	0.9	3.5	0	116	95	96	32	12	0.4	8.5	185	175
NOV												
29...	0.7	3.4	0	176	145	150	37	13	0.3	8.7	258	232
DEC												
15...	0.5	4.4	0	154	126	130	29	8.8	0.3	10	218	203
JAN												
19...	0.6	3.0	0	170	140	140	32	10	0.3	9.0	233	218
FEB												
23...	1	2.6	0	211	173	170	85	27	0.4	4.4	368	350
MAR												
16...	0.6	3.0	0	136	112	110	47	11	0.4	7.8	240	218
29...	0.6	3.0	0	185	151	150	34	12	0.3	5.9	242	229
APR												
10...	0.8	3.6	0	214	175	180	60	18	0.40	5.3	302	300
26...	0.5	2.9	0	E182	150	149	36	11	0.3	4.6	243	231
MAY												
11...	0.4	3.3	0	131	107	110	28	7.2	0.30	9.0	193	176
JUN												
06...	0.8	3.3	0	181	148	150	59	20	0.3	5.6	294	280
22...	0.7	3.6	0	151	124	124	39	14	0.30	5.3	218	212
28...	1	3.8	0	198	162	160	100	38	0.4	7.7	407	376
AUG												
17...	1	3.7	0	178	146	140	78	39	0.4	10	341	332
SEP												
05...	2	4.1	0	209	171	170	130	83	0.5	9.8	533	511
21...	2	3.7	0	206	169	170	150	65	0.4	7.8	529	501

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS TOTAL (MG/L AS P)
OCT												
27...	0.280	--	<0.010	0.280	0.28	<0.015	0.78	0.50	--	0.3	0.5	0.1
NOV												
29...	0.530	--	<0.010	0.530	0.53	<0.015	0.93	0.40	--	0.2	0.4	0.0
DEC												
15...	0.910	0.910	0.0	0.930	0.93	0.0	1.3	0.37	0.27	0.3	0.4	0.1
JAN												
19...	0.480	--	<0.010	0.480	0.48	0.0	1.1	0.57	0.27	0.3	0.6	0.13
FEB												
23...	0.530	0.530	0.050	0.580	0.580	0.040	0.88	0.26	0.16	0.20	0.30	0.020
MAR												
16...	1.46	1.46	0.340	1.80	1.80	0.090	2.4	0.51	0.41	0.50	0.60	0.040
29...	0.730	0.730	0.1	0.800	0.80	0.0	1.2	0.37	0.27	0.3	0.4	<0.010
APR												
10...	1.66	1.66	0.040	1.70	1.70	0.030	2.2	0.47	0.57	0.60	0.50	0.030
26...	0.940	0.940	0.0	0.980	0.98	0.1	1.4	0.33	0.33	0.4	0.4	<0.010
MAY												
11...	0.700	0.700	0.050	0.750	0.750	0.050	1.3	0.55	0.35	0.40	0.60	0.110
JUN												
06...	0.570	0.570	0.010	0.580	0.580	0.030	0.78	0.17	0.17	0.20	0.20	<0.010
22...	0.380	--	<0.010	0.380	0.380	0.020	0.98	0.58	0.28	0.30	0.60	0.100
28...	0.180	--	<0.010	0.180	0.18	0.0	0.58	0.37	0.27	0.3	0.4	0.1
AUG												
17...	--	--	<0.010	--	<0.050	<0.015	0.50	0.50	--	0.20	0.50	0.040
SEP												
05...	--	--	<0.010	--	<0.050	<0.015	0.40	0.40	--	0.30	0.40	0.050
21...	0.060	--	<0.010	0.060	0.060	0.020	0.46	0.38	0.18	0.20	0.40	0.090

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	PROP-CHLOR, WATER, DISS, REC (UG/L)	BUTYL-ATE, WATER, DISS, REC (UG/L)	BRO-MACIL, WATER, DISS, REC (UG/L)	SI-MAZINE, WATER, DISS, REC (UG/L)	PRO-METON, WATER, DISS, REC (UG/L)
OCT												
27...	0.0	0.0	0.03	4.1	4.8	21	1	<0.02	<0.0	<0.05	0.02	0.01
NOV												
29...	0.0	0.0	0.03	3.7	1.2	11	3	<0.02	<0.0	<0.05	0.04	0.01
DEC												
15...	0.0	0.0	0.15	5.6	>5.0	22	1	<0.02	<0.0	<0.05	0.02	<0.0
JAN												
19...	0.0	0.0	0.12	5.1	4.6	29	2	<0.02	<0.0	<0.05	0.02	E0.0
FEB												
23...	<0.010	<0.010	--	3.0	0.6	<3	11	<0.02	<0.008	<0.05	0.02	E0.007
MAR												
16...	0.020	0.020	0.06	5.2	>4.2	39	1	<0.02	<0.0	<0.05	0.05	<0.0
29...	<0.010	<0.010	--	3.7	1.4	6	<1	--	--	--	--	--
APR												
10...	0.010	<0.010	--	4.2	1.7	9	1	<0.02	<0.008	<0.05	0.08	0.01
26...	<0.010	0.0	0.03	3.9	3.2	16	2	--	--	--	--	--
MAY												
11...	0.030	0.020	0.06	5.1	6.8	37	2	<0.02	<0.008	<0.05	0.02	E0.006
JUN												
06...	<0.010	<0.010	--	3.7	2.2	<3	2	<0.02	<0.0	<0.03	0.03	0.01
22...	0.020	<0.010	--	3.4	1.4	6	<1	<0.02	<0.008	<0.05	0.03	0.01
28...	0.0	<0.010	--	3.6	1.1	<3	7	--	--	--	--	--
AUG												
17...	<0.010	<0.010	--	3.9	1.1	6	4	<0.0	<0.0	<0.03	<0.0	<0.02
SEP												
05...	<0.010	<0.010	--	3.6	1.2	<3	15	--	--	--	--	--
21...	<0.010	<0.010	--	3.0	--	<3	7	--	--	--	--	--

DATE	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L)	CYANA-ZINE, WATER, DISS, REC (UG/L)	FONOFOS WATER DISS REC (UG/L)	ALPHA BHC DIS-SOLVED (UG/L)	P,P' DDE DISSOLV (UG/L)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L)	METHIO-CARB, WATER, FLTRD, GF 0.7U REC (UG/L)	PRO-POXUR, WATER, FLTRD, GF 0.7U REC (UG/L)	BENTA-ZON, WATER, FLTRD, GF 0.7U REC (UG/L)
OCT												
27...	E0.07	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV												
29...	E0.04	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC												
15...	E0.04	E0.0	<0.0	<0.0	E0.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN												
19...	E0.02	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FEB												
23...	E0.02	<0.01	<0.008	<0.007	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAR												
16...	E0.10	<0.01	<0.0	<0.0	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	E0.22	<0.01	<0.008	<0.007	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	E0.12	0.01	<0.008	<0.007	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN												
06...	E0.14	<0.01	<0.0	<0.0	<0.01	<0.03	<0.02	<0.07	<0.03	<0.02	<0.03	<0.02
22...	E0.13	<0.01	<0.008	<0.007	<0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	E0.03	<0.0	<0.0	<0.0	<0.0	<0.03	<0.02	<0.05	<0.03	<0.03	<0.03	<0.01
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L)	FLUO-METURON WATER, FLTRD, GF 0.7U REC (UG/L)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L)	CHLOR-PYRIFOS DIS-SOLVED (UG/L)	LINDANE DIS-SOLVED (UG/L)	DI-ELDRIN DIS-SOLVED (UG/L)	METO-LACHLOR WATER DISSOLV (UG/L)	MALA-THION, DIS-SOLVED (UG/L)	PARA-THION, DIS-SOLVED (UG/L)	DI-AZINON, DIS-SOLVED (UG/L)	ATRA-ZINE, WATER, DISS, REC (UG/L)	2,4-D, DIS-SOLVED (UG/L)
OCT												
27...	<0.05	0.19	<0.05	<0.0	<0.01	<0.0	0.07	<0.01	<0.02	E0.0	0.85	<0.05
NOV												
29...	<0.05	0.16	<0.05	<0.0	<0.01	<0.0	0.06	<0.01	<0.02	0.0	0.63	<0.05
DEC												
15...	<0.05	E0.05	<0.05	<0.0	<0.01	<0.0	0.03	<0.01	<0.02	E0.0	0.42	<0.05
JAN												
19...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	0.04	<0.01	<0.02	E0.0	0.33	<0.05
FEB												
23...	<0.05	0.06	<0.05	<0.005	<0.01	<0.008	0.03	<0.01	<0.02	<0.008	0.29	<0.05
MAR												
16...	<0.05	<0.05	<0.05	<0.0	<0.01	<0.0	2.0	<0.01	<0.02	0.0	E9.4	0.33
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	<0.05	<0.05	<0.05	<0.005	<0.01	<0.008	1.3	<0.01	<0.02	E0.007	8.4	0.19
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<0.05	E0.66	<0.05	0.008	<0.01	<0.008	0.52	<0.01	<0.02	0.01	1.2	<0.05
JUN												
06...	<0.03	E0.62	<0.02	<0.0	<0.01	<0.0	0.59	<0.01	<0.02	0.01	2.3	<0.03
22...	<0.05	E0.38	<0.05	<0.005	<0.01	<0.008	0.48	<0.01	<0.02	0.01	2.0	<0.05
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	<0.03	E0.45	<0.02	<0.0	<0.0	<0.0	0.03	<0.0	<0.0	<0.0	0.14	<0.03
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	2,4,5-T DIS-SOLVED (UG/L)	SILVEX, DIS-SOLVED (UG/L)	ALA-CHLOR, WATER, DISS, REC, (UG/L)	TRI-CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L)	PRO-PHAM, WATER, FLTRD, GF 0.7U REC (UG/L)	ACETO-CHLOR, WATER FLTRD REC (UG/L)	PIC-LORAM, WATER, FLTRD, GF 0.7U REC (UG/L)	ORY-ZALIN, WATER, FLTRD, GF 0.7U REC (UG/L)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L)	NEB-URON, WATER, FLTRD, GF 0.7U REC (UG/L)	1-NAPH THOL, WATER, FLTRD, GF 0.7U REC (UG/L)	METH-OMYL, WATER, FLTRD, GF 0.7U REC (UG/L)
OCT												
27...	<0.05	<0.05	0.04	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV												
29...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC												
15...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN												
19...	<0.05	<0.05	<0.0	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FEB												
23...	<0.05	<0.05	<0.009	<0.05	<0.05	<0.00	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAR												
16...	<0.05	<0.05	0.76	<0.05	<0.05	E0.0	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	<0.05	<0.05	0.30	<0.05	<0.05	0.01	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<0.05	<0.05	0.25	<0.05	<0.05	<0.009	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN												
06...	<0.03	<0.03	0.04	<0.09	<0.03	<0.0	<0.07	<0.02	<0.02	<0.02	<0.02	<0.05
22...	<0.05	<0.05	<0.009	<0.05	<0.05	<0.009	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	<0.03	<0.02	<0.0	<0.05	<0.03	<0.0	<0.05	<0.02	<0.02	<0.02	<0.0	0.12
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	FEN-URON, WATER, FLTRD, GF 0.7U REC (UG/L)	ESFEN-VAL-ERATE, WAT,FLT GF 0.7U REC (UG/L)	OCRESOL 4,6-DINITRO WAT,FLT GF 0.7U REC (UG/L)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L)	DICHLO-BENIL, WATER, FLTRD, GF 0.7U REC (UG/L)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L)	CLOPYR-ALID, WATER, FLTRD, GF 0.7U REC (UG/L)	CHLORO-THALO-NIL, WAT,FLT GF 0.7U REC (UG/L)	AMIBEN, WATER, FLTRD, GF 0.7U REC (UG/L)	3HYDRXY CARBO-FURAN WAT,FLT GF 0.7U REC (UG/L)
OCT												
27...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
NOV												
29...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
DEC												
15...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JAN												
19...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
FEB												
23...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
MAR												
16...	<0.05	<0.05	<0.05	E0.03	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
JUN												
06...	<0.02	<0.05	<0.53	<0.02	<0.03	<0.03	<0.02	<0.03	<0.07	<0.03	<0.02	<0.03
22...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	<0.01	<0.02	<0.03	<0.02	<0.03	<0.03	<0.02	<0.02	<0.05	<0.03	<0.01	<0.01
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CARBO-FURAN, WATER, FLTRD, GF 0.7U REC (UG/L)	CAR-BARYL, WATER, FLTRD, GF 0.7U REC (UG/L)	BRO-MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L)	ALDI-CARB, WATER, FLTRD, GF 0.7U REC (UG/L)	ALDI-CARB SULFONE WAT,FLT GF 0.7U REC (UG/L)	ALDICA-RB SUL-FOXIDE, WAT,FLT GF 0.7U REC (UG/L)	ACIFL-UORFEN WATER, FLTRD, GF 0.7U REC (UG/L)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L)
OCT												
27...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	E0.01	<0.0	<0.01	<0.01	<0.01
NOV												
29...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
DEC												
15...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.01	<0.0	<0.01	<0.01	<0.01
JAN												
19...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	<0.01	<0.01	<0.01
FEB												
23...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.006	<0.01	<0.01	<0.01
MAR												
16...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.0	E0.0	<0.01	<0.01
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.006	<0.01	<0.01	<0.01
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.006	E0.005	<0.01	<0.01
JUN												
06...	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.01	<0.0	<0.01	<0.01	<0.01
22...	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.01	<0.006	<0.01	<0.01	<0.01
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	<0.03	<0.0	<0.03	<0.02	<0.02	<0.02	<0.03	<0.0	<0.0	<0.0	<0.0	<0.0
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L)
OCT												
27...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.01	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
NOV												
29...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.0	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
DEC												
15...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.0	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
JAN												
19...	<0.03	<0.04	<0.03	<0.0	<0.0	<0.02	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
FEB												
23...	<0.03	<0.04	<0.03	E0.002	<0.009	<0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.06
MAR												
16...	<0.03	<0.04	<0.03	0.02	<0.0	<0.02	<0.0	<0.01	<0.01	E0.13	<0.01	<0.06
29...	--	--	--	--	--	--	--	--	--	--	--	--
APR												
10...	<0.03	<0.04	<0.03	<0.005	<0.009	E0.004	<0.007	<0.01	<0.01	E0.13	<0.01	<0.06
26...	--	--	--	--	--	--	--	--	--	--	--	--
MAY												
11...	<0.03	<0.04	<0.03	<0.005	<0.009	<0.02	E0.006	<0.01	<0.01	<0.01	<0.01	<0.06
JUN												
06...	<0.03	<0.04	<0.03	<0.0	<0.0	E0.01	<0.0	<0.01	<0.01	<0.01	<0.01	<0.06
22...	<0.03	<0.04	<0.03	<0.005	<0.009	0.02	<0.007	<0.01	<0.01	<0.01	<0.01	<0.06
28...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
17...	<0.0	<0.0	<0.0	<0.0	<0.0	<0.01	<0.0	<0.0	<0.0	<0.0	<0.01	<0.02
SEP												
05...	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L)	METHYL AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
27...	<0.0	<0.02	<0.05	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	660	100
NOV												
29...	<0.0	<0.02	<0.05	<0.0	<0.0	<0.02	<0.01	<0.0	<0.04	<0.02	86	99
DEC												
15...	<0.0	<0.02	<0.05	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	758	96
JAN												
19...	<0.0	<0.02	<0.05	<0.0	E0.0	<0.02	<0.01	<0.0	<0.04	<0.02	515	96
FEB												
23...	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02	57	100
MAR												
16...	<0.0	<0.02	<0.05	<0.0	<0.0	<0.02	<0.01	<0.0	<0.04	<0.02	873	99
29...	--	--	--	--	--	--	--	--	--	--	128	98
APR												
10...	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02	222	100
26...	--	--	--	--	--	--	--	--	--	--	298	97
MAY												
11...	<0.008	<0.02	<0.05	E0.006	<0.004	0.04	<0.01	<0.006	<0.04	<0.02	1060	86
JUN												
06...	<0.0	<0.02	<0.05	<0.0	<0.0	<0.02	<0.01	<0.0	<0.04	<0.02	161	99
22...	<0.008	<0.02	<0.05	<0.008	<0.004	<0.02	<0.01	<0.006	<0.04	<0.02	105	99
28...	--	--	--	--	--	--	--	--	--	--	109	82
AUG												
17...	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.0	<0.01	<0.0	<0.0	56	94
SEP												
05...	--	--	--	--	--	--	--	--	--	--	86	86
21...	--	--	--	--	--	--	--	--	--	--	--	--

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	13024.74	283	161	5650	12	430	36	1270	100
NOV.	1994	27503	353	201	14900	17	1240	46	3440	120
DEC.	1994	56409	319	182	27700	15	2220	41	6320	110
JAN.	1995	33021	376	215	19200	19	1660	50	4480	130
FEB.	1995	4931	597	348	4640	37	498	87	1160	200
MAR.	1995	38855	366	209	22000	18	1890	49	5110	130
APR.	1995	66540	348	199	35700	17	2980	46	8250	120
MAY	1995	75711	319	182	37100	15	2980	41	8480	110
JUNE	1995	30076	330	188	15300	16	1260	43	3520	120
JULY	1995	1347.4	686	406	1480	50	180	110	388	220
AUG.	1995	5730.7	362	207	3200	17	270	48	741	130
SEPT	1995	365.1	771	459	452	58	58	120	121	250
TOTAL		353513.94	**	**	187000	**	15700	**	43300	**
WTD.AVG.		969	344	196	**	16	**	45	**	120

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e1930	309	309	309	432	396	401	382	376	379
2	---	---	e1930	311	309	310	463	432	449	376	371	374
3	---	---	e1940	313	310	312	445	442	444	380	373	376
4	---	---	e1960	383	312	324	447	444	445	380	373	377
5	---	---	e1980	393	239	297	447	445	446	404	376	383
6	---	---	e1980	328	278	313	448	440	444	405	397	400
7	---	---	e1910	336	322	330	449	442	446	401	395	398
8	---	---	e1870	339	331	335	450	439	444	426	391	404
9	---	---	e1870	344	324	337	459	329	440	472	417	425
10	---	---	e1890	376	271	327	345	249	286	593	469	487
11	---	---	e1910	356	347	352	374	328	349	629	593	620
12	---	---	e1920	350	346	348	395	374	386	639	200	575
13	---	---	e1920	356	349	352	412	394	401	275	165	221
14	---	---	e1920	357	355	356	412	359	398	388	275	347
15	---	---	e1870	397	338	360	359	313	337	405	388	396
16	---	---	e1810	347	331	337	313	198	244	405	390	398
17	---	---	e1790	372	347	362	291	216	255	410	397	404
18	---	---	e1270	379	372	375	324	291	311	411	332	376
19	---	---	e471	394	379	384	349	324	335	444	343	380
20	---	---	e261	407	394	399	390	349	371	480	444	467
21	---	---	e233	438	407	425	429	390	409	459	449	453
22	---	---	e274	443	427	436	444	429	439	452	427	445
23	---	---	e312	427	412	419	466	367	436	436	427	432
24	---	---	e333	412	409	410	374	366	370	444	434	438
25	---	---	e341	416	412	413	374	369	372	451	444	447
26	---	---	e339	423	416	420	376	361	369	457	366	429
27	---	---	e312	431	423	428	365	343	355	425	378	398
28	---	---	e310	428	420	423	397	343	356	480	425	453
29	---	---	e310	420	400	411	413	393	403	487	477	481
30	---	---	e311	401	398	400	405	376	386	481	465	471
31	---	---	e310	---	---	---	378	375	377	596	459	486
MONTH	---	---	1220	443	239	367	466	198	384	639	165	423

e Estimated

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	620	596	617	606	600	604	397	395	396	435	433	434
2	631	549	617	603	590	597	396	393	394	482	421	444
3	549	540	545	600	589	593	396	389	392	478	464	474
4	548	539	542	616	600	609	416	326	370	494	474	486
5	547	541	543	624	615	619	426	334	376	493	479	485
6	547	532	541	627	619	623	532	420	472	482	275	338
7	545	540	542	626	617	621	477	408	431	364	303	344
8	544	537	540	638	620	626	494	473	477	362	196	242
9	542	536	539	680	638	663	504	488	495	278	208	247
10	550	542	546	761	680	723	515	248	462	315	269	295
11	550	539	545	729	698	717	282	192	222	323	312	315
12	546	540	543	698	669	683	325	282	309	350	323	333
13	611	538	546	669	246	388	352	325	339	383	350	365
14	704	611	684	297	244	266	370	349	363	418	383	400
15	710	704	709	351	297	322	389	370	381	441	404	429
16	715	703	709	385	351	370	400	382	389	404	367	391
17	706	703	704	402	385	393	405	398	401	372	366	369
18	719	706	713	421	402	408	414	358	395	368	366	367
19	734	719	727	434	421	426	403	223	355	368	367	367
20	736	733	735	453	434	444	315	221	277	367	366	366
21	740	732	736	462	453	457	372	315	351	367	365	366
22	795	598	642	488	462	473	412	372	397	366	364	365
23	598	595	597	501	442	491	473	412	433	366	363	364
24	597	592	594	442	394	428	451	392	407	381	355	363
25	594	587	589	398	395	396	408	394	401	448	312	355
26	597	586	590	398	391	396	413	408	410	472	356	382
27	621	597	611	394	391	392	415	410	412	379	371	374
28	622	602	611	397	393	395	438	412	419	372	366	368
29	---	---	---	399	392	394	438	429	436	367	349	354
30	---	---	---	401	389	400	435	429	433	403	303	353
31	---	---	---	400	395	398	---	---	---	418	303	368
MONTH	795	532	613	761	244	494	532	192	393	494	196	371

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	442	366	394	762	743	749	960	281	394	815	785	803
2	517	437	457	775	762	767	380	271	327	846	815	835
3	459	414	432	777	761	769	427	325	352	851	831	842
4	457	437	446	798	775	785	330	325	327	859	839	851
5	489	423	442	809	788	801	327	321	325	898	848	879
6	502	489	494	789	769	779	350	323	332	921	891	906
7	656	502	623	813	700	767	351	342	346	954	920	936
8	664	645	654	814	802	808	367	346	359	985	954	968
9	660	645	655	808	796	802	452	367	417	1020	983	1000
10	691	276	649	810	786	801	477	451	462	1050	1020	1030
11	322	161	207	843	777	802	509	476	493	1090	1050	1080
12	319	259	301	899	843	867	516	509	513	1130	1080	1110
13	349	319	329	916	899	906	532	516	524	1130	1100	1110
14	362	346	353	920	825	878	544	527	533	1150	1100	1120
15	354	345	348	825	792	807	551	540	545	1170	1150	1160
16	354	349	351	801	775	789	565	551	561	1180	1160	1180
17	350	345	346	806	784	796	582	563	575	1180	1170	1180
18	346	340	344	791	248	746	602	572	592	1180	1180	1180
19	359	336	345	512	235	316	612	599	606	1220	1180	1200
20	360	351	357	772	295	354	619	604	611	1270	951	1140
21	392	354	362	394	356	382	625	612	618	951	692	814
22	397	385	390	609	385	474	644	615	632	846	686	726
23	522	394	415	733	609	690	671	644	661	1000	533	690
24	601	522	588	749	733	743	679	669	675	674	552	592
25	628	600	619	765	743	755	685	669	678	629	544	565
26	652	627	640	795	756	776	703	680	690	780	629	726
27	668	644	657	841	792	809	724	696	703	833	780	806
28	698	662	677	880	841	853	736	709	718	---	833	853
29	725	697	706	914	880	892	743	725	732	898	---	881
30	746	722	729	944	914	929	772	742	758	922	898	913
31	---	---	---	1060	921	950	785	772	777	---	---	---
MONTH	746	161	477	1060	235	753	960	271	543	1270	533	936
YEAR	1270	161	581									

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.0	8.5	9.5	14.5	10.5	12.0	16.5	15.5	16.0	21.0	20.0	20.5
2	11.5	9.5	10.5	10.5	8.5	9.5	17.0	15.5	16.5	21.0	19.5	20.0
3	12.0	11.0	11.5	8.5	8.0	8.0	16.5	15.5	16.0	20.0	18.5	19.5
4	11.5	10.5	11.0	8.5	8.0	8.0	16.5	16.0	16.0	19.5	18.5	19.0
5	11.5	10.5	11.0	10.0	8.5	9.5	16.5	16.0	16.5	20.5	19.5	20.0
6	10.5	10.0	10.5	11.5	10.0	11.0	16.5	16.0	16.5	21.0	19.5	20.0
7	10.5	9.5	10.5	12.0	10.5	11.5	19.0	16.0	17.0	22.0	21.0	21.5
8	9.5	8.5	9.0	10.5	8.0	9.0	20.0	17.5	18.5	22.0	19.5	20.0
9	10.0	9.0	9.5	10.0	8.0	9.0	20.0	19.0	19.5	22.5	20.0	21.0
10	11.5	9.5	10.5	11.0	9.0	10.0	20.5	17.5	19.5	22.5	21.5	22.0
11	11.5	10.0	11.0	12.0	10.0	11.0	17.5	14.5	15.5	22.0	20.5	21.0
12	10.0	8.5	8.5	14.0	12.0	13.0	17.5	15.0	16.0	20.5	20.0	20.0
13	9.0	8.0	8.5	14.5	14.0	14.0	19.0	17.0	17.5	23.5	20.5	21.5
14	8.0	7.0	7.0	15.0	14.5	14.5	19.0	17.0	18.0	26.0	22.5	24.0
15	9.0	7.0	8.0	14.5	14.0	14.5	19.0	17.5	18.5	27.0	24.5	25.5
16	12.0	9.0	10.5	15.5	14.0	14.5	19.5	19.0	19.0	26.0	23.0	24.5
17	11.0	9.5	10.0	16.5	14.5	15.5	19.5	19.0	19.5	23.5	22.5	23.0
18	11.5	9.5	10.5	17.5	15.0	16.5	21.0	19.0	19.5	23.5	22.5	23.0
19	12.0	9.5	11.0	19.0	15.5	17.0	21.0	19.5	20.0	23.5	22.5	23.0
20	13.5	11.0	12.0	19.5	16.5	18.0	20.5	19.0	19.5	23.5	23.0	23.5
21	14.5	11.5	13.0	19.5	17.0	18.0	21.0	19.0	20.0	23.5	22.5	23.0
22	13.5	12.5	13.0	21.0	18.5	19.0	21.0	19.5	20.0	23.5	22.5	23.0
23	14.5	12.5	13.5	21.5	20.0	21.0	19.5	16.0	17.5	24.0	23.0	23.5
24	16.0	14.5	15.0	20.5	18.0	19.5	18.0	14.5	15.5	24.0	23.0	23.5
25	15.5	13.5	14.5	18.0	17.0	17.5	18.5	16.5	17.5	24.5	23.0	23.5
26	13.5	13.0	13.5	19.0	16.5	17.5	18.5	17.5	18.0	24.5	23.5	24.0
27	16.5	13.5	15.0	19.0	18.0	18.5	19.5	18.5	18.5	24.5	24.0	24.5
28	16.5	14.5	15.5	18.0	16.5	17.5	19.5	19.0	19.5	26.5	24.0	25.0
29	---	---	---	16.5	16.0	16.0	19.5	19.0	19.5	27.0	26.0	26.5
30	---	---	---	16.0	15.5	16.0	20.5	19.5	20.0	26.0	24.5	25.0
31	---	---	---	16.0	15.5	16.0	---	---	---	26.0	25.0	25.5
MONTH	16.5	7.0	11.0	21.5	8.0	14.5	21.0	14.5	18.0	27.0	18.5	22.5

08064100 CHAMBERS CREEK NEAR RICE, TEX.--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.5	24.0	25.0	27.0	26.0	26.5	27.5	24.5	25.5	28.5	27.0	28.0
2	26.0	24.0	25.0	27.5	26.0	27.0	28.0	25.5	26.0	29.0	27.5	28.0
3	26.0	25.5	26.0	28.5	26.5	27.5	28.5	26.5	27.0	29.0	27.0	28.0
4	26.5	25.5	26.0	28.5	27.0	28.0	29.0	28.0	28.5	28.5	27.5	28.0
5	27.5	26.0	26.5	28.5	26.5	27.0	29.5	29.0	29.0	28.5	27.0	28.0
6	27.0	26.0	26.5	27.0	25.5	26.5	29.5	29.0	29.5	28.0	27.0	27.5
7	29.0	26.0	27.5	27.5	25.5	26.5	29.5	29.0	29.5	28.0	27.0	27.5
8	29.0	27.0	28.0	29.0	27.5	28.5	30.0	28.5	29.5	27.5	26.0	27.0
9	29.0	27.5	28.5	30.5	28.5	29.5	30.0	28.5	29.0	26.0	25.0	25.5
10	29.0	24.5	28.0	30.5	29.0	30.0	29.5	28.5	29.0	25.0	24.0	24.5
11	25.0	21.5	22.5	31.0	29.0	30.0	30.0	28.5	29.5	24.5	23.0	24.0
12	23.5	22.5	23.0	31.5	29.0	30.5	30.5	28.5	29.5	25.0	24.0	24.5
13	25.0	22.5	23.5	31.5	29.5	30.5	30.0	29.0	29.5	25.5	24.0	25.0
14	25.5	23.0	24.0	31.0	29.5	30.5	30.0	29.0	29.5	25.0	24.5	25.0
15	26.0	24.0	25.0	30.5	29.5	30.0	29.5	28.5	29.0	26.0	25.0	25.5
16	26.0	24.5	25.5	29.5	28.5	29.0	29.5	28.5	29.0	27.0	25.0	26.0
17	26.0	25.5	25.5	29.0	28.0	28.5	29.5	28.5	29.0	26.5	25.5	26.0
18	26.0	25.5	26.0	29.0	25.5	28.5	29.5	28.5	29.0	25.5	25.0	25.5
19	27.0	26.0	26.5	27.5	25.0	26.0	29.5	29.0	29.0	26.0	25.0	25.5
20	27.0	26.5	27.0	29.5	27.5	28.5	29.5	28.5	29.0	26.0	25.0	25.5
21	27.5	26.5	27.0	29.5	28.5	29.0	29.5	28.5	29.0	26.0	23.0	25.0
22	28.0	27.0	27.5	30.0	28.5	29.5	29.5	28.5	29.0	23.0	20.5	21.5
23	28.5	27.0	27.5	30.0	29.5	30.0	29.5	28.5	29.0	20.5	17.5	18.5
24	29.5	27.0	28.5	30.5	29.0	29.5	29.0	28.0	28.5	19.0	17.0	17.5
25	29.5	27.0	28.5	30.5	29.0	29.5	29.5	28.0	28.5	19.0	18.5	19.0
26	29.0	27.0	28.0	30.5	29.5	30.0	29.5	28.0	28.5	19.5	18.5	19.0
27	28.0	26.5	27.0	30.5	29.0	30.0	29.0	28.0	28.5	21.0	19.5	20.5
28	27.0	26.5	27.0	31.0	29.5	30.0	29.5	28.0	28.5	---	---	---
29	26.5	26.0	26.5	30.5	29.5	30.0	29.0	28.0	28.5	---	---	---
30	27.5	26.0	26.5	29.5	29.0	29.0	28.5	28.0	28.0	24.0	22.5	23.5
31	---	---	---	29.0	27.5	28.0	28.5	27.0	27.5	---	---	---
MONTH	29.5	21.5	26.5	31.5	25.0	29.0	30.5	24.5	28.5	29.0	17.0	24.5
YEAR	31.5	7.0	19.0									

TRINITY RIVER BASIN
08064550 RICHLAND-CHAMBERS RESERVOIR NEAR KERENS, TX

LOCATION.--Lat 32°02'25", long 96°12'23", Navarro County, Hydrologic Units 12030108 and 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 mi².

PERIOD OF RECORD.--November 1988 to current year.

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

REMARKS.--The reservoir is formed by a rolled earthfill dam 31,000 ft long. Deliberate impoundment of water began July 14, 1987, and the dam was completed in December 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-foot radial gates. The low flow outlet works consist of two 3- x 5-foot outlets at elevation 266.0 ft, one 1.5 x 2.5 foot outlet, and one 1 x 1 foot outlet at elevation 285.0 ft. Each of the low flow outlets is controlled by sluice gates. The dam is owned by Tarrant County Water Control and Improvement District No. 1, and was built for municipal and industrial water supply and for recreation. The area and capacity tables were prepared by Freese and Nichols, Consulting Engineers for Tarrant County Water Control and Improvement District No. 1, who provided copies of the tables. Flow from 464 mi² above the dam is controlled by Bardwell and Navarro Mills Lakes. Figures given herein represent total contents. Satellite telemeter at station. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	330.0	--
Top of gates	317.34	1,290,000
Top of conservation pool	315.0	1,182,000
Crest of spillway	290.0	370,200
Lowest gated outlet	266.0	43,240

COOPERATION.--Capacity table was prepared by Freese and Nichols, consulting engineers for Tarrant County Water Control and Improvement District No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,267,000 acre-ft Dec. 22, 1991 (elevation 316.85 ft); minimum contents, 233,600 acre-ft Dec. 8, 1988 (elevation, 283.02 ft).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,258,000 acre-ft May 10 at 2300 hrs (elevation 316.67 ft); minimum contents, 1,084,000 acre-ft Oct. 7 (elevation, 312.74 ft).

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

283.0	233,300	312.0	1,052,000	315.0	1,182,000
293.0	440,300	313.0	1,095,000	316.0	1,227,000
303.0	721,000	314.0	1,138,000	317.0	1,274,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1087000	1121000	1183000	1205000	1187000	1188000	1191000	1210000	1201000	1179000	1162000	1166000
2	1087000	1120000	1185000	1204000	1187000	1185000	1190000	1207000	1198000	1179000	1172000	1165000
3	1086000	1121000	1185000	1200000	1186000	1183000	1189000	1203000	1194000	1178000	1179000	1164000
4	1085000	1125000	1186000	1198000	1186000	1183000	1192000	1200000	1190000	1175000	1185000	1162000
5	1085000	1140000	1186000	1195000	1185000	1181000	1195000	1202000	1187000	1176000	1189000	1158000
6	1084000	1158000	1185000	1192000	1185000	1184000	1198000	1210000	1184000	1175000	1192000	1158000
7	1091000	1166000	1184000	1190000	1184000	1181000	1200000	1216000	1183000	1175000	1195000	1157000
8	1093000	1170000	1185000	1189000	1184000	1183000	1198000	1246000	1181000	1176000	1196000	1154000
9	1091000	1175000	1190000	1188000	1184000	1184000	1195000	1251000	1180000	1175000	1197000	1154000
10	1090000	1180000	1197000	1189000	1183000	1184000	1192000	1258000	1181000	1173000	1197000	1151000
11	1089000	1184000	1205000	1186000	1184000	1185000	1192000	1245000	1207000	1173000	1196000	1152000
12	1090000	1186000	1208000	1193000	1184000	1185000	1205000	1234000	1221000	1172000	1194000	1150000
13	1088000	1187000	1207000	1200000	1184000	1215000	1212000	1228000	1229000	1170000	1191000	1151000
14	1087000	1186000	1212000	1205000	1183000	1233000	1211000	1224000	1229000	1170000	1188000	1150000
15	1085000	1185000	1227000	1202000	1184000	1249000	1209000	1220000	1223000	1168000	1186000	1150000
16	1090000	1190000	1240000	1203000	1183000	1233000	1211000	1220000	1220000	1168000	1184000	1149000
17	1090000	1194000	1249000	1203000	1183000	1224000	1212000	1221000	1217000	1165000	1181000	1148000
18	1092000	1195000	1245000	1208000	1182000	1218000	1215000	1219000	1214000	1168000	1181000	1147000
19	1093000	1193000	1227000	1213000	1184000	1216000	1216000	1215000	1212000	1169000	1179000	1151000
20	1094000	1191000	1216000	1209000	1183000	1213000	1219000	1216000	1206000	1167000	1178000	1151000
21	1104000	1191000	1206000	1205000	1183000	1211000	1225000	1217000	1202000	1168000	1177000	1151000
22	1110000	1188000	1200000	1202000	1182000	1207000	1236000	1219000	1199000	1166000	1177000	1151000
23	1117000	1187000	1194000	1201000	1182000	1202000	1236000	1219000	1194000	1165000	1174000	1150000
24	1120000	1186000	1191000	1200000	1183000	1202000	1233000	1219000	1190000	1162000	1174000	1149000
25	1121000	1184000	1190000	1197000	1184000	1205000	1228000	1221000	1186000	1161000	1174000	1148000
26	1121000	1185000	1188000	1197000	1189000	1204000	1223000	1223000	1186000	1159000	1173000	1147000
27	1120000	1183000	1187000	1198000	1190000	1200000	1219000	1221000	1183000	1159000	1172000	1147000
28	1120000	1183000	1197000	1195000	1190000	1199000	1217000	1216000	1182000	1157000	1170000	1146000
29	1120000	1182000	1208000	1192000	---	1197000	1214000	1212000	1181000	1154000	1168000	1144000
30	1120000	1182000	1211000	1191000	---	1195000	1216000	1209000	1179000	1155000	1168000	1144000
31	1120000	---	1210000	1188000	---	1194000	---	1207000	---	1158000	1167000	---
MAX	1121000	1195000	1249000	1213000	1190000	1249000	1236000	1258000	1229000	1179000	1197000	1166000
MIN	1084000	1120000	1183000	1186000	1182000	1181000	1189000	1200000	1179000	1154000	1162000	1144000
(+)	313.58	315.01	315.61	315.14	315.17	315.26	315.75	315.55	314.94	314.45	314.66	314.14
(@)	+33000	+62000	+28000	-22000	+2000	+4000	+22000	-9000	-28000	-21000	+9000	-23000

CAL YR 1994 MAX 1249000 MIN 1084000 (@) +29000
WTR YR 1995 MAX 1258000 MIN 1084000 (@) +57000

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

08064700 TEHUACANA CREEK NEAR STREETMAN, TX

LOCATION.--Lat 31°50'46", long 96°17'37", Freestone County, Hydrologic Unit 12030201, at left end of upstream bridge on Interstate Highway 45, 2.8 mi southeast of Streetman, 2.9 mi downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 4.0 mi upstream from Caney Creek, and 24.8 mi upstream from mouth.

DRAINAGE AREA.--142 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 280.13 ft above sea level. Prior to Dec. 14, 1993, at site 0.2 mi downstream at datum 7.45 ft higher.

REMARKS.--Records fair, except those for estimated daily discharges and those for daily discharges below 15 ft³/s, which are poor. Water year 1994 not previously published.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1932 reached a stage of about 24 ft. at site and datum 0.2 mi downstream from information by Texas Department of Transportation.

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

Current year:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 5	1230	3,030	30.83	Mar. 13	1830	2,680	30.00
Dec. 15	1230	2,760	30.24	May 8	1930	4,900	32.26
Dec. 29	0630	3,910	31.85				

Water year 1994:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 20	1400	3,090	21.77	Feb. 22	2100	19,800	33.59

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.93	2.6	.57	.79	456	4.8	e.91	e2.6	2.2	.40	.02
2	.00	.75	3.1	.57	.72	238	3.6	e32	e2.2	2.1	.35	6.0
3	.00	1.4	3.1	.57	.71	80	2.8	e383	e2.0	2.2	.60	.40
4	.00	1.5	2.9	.57	.68	36	2.3	e71	e1.8	2.1	.01	.00
5	.00	2.1	2.8	.56	.64	21	2.1	e14	e1.8	1.8	.00	.00
6	.00	2.9	2.4	.53	.57	13	2.4	e3.2	e1.9	1.6	.00	.00
7	.00	2.8	2.5	.53	.57	8.8	2.9	e1.3	1.8	1.4	.00	.00
8	.00	2.6	2.9	.53	.57	7.3	2.5	e.68	1.7	1.3	.00	.11
9	.00	2.0	3.4	.55	.56	77	2.3	e1.8	1.4	1.2	.00	.56
10	.00	1.6	3.5	.57	.53	107	2.2	e131	2.8	1.2	.00	.05
11	.00	1.9	2.6	.79	1.0	35	2.0	e54	30	1.2	.00	.00
12	.46	2.1	2.5	.96	1.1	16	29	e21	4.1	1.3	.02	.00
13	373	2.0	3.1	1.0	1.1	9.3	17	e10	1.9	.55	.03	.00
14	159	2.0	2.8	.98	.87	6.8	7.2	e6.6	1.4	.47	.03	.00
15	18	2.0	e3.7	.81	1.3	5.6	4.4	e5.3	78	.92	.03	.00
16	9.8	2.0	1.8	.70	1.5	4.6	3.0	e4.4	127	1.1	.03	.00
17	7.1	2.4	2.0	.68	1.1	3.7	2.3	e3.7	86	.94	.05	.00
18	5.9	4.7	2.3	.84	1.1	3.0	1.9	e3.1	34	.84	.07	.00
19	5.0	4.2	2.5	.96	.91	2.8	1.6	e2.8	12	1.1	.07	.00
20	1590	5.2	2.5	.76	203	2.5	1.5	e2.7	6.5	1.3	.07	.00
21	695	4.6	2.1	.70	330	2.3	184	e2.5	4.1	1.4	.07	.00
22	64	3.3	2.1	.68	8710	2.0	110	e2.4	2.7	1.5	.07	.00
23	18	2.8	5.6	.65	4440	2.0	259	e2.3	2.1	1.5	.06	.00
24	6.2	2.5	4.5	.75	185	3.7	190	2.2	204	1.4	.07	.00
25	3.1	2.6	3.9	1.6	60	4.4	14	e2.1	78	1.3	.03	.00
26	1.8	2.7	2.3	1.4	30	4.5	5.8	e19	17	1.3	.00	.00
27	1.3	2.7	1.6	1.3	18	5.0	e3.1	e30	7.7	1.2	.00	.00
28	.74	2.7	1.2	1.3	12	10	e2.0	e7.9	6.1	.99	.00	.00
29	.32	2.7	1.0	1.2	---	17	e1.5	e4.6	3.1	.78	.00	.00
30	.22	2.6	.80	1.1	---	10	e1.2	e3.7	2.2	.63	.00	.00
31	.79	---	.66	.96	---	7.8	---	e3.1	---	.55	.00	---
TOTAL	2959.73	76.28	80.76	25.67	14004.32	1202.1	868.4	832.29	727.9	39.37	2.06	7.14
MEAN	95.5	2.54	2.61	.83	500	38.8	28.9	26.8	24.3	1.27	.066	.24
MAX	1590	5.2	5.6	1.6	8710	456	259	383	204	2.2	.60	6.0
MIN	.00	.75	.66	.53	.53	2.0	1.2	.68	1.4	.47	.00	.00
AC-FT	5870	151	160	51	27780	2380	1720	1650	1440	78	4.1	14
CFSM	.67	.02	.02	.01	3.52	.27	.20	.19	.17	.01	.00	.00
IN.	.78	.02	.02	.01	3.67	.31	.23	.22	.19	.01	.00	.00

08064700 TEHUACANA CREEK NEAR STREETMAN, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1994, BY WATER YEAR (WY)

MEAN	59.7	50.3	141	61.9	163	126	90.0	235	76.7	4.33	17.6	30.0
MAX	379	371	1013	289	930	1048	557	2927	388	35.1	234	547
(WY)	1974	1975	1992	1992	1986	1990	1976	1989	1981	1976	1983	1974
MIN	.000	.000	.077	.12	1.08	.49	.000	.020	.042	.000	.000	.000
(WY)	1981	1981	1990	1971	1981	1971	1971	1971	1971	1978	1969	1980

SUMMARY STATISTICS	FOR 1993 CALENDAR YEAR		FOR 1994 WATER YEAR		WATER YEARS 1968 - 1994	
ANNUAL TOTAL	16222.80		20826.02			
ANNUAL MEAN	44.4		57.1		85.9	
HIGHEST ANNUAL MEAN					274	1989
LOWEST ANNUAL MEAN					12.6	1971
HIGHEST DAILY MEAN	1740	Mar 20	8710	Feb 22	42000	May 4 1989
LOWEST DAILY MEAN	.00	Jul 25	.00	Oct 1	.00	Sep 30 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 30	.00	Oct 1	.00	Sep 30 1968
INSTANTANEOUS PEAK FLOW			19800	Feb 22	g85700	May 17 1989
INSTANTANEOUS PEAK STAGE			33.59	Feb 22	g30.20	May 17 1989
ANNUAL RUNOFF (AC-FT)	32180		41310		62210	
ANNUAL RUNOFF (CFSM)	.31		.40		.60	
ANNUAL RUNOFF (INCHES)	4.25		5.46		8.22	
10 PERCENT EXCEEDS	48		29		53	
50 PERCENT EXCEEDS	2.7		1.9		1.8	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated
g At site and datum then in use.

08064700 TEHUACANA CREEK NEAR STREETMAN, TX--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.80	88	11	19	9.7	21	2.0	1.4	166	.11
2	.00	.00	.89	61	7.6	9.9	8.3	9.9	1.9	1.3	63	.15
3	.00	.00	1.1	41	6.4	9.0	7.0	12	1.8	1.2	28	.13
4	.00	1.7	1.2	30	6.0	8.4	7.1	14	1.7	1.2	9.6	.04
5	.00	1810	1.2	23	5.7	7.7	17	10	1.7	1.1	3.2	.02
6	.00	436	1.6	21	4.3	6.8	21	127	1.6	1.0	1.8	.04
7	.00	59	2.1	19	3.8	13	16	104	1.5	.88	1.1	.08
8	1.7	15	1.4	16	3.8	39	e12	2630	1.5	.79	.99	.05
9	2.6	6.0	1.9	14	3.9	16	e8.6	1890	1.5	.71	1.0	.00
10	.01	43	6.4	13	3.9	8.0	e5.2	183	1.5	.64	1.1	.00
11	.00	22	4.6	13	4.4	5.8	e5.3	53	123	.58	.87	.00
12	.00	5.7	1.6	21	5.3	4.9	5.2	29	65	.54	.62	.02
13	.00	2.9	1.1	1340	5.5	1090	4.5	19	12	.49	.56	.09
14	.00	1.8	1.9	323	6.0	1100	4.0	14	5.2	.46	.75	.07
15	.00	1.4	1770	114	6.1	271	3.9	9.7	3.2	.45	.71	.12
16	.00	1.2	2070	61	6.1	180	3.9	8.0	2.4	.40	.64	.11
17	100	1.1	694	46	5.6	103	3.9	6.5	2.1	.44	.61	.14
18	62	1.1	126	1040	5.3	54	6.2	5.3	1.8	1.1	.60	.30
19	202	1.3	50	669	4.7	33	12	4.4	1.7	25	.52	5.7
20	75	2.8	25	165	4.4	23	12	4.0	1.6	6.5	.48	56
21	360	1.8	13	71	3.9	17	7.8	3.6	1.5	2.2	.49	3.7
22	592	1.3	7.5	38	3.7	14	9.4	3.3	1.4	1.2	.42	2.1
23	117	1.0	4.8	38	3.7	12	590	3.1	1.4	.77	.37	1.2
24	7.9	.97	3.6	25	4.1	10	124	2.9	1.4	.61	.37	.82
25	.85	.95	3.1	17	4.0	9.1	44	2.7	1.4	.50	.35	.99
26	25	.92	2.7	26	4.9	9.0	22	2.6	1.4	.42	.25	.81
27	3.0	.97	2.4	218	103	9.0	12	2.5	1.4	.37	.26	1.2
28	.31	.96	371	94	50	8.7	11	2.5	1.4	.34	.17	1.0
29	.00	.88	2740	41	---	8.0	8.4	2.3	1.4	.31	.14	.86
30	.00	.87	416	20	---	8.8	49	2.3	1.4	.31	.13	.76
31	.00	---	140	13	---	11	---	2.1	---	9.7	.12	---
TOTAL	1549.37	2422.62	8466.89	4719	287.1	3118.1	1050.4	5183.7	248.8	62.91	285.22	76.61
MEAN	50.0	80.8	273	152	10.3	101	35.0	167	8.29	2.03	9.20	2.55
MAX	592	1810	2740	1340	103	1100	590	2630	123	25	166	56
MIN	.00	.00	.80	13	3.7	4.9	3.9	2.1	1.4	.31	.12	.00
AC-FT	3070	4810	16790	9360	569	6180	2080	10280	493	125	566	152
CFSM	.35	.57	1.92	1.07	.07	.71	.25	1.18	.06	.01	.06	.02
IN.	.41	.63	2.22	1.24	.08	.82	.28	1.36	.07	.02	.07	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	59.3	51.5	146	65.3	157	125	88.1	233	74.3	4.25	17.3	29.0
MAX	379	371	1013	289	930	1048	557	2927	388	35.1	234	547
(WY)	1974	1975	1992	1992	1986	1990	1976	1989	1981	1976	1983	1974
MIN	.000	.000	.077	.12	1.08	.49	.000	.020	.042	.000	.000	.000
(WY)	1981	1981	1990	1971	1981	1971	1971	1971	1971	1978	1969	1980

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	30148.13		27470.72			
ANNUAL MEAN	82.6		75.3		85.5	
HIGHEST ANNUAL MEAN					274	1989
LOWEST ANNUAL MEAN					12.6	1971
HIGHEST DAILY MEAN	8710	Feb 22	2740	Dec 29	42000	May 4 1989
LOWEST DAILY MEAN	.00	Aug 5	.00	Oct 1	.00	Sep 30 1968
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 5	.00	Oct 1	.00	Sep 30 1968
INSTANTANEOUS PEAK FLOW			4900	May 8	g85700	May 17 1989
INSTANTANEOUS PEAK STAGE			32.26	May 8	g30.20	May 17 1989
ANNUAL RUNOFF (AC-FT)	59800		54490		61920	
ANNUAL RUNOFF (CFSM)	.58		.53		.60	
ANNUAL RUNOFF (INCHES)	7.90		7.20		8.18	
10 PERCENT EXCEEDS	76		101		55	
50 PERCENT EXCEEDS	1.5		3.8		1.8	
90 PERCENT EXCEEDS	.00		.13		.00	

e Estimated
g At site and datum then in use.

08064700 TEHUACANA CREEK NEAR STREETMAN, TX--Continued

WATER-QUALITY RECORDS

LOCATION.--Lat 31°50'54", long 96°17'23", Freestone County, Hydrologic Unit 12030201, at downstream side of bridge on U.S. Highway 75, 2.8 mi southeast of Streetman, 3.1 mi downstream from Chicago, Rock Island, and Pacific Railroad Co. bridge, 3.8 mi upstream from Caney Creek, and 25 mi upstream from mouth.

PERIOD OF RECORD.--Chemical analyses: February 1968 to September 1985, October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)
DEC												
02...	1047	0.88	745	8.0	11.0	40	4.9	8.3	76	0.9	210	49
FEB												
09...	1232	5.3	865	8.4	11.0	43	15	6.0	55	0.7	240	82
APR												
12...	1427	16	996	7.7	21.0	42	6.2	5.2	59	1.8	270	97
JUN												
01...	1521	2.0	1390	7.5	31.0	22	4.5	--	--	0.5	360	110
JUL												
06...	1015	1.0	1560	7.6	27.0	--	--	6.3	79	2.5	390	140
AUG												
03...	1001	25	294	7.0	26.5	80	59	5.2	65	2.5	84	20

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L)
DEC												
02...	51	19	73	2	5.8	160	98	85	0.30	16	442	<6
FEB												
09...	60	21	87	2	4.4	150	120	110	0.3	14	511	13
APR												
12...	70	24	97	3	5.2	180	140	120	0.3	9.3	572	14
JUN												
01...	90	32	140	3	5.4	240	190	180	0.4	16	801	8
JUL												
06...	95	36	170	4	6.3	250	230	210	0.5	11	908	--
AUG												
03...	22	6.9	24	1	4.7	64	41	20	0.2	8.8	169	124

DATE	RESIDUE VOLA-TILE, SUS-PENDED (MG/L)	RESIDUE FIXED NON FILTER-ABLE (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)
DEC											
02...	<6	--	--	--	<0.010	--	<0.050	0.1	2.3	2.4	0.0
FEB											
09...	4	9	--	--	0.0	--	<0.050	0.0	0.45	0.5	0.1
APR											
12...	12	2	--	--	0.0	--	<0.050	0.0	0.47	0.5	0.0
JUN											
01...	5	3	--	--	<0.010	--	<0.050	0.020	0.28	0.30	<0.010
JUL											
06...	--	--	--	--	<0.010	--	<0.050	0.030	0.37	0.40	0.140
AUG											
03...	26	98	0.410	0.410	0.0	0.450	0.45	0.1	0.51	0.6	0.1

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC TOTAL (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
DEC											
02...	0.0	0.09	9.6	--	--	--	--	--	--	--	--
FEB											
09...	0.0	0.12	9.1	<1	89	<0.5	<1	<5	<3	<10	180
APR											
12...	0.0	0.06	26	--	--	--	--	--	--	--	--
JUN											
01...	<0.010	--	9.5	<1	120	<0.5	<1	<5	<3	<10	4
JUL											
06...	<0.010	--	--	2	110	0.6	<1	<5	<3	<10	14
AUG											
03...	0.1	0.21	12	1	29	<0.5	<1	<5	<3	10	110

08064700 TEHUACANA CREEK NEAR STREETMAN, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	<10	16	250	<0.1	<10	<10	<1	<1	620	<6	24
APR											
12...	--	--	--	--	--	--	--	--	--	--	--
JUN											
01...	<10	23	170	<0.1	10	<10	<1	<1	1000	<6	16
JUL											
06...	<10	27	890	0.1	<10	<10	<1	<1	1200	<6	17
AUG											
03...	<10	10	17	0.1	<10	<10	<1	<1	280	<6	14

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 mi northeast of Oakwood, and at mile 313.4.

DRAINAGE AREA.--12,833 mi².

PERIOD OF RECORD.--October 1923 to September 1924 (monthly discharge only), October 1924 to current year. Records of January 1905 to September 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.

REVISED RECORDS.--WSP 1442: 1934. See also PERIOD OF RECORD. WSP 1922: Drainage area. WDR TX-81-1: 1980 (M,m).

GAGE.--Water-stage recorder. Datum of gage is 175.06 ft above sea level. 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.

REMARKS.--Records good except those days for estimated daily discharges, which are fair. Twenty-one major reservoirs with a capacity of 4,200,000 acre-ft, of which 1,362,000 acre-ft is for flood control, partly regulate the flow. Streamflow is affected at times by discharge from the flood-detention pools of 252 floodwater-retarding structures with a combined detention capacity of 183,300 acre-ft. These structures control runoff from 614 mi² 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 Big Brown Lake is used to maintain the normal pool elevation for that lake. Satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--30 years (water years 1924-53), 5,045 ft³/s (3,655,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1924-53).--Maximum discharge, 153,000 ft³/s Apr. 29, 1942 (gage height, 51.64 ft); minimum observed, 28 ft³/s Aug. 24, 1925.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1890 reached a stage of 53 ft (discharge about 180,000 ft³/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 ft³/s).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860	18700	14200	15200	e10000	7990	e16500	e23500	14500	3570	1780	1020
2	853	18500	12900	15800	e6700	8320	16400	21200	14000	3620	1930	1040
3	828	16700	11600	15500	e5000	7700	15700	17800	13500	3470	2400	1030
4	818	13200	10600	13900	e7500	6530	14400	14500	13100	3360	4910	1090
5	804	12100	9710	e11700	e6800	5690	13000	12200	12400	3360	5610	1000
6	827	14200	e9600	e9700	e6100	5440	13000	11000	11400	3440	4970	935
7	869	15900	9380	e10000	e5600	5070	13700	11700	10400	3770	4450	880
8	8320	17100	9230	e8800	5200	3810	14500	14100	9400	5770	4160	881
9	5670	18000	9060	e8200	5070	4400	15400	16700	8600	6140	e3970	909
10	5210	18700	9650	e7600	4940	6050	16100	19200	8060	4400	e4000	908
11	6560	19400	11500	e6700	5080	5800	16900	24700	9570	3420	e4030	906
12	5300	20200	13600	e6500	5290	4670	17600	52800	12400	3170	e3950	890
13	3320	21100	14800	e11800	5170	6100	18300	72700	14100	e3050	e3870	890
14	2210	21700	16000	e15800	5420	11500	19100	76300	15000	e2920	e3770	903
15	1820	21800	18900	e18000	5460	e14900	19800	70300	15700	e2790	e3520	1270
16	1810	21300	22700	e19600	5320	17600	20400	61900	16400	e2680	e2970	3910
17	2730	20000	25000	e19200	5190	20400	20900	54400	17200	e2560	e2520	4520
18	2470	18200	29300	e21600	5030	25300	21400	47700	17600	e2420	e2070	3030
19	3390	17000	44600	e23400	4830	35300	21400	41900	17300	e2310	1410	1810
20	5110	16600	55200	e22000	4830	41700	20800	37300	15100	2200	e1140	1550
21	8450	16600	55400	e19600	4730	42100	19900	33800	11000	2160	e1040	1640
22	12800	17000	50000	e17400	4600	40000	18600	31000	7900	1870	e998	2700
23	14100	17400	43600	e15000	4220	36200	18100	28200	6260	1670	1020	3290
24	14700	17800	37400	e13300	3710	32900	18300	25700	5650	1460	1430	2560
25	15200	18000	32600	e10900	3740	29700	19400	23600	5410	1330	1370	2090
26	15700	18100	28500	e8600	3840	26400	e21000	21800	4990	1350	1120	1780
27	16200	17800	23900	e13300	5880	23300	e23200	20300	4250	1820	1010	1430
28	16700	17300	17500	e17600	7230	20500	e24900	18500	3830	1760	961	1250
29	17300	16700	13200	e19000	---	18300	25100	16900	3660	1420	977	1180
30	17900	15800	12800	e17800	---	17200	e24900	15800	3450	1320	1010	1120
31	18400	---	14000	e14000	---	16700	---	15100	---	1380	1040	---
TOTAL	227229	532900	686430	447500	152480	547570	558700	952600	322130	85960	79406	48412
MEAN	7330	17760	22140	14440	5446	17660	18620	30730	10740	2773	2561	1614
MAX	18400	21800	55400	23400	10000	42100	25100	76300	17600	6140	5610	4520
MIN	804	12100	9060	6500	3710	3810	13000	11000	3450	1320	961	880
AC-FT	450700	1057000	1362000	887600	302400	1086000	1108000	1889000	638900	170500	157500	96030

08065000 TRINITY RIVER NEAR OAKWOOD, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1995#, BY WATER YEAR (WY)

MEAN	2887	4387	5797	4733	5907	6805	6804	12150	8119	2845	1561	1532
MAX	14250	25900	33280	30140	29840	30130	23710	56050	33550	12590	7050	7361
(WY)	1974	1975	1992	1992	1992	1992	1977	1990	1957	1982	1982	1962
MIN	131	165	235	400	553	286	318	812	332	126	101	116
(WY)	1957	1956	1956	1957	1967	1956	1956	1971	1954	1956	1956	1956

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1954 - 1995#	
ANNUAL TOTAL	3201954		4641317			
ANNUAL MEAN	8772		12720		5290	
HIGHEST ANNUAL MEAN					15240	1992
LOWEST ANNUAL MEAN					700	1956
HIGHEST DAILY MEAN	55400	Dec 21	76300	May 14	106000	May 7 1990
LOWEST DAILY MEAN	804	Oct 5	804	Oct 5	85	Oct 14 1956
ANNUAL SEVEN-DAY MINIMUM	836	Sep 30	837	Oct 1	93	Aug 12 1956
INSTANTANEOUS PEAK FLOW			77300	May 14	107000	May 7 1990
INSTANTANEOUS PEAK STAGE			47.34	May 14	49.61	May 7 1990
ANNUAL RUNOFF (AC-FT)	6351000		9206000		3833000	
10 PERCENT EXCEEDS	19500		24200		14900	
50 PERCENT EXCEEDS	5170		10600		1620	
90 PERCENT EXCEEDS	1110		1330		439	

e Estimated
Period of regulated streamflow.

08065200 UPPER KEECHI CREEK NEAR OAKWOOD, TX

LOCATION.--Lat 31°34'11", long 95°53'17", Leon County, Hydrologic Unit 12030201, at right bank at downstream side of bridge on U.S. Highway 79, 1.9 mi upstream from Missouri Pacific Railroad Co. bridge, 2 mi southwest of Oakwood, 11 mi upstream from Buffalo Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--150 mi².

PERIOD OF RECORD.--April 1962 to current year.
Water-quality records.--Chemical analyses: June 1962 to April 1964, November 1967 to September 1975.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 240.11 ft above sea level.

REMARKS.--No estimated daily discharges. Records fair. No known diversions or regulation above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, about 21 ft in 1932, from information by local residents.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 8	0300	7,620	14.58	Jan. 13	2400	2,460	13.36
Dec. 16	0900	4,500	14.04	Mar. 14	0800	2,700	13.46

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	32	23	290	76	585	53	25	13	4.3	366	.33
2	6.2	30	24	123	68	178	46	31	15	4.3	325	.30
3	6.5	29	33	90	62	126	42	21	13	4.3	106	.31
4	6.5	36	32	74	54	113	57	20	11	5.6	34	.30
5	6.5	220	30	64	51	107	62	21	9.6	5.2	17	.26
6	6.5	327	30	61	48	93	79	22	8.5	4.9	11	.26
7	74	443	29	59	46	118	70	21	7.9	6.2	7.7	.26
8	3450	300	28	55	44	196	56	136	7.1	5.8	5.9	.25
9	791	71	32	52	42	127	47	294	7.0	4.8	4.5	.20
10	260	67	137	50	44	76	40	331	10	4.0	3.8	.20
11	61	59	88	50	67	65	45	287	295	3.4	3.1	.17
12	37	51	55	96	88	61	38	58	252	3.1	2.6	.18
13	29	42	43	1130	67	726	34	42	143	2.6	2.2	.27
14	25	37	46	1380	70	2020	30	36	33	2.4	3.0	1.3
15	24	34	715	714	91	1030	30	30	19	2.2	7.6	2.5
16	43	33	2840	329	88	626	28	25	15	2.2	4.0	1.8
17	175	33	1770	145	71	308	28	22	12	2.3	2.8	4.7
18	336	33	899	236	58	209	39	20	11	10	2.3	8.1
19	857	35	514	362	54	137	45	18	9.3	25	2.1	8.6
20	509	35	189	212	51	103	43	16	8.6	64	2.0	8.1
21	517	35	127	123	49	87	35	15	8.2	18	1.7	9.6
22	753	33	98	103	45	78	32	14	7.8	9.2	1.6	30
23	652	28	80	109	44	71	55	13	7.2	6.8	1.4	21
24	285	26	69	83	44	64	56	12	6.5	5.5	1.3	16
25	115	29	62	71	42	61	45	12	5.6	4.7	1.2	10
26	105	30	56	153	108	57	31	11	5.1	3.8	.83	7.5
27	99	31	53	381	557	59	25	11	4.7	3.0	.83	6.2
28	65	31	115	410	994	51	23	10	4.4	2.6	.66	5.4
29	48	27	389	381	---	49	22	10	4.0	2.0	.63	4.4
30	39	24	598	124	---	61	21	11	4.2	3.0	.43	4.1
31	35	---	709	88	---	60	---	12	---	43	.40	---
TOTAL	9422.0	2241	9913	7598	3123	7702	1257	1607	957.7	268.2	923.58	152.59
MEAN	304	74.7	320	245	112	248	41.9	51.8	31.9	8.65	29.8	5.09
MAX	3450	443	2840	1380	994	2020	79	331	295	64	366	30
MIN	5.8	24	23	50	42	49	21	10	4.0	2.0	.40	.17
AC-FT	18690	4450	19660	15070	6190	15280	2490	3190	1900	532	1830	303
CFSM	2.03	.50	2.13	1.63	.74	1.66	.28	.35	.21	.06	.20	.03
IN.	2.34	.56	2.46	1.88	.77	1.91	.31	.40	.24	.07	.23	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1995#, BY WATER YEAR (WY)

MEAN	45.5	51.1	110	95.6	120	130	122	145	72.7	14.1	6.14	15.9
MAX	371	513	878	403	378	461	574	1413	517	128	54.5	246
(WY)	1974	1975	1992	1991	1992	1973	1966	1965	1976	1981	1979	1974
MIN	.000	.000	.36	4.03	8.28	11.2	8.41	1.82	.48	.000	.000	.000
(WY)	1964	1964	1964	1964	1964	1967	1971	1972	1963	1964	1963	1963

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1962 - 1995#	
ANNUAL TOTAL	36490.6		45165.07			
ANNUAL MEAN	100		124		77.7	
HIGHEST ANNUAL MEAN					168	1965
LOWEST ANNUAL MEAN					4.52	1963
HIGHEST DAILY MEAN	3450	Oct 8	3450	Oct 8	9530	Apr 25 1966
LOWEST DAILY MEAN	1.6	Jul 22	.17	Sep 11	.00	Aug 5 1962
ANNUAL SEVEN-DAY MINIMUM	1.8	Jul 20	.22	Sep 6	.00	Aug 5 1962
INSTANTANEOUS PEAK FLOW			7620	Oct 8	24000	May 16 1965
INSTANTANEOUS PEAK STAGE			14.58	Oct 8	15.58	Dec 21 1991
ANNUAL RUNOFF (AC-FT)	72380		89580		56300	
ANNUAL RUNOFF (CFSM)	.67		.82		.52	
ANNUAL RUNOFF (INCHES)	9.05		11.20		7.04	
10 PERCENT EXCEEDS	201		315		133	
50 PERCENT EXCEEDS	23		34		12	
90 PERCENT EXCEEDS	3.2		2.6		.08	

Period of regulated streamflow.

08065350 TRINITY RIVER NEAR CROCKETT, TX
(National stream-quality accounting network)

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 141.15 ft above sea level. Prior to Oct. 13, 1983, water-stage recorder at site 1,000 ft downstream at datum 4.56 ft lower.

REMARKS.--Records fair. For statement regarding regulation by upstream reservoirs, see station 08065000. Flow from 44 mi² in the Elkhart Creek basin is affected by storage in Houston County Lake near Crockett (capacity 19,500 acre-ft). There are many diversions above station for irrigation, municipal, and industrial uses. Satellite telemeter at station.

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 Highways and Public Transportation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	834	18900	16100	18400	18100	9570	19100	25200	17700	3550	4500	1500
2	831	19100	14800	19200	16700	10600	18800	24500	17000	3720	4770	1500
3	825	18800	13600	19300	12100	11100	18500	22700	16400	3690	3400	1510
4	805	16900	12300	18500	7800	9560	18100	19600	15900	3490	4370	1510
5	786	14100	11300	16300	6630	7670	17400	16500	15400	3390	7030	1590
6	772	14000	10600	13800	6630	6620	17100	14200	14500	3440	6820	1500
7	773	15500	10200	12300	6570	6350	17000	13300	13400	3540	5700	1340
8	5900	17000	10000	11700	6360	5650	17100	14800	12200	4540	5130	1270
9	12400	18100	9850	11400	6110	4240	17700	17600	11000	6840	4840	1270
10	11600	18900	11200	10300	5910	5610	18200	19300	10100	6460	4710	1300
11	9420	19500	12300	9050	5840	7020	19400	21300	12400	4480	4590	1300
12	8400	20000	13800	8510	6340	6140	20300	24800	15900	3530	4640	1320
13	5750	20700	15300	13900	6330	6810	20800	31600	16500	3230	4610	1450
14	3100	21300	16300	17000	6350	13400	e21000	40600	17300	3130	4460	1440
15	1960	21800	19000	19300	6680	19400	e20800	51400	17900	3090	4400	1610
16	1850	22000	e25000	21000	6580	22900	e20600	64600	18200	2870	4110	2430
17	3610	21600	e36600	21000	6350	23200	e20100	68100	18600	2200	3520	4700
18	5370	20500	38000	23600	6070	23900	19400	63300	19100	1930	3190	4690
19	4890	18900	37000	25500	5720	25900	18900	57300	19300	2410	2840	3380
20	5140	17800	e38500	24200	5480	28800	17600	52100	18900	2840	2240	2700
21	8080	17400	e40700	22500	5390	32600	16700	47400	16400	2400	2000	2550
22	15900	17400	e43400	21600	5200	36200	16200	43500	12200	2220	1870	3050
23	18800	17700	45200	21200	4950	37400	13500	40400	8790	1910	1770	3880
24	17900	18100	44800	20900	4380	37200	13200	37200	7190	1720	1820	3850
25	17500	18400	43000	20100	3890	36100	13000	32100	6570	1500	2290	3360
26	17600	18600	40600	19100	3920	33200	17600	28200	6260	1350	2220	2890
27	17500	18600	37600	20500	6130	29700	e20000	25600	5550	1410	1900	2570
28	17400	18400	31200	18900	8320	26700	e24000	23200	4590	1850	1670	2210
29	17600	18000	25300	17000	---	23600	24500	21200	4090	1730	1590	2030
30	18000	17300	20500	17300	---	21100	25100	19500	3770	1490	1520	1930
31	18500	---	18100	17900	---	19700	---	18400	---	1690	1500	---
TOTAL	269796	555300	762150	551260	196830	587940	561700	999500	393110	91640	110020	67630
MEAN	8703	18510	24590	17780	7030	18970	18720	32240	13100	2956	3549	2254
MAX	18800	22000	45200	25500	18100	37400	25100	68100	19300	6840	7030	4700
MIN	772	14000	9850	8510	3890	4240	13000	13300	3770	1350	1500	1270
AC-FT	535100	1101000	1512000	1093000	390400	1166000	1114000	1983000	779700	181800	218200	134100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1995, BY WATER YEAR (WY)

MEAN	3281	5574	7319	6006	7719	9446	8585	14180	10080	3606	1893	1800
MAX	16840	26110	35440	33620	30490	33670	25960	62100	29570	15030	7188	6932
(WY)	1974	1975	1992	1992	1992	1992	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1964 - 1995	
ANNUAL TOTAL	3750117		5146876			
ANNUAL MEAN	10270		14100		6617	
HIGHEST ANNUAL MEAN					16810	1992
LOWEST ANNUAL MEAN					1084	1964
HIGHEST DAILY MEAN	45200	Dec 23	68100	May 17	109000	May 10 1990
LOWEST DAILY MEAN	772	Oct 6	772	Oct 6	278	Aug 12 1964
ANNUAL SEVEN-DAY MINIMUM	804	Oct 1	804	Oct 1	293	Aug 10 1964
INSTANTANEOUS PEAK FLOW			69000	May 17	109000	May 10 1990
INSTANTANEOUS PEAK STAGE			45.75	May 17	48.54	May 10 1990
ANNUAL RUNOFF (AC-FT)	7438000		10210000		4794000	
10 PERCENT EXCEEDS	24100		25700		18800	
50 PERCENT EXCEEDS	5720		13400		2450	
90 PERCENT EXCEEDS	1700		1850		692	

e Estimated

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: February 1964 to current year. Chemical and biochemical analyses: February 1968 to current year. Pesticide analyses: November 1971 to July 1981. Sediment records: November 1972 to September 1977.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February 1964 to current year.
pH: March 1975 to current year.
WATER TEMPERATURE: February 1964 to September 1971, March 1975 to current year.
DISSOLVED OXYGEN: March 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: July 1972 to September 1977.

INSTRUMENTATION.--Beginning March 1975, a four-parameter water-quality monitor continuously records specific conductance, pH, water temperature, and dissolved oxygen at this station.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,370 microsiemens Sept. 22, 1964; minimum, 96 microsiemens March 29, 1989.
pH: Maximum, 9.6 units Aug. 11-12, 1981; minimum, 5.9 units Aug. 12, 1977.
WATER TEMPERATURE: Maximum, 37.0°C Jul. 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, 754 microsiemens Sept. 2; minimum, 132 microsiemens Oct. 9.
pH: Maximum, 8.4 units Oct. 6, 7; minimum 7.0 units Oct. 9, 10, May 10, 14-19.
WATER TEMPERATURE: Maximum, 33.0°C Jul. 28; minimum, 9.5°C Jan. 5-9.
DISSOLVED OXYGEN: Maximum 12.1 mg/L Jan. 9, 10; minimum, 3.1 mg/L Jun. 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
MAR											
23...	1200	37500	329	7.2	21.5	6.6	75	1.9	130	20	45
APR											
27...	1545	22100	326	7.3	20.0	6.9	76	1.1	120	18	44
JUN											
01...	1545	17600	371	7.0	26.5	6.4	80	0.8	130	13	46
JUL											
06...	1515	3460	454	7.0	29.5	6.0	79	1.0	150	28	52
AUG											
10...	1530	4700	375	7.9	31.0	5.9	80	1.6	120	29	42
SEP											
05...	1545	1600	634	7.9	31.0	6.5	87	1.4	170	57	57

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
MAR										
23...	3.3	15	0.6	4.0	110	32	13	0.30	5.4	184
APR										
27...	3.6	16	0.6	3.8	110	28	15	0.30	4.5	183
JUN										
01...	3.9	19	0.7	4.1	120	33	17	0.30	4.1	203
JUL										
06...	4.3	31	1	5.1	120	45	30	0.50	6.3	259
AUG										
10...	3.9	26	1	4.8	92	40	25	0.40	7.7	386
SEP										
05...	6.1	58	2	7.5	110	71	63	0.90	9.0	367

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)
MAR										
23...	0.410	0.410	0.010	0.420	0.420	<0.015	--	0.40	0.060	0.040
APR										
27...	0.680	0.680	0.020	0.700	0.700	0.020	0.38	0.40	0.060	0.060
JUN										
01...	0.990	0.990	0.010	1.00	1.00	0.060	0.34	0.40	0.070	0.080
JUL										
06...	2.79	2.79	0.010	2.80	2.80	0.030	0.27	0.30	0.190	0.190
AUG										
10...	2.39	2.39	0.010	2.40	2.40	<0.015	--	0.30	0.210	0.230
SEP										
05...	6.07	6.07	0.030	6.10	6.10	0.030	0.47	0.50	0.630	0.620

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
MAR										
23...	0.12	<1	49	<0.5	<1.0	<5	<3	<10	54	<10
APR										
27...	0.18	--	--	--	--	--	--	--	--	--
JUN										
01...	0.25	--	--	--	--	--	--	--	--	--
JUL										
06...	0.58	--	--	--	--	--	--	--	--	--
AUG										
10...	0.71	3	48	<0.5	2.0	<5	<3	<10	19	20
SEP										
05...	1.9	--	--	--	--	--	--	--	--	--

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR										
23...	<4	4	<0.1	<10	<10	<1	<1.0	340	<6	4
APR										
27...	--	--	--	--	--	--	--	--	--	--
JUN										
01...	--	--	--	--	--	--	--	--	--	--
JUL										
06...	--	--	--	--	--	--	--	--	--	--
AUG										
10...	<4	1	<0.1	<10	10	<1	<1.0	340	<6	5
SEP										
05...	--	--	--	--	--	--	--	--	--	--

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	1994	269796	302	172	126000	18	13200	30	22200	110
NOV.	1994	555300	325	185	278000	20	29400	33	49100	120
DEC.	1994	762150	281	161	331000	15	31600	28	57300	110
JAN.	1995	551260	300	171	255000	17	25400	30	44500	110
FEB.	1995	196830	402	227	121000	29	15400	42	22200	130
MAR.	1995	587940	326	185	294000	20	31700	33	52200	120
APR.	1995	561700	348	198	300000	22	33400	35	53600	120
MAY	1995	999500	330	188	506000	20	54600	33	89800	120
JUNE	1995	393110	341	194	206000	21	22700	35	36700	120
JULY	1995	91640	451	253	62500	35	8750	48	11800	140
AUG.	1995	110020	447	250	74400	36	10600	47	14100	140
SEPT	1995	67630	553	305	55700	53	9760	61	11100	150
TOTAL		5146876	**	**	2610000	**	286000	**	464000	**
WTD.AVG.		14100	330	188	**	21	**	33	**	120

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
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SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	668	643	654	325	316	322	379	374	378	308	284	296
2	693	664	680	334	325	332	378	369	372	319	308	315
3	693	683	687	334	332	333	371	369	370	332	319	326
4	703	693	698	335	323	329	376	370	372	337	332	335
5	712	703	707	330	323	325	374	370	371	354	321	334
6	723	712	717	330	312	323	374	367	371	368	354	362
7	734	715	725	312	261	288	377	360	372	368	364	367
8	732	192	552	261	242	247	377	366	370	383	368	375
9	192	132	161	252	245	249	370	361	367	389	380	386
10	265	192	226	268	252	260	361	335	345	380	357	363
11	443	265	349	282	268	274	345	331	336	381	357	364
12	519	313	449	293	282	288	350	302	328	396	337	383
13	331	315	321	304	293	300	302	281	287	337	281	303
14	348	331	341	309	304	306	290	281	284	305	250	269
15	354	346	349	318	309	314	297	254	286	320	240	281
16	353	335	346	323	318	321	255	171	205	240	221	231
17	328	290	301	328	323	325	202	171	184	245	240	242
18	296	202	223	332	324	327	223	202	213	245	239	242
19	250	203	223	332	305	313	239	223	232	253	238	244
20	364	250	299	315	306	311	242	238	240	290	253	272
21	457	364	429	334	309	319	250	239	244	290	273	281
22	453	228	309	363	334	350	251	244	247	293	277	287
23	259	228	247	373	363	369	261	251	256	307	292	300
24	264	258	261	379	373	376	274	261	268	309	302	305
25	270	244	262	379	368	376	285	274	280	315	297	306
26	264	242	253	374	365	370	298	285	290	325	297	315
27	280	264	273	378	374	377	313	298	305	301	253	276
28	296	280	287	381	378	380	318	313	316	329	251	293
29	311	296	304	382	380	381	320	296	314	325	303	311
30	325	311	319	381	378	379	322	284	297	321	312	316
31	333	314	323	---	---	---	330	278	301	299	286	294
MONTH	734	132	396	382	242	325	379	171	303	396	221	309

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	310	302	306	334	323	328	370	351	362	360	356	358
2	319	306	314	380	332	352	---	---	e379	370	360	365
3	363	316	328	380	321	359	387	380	384	380	369	376
4	399	363	385	321	314	315	380	373	376	388	365	372
5	454	399	419	366	316	345	381	371	376	393	384	388
6	523	479	506	387	362	375	374	357	363	404	384	394
7	522	442	470	413	385	396	361	322	339	412	380	397
8	442	432	437	444	413	430	334	324	330	411	334	385
9	435	430	433	445	362	396	333	328	331	335	306	318
10	433	430	432	507	364	416	333	325	330	310	249	270
11	436	431	433	611	355	478	331	321	327	253	247	249
12	431	425	429	606	412	489	355	326	338	263	253	258
13	427	416	422	417	328	384	368	355	363	263	257	259
14	450	422	436	329	275	300	364	358	361	261	260	261
15	450	406	423	283	216	255	358	344	350	267	261	264
16	451	406	427	236	206	225	344	341	342	274	267	270
17	452	420	432	236	225	229	361	344	352	287	274	280
18	435	422	431	254	232	243	376	361	368	307	287	297
19	436	427	432	262	254	259	379	376	378	327	307	317
20	437	427	431	273	262	267	378	377	378	344	327	336
21	446	434	442	289	273	280	378	361	368	358	344	350
22	454	446	451	307	289	298	367	356	361	368	358	363
23	460	452	456	331	310	320	365	318	342	381	368	374
24	456	443	450	348	331	340	318	298	305	390	381	386
25	446	437	442	363	348	355	301	297	299	391	390	390
26	445	437	440	373	363	368	301	280	291	390	384	387
27	449	364	433	384	373	379	303	285	294	384	382	383
28	364	307	323	389	384	387	350	303	327	386	383	385
29	---	---	---	387	370	381	353	350	352	388	385	386
30	---	---	---	371	364	367	357	353	355	387	384	385
31	---	---	---	365	350	357	---	---	---	386	383	385
MONTH	523	302	420	611	206	344	387	280	347	412	247	342

e Estimated

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	385	383	383	431	410	420	555	253	371	730	710	718
2	385	368	376	428	411	420	367	284	338	754	730	745
3	375	368	372	450	428	442	394	339	380	742	618	661
4	368	365	366	481	450	456	474	369	398	647	626	637
5	379	365	370	499	481	493	618	474	547	644	631	638
6	384	369	378	493	459	477	619	372	506	665	640	650
7	373	366	368	459	436	447	372	347	361	689	665	676
8	372	365	367	436	419	428	372	347	360	718	686	702
9	375	367	373	450	411	433	369	354	364	718	711	715
10	370	357	367	545	364	440	398	354	375	719	711	714
11	357	294	318	408	380	392	398	380	388	725	716	721
12	296	245	273	409	398	406	454	391	431	726	721	723
13	303	245	279	439	404	421	458	416	440	737	722	730
14	271	256	262	440	386	406	416	409	412	732	675	699
15	271	258	264	397	389	394	409	400	405	675	643	658
16	290	270	281	405	396	402	410	403	407	718	625	655
17	313	290	300	423	403	412	423	407	416	735	710	723
18	328	313	321	430	422	426	470	422	440	720	331	550
19	337	328	335	429	400	419	472	467	469	408	331	386
20	341	336	339	429	342	391	470	449	459	441	400	425
21	344	336	341	580	419	486	464	454	459	400	363	372
22	370	344	356	582	483	526	474	464	469	385	337	362
23	379	370	376	520	480	495	557	474	502	466	356	415
24	394	379	389	541	492	514	587	557	573	505	426	465
25	402	394	399	534	505	527	611	587	601	537	505	527
26	401	397	399	533	520	524	631	611	618	527	442	496
27	405	397	400	537	525	533	634	621	628	486	442	471
28	429	399	410	589	537	559	634	623	631	460	424	433
29	439	423	429	610	589	599	657	634	644	450	436	442
30	442	428	435	628	589	610	700	657	681	469	450	461
31	---	---	---	592	543	570	713	695	706	---	---	---
MONTH	442	245	354	628	342	467	713	253	477	754	331	586
YEAR	754	132	389									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

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

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

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	26.5	25.5	26.0	28.5	28.0	28.0	28.5	26.5	27.5	32.0	30.5	31.0
2	26.5	26.0	26.0	29.0	28.0	28.5	28.0	27.5	27.5	32.0	30.5	31.0
3	27.0	26.0	26.5	29.0	28.0	28.5	29.0	27.5	28.0	32.0	30.5	31.0
4	27.5	26.5	27.0	29.0	28.0	28.5	30.0	28.5	29.0	31.5	30.5	31.0
5	27.5	26.5	27.0	29.0	28.5	28.5	30.5	29.5	30.0	31.0	29.5	30.5
6	27.5	27.0	27.0	29.0	28.0	28.5	30.0	29.0	29.5	31.0	29.5	30.0
7	28.0	27.0	27.5	29.5	28.0	29.0	30.0	29.0	29.5	30.5	29.5	30.0
8	28.0	27.5	28.0	29.5	28.5	29.0	30.5	29.5	30.0	30.5	29.0	29.5
9	28.5	27.5	28.0	29.5	28.5	29.0	31.0	30.0	30.5	29.5	28.5	29.0
10	28.5	28.0	28.0	29.5	28.5	29.0	31.0	30.0	30.5	29.5	28.5	29.0
11	28.0	26.0	27.0	30.0	28.5	29.5	31.0	30.5	30.5	29.0	28.0	28.5
12	26.0	25.0	25.5	31.0	29.5	30.0	31.5	30.5	31.0	29.0	28.0	28.5
13	26.0	25.0	25.5	31.0	30.0	30.5	31.5	30.5	31.0	28.5	27.5	28.0
14	26.0	25.5	25.5	31.5	30.0	30.5	31.0	30.0	30.5	28.5	27.5	28.0
15	26.5	25.0	25.5	30.5	30.0	30.5	30.5	29.5	30.0	28.5	27.0	27.5
16	27.0	25.5	26.0	30.5	29.5	30.0	31.0	29.5	30.0	29.0	27.5	28.0
17	27.5	26.0	26.5	31.0	29.5	30.5	31.0	30.0	30.5	28.5	27.5	28.0
18	27.5	26.5	27.0	31.5	30.0	30.5	31.5	30.0	31.0	27.5	26.5	27.0
19	28.0	27.0	27.5	30.5	29.0	30.0	31.5	30.5	31.0	27.5	26.0	26.5
20	28.0	27.0	27.5	30.5	28.5	29.5	32.0	30.5	31.0	27.0	26.5	27.0
21	28.0	27.5	28.0	31.5	30.0	30.5	32.5	31.0	31.5	27.0	25.5	26.5
22	28.5	28.0	28.5	31.5	30.5	31.0	32.0	31.0	31.5	25.5	23.0	24.0
23	29.0	28.5	28.5	31.5	30.5	31.0	32.0	31.0	31.5	24.0	22.5	23.0
24	29.5	28.5	29.0	32.0	30.5	31.0	32.0	30.5	31.5	24.0	23.0	23.5
25	29.5	29.0	29.0	32.0	30.5	31.0	32.5	30.5	31.5	24.0	23.0	23.5
26	29.5	28.5	29.0	32.5	30.5	31.5	32.5	31.0	31.5	24.5	23.0	23.5
27	29.5	28.5	29.0	32.5	31.0	32.0	32.5	30.5	31.5	24.5	23.0	24.0
28	30.0	28.5	29.0	33.0	31.5	32.0	32.5	30.5	31.5	25.5	24.0	24.5
29	29.0	28.0	28.5	32.0	30.5	31.0	32.5	31.0	32.0	26.0	24.5	25.0
30	29.0	27.5	28.0	30.5	29.5	30.0	32.0	31.0	31.5	26.5	25.0	25.5
31	---	---	---	29.5	28.5	29.0	32.0	30.5	31.0	---	---	---
MONTH	30.0	25.0	27.5	33.0	28.0	30.0	32.5	26.5	30.5	32.0	22.5	27.5
YEAR	33.0	9.5	21.0									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.8	7.7	8.6	6.5	6.2	6.3	9.7	8.9	9.1	10.5	10.2	10.3
2	9.4	7.6	8.3	6.9	6.2	6.4	10.1	9.1	9.2	10.6	10.2	10.4
3	9.1	7.2	8.0	7.1	6.4	6.7	10.1	9.3	9.6	10.9	10.4	10.6
4	9.2	7.2	8.1	6.9	6.5	6.7	9.8	9.6	9.7	11.1	10.7	10.8
5	10.2	7.7	8.9	7.8	6.9	7.3	10.3	9.7	9.9	11.1	10.7	10.9
6	10.4	8.4	9.4	7.9	7.2	7.6	10.0	9.4	9.6	11.6	11.0	11.3
7	9.1	7.9	8.5	7.6	7.1	7.3	9.6	8.8	9.2	11.8	11.3	11.5
8	8.0	3.9	6.0	7.5	7.1	7.3	9.3	8.6	8.9	12.0	11.4	11.7
9	4.2	3.9	4.1	7.4	6.9	7.2	9.0	8.5	8.6	12.1	11.6	11.8
10	5.1	4.1	4.5	7.1	6.7	6.9	9.4	8.7	8.9	12.1	11.6	11.9
11	6.3	5.1	5.9	7.0	6.7	6.8	9.5	9.1	9.3	11.6	11.1	11.4
12	6.8	6.1	6.5	7.5	6.7	7.1	9.9	9.4	9.6	11.1	10.3	10.9
13	7.2	6.2	6.8	7.3	7.1	7.2	10.1	9.7	9.9	10.4	9.4	9.8
14	7.6	7.2	7.4	7.8	7.1	7.2	10.2	10.0	10.1	9.8	9.4	9.6
15	8.0	7.6	7.8	7.5	7.0	7.2	10.1	9.7	10.0	9.8	9.4	9.6
16	8.2	8.0	8.1	7.0	6.8	6.9	9.7	8.7	9.1	10.4	9.8	10.2
17	8.3	7.5	7.9	7.5	6.8	7.0	8.7	8.4	8.5	10.3	10.0	10.1
18	7.5	6.7	6.9	7.9	7.2	7.6	8.5	8.3	8.4	10.1	9.6	10.0
19	7.3	6.9	7.1	7.9	7.2	7.5	8.5	8.3	8.4	10.2	9.9	10.0
20	7.1	6.9	7.0	7.9	7.5	7.7	9.0	8.3	8.6	10.6	10.1	10.3
21	7.3	6.4	7.0	8.5	7.6	7.8	8.9	8.6	8.8	10.8	10.3	10.6
22	6.6	6.1	6.5	8.4	7.5	7.9	9.2	8.6	8.9	10.8	10.6	10.7
23	6.2	6.0	6.1	8.1	7.7	7.9	9.4	9.1	9.3	10.9	10.6	10.7
24	6.3	6.0	6.1	8.5	8.1	8.2	9.4	9.0	9.3	11.1	10.6	10.8
25	6.3	5.9	6.0	8.7	8.3	8.5	9.8	9.0	9.3	11.2	10.9	11.0
26	6.9	6.3	6.7	9.3	8.6	8.8	9.9	9.1	9.4	11.3	10.9	11.1
27	7.3	6.9	7.1	9.6	8.7	8.9	9.8	9.3	9.5	10.9	10.0	10.5
28	7.5	7.1	7.4	9.6	8.6	8.8	9.9	9.5	9.6	10.5	10.0	10.2
29	7.7	7.3	7.5	9.1	8.6	8.8	10.0	9.4	9.7	10.5	10.3	10.4
30	7.5	7.2	7.4	9.2	8.7	8.9	10.4	10.0	10.2	10.4	10.3	10.4
31	7.4	6.3	7.0	---	---	---	10.5	10.3	10.4	10.6	10.1	10.4
MONTH	10.4	3.9	7.1	9.6	6.2	7.5	10.5	8.3	9.3	12.1	9.4	10.6

08065350 TRINITY RIVER NEAR CROCKETT, TX--Continued
(National stream-quality accounting network)

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.9	10.5	10.7	8.3	7.9	8.1	7.9	7.8	7.9	---	---	---
2	10.9	10.4	10.6	8.8	8.2	8.4	8.1	7.8	8.0	---	---	---
3	10.6	10.2	10.4	9.7	8.8	9.4	8.2	7.8	8.0	---	---	---
4	10.3	10.0	10.2	10.4	9.7	10.0	8.1	7.8	8.0	---	---	---
5	10.3	10.0	10.1	10.6	10.3	10.4	8.0	7.8	7.9	---	---	---
6	10.3	9.9	10.1	10.3	9.9	10.2	8.0	7.5	7.7	---	---	---
7	10.2	9.9	10.1	10.0	9.7	9.8	8.1	7.5	7.8	---	---	---
8	10.6	10.0	10.3	10.1	9.7	9.9	8.2	7.7	8.0	---	---	---
9	10.6	10.4	10.5	10.5	10.0	10.2	7.7	7.3	7.5	---	---	---
10	10.7	10.4	10.5	10.7	10.6	10.7	7.6	6.6	7.2	---	---	---
11	10.4	10.1	10.3	10.6	9.5	10.3	6.8	6.4	6.6	---	---	---
12	10.4	10.1	10.2	9.5	8.4	8.9	7.1	6.3	6.7	---	---	---
13	10.5	10.2	10.4	8.8	8.5	8.7	7.3	6.6	6.9	---	---	---
14	10.8	10.4	10.5	8.5	8.1	8.2	7.4	6.8	7.1	---	---	---
15	10.9	9.6	10.4	8.1	7.6	7.9	7.1	6.7	6.9	---	---	---
16	10.3	9.6	10.1	8.4	7.7	8.2	6.8	6.4	6.6	---	---	---
17	10.4	9.9	10.1	8.6	8.0	8.3	6.4	6.1	6.3	---	---	---
18	10.6	9.8	10.2	8.4	7.6	8.1	6.1	5.9	6.0	4.8	4.6	4.7
19	11.0	10.1	10.5	7.8	7.1	7.5	6.0	5.8	5.9	5.1	4.2	4.7
20	10.6	10.0	10.4	7.3	6.9	7.1	5.9	5.6	5.8	5.6	4.9	5.2
21	10.4	9.9	10.2	7.0	6.6	6.9	5.9	5.5	5.7	6.3	5.6	5.9
22	10.4	9.9	10.1	6.7	6.5	6.6	5.7	5.5	5.6	6.8	6.1	6.4
23	10.0	9.8	9.9	6.6	6.4	6.5	5.5	5.2	5.4	7.4	6.1	6.3
24	9.8	9.5	9.7	6.5	6.2	6.4	5.4	5.2	5.3	6.3	5.9	6.2
25	9.8	9.5	9.6	6.4	6.2	6.3	5.4	5.2	5.3	6.1	5.6	5.9
26	9.7	9.2	9.5	6.6	6.3	6.4	---	---	---	5.6	5.2	5.4
27	9.2	7.9	8.6	6.8	6.5	6.6	---	---	---	5.2	4.8	4.9
28	8.1	7.9	8.0	7.1	6.7	6.9	---	---	---	4.9	4.7	4.8
29	---	---	---	7.8	7.1	7.4	---	---	---	5.3	4.8	5.1
30	---	---	---	7.9	7.5	7.7	---	---	---	5.7	5.2	5.4
31	---	---	---	8.0	7.6	7.8	---	---	---	6.3	5.7	6.0
MONTH	11.0	7.9	10.1	10.7	6.2	8.3	8.2	5.2	6.8	7.4	4.2	5.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.4	5.8	6.2	5.8	5.2	5.5	6.1	5.2	5.7	6.6	5.2	5.7
2	6.7	6.3	6.5	5.8	5.3	5.5	5.4	4.9	5.2	6.7	5.1	5.7
3	6.7	6.5	6.6	5.8	5.3	5.5	5.7	4.9	5.2	6.5	5.0	5.6
4	6.9	6.5	6.7	5.7	5.4	5.5	6.1	5.4	5.7	6.4	5.0	5.5
5	6.9	6.5	6.8	5.5	5.2	5.4	6.0	5.4	5.6	6.2	5.1	5.5
6	6.9	6.5	6.6	6.4	5.2	5.6	5.7	5.2	5.5	6.4	5.2	5.7
7	6.9	6.2	6.4	6.2	5.5	5.8	6.2	4.7	5.8	6.5	5.4	5.8
8	6.5	6.3	6.4	6.5	5.4	5.9	6.0	5.7	5.8	6.5	5.3	5.8
9	6.5	6.2	6.4	6.4	5.5	5.8	6.1	5.7	5.8	6.4	5.3	5.7
10	6.4	5.9	6.3	5.7	5.1	5.5	6.0	5.5	5.8	6.4	5.3	5.7
11	6.8	5.8	6.3	5.9	5.3	5.6	5.9	5.5	5.7	6.3	5.2	5.7
12	6.1	5.8	5.9	6.0	5.5	5.7	6.1	5.5	5.9	6.2	5.2	5.6
13	6.0	5.6	5.7	5.9	5.4	5.6	6.4	5.7	5.9	6.1	4.9	5.4
14	5.8	5.4	5.6	5.9	5.4	5.6	6.0	5.7	5.8	6.0	5.0	5.5
15	5.4	4.6	5.1	5.6	5.3	5.4	6.1	5.5	5.8	5.7	4.9	5.3
16	4.6	4.1	4.4	6.4	5.4	5.7	6.1	5.5	5.8	5.3	4.8	5.1
17	4.1	3.6	3.9	6.1	5.5	5.8	6.3	5.4	5.8	4.9	4.1	4.5
18	3.7	3.3	3.5	6.2	5.5	5.8	6.4	5.5	5.9	4.5	4.0	4.2
19	3.7	3.1	3.4	6.3	5.3	5.8	6.4	5.5	5.8	5.0	4.5	4.8
20	4.4	3.2	3.5	6.3	5.4	5.8	6.5	5.4	5.8	5.3	4.4	5.0
21	7.1	4.4	6.2	6.5	5.6	6.0	6.4	5.3	5.8	5.2	4.6	5.0
22	6.5	5.9	6.1	6.3	5.7	6.0	6.4	5.2	5.6	4.9	4.6	4.7
23	6.6	5.5	5.7	6.3	5.8	6.0	6.1	5.1	5.5	5.6	4.7	5.1
24	6.2	5.4	5.7	6.4	5.7	6.0	---	---	---	6.2	5.0	5.5
25	5.8	5.2	5.4	6.5	5.7	6.1	---	---	---	6.5	5.2	5.8
26	7.8	5.0	5.8	6.6	5.8	6.1	---	---	---	6.6	5.3	5.8
27	6.3	4.9	5.5	6.7	5.9	6.2	---	---	---	7.0	5.5	6.1
28	5.6	5.0	5.3	6.6	5.8	6.2	---	---	---	7.0	5.9	6.3
29	6.7	4.9	6.1	6.0	5.6	5.8	---	---	---	7.1	5.8	6.4
30	6.6	5.4	5.9	6.2	5.7	5.9	7.1	5.6	6.6	7.1	6.0	6.5
31	---	---	---	6.4	5.7	6.0	6.6	5.3	5.8	---	---	---
MONTH	7.8	3.1	5.7	6.7	5.1	5.8	7.1	4.7	5.7	7.1	4.0	5.5
YEAR	12.1	3.1	7.4									

08065800 BEDIAS CREEK NEAR MADISONVILLE, TX

LOCATION.--Lat 30°53'03", long 95°46'39", Madison-Walker County line, Hydrologic Unit 12030202, on right bank at downstream side of bridge on U.S. Highways 75 and 190, 0.5 mi upstream from Interstate Highway 45, 1.5 mi downstream from Caney Creek, and 9.5 mi southeast of Madisonville.

DRAINAGE AREA.--321 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 150.00 ft above sea level.

REMARKS.--Records good. No known diversions above station. Flow may be slightly affected at times by discharge from the flood-detention pools of three floodwater-retarding structures with a combined detention capacity of 1,290 acre-ft. These structures control runoff from 2.71 mi² in the upper Caney Creek and Town Branch drainage basins. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1910, 34 ft in May 1922 (discharge unknown), from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,400 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 18	0100	14,300	21.44	Mar. 14	1200	7,310	19.51
Dec. 16	1900	24,100	23.43	Apr. 7	1400	3,650	17.80
Jan. 14	1700	3,480	17.69				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.40	5.6	3.1	274	94	127	54	9.8	140	53	1790	3.2
2	e.36	4.7	3.1	131	73	75	43	8.9	202	15	3110	3.2
3	e.32	4.5	4.0	84	61	53	35	8.4	144	6.0	2050	3.0
4	e.27	5.1	4.2	61	52	46	34	8.1	57	3.1	612	3.0
5	.28	13	3.9	48	45	46	225	7.3	25	2.6	87	3.0
6	.26	57	4.2	39	40	50	1160	7.1	12	2.3	44	3.0
7	.28	41	13	34	38	51	2810	7.0	7.4	2.2	45	2.9
8	.28	24	38	30	36	53	2090	39	4.6	3.0	48	2.9
9	1.4	12	39	26	34	179	547	175	3.2	4.4	28	2.9
10	13	8.6	333	23	33	100	132	281	2.5	6.4	22	2.9
11	16	7.0	450	22	32	58	85	95	2.9	2.9	18	2.9
12	5.5	5.4	413	22	32	43	61	45	9.2	1.4	15	2.8
13	2.3	4.8	109	921	32	590	46	29	29	.75	11	2.9
14	1.2	4.3	53	2500	31	5090	37	21	11	.59	9.6	3.8
15	.71	3.9	419	2270	32	3360	31	16	6.8	.44	64	3.9
16	37	3.7	12700	737	32	1520	27	13	4.5	.74	149	3.3
17	4040	3.4	8850	238	38	398	24	11	3.0	.59	51	3.3
18	8350	3.3	3100	963	39	170	22	10	2.2	.31	25	3.5
19	4300	3.1	1450	1050	36	115	22	76	1.8	.24	15	4.4
20	2920	3.1	347	1080	34	87	21	120	1.5	.94	10	26
21	1410	3.1	151	386	32	70	19	48	1.2	1.4	7.8	402
22	349	3.1	102	131	32	60	18	26	1.1	1.2	6.1	681
23	85	3.1	71	84	29	52	17	17	.94	.59	5.1	733
24	46	3.1	55	67	41	47	17	12	.68	.35	4.4	446
25	28	3.1	45	59	141	43	17	9.6	.60	.23	4.0	75
26	19	3.0	37	223	217	39	20	8.2	.53	.16	3.9	31
27	14	3.0	32	1290	97	36	17	7.6	.49	.13	3.6	17
28	11	2.9	29	2660	142	32	14	7.9	.49	.12	3.3	11
29	8.8	3.0	114	1720	---	34	12	9.8	7.4	.12	3.1	7.4
30	7.7	3.0	636	451	---	56	11	55	170	.14	3.1	5.6
31	6.8	---	861	141	---	62	---	102	---	474	3.1	---
TOTAL	21674.86	247.9	30469.5	17765	1575	12742	7668	1290.7	853.03	585.34	8251.1	2495.8
MEAN	699	8.26	983	573	56.2	411	256	41.6	28.4	18.9	266	83.2
MAX	8350	57	12700	2660	217	5090	2810	281	202	474	3110	733
MIN	.26	2.9	3.1	22	29	32	11	7.0	.49	.12	3.1	2.8
AC-FT	42990	492	60440	35240	3120	25270	15210	2560	1690	1160	16370	4950
CFSM	2.18	.03	3.06	1.79	.18	1.28	.80	.13	.09	.06	.83	.26
IN.	2.51	.03	3.53	2.06	.18	1.48	.89	.15	.10	.07	.96	.29

08065800 BEDIAS CREEK NEAR MADISONVILLE, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1995, BY WATER YEAR (WY)

MEAN	226	125	219	327	309	288	275	349	279	23.3	29.8	96.6
MAX	3021	688	983	2015	1580	909	1333	1046	1745	260	266	1551
(WY)	1985	1986	1995	1991	1992	1973	1969	1969	1968	1979	1995	1974
MIN	.000	.025	.22	1.99	5.41	3.13	2.30	5.30	.82	.013	.000	.000
(WY)	1979	1989	1968	1971	1971	1971	1981	1988	1988	1977	1969	1969

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1968 - 1995	
ANNUAL TOTAL	92547.54		105618.23			
ANNUAL MEAN	254		289		212	
HIGHEST ANNUAL MEAN					423	1985
LOWEST ANNUAL MEAN					35.8	1984
HIGHEST DAILY MEAN	12700	Dec 16	12700	Dec 16	23000	Jan 10 1991
LOWEST DAILY MEAN	.26	Oct 6	.12	Jul 28	.00	Aug 31 1968
ANNUAL SEVEN-DAY MINIMUM	.29	Oct 2	.18	Jul 24	.00	Aug 31 1968
INSTANTANEOUS PEAK FLOW			24100	Dec 16	33800	Sep 14 1974
INSTANTANEOUS PEAK STAGE			23.43	Dec 16	25.07	Sep 14 1974
ANNUAL RUNOFF (AC-FT)	183600		209500		153400	
ANNUAL RUNOFF (CFSM)	.79		.90		.66	
ANNUAL RUNOFF (INCHES)	10.73		12.24		8.96	
10 PERCENT EXCEEDS	289		460		431	
50 PERCENT EXCEEDS	8.3		23		8.6	
90 PERCENT EXCEEDS	.82		1.4		.05	

e Estimated

08065800 BEDIAS CREEK NEAR MADISONVILLE, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORDS.--Chemical analyses: July 1962 to April 1964, January 1968 to September 1974. Chemical and biochemical analyses: September 1970 to September 1974, April 1985 to June 1988, April 1993 to current year. Pesticide analyses: April 1985 to April 1988.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1984 to September 1987.
WATER TEMPERATURE: October 1984 to September 1987.
SUSPENDED SEDIMENT DISCHARGE: October 1984 to September 1986.

INSTUMENTATION.--From September 1984 to September 1987, specific conductance and water temperature were recorded continuously at this station. Interruptions in the record were due to malfunctions of the instrument.

REMARKS.--Water-quality data collection reactivated in NAWQA program-Trinity River Basin.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,680 microsiemens Sept. 1, 1987; minimum, 56 microsiemens Nov. 27, 1985.
WATER TEMPERATURE: Maximum, 31.5°C Aug. 9, 10, 1985; minimum, 56 microsoemens Nov. 27 , 1985.
SEDIMENT CONCENTRATIONS: Maximum mean, 915 mg/L Oct. 19, 28, 1985; minimum daily mean, 10 mg/L July 25, 1985, Aug. 11, 1986.
SEDIMENT LOADS: Maximum daily, 7,510 tons Nov. 26, 1985; minimum daily, no flow on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT												
27...	0910	13	269	6.9	16.0	8.2	83	71	38	19	5.6	23
NOV												
10...	0827	8.5	320	6.8	16.5	7.6	78	82	45	22	6.6	28
DEC												
13...	1125	103	180	7.0	9.5	10.0	86	45	19	12	3.6	14
JAN												
20...	1255	1010	118	6.5	10.5	10.8	97	34	18	9.2	2.6	7.0
FEB												
28...	1112	122	430	6.6	17.0	8.1	84	93	65	25	7.3	38
MAR												
30...	1515	48	520	7.3	16.0	7.6	77	120	86	31	9.9	45
APR												
28...	0940	9.0	672	7.1	18.0	7.2	76	160	110	42	13	64
MAY												
18...	0908	4.2	420	7.0	24.0	4.9	59	100	53	26	8.4	39
JUN												
27...	0844	0.27	555	6.8	24.0	3.8	45	130	72	33	12	51
JUL												
26...	0902	0.07	530	7.1	27.5	3.0	38	120	38	31	10	53
AUG												
18...	0950	26	185	6.8	26.0	5.8	72	47	27	13	3.6	14
SEP												
29...	1046	7.4	200	7.1	20.0	6.2	68	49	20	13	4.0	16

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT											
27...	1	6.4	0	40	32	45	33	<0.10	20	203	174
NOV											
10...	1	6.3	0	45	37	54	38	<0.10	22	229	201
DEC											
13...	0.9	5.9	0	32	26	27	18	<0.10	13	145	111
JAN											
20...	0.5	4.5	0	19	14	15	14	<0.10	9.4	103	72
FEB											
28...	2	5.4	0	34	28	71	51	0.10	15	265	234
MAR											
30...	2	4.7	0	39	32	98	62	<0.10	22	330	294
APR											
28...	2	5.5	0	55	45	130	88	0.10	26	422	399
MAY											
18...	2	6.7	0	57	47	62	53	0.10	19	271	245
JUN											
27...	2	3.8	0	73	60	90	65	0.20	13	341	306
JUL											
26...	2	8.0	0	98	80	65	63	0.20	12	318	292
AUG											
18...	0.9	5.8	0	25	19	26	23	<0.10	12	110	113
SEP											
29...	1	6.0	0	35	28	27	22	<0.10	15	142	122

08065800 BEDIAS CREEK NEAR MADISONVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 27...	0.290	--	<0.010	0.290	0.290	0.020	1.3	0.98	0.78	0.80	1.0
NOV 10...	0.240	0.240	0.010	0.250	0.250	0.020	0.75	0.48	0.48	0.50	0.50
DEC 13...	0.240	0.240	0.020	0.260	0.260	0.110	1.6	1.2	0.79	0.90	1.3
JAN 20...	0.100	0.100	0.020	0.120	0.120	0.040	1.5	1.4	0.86	0.90	1.4
FEB 28...	0.650	0.650	0.060	0.710	0.710	0.450	2.1	0.95	0.75	1.2	1.4
MAR 30...	0.210	0.210	0.020	0.230	0.230	0.030	1.0	0.77	0.57	0.60	0.80
APR 28...	0.520	--	<0.010	0.520	0.520	0.030	1.2	0.67	0.47	0.50	0.70
MAY 18...	0.420	0.420	0.020	0.440	0.440	0.040	1.2	0.76	0.66	0.70	0.80
JUN 27...	0.200	--	<0.010	0.200	0.200	0.060	1.1	0.84	--	<0.20	0.90
JUL 26...	0.130	--	<0.010	0.130	0.130	0.060	0.93	0.74	0.54	0.60	0.80
AUG 18...	0.550	0.550	0.010	0.560	0.560	<0.015	1.4	0.80	--	0.70	0.80
SEP 29...	0.180	--	<0.010	0.180	0.180	0.030	0.78	0.57	0.47	0.50	0.60

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 27...	0.200	0.130	0.110	0.34	14	--	16	0.56	100	670	120
NOV 10...	0.120	0.140	0.130	0.40	13	--	16	0.37	95	500	100
DEC 13...	0.180	0.070	0.070	0.21	13	2.1	44	12	99	660	76
JAN 20...	0.130	0.060	0.060	0.18	15	1.5	60	164	91	250	24
FEB 28...	0.180	0.140	0.120	0.37	11	1.1	62	20	100	350	99
MAR 30...	0.170	0.070	0.060	0.18	10	0.8	35	4.5	99	390	150
APR 28...	0.180	0.090	0.090	0.28	8.6	0.6	32	0.78	98	290	110
MAY 18...	0.250	0.180	0.200	0.61	12	1.0	34	0.39	99	410	160
JUN 27...	0.280	0.160	0.150	0.46	11	0.5	35	0.03	97	500	340
JUL 26...	0.320	0.190	0.190	0.58	11	0.4	26	0.00	98	320	410
AUG 18...	0.210	0.120	0.130	0.40	9.9	1.5	36	2.5	90	160	57
SEP 29...	0.190	0.140	0.120	0.37	10	1.0	17	0.34	95	240	83

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 mi².

PERIOD OF RECORD.--December 1965 to current year.
Water-quality records.--Chemical analyses: December 1963 to September 1969. Chemical and biochemical analyses: October 1969 to September 1974.

GAGE.--Water-stage recorder and crest-stage gages. Datum of gage is 139.85 ft above sea level.

REMARKS.--Records poor. Low flow is sustained by sewage effluent that enters the creek upstream from this station.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct 17	Unkown	84,600	a41.85	Mar. 13	1100	8,670	20.44
Jan. 17	2400	6,070	17.52	Apr. 11	0200	3,130	13.41
Jan. 18	1000	2,600	12.48	May 30	1300	4,120	14.95
Mar. 7	0700	6,880	18.51				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	e9.0	e5.1	e55	e38	e60	20	11	50	4.0	10	e.66
2	.47	e8.0	e5.5	e42	e34	24	14	10	17	2.7	6.1	e.62
3	.47	e7.5	e13	e34	e32	45	12	9.6	13	2.3	5.0	e.58
4	.47	e7.9	e12	e27	e28	44	89	9.9	7.4	2.1	e4.0	e.54
5	.42	e42	e8.7	e24	e26	44	355	9.6	5.5	2.1	e3.3	e.50
6	.40	e23	e8.0	e22	e25	35	492	9.3	4.4	2.1	e2.8	e.48
7	.43	e15	e35	e38	e24	1990	65	11	4.0	2.0	e2.3	e.46
8	384	e13	e168	e28	e23	170	31	601	3.5	1.9	e2.0	e.42
9	15	e8.8	e31	e24	e22	67	21	108	3.2	1.8	e1.8	e.40
10	2.9	e8.2	e250	e20	e20	45	96	26	3.0	1.8	e1.7	e.38
11	1.7	e8.6	e96	e18	e22	37	1160	17	69	1.7	e1.4	e.36
12	1.2	e7.6	e27	e17	e35	32	59	15	13	1.7	e1.3	e.34
13	1.1	e7.1	e22	e300	e33	3180	25	13	6.0	1.7	e1.2	e.32
14	.96	e7.1	e18	e120	e40	376	17	12	4.1	1.8	e1.7	e.31
15	1.2	e7.3	e32	e60	e60	128	13	11	3.3	1.8	e4.2	e.30
16	6040	e7.1	e2460	e31	e57	209	12	9.6	3.0	2.1	e3.0	e.29
17	e38800	e7.2	e290	514	e52	65	10	8.9	2.7	1.9	e2.2	e.42
18	e8120	e6.9	e87	2070	e47	38	10	13	2.5	1.7	e2.0	e.80
19	e2950	e6.9	e62	e63	e41	27	10	11	2.4	5.2	e1.8	1.7
20	e1280	e7.0	e30	e35	e37	22	153	8.6	2.3	10	e1.7	6.3
21	e539	e6.6	e32	e25	e33	19	246	7.7	2.2	3.8	e1.5	23
22	e218	e6.6	e26	e26	e28	17	36	7.2	2.1	2.2	e1.4	17
23	e88	e6.1	e20	e30	e26	15	37	7.0	2.0	1.9	e1.3	4.4
24	e38	e6.1	e18	e24	e23	14	26	6.9	2.0	1.7	e1.2	2.4
25	e30	e5.9	e16	e50	e21	14	18	6.4	1.9	1.6	e1.1	1.9
26	e25	e6.1	e14	292	e18	13	15	6.3	1.8	1.5	e1.0	1.7
27	e22	e6.1	e14	524	e16	13	14	6.1	1.8	1.5	e.92	1.5
28	e19	e6.3	e27	e180	e140	11	13	11	1.8	1.5	e.86	1.4
29	e16	e5.9	e462	e80	---	38	13	35	5.3	2.0	e.80	1.4
30	e13	e5.6	e82	e49	---	43	12	768	7.9	2.4	e.76	1.4
31	e11	---	e69	e42	---	22	---	57	---	20	e.69	---
TOTAL	58620.19	276.5	4440.3	4864	1001	6857	3094	1843.1	248.1	92.5	71.03	72.28
MEAN	1891	9.22	143	157	35.7	221	103	59.5	8.27	2.98	2.29	2.41
MAX	38800	42	2460	2070	140	3180	1160	768	69	20	10	23
MIN	.40	5.6	5.1	17	16	11	10	6.1	1.8	1.5	.69	.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

MEAN	80.1	26.3	51.9	75.8	73.7	68.2	61.3	68.3	59.3	11.6	7.63	11.6
MAX	1891	163	177	320	288	236	270	202	365	100	51.4	107
(WY)	1995	1975	1966	1974	1992	1990	1979	1982	1973	1989	1975	1973
MIN	.31	.82	1.72	1.49	1.54	.76	1.13	.86	.31	.083	.32	.37
(WY)	1988	1991	1981	1971	1971	1971	1971	1988	1971	1971	1988	1989

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995	
ANNUAL TOTAL	75557.68		81480.00			
ANNUAL MEAN	207		223		49.5	
HIGHEST ANNUAL MEAN					223	1995
LOWEST ANNUAL MEAN					4.63	1971
HIGHEST DAILY MEAN	38800	Oct 17	38800	Oct 17	38800	Oct 17 1994
LOWEST DAILY MEAN	.40	Oct 6	.29	Sep 16	.02	Sep 27 1967
ANNUAL SEVEN-DAY MINIMUM	.45	Oct 1	.33	Sep 10	.02	Sep 27 1967
INSTANTANEOUS PEAK FLOW			84600	Oct 17	84600	Oct 17 1994
INSTANTANEOUS PEAK STAGE			a41.85	Oct 17	a41.85	Oct 17 1994
10 PERCENT EXCEEDS	105		96		62	
50 PERCENT EXCEEDS	4.9		12		3.6	
90 PERCENT EXCEEDS	.75		1.2		.48	

e Estimated
a From floodmark.

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 mi southwest of Livingston, 11.7 mi upstream from Long King Creek, and at mile 129.2.

DRAINAGE AREA.--16,583 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by Trinity River Authority). Prior to Feb. 26, 1969, temporary nonrecording gages at site about 200 ft upstream and at same datum.

REMARKS.--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 with a combined detention capacity of 184,600 acre-ft. These structures control runoff from an 617 mi² area in the Richland, Chambers, Tehuacana, and Bedias Creeks drainage basins above this station. Figures given herein represent total contents. Data regarding the dam and reservoir are given in the following table:

	Elevation (feet)	Capacity (acre-feet)
Top of dam	145.0	-
Design flood	135.0	2,136,000
Top of tainter gates	134.0	2,046,000
Top of conservation pool	131.0	1,788,000
Crest of spillway (sill of tainter gates)	99.0	157,900
Lowest gated outlet (invert)	58.0	335

COOPERATION.--The capacity table, furnished by the Trinity River Authority, is based on U. S. Geological Survey topographic maps.

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, 2,081,000 acre-ft Oct. 17 at 1700 (elevation, 134.39 ft); minimum, 1,746,000 acre-ft Sept. 17 (elevation, 130.48 ft).

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

125.0	1,329,000	129.0	1,627,000	133.0	1,958,000
126.0	1,401,000	130.0	1,707,000	134.0	2,046,000
127.0	1,474,000	131.0	1,788,000	135.0	2,136,000
128.0	1,550,000	132.0	1,872,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1767000	1791000	1807000	1794000	1818000	1821000	1876000	1822000	1811000	1807000	1825000	1784000
2	1764000	1798000	1803000	1790000	1810000	1829000	1854000	1823000	1797000	1798000	1841000	1782000
3	1762000	1799000	1810000	1791000	1807000	1834000	1840000	1828000	1792000	1796000	1844000	1779000
4	1760000	1801000	1799000	1787000	1793000	1835000	1839000	1835000	1793000	1794000	1836000	1774000
5	1755000	1818000	1796000	1788000	1787000	1839000	1835000	1829000	1788000	1803000	1819000	1774000
6	1748000	1813000	1791000	1795000	1780000	1834000	1842000	1822000	1790000	1805000	1817000	1774000
7	1748000	1806000	1799000	1792000	1788000	1873000	1839000	1808000	1793000	1807000	1813000	1771000
8	1771000	1803000	1799000	1790000	1784000	1849000	1826000	1825000	1791000	1807000	1808000	1771000
9	1780000	1808000	1801000	1788000	1788000	1830000	1818000	1821000	1793000	1808000	1808000	1770000
10	1794000	1804000	1817000	1788000	1790000	1816000	1841000	1824000	1796000	1812000	1803000	1769000
11	1803000	1806000	1818000	1785000	1790000	1811000	1844000	1821000	1812000	1815000	1799000	1764000
12	1810000	1808000	1825000	1799000	1785000	1803000	1843000	1819000	1821000	1811000	1798000	1762000
13	1811000	1815000	1826000	1837000	1793000	1852000	1839000	1826000	1833000	1809000	1795000	1763000
14	1806000	1829000	1829000	1859000	1797000	1869000	1827000	1837000	1840000	1808000	1803000	1762000
15	1808000	1839000	1849000	1865000	1804000	1883000	1824000	1841000	1844000	1812000	1802000	1757000
16	1976000	1841000	1973000	1869000	1811000	1892000	1816000	1844000	1852000	1811000	1802000	1758000
17	2050000	1849000	1990000	1891000	1812000	1892000	1803000	1858000	1854000	1809000	1802000	1763000
18	1974000	1858000	1987000	1967000	1816000	1889000	1817000	1862000	1855000	1801000	1798000	1767000
19	1923000	1859000	1963000	1965000	1818000	1879000	1810000	1859000	1859000	1805000	1798000	1768000
20	1886000	1862000	1936000	1947000	1818000	1880000	1822000	1860000	1862000	1801000	1798000	1783000
21	1863000	1859000	1904000	1922000	1816000	1875000	1821000	1868000	1866000	1800000	1798000	1805000
22	1850000	1854000	1876000	1903000	1812000	1881000	1830000	1872000	1864000	1796000	1795000	1802000
23	1844000	1845000	1851000	1875000	1813000	1894000	1821000	1876000	1852000	1793000	1797000	1800000
24	1838000	1834000	1834000	1857000	1813000	1902000	1811000	1881000	1839000	1792000	1797000	1803000
25	1828000	1834000	1819000	1839000	1808000	1904000	1801000	1882000	1825000	1791000	1794000	1808000
26	1814000	1828000	1811000	1856000	1810000	1924000	1799000	1869000	1812000	1790000	1791000	1808000
27	1808000	1835000	1805000	1877000	1815000	1923000	1804000	1854000	1802000	1787000	1788000	1804000
28	1803000	1825000	1818000	1879000	1824000	1928000	1798000	1845000	1798000	1785000	1787000	1801000
29	1798000	1822000	1821000	1865000	---	1925000	1802000	1834000	1809000	1788000	1784000	1798000
30	1796000	1815000	1809000	1845000	---	1911000	1807000	1840000	1808000	1791000	1782000	1797000
31	1803000	---	1802000	1826000	---	1897000	---	1816000	---	1798000	1781000	---
MAX	2050000	1862000	1990000	1967000	1824000	1928000	1876000	1882000	1866000	1815000	1844000	1808000
MIN	1748000	1791000	1791000	1785000	1780000	1803000	1798000	1808000	1788000	1785000	1781000	1757000
(+)	131.17	131.32	131.16	131.45	131.42	132.29	131.22	131.33	131.23	131.11	130.91	131.10
(@)	+36000	+12000	-13000	+24000	-2000	+73000	-90000	+9000	-8000	-10000	-17000	+16000

CAL YR 1994 MAX 2050000 MIN 1748000 (@) +22000
WTR YR 1995 MAX 2050000 MIN 1748000 (@) +30000

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

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

WATER-QUALITY RECORDS

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

303807095011101 - LIVINGSTON RES SITE AC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	RESER-VOIR STORAGE (AC-FT)	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB												
01...	1210	1820000	1.00	250	7.8	12.5	0.40	11.3	106	88	13	30
01...	1212	--	10.0	250	7.8	12.0	--	11.2	104	--	--	--
01...	1214	--	20.0	250	7.8	12.0	--	11.2	104	--	--	--
01...	1216	--	30.0	250	7.8	12.0	--	11.2	104	--	--	--
01...	1218	--	40.0	250	7.8	12.0	--	11.1	103	--	--	--
01...	1220	--	50.0	250	7.8	12.0	--	11.1	103	--	--	--
01...	1222	--	60.0	250	7.8	12.0	--	11.0	102	--	--	--
01...	1224	--	75.0	250	7.7	12.0	--	10.8	100	87	14	30
AUG												
24...	1210	1800000	1.00	270	8.8	31.0	1.00	7.6	102	100	18	35
24...	1212	--	10.0	270	8.6	30.0	--	6.8	90	--	--	--
24...	1214	--	20.0	270	8.5	30.0	--	6.5	86	--	--	--
24...	1216	--	30.0	285	7.3	29.5	--	2.4	31	--	--	--
24...	1218	--	40.0	285	7.3	29.0	--	2.4	31	--	--	--
24...	1220	--	50.0	285	7.2	28.5	--	2.4	31	--	--	--
24...	1222	--	60.0	300	7.2	27.5	--	2.4	30	--	--	--
24...	1224	--	71.0	350	7.2	25.5	--	2.4	29	140	0	48

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB												
01...	3.1	14	0.7	3.9	75	21	15	0.20	8.0	143	0.580	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	0.590	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.0	14	0.7	4.0	73	22	15	0.20	7.9	143	0.580	0.580
AUG												
24...	3.8	20	0.9	3.8	85	29	19	0.30	2.8	165	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--	--
24...	4.3	18	0.7	3.7	140	16	16	0.30	10	209	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB											
01...	<0.010	0.580	0.580	0.080	0.32	0.40	0.060	0.060	0.18	36	2
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	<0.010	0.590	0.590	0.020	0.38	0.40	0.060	0.060	0.18	40	<10
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	0.010	0.590	0.590	0.020	0.38	0.40	0.060	0.070	0.21	47	5
AUG											
24...	<0.010	--	<0.050	<0.015	--	0.30	0.010	0.020	0.06	4	7
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.010	--	<0.050	<0.015	--	0.50	0.020	0.030	0.09	20	60
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.010	--	<0.050	0.130	0.27	0.40	0.160	0.140	0.43	100	360
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.010	--	<0.050	1.40	0.40	1.8	0.950	0.950	2.9	1100	1900

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

303821095005001 - LIVINGSTON RES SITE AL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
01...	1250	1.00	250	7.8	12.5	0.40	11.2	105
01...	1252	10.0	250	7.8	12.0	--	11.1	103
01...	1254	20.0	250	7.8	12.0	--	11.1	103
01...	1256	30.0	250	7.7	12.0	--	11.0	102
01...	1258	40.0	250	7.7	12.0	--	11.0	102
01...	1300	56.0	250	7.7	12.0	--	10.9	101
AUG								
24...	1240	1.00	275	8.8	31.5	1.00	7.5	102
24...	1242	10.0	275	8.6	30.0	--	6.9	91
24...	1244	20.0	275	8.5	30.0	--	6.4	85
24...	1246	30.0	280	7.4	29.5	--	2.5	33
24...	1248	40.0	285	7.4	29.0	--	2.4	31
24...	1250	48.0	285	7.4	29.0	--	2.4	31

303935095055401 - LIVINGSTON RES SITE BC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
01...	1125	1.00	250	7.8	12.0	0.40	11.3	105
01...	1127	10.0	250	7.8	12.0	--	11.3	105
01...	1129	20.0	250	7.8	12.0	--	11.3	105
01...	1131	30.0	250	7.8	12.0	--	11.2	104
01...	1133	40.0	250	7.8	12.0	--	11.1	103
01...	1135	50.0	250	7.8	12.0	--	11.0	102
01...	1137	62.0	245	7.8	12.0	--	10.7	99
AUG								
24...	1130	1.00	270	8.8	31.5	1.00	7.4	100
24...	1132	10.0	270	8.7	30.5	--	6.7	89
24...	1134	20.0	270	8.6	30.5	--	6.2	83
24...	1136	30.0	290	7.5	30.0	--	3.2	42
24...	1138	40.0	290	7.3	29.0	--	2.6	34
24...	1140	50.0	290	7.2	28.0	--	2.5	32
24...	1142	58.0	300	7.2	28.0	--	2.5	32

304144095073001 - LIVINGSTON RES SITE CC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
01...	1050	1.00	245	7.8	12.0	0.30	11.2	104
01...	1052	10.0	245	7.8	12.0	--	11.2	104
01...	1054	20.0	245	7.8	12.0	--	11.0	102
01...	1056	30.0	245	7.8	12.0	--	10.9	101
01...	1058	40.0	250	7.7	11.5	--	10.8	99
01...	1100	50.0	255	7.7	11.5	--	10.2	93
01...	1102	58.0	255	7.7	11.5	--	10.2	93
AUG								
24...	1110	1.00	270	8.7	31.0	0.90	6.7	90
24...	1112	10.0	270	8.5	30.5	--	6.2	83
24...	1114	20.0	280	8.4	30.5	--	5.5	73
24...	1116	30.0	280	7.6	30.0	--	3.4	45
24...	1118	40.0	280	7.2	29.0	--	2.4	31
24...	1120	54.0	295	7.2	28.5	--	2.4	31

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

304521095075501 - LIVINGSTON RES SITE DC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB											
01...	1000	1.00	240	7.8	12.0	0.30	11.2	104	0.510	--	<0.010
01...	1002	10.0	240	7.8	12.0	--	11.2	104	--	--	--
01...	1004	20.0	240	7.8	12.0	--	11.2	104	--	--	--
01...	1006	30.0	240	7.8	12.0	--	11.1	103	--	--	--
01...	1008	40.0	240	7.8	12.0	--	11.0	102	--	--	--
01...	1010	50.0	245	7.7	12.0	--	10.9	101	--	--	--
01...	1012	56.0	245	7.7	12.0	--	10.8	100	0.510	0.510	0.010
AUG											
24...	1015	1.00	270	8.4	30.5	0.80	5.6	75	--	--	<0.010
24...	1017	10.0	270	8.2	30.5	--	5.2	70	--	--	--
24...	1019	20.0	270	8.2	30.5	--	5.1	68	--	--	--
24...	1021	30.0	280	7.5	30.0	--	3.2	42	--	--	--
24...	1023	40.0	295	7.2	29.0	--	2.4	31	--	--	--
24...	1025	51.0	300	7.2	28.5	--	2.4	31	--	--	<0.010

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS DISSOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	IRON, DISSOLVED (UG/L AS FE)	MANGANESE, DISSOLVED (UG/L AS MN)
FEB										
01...	0.510	0.510	0.040	0.36	0.40	0.060	0.060	0.18	40	<10
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	0.520	0.520	0.060	0.54	0.60	0.060	0.060	0.18	60	30
AUG										
24...	--	<0.050	<0.015	--	0.30	0.030	0.040	0.12	<10	20
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	<0.050	0.700	0.30	1.0	0.370	0.390	1.2	270	900

304453095064901 - LIVINGSTON RES SITE DL

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)
FEB								
01...	0940	1.00	235	7.8	12.0	0.30	11.0	102
01...	0942	10.0	235	7.8	11.5	--	10.8	99
01...	0944	21.0	235	7.8	11.5	--	10.7	98
AUG								
24...	0958	1.00	280	8.4	30.5	0.70	5.5	74
24...	1000	10.0	280	8.3	30.5	--	5.3	71
24...	1002	20.0	280	8.2	30.0	--	5.0	66

304659095052001 - LIVINGSTON RES SITE EC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	PH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	TRANSPARENCY (SECCHI DISK) (M)	OXYGEN, DISSOLVED (MG/L)	OXYGEN, DISSOLVED (PERCENT SATURATION)	NITROGEN, NITRATE TOTAL (MG/L AS N)	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)
FEB											
01...	0915	1.00	235	7.8	12.0	0.30	10.8	100	0.470	0.470	0.010
01...	0917	10.0	230	7.8	12.0	--	10.7	99	--	--	--
01...	0919	20.0	230	7.7	11.5	--	10.7	98	--	--	--
01...	0921	30.0	230	7.7	11.5	--	10.7	98	0.480	--	<0.010
AUG											
24...	0930	1.00	270	8.4	30.5	0.25	5.8	78	--	--	<0.010
24...	0932	10.0	270	8.4	30.5	--	5.6	75	--	--	--
24...	0934	20.0	290	7.5	30.0	--	3.4	45	--	--	--
24...	0936	29.0	290	7.3	30.0	--	2.6	34	0.110	0.110	0.060

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

304659095052001 - LIVINGSTON RES SITE EC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB										
01...	0.480	0.480	0.040	0.46	0.50	0.060	0.060	0.18	60	<10
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	0.480	0.480	0.040	0.36	0.40	0.060	0.060	0.18	70	<10
AUG										
24...	--	<0.050	<0.015	--	0.30	0.020	0.030	0.09	30	20
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	0.170	0.170	0.190	0.31	0.50	0.100	0.070	0.21	<10	150

304843095104001 - LIVINGSTON RES SITE FC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB								
01...	1410	1.00	240	7.7	12.0	0.25	11.0	102
01...	1412	10.0	240	7.7	12.0	--	10.9	101
01...	1414	20.0	240	7.7	12.0	--	10.9	101
01...	1416	30.0	240	7.7	12.0	--	10.7	99
01...	1418	40.0	240	7.7	12.0	--	10.5	97
01...	1420	50.0	240	7.6	12.0	--	10.3	95
01...	1422	57.0	240	7.6	12.0	--	10.3	95
AUG								
24...	1330	1.00	280	9.1	32.5	0.50	9.2	127
24...	1332	10.0	280	8.2	30.5	--	4.9	65
24...	1334	20.0	310	7.5	30.5	--	2.9	39
24...	1336	30.0	315	7.4	30.0	--	2.4	32
24...	1338	40.0	315	7.3	29.5	--	2.4	31
24...	1340	50.0	315	7.3	29.5	--	2.4	31
24...	1342	56.0	315	7.3	29.5	--	2.4	31

305411095144901 - LIVINGSTON RES SITE GC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB												
01...	1455	1.00	270	7.6	13.0	0.20	11.3	107	75	15	25	3.1
01...	1457	10.0	280	7.7	12.0	--	11.3	105	--	--	--	--
01...	1459	20.0	280	7.7	12.0	--	11.2	104	--	--	--	--
01...	1501	30.0	285	7.8	12.0	--	11.1	103	--	--	--	--
01...	1503	40.0	290	7.7	12.0	--	11.0	102	--	--	--	--
01...	1505	48.0	290	7.7	12.0	--	11.0	102	100	19	35	3.8
AUG												
24...	1430	1.00	365	8.6	31.5	--	6.6	90	120	25	42	4.3
24...	1432	10.0	355	8.0	30.5	--	4.7	63	--	--	--	--
24...	1434	20.0	355	7.9	30.0	--	4.6	61	--	--	--	--
24...	1436	30.0	355	7.7	30.0	--	4.5	60	--	--	--	--
24...	1438	40.0	355	7.5	30.0	--	2.9	39	--	--	--	--
24...	1440	46.0	355	7.4	30.0	--	2.4	32	130	18	43	4.3

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

305411095144901 - LIVINGSTON RES SITE GC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)
FEB											
01...	15	0.8	3.5	60	23	16	0.10	8.5	133	0.450	0.450
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	0.810	0.810
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	18	0.8	3.9	84	23	20	0.20	6.8	165	0.840	0.840
AUG											
24...	29	1	4.5	98	38	32	0.40	7.9	221	0.710	0.710
24...	--	--	--	--	--	--	--	--	--	0.840	0.840
24...	--	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	0.830	0.830
24...	--	--	--	--	--	--	--	--	--	--	--
24...	27	1	4.2	110	38	28	0.40	8.6	223	0.880	0.880

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB											
01...	0.010	0.460	0.460	0.040	0.46	0.50	0.060	0.060	0.18	100	27
01...	--	--	--	--	--	--	--	--	--	--	--
01...	0.030	0.840	0.840	0.040	0.36	0.40	0.080	0.090	0.28	80	<10
01...	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--
01...	0.020	0.860	0.860	0.040	0.36	0.40	0.060	0.090	0.28	83	4
AUG											
24...	0.070	0.780	0.780	0.020	0.28	0.30	0.100	0.110	0.34	<3	5
24...	0.100	0.940	0.940	0.100	0.30	0.40	0.130	0.110	0.34	<10	20
24...	--	--	--	--	--	--	--	--	--	--	--
24...	0.110	0.940	0.940	0.090	0.31	0.40	0.150	0.110	0.34	<10	60
24...	--	--	--	--	--	--	--	--	--	--	--
24...	0.090	0.970	0.970	0.180	0.32	0.50	0.130	0.110	0.34	8	260

305447095161401 - LIVINGSTON RES SITE HC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS),	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
FEB											
01...	1530	1.00	120	6.7	13.0	0.25	11.0	105	0.110	--	<0.010
01...	1532	10.0	120	6.9	12.5	--	11.0	103	--	--	--
01...	1534	20.0	135	7.2	12.5	--	11.2	105	--	--	--
01...	1536	30.0	265	7.7	12.0	--	11.1	103	--	--	--
01...	1538	39.0	265	7.6	12.0	--	10.8	101	0.630	0.630	0.010
AUG											
24...	1505	1.00	305	8.9	33.0	--	8.4	117	0.050	0.050	0.040
24...	1507	10.0	330	8.2	30.5	--	4.9	66	--	--	--
24...	1509	20.0	330	8.2	30.5	--	4.9	66	--	--	--
24...	1511	30.0	330	8.0	30.5	--	4.2	56	--	--	--
24...	1513	38.0	350	7.8	30.5	--	4.0	54	0.530	0.530	0.060

08066190 LIVINGSTON RESERVOIR NEAR GOODRICH, TX--Continued

305447095161401 - LIVINGSTON RES SITE HC--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
FEB										
01...	0.110	0.110	0.040	0.46	0.50	0.030	0.040	0.12	140	60
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--
01...	0.640	0.640	0.040	0.46	0.50	0.050	0.070	0.21	50	40
AUG										
24...	0.090	0.090	<0.015	--	0.40	0.030	0.030	0.09	10	50
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
24...	0.590	0.590	0.170	0.33	0.50	0.090	0.090	0.28	<10	150

305135095193601 - LIVINGSTON RES SITE IC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)
FEB								
02...	0840	1.00	285	7.8	11.5	0.15	11.0	101
02...	0842	10.0	285	7.8	11.5	--	10.9	100
02...	0844	20.0	285	7.8	11.5	--	10.8	99
02...	0846	30.0	285	7.7	11.5	--	10.7	98
02...	0848	41.0	285	7.7	11.5	--	10.5	96
AUG								
25...	0905	1.00	380	8.3	31.5	--	6.4	87
25...	0907	10.0	390	7.6	31.0	--	4.8	65
25...	0909	20.0	395	7.4	30.5	--	4.2	56
25...	0911	30.0	395	7.4	30.5	--	4.0	54
25...	0913	38.0	395	7.3	30.5	--	3.6	48

305135095235401 - LIVINGSTON RES SITE JC

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	SAM-PLING DEPTH (FEET)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK) (M)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
FEB												
02...	0915	1.00	290	7.8	11.5	0.12	11.4	104	100	17	35	3.6
02...	0917	10.0	290	7.8	11.5	--	11.3	103	--	--	--	--
02...	0919	20.0	290	7.8	11.5	--	11.2	102	--	--	--	--
02...	0921	30.0	290	7.8	11.5	--	11.1	101	--	--	--	--
02...	0923	40.0	290	7.8	11.5	--	10.4	95	100	17	35	3.6
AUG												
25...	0935	1.00	395	8.4	31.5	--	6.9	94	130	25	43	4.9
25...	0937	10.0	395	7.9	31.5	--	5.6	76	--	--	--	--
25...	0939	20.0	395	7.7	31.0	--	5.1	69	--	--	--	--
25...	0941	30.0	400	7.6	31.0	--	4.8	65	--	--	--	--
25...	0943	37.0	400	7.6	31.0	--	4.8	65	130	22	43	4.9

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 downstream side of bridge on U.S. Highway 190, 2 mi west of Livingston, 2 mi upstream from Choates Creek, and 14.8 mi upstream from mouth.

DRAINAGE AREA.--141 mi².

PERIOD OF RECORD.--January 1963 to current year.
Water-quality records.--Chemical analyses: January 1963 to September 1974.

GAGE.--Water-stage recorder. Datum of gage is 100.12 ft above sea level.

REMARKS.--Records good. No known diversions above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1870, about 41 ft in May 1929.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	1000	50,900	30.49	Jan. 27	0500	8,450	19.04
Dec. 16	1830	15,500	24.15	Mar. 13	2230	8,260	18.84
Dec. 29	0600	2,650	10.57	May 31	0200	3,750	12.71
Jan. 18	1600	9,870	20.42				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	29	17	135	96	317	47	e47	505	39	73	16
2	.91	28	17	95	84	135	40	e39	186	22	132	17
3	.83	26	47	80	75	252	281	e33	113	17	166	11
4	.56	27	51	72	66	238	1120	e28	88	15	38	7.6
5	.25	119	32	60	61	215	1140	25	51	18	22	6.1
6	.02	83	26	62	57	148	300	23	36	19	34	5.7
7	.20	41	141	80	57	757	148	25	32	16	27	5.1
8	16	33	1330	60	58	602	96	654	32	13	42	4.4
9	17	31	219	51	54	164	116	682	24	11	22	4.6
10	10	31	986	50	54	107	2550	101	23	10	15	4.0
11	5.6	30	599	49	56	85	481	51	779	8.7	12	3.2
12	3.2	28	130	48	52	75	148	43	346	8.5	9.7	2.9
13	2.8	26	84	1240	49	3830	88	47	51	8.6	10	2.9
14	2.6	25	72	391	63	3090	66	32	32	12	17	2.9
15	8.6	25	85	139	67	499	56	28	26	16	90	2.7
16	1360	24	8650	91	65	304	53	26	23	19	24	2.4
17	30100	24	2720	76	62	216	56	22	20	14	17	3.2
18	6470	23	331	5440	53	140	52	29	19	12	13	12
19	1980	22	188	2670	55	103	156	36	17	27	13	9.6
20	308	22	130	306	61	84	330	24	16	24	16	28
21	151	21	145	162	51	72	111	22	15	14	17	36
22	436	22	125	127	44	65	90	20	14	10	13	65
23	319	21	91	149	44	58	71	18	14	7.9	17	31
24	106	20	76	106	44	55	47	17	13	6.9	128	16
25	70	19	65	88	42	52	39	16	12	5.9	37	10
26	54	19	58	736	40	49	40	16	10	5.7	20	7.4
27	45	19	53	6500	40	44	43	15	9.5	5.0	13	6.2
28	41	20	92	755	264	41	34	86	9.5	3.9	40	4.9
29	37	19	2130	251	---	56	36	1570	27	8.5	21	4.3
30	34	18	505	155	---	89	35	1680	154	17	12	3.7
31	32	---	200	115	---	65	---	1970	---	85	8.8	---
TOTAL	41612.24	895	19395	20339	1814	12007	7870	7425	2697.0	499.6	1119.5	335.8
MEAN	1342	29.8	626	656	64.8	387	262	240	89.9	16.1	36.1	11.2
MAX	30100	119	8650	6500	264	3830	2550	1970	779	85	166	65
MIN	.02	18	17	48	40	41	34	15	9.5	3.9	8.8	2.4
AC-FT	82540	1780	38470	40340	3600	23820	15610	14730	5350	991	2220	666
CFSM	9.52	.21	4.44	4.65	.46	2.75	1.86	1.70	.64	.11	.26	.08
IN.	10.98	.24	5.12	5.37	.48	3.17	2.08	1.96	.71	.13	.30	.09

08066200 LONG KING CREEK AT LIVINGSTON, TX--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1995, BY WATER YEAR (WY)

MEAN	71.7	71.8	142	179	171	152	139	147	141	37.0	16.5	21.3
MAX	1342	689	626	966	629	640	844	662	869	493	191	186
(WY)	1995	1974	1995	1974	1992	1990	1979	1969	1989	1989	1983	1973
MIN	.18	.92	2.83	2.79	5.53	3.75	4.06	2.58	.72	.000	.000	.15
(WY)	1966	1989	1971	1971	1971	1971	1971	1963	1971	1971	1971	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1963 - 1995	
ANNUAL TOTAL	92804.64		116009.14			
ANNUAL MEAN	254		318		109	
HIGHEST ANNUAL MEAN					318	1995
LOWEST ANNUAL MEAN					12.3	1970
HIGHEST DAILY MEAN	30100	Oct 17	30100	Oct 17	30100	Oct 17 1994
LOWEST DAILY MEAN	.02	Oct 6	.02	Oct 6	.00	Aug 5 1965
ANNUAL SEVEN-DAY MINIMUM	.49	Oct 1	.49	Oct 1	.00	Jun 28 1971
INSTANTANEOUS PEAK FLOW			50900	Oct 17	50900	Oct 17 1994
INSTANTANEOUS PEAK STAGE			30.49	Oct 17	30.49	Oct 17 1994
ANNUAL RUNOFF (AC-FT)	184100		230100		78810	
ANNUAL RUNOFF (CFSM)	1.80		2.25		.77	
ANNUAL RUNOFF (INCHES)	24.48		30.61		10.48	
10 PERCENT EXCEEDS	290		337		150	
50 PERCENT EXCEEDS	20		41		12	
90 PERCENT EXCEEDS	2.6		8.3		.86	

e Estimated

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 mi².

PERIOD OF RECORD.--December 1965 to current year.
Water-quality records.--March 1966 to September 1973.

GAGE.--Water-stage recorder. Datum of gage is 40.00 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Twenty-two major reservoirs with a capacity of 6,246,000 acre-ft, of which 1,362,000 acre-ft is for flood control, partly regulate the flow. See station 08065000 for statement regarding floodwater-retarding structures.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1929, 52.0 ft in May 1942, from information by Texas Department of Transportation and by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1320	16900	18600	27900	24000	7440	e32800	e22000	e35100	5660	3890	1550
2	1320	16600	17300	24000	21400	7190	e31300	e22000	e29500	5290	7940	1520
3	1320	16000	16800	20900	19300	8090	e29700	e22000	e25300	4510	11100	1490
4	1330	16000	16700	20300	17000	9280	e29500	e22000	e19900	3520	e11300	1470
5	1330	16200	14300	18500	13100	10100	e29500	e22000	e19100	3530	e10300	1500
6	1330	16100	12800	16500	9060	10000	e28700	e22000	e16500	3580	e8730	1510
7	1340	16000	11300	15800	6160	12500	e28500	e22000	e14000	3480	e7430	1490
8	1380	15900	11900	14300	5760	20700	e28500	e20600	e14000	3460	e6400	1460
9	1380	15900	11500	12700	5730	e20900	e28500	e20700	e13500	3440	e5630	1430
10	1710	15800	11500	12300	5710	e17200	e29800	e20100	e12000	3430	5270	1420
11	3990	15800	12100	11600	5700	e12100	e24500	e20100	e11800	3680	5100	1430
12	5130	15800	11400	10600	5630	e11100	e24100	e20000	e10400	4040	4090	1470
13	5240	15800	12800	11200	5160	e15000	e24100	e20000	e10100	3590	3980	1470
14	5260	15800	13700	14300	5100	e24500	e24100	e21400	e11300	3430	3910	1470
15	5290	15800	15400	17000	5110	e24500	e24100	e26600	e13800	3440	4000	1470
16	6990	15800	30700	18800	5100	e24300	e24100	e31300	e15000	3460	3990	1460
17	68700	15900	54600	19800	5080	e28300	e24100	e34800	e16200	3450	3950	1460
18	120000	16600	57100	33800	5060	e28500	e24100	e38100	e17000	3410	3790	1460
19	101000	16900	57100	42900	5490	e28500	e24200	e43400	e18000	3390	2590	1450
20	65500	17500	57200	38500	6150	e28500	e24300	e43800	e18000	3560	2450	1450
21	36200	18800	55300	37600	6160	e28500	e24100	e43800	e18000	3390	2450	1480
22	26100	18800	50300	37000	6150	e28500	e24100	e43800	e18000	3130	2450	1770
23	24200	18800	47300	32700	6150	e28500	e24100	e46000	e18000	2720	2440	2250
24	23500	18800	43900	29500	6150	e28400	e24400	e46000	e18000	2700	2460	2240
25	23300	18700	42200	27900	6130	e31400	e24400	e46000	e16200	2700	2330	2230
26	22600	18800	40500	28400	6130	e31700	e23200	e46000	e13400	2690	2330	2450
27	20800	18800	39400	37500	6160	e31700	e22000	e46000	e11500	2680	2330	2860
28	19200	18700	38300	33500	7000	e31700	e22000	e45200	e8630	2670	2340	2880
29	19000	18700	39100	30900	---	e31800	e22000	e43800	e6560	2690	2340	2630
30	18300	18600	39000	29300	---	e32600	e22000	e42100	e5620	2710	2060	2270
31	17000	---	35300	26900	---	e32900	---	e39200	---	3090	1540	---
TOTAL	651060	510600	935400	752900	230830	686400	770800	1002800	474410	106520	140910	52490
MEAN	21000	17020	30170	24290	8244	22140	25690	32350	15810	3436	4545	1750
MAX	120000	18800	57200	42900	24000	32900	32800	46000	35100	5660	11300	2880
MIN	1320	15800	11300	10600	5060	7190	22000	20000	5620	2670	1540	1420
AC-FT	1291000	1013000	1855000	1493000	457900	1361000	1529000	1989000	941000	211300	279500	104100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

MEAN	3725	6469	8787	8970	9521	11580	11250	16050	12820	4844	2305	2205
MAX	25630	30260	30270	45550	38660	40490	30750	57850	32120	24310	6819	15230
(WY)	1974	1975	1992	1992	1992	1992	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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995	
ANNUAL TOTAL	4266050		6315120			
ANNUAL MEAN	11690		17300		8146	
HIGHEST ANNUAL MEAN					18310	1992
LOWEST ANNUAL MEAN					746	1971
HIGHEST DAILY MEAN	120000	Oct 18	120000	Oct 18	120000	Oct 18 1994
LOWEST DAILY MEAN	1310	Sep 24	1320	Oct 1	191	Aug 6 1971
ANNUAL SEVEN-DAY MINIMUM	1310	Sep 24	1330	Oct 1	240	Aug 16 1972
INSTANTANEOUS PEAK FLOW			125000	Oct 18	125000	Oct 18 1994
INSTANTANEOUS PEAK STAGE			48.97	Oct 18	48.97	Oct 18 1994
ANNUAL RUNOFF (AC-FT)	8462000		12530000		5901000	
10 PERCENT EXCEEDS	25900		37200		23400	
50 PERCENT EXCEEDS	6140		15800		2870	
90 PERCENT EXCEEDS	1580		2250		725	

e Estimated
Period of regulated steamflow.

08066295 MENARD CREEK NEAR FUQUA, TX
(National water-quality assessment program)

WATER-QUALITY RECORDS

LOCATION.--Lat 30°27'42", long 94°43'22", Liberty County, 1.5 mi downstream from Menard Creek at Rye, Texas, 0.8 mi west of Hwy 105.

DRAINAGE AREA.--109 mi².

PERIOD OF RECORD.--Chemical and biochemical analyses: April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 26...	1345	133	56	5.5	19.0	7.8	83	15	8	4.0	1.3	4.6
NOV 09...	1615	63	58	5.8	20.0	7.8	86	16	6	4.3	1.2	5.5
DEC 12...	1650	84	55	6.4	12.0	9.8	90	12	3	3.0	1.2	5.9
JAN 19...	1810	502	92	3.9	13.0	5.8	55	10	--	2.7	0.73	3.4
FEB 27...	1632	56	62	6.3	17.5	8.6	90	14	6	3.9	1.0	6.4
MAR 30...	1100	279	44	5.5	15.0	8.2	81	11	5	3.0	0.85	4.1
APR 27...	1656	63	62	6.1	18.5	7.7	81	15	6	4.3	1.1	4.9
MAY 17...	1625	35	66	6.0	24.0	7.0	84	15	4	4.3	1.1	6.1
JUN 26...	1430	23	66	5.8	23.0	6.5	76	14	3	3.8	1.0	5.6
JUL 25...	1520	20	62	5.7	26.0	6.3	78	15	4	4.2	1.1	6.1
AUG 17...	1346	41	62	6.1	25.0	6.6	80	14	3	3.6	1.1	5.3
SEP 28...	0850	20	55	6.6	20.0	7.1	78	14	3	3.8	1.0	5.2

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 26...	0.5	1.2	0	9	7	--	3.4	12	<0.10	12	78	44
NOV 09...	0.6	0.90	0	12	8	--	1.9	13	<0.10	15	69	49
DEC 12...	0.7	0.90	0	11	8	--	1.5	12	<0.10	15	68	46
JAN 19...	0.5	0.70	0	0	0	--	3.3	14	<0.10	7.3	57	--
FEB 27...	0.7	0.60	0	10	9	--	1.6	13	<0.10	13	61	46
MAR 30...	0.5	0.70	0	7	6	--	1.5	10	<0.10	7.6	71	32
APR 27...	0.5	0.70	0	11	9	--	1.4	12	<0.10	13	66	44
MAY 17...	0.7	0.80	0	14	11	--	1.1	13	<0.10	15	65	50
JUN 26...	0.7	0.80	0	13	11	--	1.5	11	<0.10	14	56	45
JUL 25...	0.7	0.90	0	13	9	--	1.5	12	<0.10	13	56	47
AUG 17...	0.6	0.90	0	13	9	--	1.6	11	<0.10	15	50	47
SEP 28...	0.6	1.2	--	--	--	11	1.8	10	<0.10	14	58	44

08066295 MENARD CREEK NEAR FUQUA, TX--Continued
(National water-quality assessment program)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 26...	--	--	<0.010	--	<0.050	<0.015	0.70	0.70	--	0.60	0.70
NOV 09...	--	--	<0.010	--	<0.050	<0.015	0.40	0.40	--	0.30	0.40
DEC 12...	--	--	<0.010	--	<0.050	<0.015	0.40	0.40	--	0.30	0.40
JAN 19...	0.050	--	<0.010	0.050	0.050	<0.015	0.65	0.60	--	0.40	0.60
FEB 27...	0.080	--	<0.010	0.080	0.080	<0.015	0.38	0.30	--	0.20	0.30
MAR 30...	--	--	0.020	--	<0.050	0.020	0.70	0.68	0.48	0.50	0.70
APR 27...	0.090	--	<0.010	0.090	0.090	0.030	0.59	0.47	0.37	0.40	0.50
MAY 17...	0.120	0.120	0.010	0.130	0.130	0.020	0.43	0.28	0.28	0.30	0.30
JUN 26...	0.120	--	<0.010	0.120	0.120	<0.015	0.42	0.30	--	<0.20	0.30
JUL 25...	0.150	--	<0.010	0.150	0.150	<0.015	0.35	0.20	--	<0.20	0.20
AUG 17...	0.110	--	<0.010	0.110	0.110	<0.015	0.31	0.20	--	0.20	0.20
SEP 28...	0.060	--	<0.010	0.060	0.060	<0.015	0.26	0.20	--	0.20	0.20

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 26...	0.040	0.010	<0.010	--	17	0.9	19	6.8	96	980	250
NOV 09...	0.020	<0.010	<0.010	--	11	0.2	8	1.4	94	920	51
DEC 12...	0.020	0.020	<0.010	--	9.5	0.2	8	1.8	99	970	31
JAN 19...	0.030	0.020	<0.010	--	14	2.2	32	43	100	510	72
FEB 27...	0.020	<0.010	0.010	0.03	5.6	0.3	5	0.76	97	690	35
MAR 30...	0.040	0.020	<0.010	--	15	2.2	31	23	89	850	63
APR 27...	0.020	0.020	0.010	0.03	8.2	0.2	10	1.7	90	1100	57
MAY 17...	0.010	<0.010	0.020	0.06	5.7	0.9	7	0.66	99	1100	82
JUN 26...	0.020	<0.010	<0.010	--	4.1	0.4	6	0.37	83	650	45
JUL 25...	0.030	0.010	0.010	0.03	4.3	0.3	8	0.43	82	800	75
AUG 17...	0.030	0.020	0.010	0.03	6.7	0.7	14	1.5	81	1100	53
SEP 28...	0.030	0.020	0.010	0.03	4.7	0.2	8	0.43	87	510	51

08066300 MENARD CREEK NEAR RYE, TX

LOCATION.--Lat 30°28'52", long 94°46'46", Liberty County, Hydrologic Unit 12030202, on left bank 20 ft downstream from bridge on State Highway 146, 2.3 mi northwest of Rye, and about 6 mi upstream from mouth.

DRAINAGE AREA.--152 mi².

PERIOD OF RECORD.--December 1965 to current year.
Water quality records.--Chemical analyses: August 1950 to August 1994.

GAGE.--Water-stage recorder and crest-stage gage. Datum of of gage is 62.32 ft above sea level. September 1974 to August 1976, wire-weight gage read twice daily.

REMARKS.--Records good except those for estimated daily discharges, which are poor. No known diversions above station. Regulation by Bear Foot Lake on Mill Creek, located 0.5 mi upstream from station. A section of the dam on this lake washed out on June 26-27, 1986, and was repaired in 1987.

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 September 1961 reached a stage of about 34.0 ft, from information by local resident. Flood of May 1929 may have been equaled or exceeded by other floods during the period 1929-65.

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

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 17	2300	13,700	31.12	Mar. 16	0200	1,540	19.18
Jan. 20	1030	2,920	22.16	June 3	0700	1,810	20.03
Jan. 28	1630	4,020	23.44				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	86	53	410	348	668	315	74	281	74	106	37
2	16	79	49	201	262	474	207	70	476	106	155	46
3	16	75	75	138	218	444	159	67	1510	102	139	38
4	15	73	106	117	186	e385	235	66	817	65	123	34
5	15	82	120	103	164	407	773	65	305	64	102	33
6	15	94	109	98	147	398	1230	64	133	73	66	32
7	16	112	84	96	138	e415	1160	63	101	88	72	30
8	29	106	72	97	134	508	989	98	85	79	176	30
9	28	84	67	93	130	384	647	107	75	58	122	29
10	37	73	68	84	131	349	327	129	68	48	155	28
11	38	68	72	80	129	228	486	113	199	43	78	27
12	31	68	86	77	126	187	435	82	226	39	57	27
13	25	67	100	213	123	364	374	73	218	37	49	26
14	23	64	79	243	120	761	289	67	201	38	45	26
15	27	62	72	284	118	962	190	63	102	36	52	26
16	81	60	106	307	126	1320	158	58	77	35	52	25
17	7770	59	168	158	130	900	140	54	66	43	54	26
18	12000	59	178	312	120	534	128	54	59	91	48	25
19	6730	57	260	687	115	331	119	55	55	59	42	25
20	2630	56	168	2090	115	256	150	67	51	45	38	26
21	1550	54	110	1400	112	212	180	65	49	39	37	26
22	890	52	98	739	106	185	162	53	46	35	41	30
23	480	50	88	648	97	163	204	48	44	34	44	43
24	335	49	79	510	91	147	147	45	42	32	55	48
25	284	48	72	444	87	137	125	43	41	30	49	43
26	186	48	68	399	85	129	109	42	39	29	51	35
27	143	50	65	1870	99	135	95	41	37	29	52	30
28	123	54	69	2850	879	155	87	42	36	28	56	28
29	110	63	165	2130	---	332	82	51	49	34	55	26
30	98	56	185	1170	---	414	78	62	66	44	44	25
31	92	---	316	633	---	300	---	151	---	112	39	---
TOTAL	33849	2008	3407	18681	4636	12584	9780	2132	5554	1669	2254	930
MEAN	1092	66.9	110	603	166	406	326	68.8	185	53.8	72.7	31.0
MAX	12000	112	316	2850	879	1320	1230	151	1510	112	176	48
MIN	15	48	49	77	85	129	78	41	36	28	37	25
AC-FT	67140	3980	6760	37050	9200	24960	19400	4230	11020	3310	4470	1840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1995, BY WATER YEAR (WY)

MEAN	78.8	80.7	149	210	225	178	175	205	156	68.2	45.8	44.0
MAX	1092	514	457	777	727	510	977	757	788	464	354	192
(WY)	1995	1975	1975	1974	1992	1992	1979	1983	1986	1989	1983	1983
MIN	3.42	3.55	8.05	14.6	14.0	13.5	9.77	23.2	8.72	4.52	5.47	4.43
(WY)	1968	1968	1968	1971	1971	1971	1971	1978	1971	1971	1967	1967

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1966 - 1995	
ANNUAL TOTAL	72617		97484			
ANNUAL MEAN	199		267		136	
HIGHEST ANNUAL MEAN					279	1975
LOWEST ANNUAL MEAN					14.7	1971
HIGHEST DAILY MEAN	12000	Oct 18	12000	Oct 18	12000	Oct 18 1994
LOWEST DAILY MEAN	15	Oct 4	15	Oct 4	2.6	Nov 1 1967
ANNUAL SEVEN-DAY MINIMUM	16	Sep 30	16	Oct 1	2.9	Nov 1 1967
INSTANTANEOUS PEAK FLOW			13700	Oct 17	13700	Oct 17 1994
INSTANTANEOUS PEAK STAGE			31.12	Oct 17	31.12	Oct 17 1994
ANNUAL RUNOFF (AC-FT)	144000		193400		98380	
10 PERCENT EXCEEDS	281		456		282	
50 PERCENT EXCEEDS	66		84		50	
90 PERCENT EXCEEDS	21		31		14	

e Estimated

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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1392: 1932, 1935. WSP 1922: Drainage area. WDR TX-81-1: 1980(M, m).

GAGE.--Water-stage recorder. Datum of gage is 25.92 ft above sea level. Prior to Oct. 1, 1943, nonrecording gage at datum 63.57 ft higher at railroad bridge 1.9 mi upstream. Oct. 1, 1943 to Dec. 31, 1988, water-stage recorder and nonrecording gage (Sept. 15, 1975 to June 16, 1977) at present site and at datum 10.00 ft higher than current datum.

REMARKS.--Records good. Since Sept. 28, 1968, flow has been regulated by Livingston Reservoir (station 08066190), capacity 1,788,000 acre-ft, 35 mi upstream. There are no known large diversions between Livingston Reservoir and this station.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--44 years (water years 1925-68) 7,155 ft³/s (5,184,000 acre-ft/yr).

EXTREMES FOR PERIOD PRIOR TO REGULATION (WATER YEARS 1925-68).--Maximum discharge, 111,000 ft³/s May 9, 1942 (gage height, 45.8 ft, from floodmark), present site and datum; minimum, 102 ft³/s Aug. 24, 25, 1956. Maximum stage since at least 1908, that of May 9, 1942.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	18400	19500	34300	27300	9040	30800	19900	32700	6590	3490	1250
2	1360	18200	18800	27300	24200	8570	29300	19900	27400	5810	7170	1290
3	1360	17500	17800	22600	21500	8930	27400	19800	23100	5140	11200	1230
4	1350	17400	17700	21200	19200	10000	27100	19800	18700	3830	11800	1190
5	1330	17500	16200	19700	15800	11000	29100	19700	16900	3640	11700	1160
6	1340	17600	13800	17700	11200	11200	30700	19700	14000	3700	9880	1180
7	1340	17400	12700	16800	7410	11900	29600	19200	12100	3580	8460	1200
8	1460	17300	12100	15200	5970	17100	28500	18100	11900	3520	7540	1160
9	1460	17300	12500	13800	5850	19700	27800	18700	11200	3430	6720	1110
10	1420	17200	11900	12900	5850	15800	25500	18100	10100	3360	5790	1080
11	3300	17100	12800	12400	5810	11000	25100	17600	9530	3480	5620	1050
12	5700	17000	12000	11800	5760	9790	25700	17400	9570	4280	4690	1070
13	6250	17000	13100	12000	5280	12200	23900	17400	8950	4050	4250	1090
14	6310	17000	13800	14100	5040	22200	23200	19200	10400	3570	4170	1080
15	6400	17000	15400	17200	5040	26400	22800	23200	12200	3540	4170	1060
16	7010	16900	20700	19500	5020	25600	22700	27400	13000	3570	4240	1050
17	46100	16900	27200	20300	4990	27700	22600	29800	14300	3550	4210	1040
18	104000	17300	56900	29500	4960	27700	22500	33200	14900	3570	4130	1040
19	117000	17800	64400	50700	5120	27200	22500	37100	15600	3550	3030	1040
20	92600	18000	65000	48200	6220	27100	22500	38000	15700	3530	2460	1040
21	62800	19500	65100	45500	6370	27000	22800	38200	15700	3510	2400	1050
22	38500	19800	62300	43600	6340	26900	22700	38700	15600	3400	2390	1100
23	29700	19800	59000	40400	6320	26800	22600	40100	15600	2840	2350	1720
24	27100	19700	55800	34900	6290	27200	22500	40500	15500	2720	2380	1790
25	25900	19700	52400	32200	6280	29300	22300	40600	13800	2710	2320	1730
26	25100	19700	49300	31600	6260	29700	21200	40800	11500	2700	2150	1730
27	23200	19700	47000	41600	6310	29800	20300	40800	9650	2690	2200	2310
28	21200	19600	45300	44700	8130	29800	20200	39900	7620	2680	2190	2430
29	20700	19500	45600	39900	---	29900	20100	38600	6070	2700	2190	e2470
30	20300	19500	46000	35800	---	31000	20000	36900	6510	2700	2080	e1570
31	18700	---	43000	32000	---	30900	---	35800	---	3150	1430	---
TOTAL	721650	544300	1025100	859400	249820	658430	734000	884100	419800	111090	148800	40310
MEAN	23280	18140	33070	27720	8922	21240	24470	28520	13990	3584	4800	1344
MAX	117000	19800	65100	50700	27300	31000	30800	40800	32700	6590	11800	2470
MIN	1330	16900	11900	11800	4960	8570	20000	17400	6070	2680	1430	1040
AC-FT	1431000	1080000	2033000	1705000	495500	1306000	1456000	1754000	832700	220300	295100	79950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1995#, BY WATER YEAR (WY)

MEAN	4038	6986	9901	10210	10690	13120	11670	15280	13640	5244	2592	2398
MAX	25380	30780	33070	51740	44510	46100	31340	60070	33140	26280	7021	14850
(WY)	1974	1975	1995	1992	1992	1992	1977	1990	1989	1989	1982	1974
MIN	326	449	351	347	450	909	1176	1303	952	936	404	469
(WY)	1973	1971	1971	1971	1971	1981	1971	1971	1972	1971	1972	1971

SUMMARY STATISTICS	FOR 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1969 - 1995#	
ANNUAL TOTAL	4836980		6396800			
ANNUAL MEAN	13250		17530		8802	
HIGHEST ANNUAL MEAN					20630	1992
LOWEST ANNUAL MEAN					730	1971
HIGHEST DAILY MEAN	117000	Oct 19	117000	Oct 19	117000	Oct 19 1994
LOWEST DAILY MEAN	1330	Oct 5	1040	Sep 17	292	Oct 18 1972
ANNUAL SEVEN-DAY MINIMUM	1350	Oct 1	1050	Sep 15	297	Oct 13 1972
INSTANTANEOUS PEAK FLOW			122000	Oct 19	122000	Oct 19 1994
INSTANTANEOUS PEAK STAGE			42.70	Oct 19	42.70	Oct 19 1994
ANNUAL RUNOFF (AC-FT)	9594000		12690000		6377000	
10 PERCENT EXCEEDS	30900		38300		24500	
50 PERCENT EXCEEDS	7390		15700		3180	
90 PERCENT EXCEEDS	1540		1730		855	

e Estimated
Period of regulated streamflow.

08066500 TRINITY RIVER AT ROMAYOR, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1941 to November 1949, February 1950 to September 1951, October 1953 to current year. Chemical and biochemical analyses: February 1968 to current year. Pesticide analyses: February 1968 to July 1981, August 1983 to current year. Sediment records: March 1959 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1941 to September 1942, January 1944 to September 1951, October 1953 to September 1994.
WATER TEMPERATURE: October 1941 to September 1950, October 1953 to September 1994.
SUSPENDED-SEDIMENT DISCHARGE: October 1954 to September 1955, October 1968 to September 1971.

REMARKS.--Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and regression relationships between each chemical constituent and specific conductance. Regression equations developed for this station may be obtained from the U.S. Geological Survey District office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (1945-50, 1953 to current year): Maximum daily, 3,800 microsiemens Oct. 30, 1956; minimum daily, 103 microsiemens Nov. 9, 1946.
WATER TEMPERATURE (1953-58, 1961 to current year): Maximum daily, 37.0°C July 18, 27, 1953; minimum daily, 3.0°C Jan. 18, 1956, Jan. 15, 16, 1968, Jan. 2, 3, 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH WATER WHOLE FIELD (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	HARD-NESS TOTAL (MG/L AS CACO3)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT 26...	1045	25400	302	7.5	20.5	9.5	105	96	30	33	3.3	22
NOV 09...	1125	17300	290	7.3	21.5	9.4	107	96	14	33	3.2	21
DEC 12...	1300	11900	295	7.6	11.0	11.6	103	110	19	38	3.4	17
JAN 19...	1412	51900	222	6.9	12.5	12.8	120	80	11	28	2.5	11
FEB 27...	1410	6280	265	7.6	14.5	9.5	93	90	20	31	3.0	14
MAR 29...	1550	29900	305	7.8	16.0	10.0	101	97	27	33	3.5	18
APR 27...	1320	20300	325	7.4	20.0	9.0	99	120	25	41	3.8	18
MAY 17...	1330	29900	342	7.9	24.0	9.6	115	120	23	42	3.8	18
JUN 26...	1056	11500	320	8.3	28.0	7.5	96	110	14	39	3.8	17
JUL 25...	1150	2710	322	7.8	30.0	8.0	0	120	24	41	3.9	18
AUG 17...	1050	4190	304	7.4	29.0	8.6	112	110	23	37	3.7	19
SEP 28...	1150	2430	297	8.2	25.5	7.8	96	100	14	34	3.8	20

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3	ALKA-LINITY WAT DIS FIX END FIELD CACO3 (MG/L)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
OCT 26...	1	4.3	0	81	55	--	31	25	0.30	6.0	188	167
NOV 09...	0.9	3.6	0	99	72	--	27	21	0.20	6.6	177	167
DEC 12...	0.7	4.8	0	109	90	--	26	18	0.20	8.6	192	173
JAN 19...	0.5	3.5	0	84	69	--	17	12	0.10	7.2	139	125
FEB 27...	0.6	3.7	0	85	70	--	23	16	0.20	8.6	164	144
MAR 29...	0.8	3.7	0	85	69	--	31	20	0.20	7.8	178	163
APR 27...	0.7	4.1	0	113	93	--	32	18	0.30	6.8	194	183
MAY 17...	0.7	3.8	0	119	98	--	31	17	0.20	6.1	205	184
JUN 26...	0.7	10	3	115	97	--	28	19	0.30	2.8	185	180
JUL 25...	0.7	4.1	0	115	92	--	26	21	0.20	4.2	187	176
AUG 17...	0.8	4.1	0	103	85	--	29	22	0.20	3.8	166	170
SEP 28...	0.9	4.2	--	--	--	87	29	20	0.20	4.8	179	169

08066500 TRINITY RIVER AT ROMAYOR, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 26...	0.510	--	<0.010	0.510	0.510	<0.015	1.1	0.60	--	0.30	0.60
NOV 09...	0.580	--	<0.010	0.580	0.580	0.020	1.5	0.88	0.28	0.30	0.90
DEC 12...	0.700	--	<0.010	0.700	0.700	<0.015	1.1	0.40	--	0.40	0.40
JAN 19...	0.470	--	<0.010	0.470	0.470	0.020	1.2	0.68	0.38	0.40	0.70
FEB 27...	0.640	--	<0.010	0.640	0.640	0.020	1.1	0.48	0.28	0.30	0.50
MAR 29...	0.900	0.900	0.020	0.920	0.920	0.020	1.4	0.48	0.38	0.40	0.50
APR 27...	0.750	--	<0.010	0.750	0.750	<0.015	1.2	0.50	--	0.40	0.50
MAY 17...	0.740	--	<0.010	0.740	0.740	<0.015	1.0	0.30	--	0.30	0.30
JUN 26...	0.070	--	<0.010	0.070	0.070	0.020	0.67	0.58	--	<0.20	0.60
JUL 25...	0.090	--	<0.010	0.090	0.090	<0.015	0.49	0.40	--	0.30	0.40
AUG 17...	--	--	<0.010	--	<0.050	<0.015	0.40	0.40	--	0.30	0.40
SEP 28...	--	--	<0.010	--	<0.050	<0.015	0.60	0.60	--	0.30	0.60

DATE	PHOS-PHORUS TOTAL (MG/L AS P)	PHOS-PHORUS DIS-SOLVED (MG/L AS P)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 26...	0.120	0.070	0.060	0.18	5.2	0.8	47	3220	94	16	3
NOV 09...	0.220	0.070	0.070	0.21	4.8	0.7	31	1450	95	29	3
DEC 12...	0.120	0.090	0.090	0.28	5.4	0.6	38	1220	98	44	3
JAN 19...	0.190	0.050	0.050	0.15	6.9	2.1	134	18800	100	86	6
FEB 27...	0.120	0.070	0.060	0.18	6.4	0.8	42	712	100	110	5
MAR 29...	0.120	0.080	0.070	0.21	6.5	0.4	61	4920	79	66	2
APR 27...	0.110	0.080	0.080	0.25	5.5	0.3	38	2080	98	29	2
MAY 17...	0.070	0.050	0.070	0.21	5.1	0.3	20	1610	100	20	2
JUN 26...	0.040	<0.010	0.010	0.03	5.0	0.4	50	1550	93	11	1
JUL 25...	0.070	0.040	0.040	0.12	4.1	0.7	11	80	94	57	6
AUG 17...	0.100	0.060	0.050	0.15	4.6	0.5	17	192	76	16	<1
SEP 28...	0.110	0.050	0.040	0.12	4.4	0.8	33	217	78	11	2

08067000 TRINITY RIVER AT LIBERTY, TX

LOCATION.--Lat 30°03'27", long 94°49'05", Liberty County, Hydrologic Unit 12030203, at upstream side of upstream bridge on U.S. Highway 90 in Liberty, 345 ft downstream from Texas and New Orleans Railroad Co. bridge, and at mile 40.3.

DRAINAGE AREA.--17,468 mi².

PERIOD OF RECORD.--October 1938 to September 1940 (gage heights, discharge measurements, and some records of daily discharge), October 1940 to current year (high-water records only). Gage-height records collected in this vicinity since 1903 are contained in reports of the National Weather Service.
Water-quality records.--Chemical and biochemical analyses: October 1970 to September 1972. Pesticide analyses: May 1971 to September 1972.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2.22 ft below sea level; unadjusted land-surface subsidence. Prior to Mar. 13, 1973, nonrecording gage at site 105 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Discharges for current year were computed using stage discharge relationship. 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. Estimated discharges below 10,000 ft³/s are not published. Considerable regulation of flow by Livingston Reservoir (station 08066190) 88.9 mi upstream. Many diversions above station for municipal supplies, industrial uses, and irrigation. Gage-height telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 135,000 ft³/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, 135,000 ft³/s Oct. 18 at 0500 hours (gage height, 31.00 ft); minimum discharge not determined (affected by tides); minimum gage height, not recorded.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	21400	19600	40700	35700	10200	31800	21300	38600	---	---	---
2	---	20400	19500	37200	32800	10700	31800	21200	36900	---	---	---
3	---	19500	19400	33000	30000	10500	31100	21100	34000	---	---	---
4	---	18600	18800	29700	27100	10800	30700	21100	30300	---	11800	---
5	---	18200	18300	26900	24200	11600	31300	21000	26400	---	12500	---
6	---	18000	16500	24400	20300	12300	32400	21000	23100	---	12300	---
7	---	17700	14900	22000	16000	12700	33100	20900	19300	---	10700	---
8	---	17400	13600	20100	12400	15000	32400	20800	16700	---	---	---
9	---	17200	13400	18200	10400	20100	31700	20400	15400	---	---	---
10	---	17100	13100	16300	---	19600	31000	20400	13800	---	---	---
11	---	17000	12900	15100	---	16700	30200	19900	12800	---	---	---
12	---	16800	13100	14100	---	13600	30000	19500	12100	---	---	---
13	---	16800	12800	13800	---	12700	29300	19300	11400	---	---	---
14	---	16700	13500	14400	---	18300	28000	19400	10700	---	---	---
15	---	16600	14300	16300	---	25300	26900	21000	11400	---	---	---
16	---	16600	16800	18400	---	25700	26100	23800	12600	---	---	---
17	19200	16600	28500	19800	---	26400	25400	26500	13300	---	---	---
18	43600	16600	35000	21700	---	27800	25000	28900	14400	---	---	---
19	75400	17000	38900	29700	---	28400	24600	31500	15100	---	---	---
20	121000	17400	43000	34800	---	28500	24300	33600	15700	---	---	---
21	130000	17900	47500	37900	---	28500	24300	35100	15900	---	---	---
22	103000	18900	50200	39000	---	28500	24300	35800	16000	---	---	---
23	66800	19200	51800	39500	---	28400	24100	36400	16000	---	---	---
24	46000	19400	51900	38500	---	28300	24000	37200	16000	---	---	---
25	38600	19500	49100	37000	---	28600	23900	37800	15600	---	---	---
26	34200	19600	47400	35600	---	29600	23700	38400	14100	---	---	---
27	31400	19600	45100	36900	---	30100	22900	38500	12200	---	---	---
28	28800	19600	44200	39100	---	30500	22200	39100	10500	---	---	---
29	26400	19600	43300	40100	---	30800	21700	39900	---	---	---	---
30	24800	19600	43000	39700	---	31200	21400	39700	---	---	---	---
31	23200	---	42500	37900	---	31600	---	39000	---	---	---	---

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 mi east of Farm Road 1409, and 7.4 mi south-east of Dayton.

PERIOD OF RECORD.--April 1981 to current year. Prior to October 1990, published as CIWA Canal near Dayton, TX.

GAGE.--Water-stage recorder. Mean sea level of gage not determined.

REMARKS.--Records good except those for estimated daily discharges, which are poor. 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 1994 TO SEPTEMBER 1995
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	656	555	431	413	429	558	e540	685	619	646	671	663
2	637	612	432	412	427	559	e570	673	656	664	654	667
3	645	591	403	410	426	559	e590	671	682	653	666	706
4	631	589	381	408	423	562	e570	669	657	666	682	700
5	628	592	380	409	419	559	e560	667	654	672	664	691
6	629	593	412	437	420	523	e560	721	714	657	664	688
7	627	593	387	430	439	552	e560	721	740	675	661	687
8	629	593	396	430	463	555	e560	636	724	670	706	714
9	614	592	384	428	476	570	e580	657	754	669	756	730
10	590	588	381	435	473	574	e625	695	764	669	736	733
11	581	579	419	470	469	559	e640	738	762	664	730	756
12	588	563	383	478	493	561	e640	736	767	699	729	736
13	598	440	384	475	525	575	e640	734	725	741	715	707
14	602	439	386	444	530	590	e675	733	704	755	689	698
15	586	399	388	448	535	593	e710	734	713	734	688	691
16	570	328	395	449	530	594	e700	736	719	733	721	668
17	283	346	401	451	531	598	e720	740	718	727	734	648
18	241	374	428	435	531	599	e760	743	723	721	692	651
19	460	376	436	393	548	598	e730	755	705	718	664	669
20	551	415	437	409	530	599	720	772	679	718	659	664
21	560	428	438	408	585	e600	602	764	682	730	689	664
22	557	429	439	409	577	e600	602	741	680	749	690	655
23	568	431	425	410	581	e600	562	713	711	743	689	640
24	563	432	411	418	578	e600	525	714	723	742	688	603
25	558	434	411	418	576	e580	541	736	721	750	687	579
26	561	436	500	418	576	e560	575	752	744	761	692	607
27	565	435	431	418	581	e530	652	753	777	770	689	627
28	566	433	412	418	578	e530	676	753	770	769	686	664
29	566	434	412	420	---	e530	703	672	761	760	683	678
30	565	434	412	422	---	e530	703	647	645	713	685	682
31	563	---	413	424	---	e530	---	617	---	723	691	---
TOTAL	17538	14483	12748	13247	14249	17627	18791	22078	21393	22061	21450	20266
MEAN	566	483	411	427	509	569	626	712	713	712	692	676
MAX	656	612	500	478	585	600	760	772	777	770	756	756
MIN	241	328	380	393	419	523	525	617	619	646	654	579
AC-FT	34790	28730	25290	26280	28260	34960	37270	43790	42430	43760	42550	40200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1995, BY WATER YEAR (WY)

MEAN	393	375	360	356	365	383	416	441	462	485	453	432
MAX	599	564	573	570	565	569	626	712	713	764	746	676
(WY)	1994	1993	1994	1994	1994	1995	1995	1995	1995	1993	1993	1995
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 1994 CALENDAR YEAR		FOR 1995 WATER YEAR		WATER YEARS 1981 - 1995	
ANNUAL TOTAL	214672		215931			
ANNUAL MEAN	588		592		414	
HIGHEST ANNUAL MEAN					608	1994
LOWEST ANNUAL MEAN					259	1983
HIGHEST DAILY MEAN	780	May 28	777	Jun 27	826	Jul 6 1993
LOWEST DAILY MEAN	241	Oct 18	241	Oct 18	52	Aug 18 1983
ANNUAL SEVEN-DAY MINIMUM	381	Nov 15	381	Nov 15	167	Aug 18 1983
INSTANTANEOUS PEAK FLOW			891	Jun 12	918	Jun 30 1994
INSTANTANEOUS PEAK STAGE			2.77	Jun 12	2.82	Jun 30 1994
ANNUAL RUNOFF (AC-FT)	425800		428300		300200	
10 PERCENT EXCEEDS	717		736		617	
50 PERCENT EXCEEDS	592		600		381	
90 PERCENT EXCEEDS	432		413		243	

e Estimated

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.--Not determined.

WATER-STAGE RECORDS

PERIOD OF RECORD.--December 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5.81 ft below sea level.

REMARKS.--Records good. Lake Charlotte is a shallow natural lake within the Trinity River delta. December 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. Satellite telemeter at station.

EXTREME FOR PERIOD OF RECORD.--Maximum gage height, 15.9 ft October 22, 1994 at 1345 hours.

EXTREME FOR CURRENT YEAR.--Maximum gage height, 15.9 ft October 22 at 1345 hours.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	11.5	11.0	12.4	12.2	8.0	11.8	11.3	12.4	8.6	8.6	6.9
2	7.4	11.5	11.0	12.3	12.1	8.2	11.8	11.2	12.4	8.2	8.6	7.0
3	7.4	11.4	11.3	12.2	11.9	8.3	11.8	11.2	12.2	8.0	8.6	7.0
4	7.3	11.3	11.2	12.0	11.8	8.5	11.9	11.2	12.1	8.2	8.9	7.0
5	7.2	11.3	11.2	11.8	11.7	8.7	11.9	11.2	11.9	8.2	9.1	7.1
6	7.4	11.1	11.1	11.8	11.5	9.0	11.9	11.1	11.7	8.0	9.4	7.3
7	7.5	11.0	10.9	11.6	11.2	9.4	11.9	11.2	11.6	7.7	9.6	7.4
8	7.8	10.9	10.6	11.5	10.6	9.4	11.9	11.4	---	7.4	9.4	7.3
9	7.5	10.8	10.3	11.3	9.9	9.8	11.9	11.3	---	7.2	9.1	7.2
10	7.1	10.7	10.2	11.0	9.3	10.1	12.0	11.2	---	7.0	8.8	7.0
11	6.8	10.7	9.8	10.7	8.8	10.4	11.9	11.1	---	6.8	8.5	7.0
12	6.8	10.6	9.8	10.5	8.4	10.4	11.8	11.1	---	<6.7	8.4	7.0
13	6.8	10.6	9.8	10.3	8.1	10.4	11.8	11.2	---	<6.7	8.2	7.0
14	6.8	10.6	9.8	10.2	8.0	10.5	11.7	11.2	---	6.8	8.0	7.0
15	7.1	10.6	9.9	10.0	8.0	10.7	11.7	11.1	---	7.0	7.8	7.1
16	7.6	10.6	10.0	10.2	7.8	11.0	11.7	11.1	---	7.0	7.6	7.3
17	8.6	---	10.3	10.4	7.5	11.2	11.6	11.4	---	6.9	7.5	7.2
18	11.9	10.5	10.8	10.8	7.3	11.4	11.6	11.6	---	6.7	7.3	7.1
19	13.5	10.6	11.3	11.0	7.1	11.5	11.6	11.6	9.8	<6.7	7.3	7.3
20	14.3	10.6	11.9	11.3	7.0	11.6	11.6	11.7	9.9	<6.7	7.1	7.2
21	15.6	10.6	12.4	11.6	7.0	11.6	11.6	11.8	9.9	<6.7	6.9	7.1
22	15.9	10.6	12.5	11.9	7.2	11.6	11.6	11.9	9.9	6.8	7.0	6.7
23	---	10.7	12.6	12.1	7.3	11.6	11.5	12.0	10.0	6.8	7.1	<6.7
24	---	10.7	12.6	12.2	7.3	11.6	11.4	12.1	10.0	6.9	7.2	7.0
25	---	10.8	12.6	12.2	7.3	11.6	11.4	12.1	10.1	6.8	7.2	7.3
26	12.4	10.9	12.6	12.1	7.5	11.7	11.4	12.2	10.1	6.8	7.2	7.3
27	12.2	11.0	12.6	12.2	7.6	11.7	11.4	12.3	9.8	<6.7	7.1	7.3
28	12.1	11.0	12.6	12.2	7.8	11.7	11.4	12.3	9.5	<6.7	7.0	7.3
29	11.9	11.0	12.5	12.2	---	11.8	11.4	12.4	9.1	<6.7	6.8	7.4
30	11.7	11.0	12.5	12.2	---	11.8	11.3	12.5	9.0	7.7	7.0	7.7
31	11.7	---	12.4	12.2	---	11.8	---	12.4	---	8.6	7.0	---
MAX	---	---	12.6	12.4	12.2	11.8	12.0	12.5	---	8.6	9.6	7.7
MIN	---	---	9.8	10.0	7.0	8.0	11.3	11.1	---	6.7	6.8	6.7

< Actual value is known to be less than value shown.

08067118 LAKE CHARLOTTE NEAR ANAHUAC, TX--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1991 to current year.

INSTRUMENTATION.-- Water-quality instrumentation for water temperature, specific conductance, and air temperature was recorded.

REMARKS.--Interruption in the record was due to malfunctions of the instrumentation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum recorded, 36.5°C Jul. 31, Aug. 1, 1992; minimum recorded, 5.0°C Nov. 28. 1992.
SPECIFIC CONDUCTANCE: Maximum recorded, 562 microsiemens Nov. 11, 12, 1993; minimum recorded, 128 microsiemens Jan. 9, 1994.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 34.0°C Jul. 8,12; minimum recorded, 16.0°C Oct. 10.
SPECIFIC CONDUCTANCE: Maximum recorded, 516 microsiemens Oct. 6; minimum recorded, 46 microsiemens Oct. 20.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	427	348	385	269	180	225	232	153	192	223	95	166
2	446	345	393	250	183	222	253	113	199	189	128	148
3	440	375	403	278	198	239	250	159	199	195	116	155
4	455	357	413	284	229	255	241	180	209	180	119	143
5	482	372	427	299	205	259	235	171	203	180	79	132
6	516	379	432	278	189	235	275	195	234	208	134	173
7	461	391	432	275	183	235	302	201	246	220	116	169
8	473	375	433	281	217	246	278	195	244	226	110	164
9	412	339	385	302	211	258	293	198	248	229	137	176
10	427	330	374	305	177	234	256	165	208	235	147	195
11	452	327	385	266	162	219	238	159	196	226	128	190
12	458	333	395	266	174	222	247	137	192	241	171	203
13	461	360	398	290	192	235	266	159	211	229	140	179
14	437	369	396	360	189	240	238	168	209	217	128	175
15	452	336	396	272	208	243	244	189	213	256	150	198
16	424	366	400	327	192	240	256	171	227	232	162	195
17	446	269	395	241	180	214	278	183	224	247	153	198
18	278	89	192	256	195	217	253	162	213	238	153	188
19	253	67	141	278	183	229	284	174	233	235	140	191
20	101	46	70	278	183	233	275	195	231	266	128	188
21	147	82	113	253	162	217	284	168	223	241	128	184
22	192	122	154	275	183	225	272	140	203	226	131	168
23	220	143	175	278	116	216	259	150	216	223	140	171
24	250	156	197	223	116	182	290	180	228	208	137	171
25	296	153	198	250	165	192	275	183	227	201	101	171
26	247	171	192	235	183	211	266	180	225	235	156	185
27	226	140	183	256	198	228	281	183	224	235	171	201
28	235	134	181	266	165	217	250	183	211	223	168	195
29	266	189	217	253	131	200	229	89	189	208	119	168
30	263	183	219	253	153	207	250	162	209	192	128	158
31	275	180	220	---	---	---	238	150	194	211	128	169
MONTH	516	46	300	360	116	226	302	89	215	266	79	176

08067118 LAKE CHARLOTTE NEAR ANAHUAC, TX--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	235	116	166	256	171	213	278	201	231	311	253	282
2	211	134	171	247	159	201	287	205	247	308	235	270
3	217	156	182	247	168	209	284	220	249	317	217	262
4	201	140	166	278	180	236	266	211	238	345	250	293
5	247	137	178	293	223	258	275	177	235	336	263	295
6	217	116	168	305	226	263	299	205	247	345	281	312
7	278	134	171	275	122	206	290	214	256	348	290	316
8	205	110	160	232	131	186	336	214	242	339	263	297
9	217	110	173	238	147	197	275	189	237	354	241	304
10	214	143	184	259	159	206	259	195	235	363	287	325
11	217	113	172	250	153	211	241	156	208	339	247	299
12	168	92	133	278	183	221	269	156	220	351	253	295
13	195	101	147	241	159	212	284	195	245	348	201	266
14	189	116	154	275	162	211	296	205	242	299	201	259
15	250	150	212	247	165	215	317	186	235	354	263	301
16	238	153	198	253	159	213	275	205	243	345	281	317
17	208	125	171	241	162	207	308	211	266	366	269	316
18	244	122	183	266	162	216	299	232	269	354	250	303
19	287	198	241	275	168	222	308	244	266	351	247	290
20	336	201	257	278	168	223	296	226	255	330	247	295
21	324	192	275	272	201	234	317	201	259	348	253	305
22	299	217	258	272	198	237	305	241	278	369	278	321
23	293	189	244	263	205	235	281	214	244	357	284	314
24	272	195	233	287	198	236	284	201	241	345	266	315
25	259	150	212	278	201	248	299	217	258	366	266	321
26	351	186	253	275	220	245	302	229	264	363	287	330
27	281	214	254	302	217	246	314	229	270	369	296	329
28	284	168	215	281	192	236	314	256	276	354	284	324
29	---	---	---	232	122	201	339	220	280	342	238	302
30	---	---	---	266	122	212	336	259	286	317	275	299
31	---	---	---	272	201	232	---	---	---	357	250	304
MONTH	351	92	198	305	122	222	339	156	251	369	201	302

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	336	250	297	334	318	325	264	210	241	316	298	307
2	360	269	301	336	311	327	288	246	275	327	308	318
3	339	269	302	356	303	329	279	192	235	334	326	330
4	330	244	297	400	301	328	207	189	197	337	328	333
5	348	238	294	369	299	322	211	200	204	345	336	340
6	314	192	281	327	298	315	257	210	226	350	343	347
7	308	162	248	332	311	318	298	235	262	370	347	356
8	299	248	258	332	322	328	298	256	280	370	347	359
9	---	---	---	337	316	327	260	238	249	372	350	362
10	---	---	---	335	318	328	261	236	244	378	363	369
11	---	---	---	344	331	337	259	225	248	379	371	376
12	---	---	---	465	385	407	260	251	257	384	370	378
13	---	---	---	406	314	367	323	256	272	402	382	387
14	---	---	---	354	316	329	323	272	300	409	395	401
15	---	---	---	366	316	342	272	224	245	417	387	404
16	---	---	---	330	279	290	311	243	272	429	401	417
17	---	---	---	439	309	337	319	294	307	438	413	429
18	---	---	---	318	306	311	312	300	305	435	416	427
19	350	336	346	325	309	317	315	296	306	433	419	427
20	355	342	349	328	318	322	315	302	308	438	420	431
21	366	342	346	318	290	308	313	302	306	440	409	431
22	355	342	346	338	271	291	312	303	308	415	414	415
23	357	344	350	418	336	389	304	236	261	443	427	439
24	353	339	349	416	353	395	292	266	279	444	434	436
25	354	341	346	377	320	358	290	274	280	443	420	432
26	354	343	347	376	320	350	297	289	293	443	426	431
27	358	339	351	347	330	340	302	294	297	447	439	444
28	357	334	345	357	312	348	307	289	298	451	443	447
29	354	338	347	339	313	327	307	303	304	459	451	454
30	349	322	338	357	256	328	326	295	311	461	450	455
31	---	---	---	323	126	218	319	283	304	---	---	---
MONTH	366	162	322	465	126	331	326	189	273	461	298	396
YEAR	516	46	266									

08067118 LAKE CHARLOTTE NEAR ANAHUAC, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	27.0	23.5	25.5	20.0	18.0	19.0	---	---	---	---	---	---
2	27.5	24.0	25.5	18.5	18.0	18.0	---	---	---	---	---	---
3	28.5	25.0	26.5	20.0	18.5	19.0	---	---	---	---	---	---
4	31.5	25.5	28.5	21.5	20.0	21.0	---	---	---	---	---	---
5	28.5	24.5	27.0	22.5	21.5	22.0	---	---	---	---	---	---
6	28.5	24.5	26.5	22.5	21.0	22.0	---	---	---	---	---	---
7	27.5	25.0	26.0	21.5	20.5	21.0	---	---	---	---	---	---
8	27.0	24.5	26.0	20.5	20.0	20.0	---	---	---	---	---	---
9	24.5	19.0	22.5	22.0	20.5	21.0	---	---	---	---	---	---
10	20.5	16.0	18.5	23.0	20.0	21.5	---	---	---	---	---	---
11	21.0	16.5	19.0	20.0	17.5	18.5	---	---	---	---	---	---
12	21.0	16.5	18.5	18.0	17.0	17.5	---	---	---	---	---	---
13	22.0	18.5	20.0	17.0	17.0	17.0	---	---	---	---	---	---
14	20.0	17.5	18.5	17.5	17.0	17.5	---	---	---	---	---	---
15	21.5	18.5	19.5	18.5	17.5	18.0	---	---	---	---	---	---
16	21.5	18.5	20.0	20.0	18.5	19.0	---	---	---	---	---	---
17	23.5	21.5	23.0	19.0	18.0	18.5	---	---	---	---	---	---
18	22.5	21.0	21.5	---	---	---	---	---	---	---	---	---
19	22.0	21.0	21.0	---	---	---	---	---	---	---	---	---
20	21.0	21.0	21.0	---	---	---	---	---	---	---	---	---
21	22.0	21.0	21.5	---	---	---	---	---	---	---	---	---
22	22.0	21.5	22.0	---	---	---	---	---	---	---	---	---
23	22.5	22.0	22.0	---	---	---	---	---	---	---	---	---
24	22.5	22.0	22.0	---	---	---	---	---	---	---	---	---
25	22.0	22.0	22.0	---	---	---	---	---	---	---	---	---
26	22.5	20.0	21.5	---	---	---	---	---	---	---	---	---
27	20.5	19.0	20.0	---	---	---	---	---	---	---	---	---
28	19.0	18.0	18.5	---	---	---	---	---	---	---	---	---
29	18.5	18.0	18.0	---	---	---	---	---	---	---	---	---
30	18.0	18.0	18.0	---	---	---	---	---	---	---	---	---
31	18.5	18.0	18.0	---	---	---	---	---	---	---	---	---
MONTH	31.5	16.0	22.0	23.0	17.0	19.5	---	---	---	---	---	---

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

08067118 LAKE CHARLOTTE NEAR ANAHUAC, TX--Continued

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	29.5	24.5	26.5	28.5	26.5	27.0	33.5	28.5	31.0
2	---	---	---	32.5	28.0	30.0	28.0	27.0	27.5	33.0	28.5	31.5
3	---	---	---	31.5	29.0	30.5	33.5	27.5	29.5	33.0	30.5	32.0
4	---	---	---	30.5	27.5	29.0	33.5	30.5	32.0	33.0	30.0	32.0
5	---	---	---	31.0	28.0	29.0	33.0	31.0	31.5	32.5	29.5	31.0
6	---	---	---	31.0	27.0	28.5	31.5	30.0	30.5	31.5	28.0	30.0
7	---	---	---	34.0	28.5	31.0	31.0	30.0	30.5	32.5	27.0	30.0
8	---	---	---	34.0	29.0	32.0	31.0	29.0	30.0	33.5	28.5	30.5
9	---	---	---	33.5	29.5	32.0	30.0	28.5	29.5	33.0	28.0	31.0
10	---	---	---	33.5	30.5	32.5	30.0	28.5	29.0	32.5	28.0	30.5
11	---	---	---	33.5	30.0	32.0	30.5	28.5	29.5	32.5	27.5	30.0
12	---	---	---	34.0	30.0	32.5	31.0	29.0	30.0	32.5	28.5	30.5
13	---	---	---	33.5	30.0	32.0	31.0	29.5	30.5	32.0	28.0	30.0
14	---	---	---	33.5	27.5	30.5	30.0	28.0	29.0	32.5	28.0	30.5
15	---	---	---	33.0	28.0	30.5	32.0	26.5	29.0	33.0	29.0	31.0
16	---	---	---	32.5	28.0	30.0	32.5	29.5	30.5	33.0	29.0	31.0
17	---	---	---	33.5	28.5	31.5	32.5	30.5	32.0	32.5	29.5	31.0
18	---	---	---	33.0	30.0	32.0	33.0	31.0	32.0	31.5	28.5	30.0
19	28.5	27.5	27.5	32.0	28.5	31.0	32.0	29.0	30.5	32.5	28.0	30.5
20	30.5	27.0	28.5	33.0	30.0	32.0	32.5	30.5	32.0	32.5	29.5	31.0
21	30.5	28.5	29.5	33.0	29.0	31.5	32.5	29.5	31.5	31.5	27.5	29.5
22	30.5	28.5	29.5	33.0	28.5	31.0	33.0	30.0	31.5	27.5	27.0	27.0
23	30.5	29.5	30.0	33.0	28.0	30.5	32.5	28.5	30.5	25.5	25.0	25.0
24	31.5	29.5	30.5	33.5	28.0	31.0	32.5	28.0	30.5	27.0	25.0	25.5
25	32.0	30.0	31.0	33.0	29.5	31.5	33.0	28.5	31.0	28.0	25.0	26.5
26	31.0	29.5	30.0	33.0	29.0	31.5	32.5	30.0	31.5	29.5	26.0	27.5
27	31.5	29.0	30.0	33.0	30.0	32.0	33.0	30.0	32.0	28.5	26.0	27.0
28	31.0	30.0	30.5	33.5	30.0	32.0	32.0	29.0	31.0	28.5	25.5	27.0
29	30.0	25.5	27.5	33.0	27.0	30.0	32.5	30.0	32.0	29.5	25.0	27.0
30	25.5	25.0	25.5	29.0	25.0	26.5	33.5	31.0	32.0	28.5	26.5	27.5
31	---	---	---	27.0	24.5	25.5	32.0	28.5	30.5	---	---	---
MONTH	32.0	25.0	29.0	34.0	24.5	30.5	33.5	26.5	30.5	33.5	25.0	29.5
YEAR	34.0	16.0	27.0									

08067252 TRINITY RIVER AT WALLISVILLE, TX

LOCATION.--Lat 29°50'10", long 94°44'57", Chambers County, Hydrologic Unit 12030203, on the left bank at the Corp of Engineers boat ramp which is located 3.2 miles west along Interstate 10 highway from the the Interstate overpass over Farm Road 563 and .25 miles south of the Corp of Engineers office and .50 miles west of Wallisville, TX.

DRAINAGE AREA.--Not determined.

WATER-STAGE RECORDS

PERIOD OF RECORD.--October 1994 to current year.

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

REMARKS.--Records good. Mostly tidal.

EXTREME FOR PERIOD OF RECORD.--Maximum gage height, 7.7 ft October 22, 1994 at 0300 hours; minimum, -.60 ft Oct. 9, 1994.

EXTREME FOR CURRENT YEAR.--Maximum gage height, 7.7 ft October 22 at 0300 hours; minimum, -.60 ft Oct. 9.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.4	.6	4.0	3.8	3.6	3.3	5.0	4.8	4.7	4.6	1.3	1.0
2	2.2	1.4	4.1	3.8	3.6	3.3	4.9	4.7	4.6	4.5	1.6	1.3
3	2.0	1.0	4.0	3.6	3.9	3.6	4.8	4.7	4.5	4.2	1.6	1.4
4	1.9	1.0	4.0	3.6	3.8	3.4	4.7	4.4	4.2	4.0	1.9	1.5
5	1.9	.6	4.2	3.6	3.6	3.3	4.4	4.3	4.0	3.8	2.1	1.8
6	2.1	1.2	3.7	3.3	3.5	3.2	4.5	4.1	3.8	3.7	2.4	1.8
7	2.5	1.4	3.5	3.2	3.4	3.0	4.1	3.8	3.7	3.2	2.4	1.9
8	2.7	.8	3.5	3.2	3.1	2.8	3.8	3.7	3.2	2.7	2.1	1.8
9	.9	-.1	3.5	3.2	2.9	2.5	3.7	3.4	2.7	2.2	2.8	2.1
10	.5	-.1	3.2	2.9	2.6	2.2	3.5	3.2	2.5	1.8	3.1	2.6
11	1.0	-.1	3.1	2.9	2.4	2.1	3.2	3.0	1.9	1.1	3.1	2.8
12	1.2	-.1	3.2	2.9	2.6	2.3	3.1	2.7	1.3	.8	3.1	2.8
13	1.3	.0	3.3	3.1	2.6	2.2	3.2	2.6	1.5	1.0	3.3	3.0
14	1.3	.4	3.3	3.1	2.8	2.4	2.6	2.3	1.7	1.0	3.3	2.9
15	2.5	.8	3.3	3.0	2.8	2.4	2.5	2.3	1.8	1.1	3.4	3.1
16	2.7	2.0	3.1	2.8	3.1	2.7	2.9	2.5	1.5	.6	3.4	3.2
17	4.4	2.6	3.2	2.8	3.2	2.9	3.2	2.9	.6	.2	3.5	3.4
18	5.5	4.3	3.2	2.9	3.6	3.2	3.5	3.1	1.0	.3	3.7	3.5
19	6.2	5.5	3.2	2.9	4.1	3.6	3.3	3.1	.9	.5	3.8	3.6
20	7.0	6.2	3.4	3.2	4.6	4.1	3.7	3.3	.8	.3	4.0	3.7
21	7.6	7.0	3.4	3.0	4.8	4.6	4.0	3.7	.9	.3	4.0	3.8
22	7.7	7.5	3.2	3.0	4.9	4.8	4.4	4.0	1.1	.5	4.1	3.8
23	7.5	6.9	3.1	2.9	5.1	4.9	4.5	4.4	1.2	.6	4.0	3.8
24	6.9	6.1	3.3	3.0	5.1	5.1	4.6	4.5	1.2	.4	4.0	3.8
25	6.1	5.3	3.5	3.3	5.2	5.1	4.6	4.6	1.4	.6	4.2	3.9
26	5.3	4.9	3.5	3.3	5.2	5.1	4.7	4.6	1.7	.9	4.2	4.1
27	4.9	4.7	3.7	3.4	5.1	5.0	4.8	4.7	1.7	.9	4.2	3.9
28	4.7	4.5	3.5	3.3	5.2	5.0	4.8	4.7	1.6	1.0	4.1	3.9
29	4.6	4.4	3.6	3.3	5.2	4.9	4.7	4.6	---	---	4.2	4.0
30	4.5	4.2	3.5	3.2	5.0	4.9	4.7	4.6	---	---	4.3	4.1
31	4.3	4.0	---	---	5.0	4.9	4.7	4.6	---	---	4.3	4.2
MONTH	7.7	-.1	4.2	2.8	5.2	2.1	5.0	2.3	4.7	.2	4.3	1.0

08067252 TRINITY RIVER AT WALLISVILLE, TX--Continued

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.4	4.1	3.7	3.4	4.9	4.8	1.8	1.3	2.9	2.2	1.5	.2
2	4.3	4.2	3.5	3.2	4.9	4.8	1.6	1.1	3.0	2.1	1.7	.4
3	4.4	4.2	3.9	3.3	4.9	4.7	1.9	1.1	2.3	1.9	1.7	.4
4	4.5	4.2	3.8	3.5	4.7	4.6	2.5	1.8	2.3	1.9	1.7	.4
5	4.7	4.4	3.6	3.3	4.6	4.4	2.3	1.4	2.5	1.9	1.9	.2
6	4.6	4.4	3.7	3.3	4.4	4.1	1.7	.8	3.0	2.1	2.1	.7
7	4.6	4.3	3.9	3.5	4.1	3.8	1.3	.4	3.1	2.3	2.2	1.1
8	4.6	4.4	4.2	3.7	3.8	3.4	1.0	.3	2.7	2.2	1.8	1.0
9	4.6	4.4	3.8	3.6	3.7	3.3	1.3	.2	2.6	2.0	1.8	.9
10	4.9	4.4	3.6	3.4	3.5	2.9	1.2	.3	2.4	1.8	1.7	.8
11	4.9	4.3	3.4	3.3	3.2	2.5	.9	.0	2.6	1.6	1.7	.8
12	4.3	4.1	3.7	3.3	2.5	2.1	.8	-.1	2.4	1.7	1.7	.6
13	4.2	4.0	3.9	3.5	2.4	1.9	1.2	.0	2.2	1.5	1.7	.6
14	4.1	4.0	3.9	3.5	2.3	1.9	1.7	.2	2.1	1.3	1.7	.6
15	4.2	4.0	3.6	3.3	2.3	1.7	1.5	.6	1.9	1.3	1.8	.9
16	4.1	3.9	3.9	3.3	2.4	1.9	1.3	.6	1.8	1.0	2.1	1.0
17	4.3	3.9	4.4	3.6	2.8	2.1	1.3	.6	1.8	.9	2.0	.5
18	4.2	3.9	4.2	3.8	3.2	2.6	1.0	.2	1.6	.6	1.6	.4
19	4.3	3.8	3.9	3.7	2.9	2.5	.7	.2	1.7	.6	2.1	.7
20	4.4	4.0	4.0	3.7	2.6	2.4	1.0	.1	1.5	.5	1.6	.7
21	4.1	3.7	4.2	4.0	2.4	2.3	1.2	.3	1.4	.2	1.5	.4
22	4.1	3.7	4.4	4.2	2.4	2.3	1.2	.5	1.5	.3	.4	-.1
23	4.0	3.5	4.6	4.3	2.6	2.3	1.3	.4	1.8	.3	1.5	-.1
24	3.5	3.4	4.7	4.5	2.7	2.4	1.4	.4	1.8	.6	2.0	.8
25	3.7	3.5	4.6	4.5	2.8	2.4	1.4	.1	1.8	.5	2.2	1.3
26	4.0	3.6	4.7	4.6	2.7	2.4	1.1	.3	1.6	.9	2.2	1.1
27	3.8	3.6	4.9	4.7	2.6	2.3	1.0	.2	1.6	.8	2.1	.9
28	3.7	3.5	4.9	4.7	2.5	2.1	.9	.0	1.6	.7	2.0	.8
29	4.0	3.5	4.9	4.7	2.4	1.8	.9	-.1	1.5	.5	2.2	1.3
30	3.7	3.6	5.1	4.8	2.7	1.6	2.2	.5	1.5	.8	2.7	1.7
31	---	---	4.9	4.8	---	---	3.1	2.2	1.7	.7	---	---
MONTH	4.9	3.4	5.1	3.2	4.9	1.6	3.1	-.1	3.1	.2	2.7	-.1
YEAR	7.7	-.1										

08067500 CEDAR BAYOU NEAR CROSBY, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 29°58'21", long 94°59'08", Liberty County, Hydrologic Unit 12040203, on right bank at downstream side of bridge on U.S. Highway 90 and 6.6 mi northeast of Crosby.

DRAINAGE AREA.--64.9 mi².

PERIOD OF RECORD.--March to August 1946, March 1963 to February 1964, May to August 1971 (discharge measurements only), October 1971 to September 1991 (daily mean discharge); October 1991 to current year (peak discharges greater than base discharge).
Water-quality records.--Chemical, biochemical, and pesticide analyses: May 1971 to September 1979.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 31.31 ft above sea level.

REMARKS.--Records fair. Stage-discharge relationship is affected by seasonal vegetation during most years. Low flow is sustained by drainage from irrigated lands. There are diversions upstream from station for irrigation. Radio telemeter at station.

AVERAGE DISCHARGE.--20 years (water years 1972-91), 78.7 ft³/s (57,020 acre-ft/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,800 ft³/s Oct. 18, 1994 (gage height, 28.33 ft); no flow occasionally during pumping season of some years.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 18	1100	7,800	28.33	Jan. 27	0800	2,590	21.54
Jan. 18	2000	2,110	20.15	Mar. 13	2100	1,480	17.92

Because the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the U.S. Geological Survey collects limited streamflow data at sites other than continuous stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage of those events. The data collected for special reasons are called measurements at miscellaneous sites.

Streamflow data collected at partial-record stations where water-quality data other than observations of water temperature are not obtained are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low and high flows are given in a third table. Discharge measurements and water-quality data collected at partial-record stations are presented in downstream order in the section of this report entitled "Gaging-station records."

Low-flow partial-record stations

Measurements of streamflow at low-flow partial-record stations that are not published in the gaging-station section are given in the following table. Most of the measurements of low flow were made during periods when streamflow was sustained primarily by ground-water discharge. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will indicate the low-flow potential of the stream. The years listed in the column headed "Period of record" identifies the water years in which measurements were made at the same or at practically the same site.

Discharge measurements made at low-flow partial-record station during water year 1995

Station no.	Station name	Location	Drainage area (mi^2)	Period of record	Measurements	
					Date	Discharge (ft^3/s)
		Red River Basin				
07299890	Lelia Lake Creek below Bell Creek near Hedley, Tex.	Lat 34°56'08", long 100°41'46", Donley County, 150 ft downstream from county road crossing, 1.0 mi downstream from mouth of Bell Creek, and about 5 mi north of Hedley.	74	1964-94	03-21-94	3.29
07307700	Roaring Springs near Roaring Springs, Tex.	Lat 33°51'12", long 100°51'53", Motley County, 3.5 mi south of Roaring Srpings.	(a)	1937, 1943-94	01-27-94	1.07
		Neches River Basin				
08041550	Village Creek at State Hwy. 327 near Silsbee, Tex.	Lat 30°20'48", long 94°16'44", Hardin County, at bridge on State Highway 327, about 1.6 mi upstream from Mill Creek, and 2.7 mi west of Silsbee.	--	1979-95	09-28-95	170
08041720	Pine Island Bayou at State Highway 105 near Sour Lake, Tex.	Lat 30°08'08", long 94°16'44", Hardin-Jefferson County line, at bridge on State Highway 105, about 2.0 mi upstream from mouth of Little Pine Island Bayou, and 7.90 mi east of Sour Lake.	--	1979-95	09-20-95	15.8

a Not applicable.

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 relaiton 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 facillitate 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 occuring between inspections of the gage. The years used in the column "Period of record" identify the years in which the annual maximum has been determined.

Annual maximum stage and (or) discharge during water year 1995

Station name	Location	Period of record	Water Year 1995 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
Sabine River Basin								
Long Branch at Greenville, Tex. 08017210	Lat 33°07'20", long 96°05'54", Hunt County, on left edge of low-water channel 80 ft upstream from from culvert under Moulton St. (Business Rte. U.S. Highway 69), 0.5 mi upstream from IH-30, and 1.3 mi southeast of Hunt County Courthouse in Greenville. Drainage area is 5.37 mi^2.	1986-95	03-13-95	12.40	--	03-13-95	12.40	--
Trinity River Basin								
Big Fossil Creek at Haltom City, Tex. 08048800	Lat 32°48'26", long 97°14'26", 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 downstream section of Fort Worth. Drainage area is 52.8 mi^2.	1960-73† 1974-84ϕ 1985-95	11-14-94	13.02	--	09-07-62	26.90	27,000
Cedar River Basin								
Cedar Bayou near Baytown, Tex. 08067510	Lat 29°46'12", long 94°54'59", Chambers-Harris County Line, at bridge on State Highway 146, 0.2 mi downstream from Cary Bayou, 0.2 mi upstream from Saw Pit Gully, and 4.3 mi northeast of Baytown. Drainage area is 169 mi^2.	1984-95	10-19-94	*10.87	--	10-19-94	*10.87	--

u Unknown.
* Elevation, in feet.
† Operated as a continuous-record station.
ϕ Operated as an unpublished stage-only station.

CONVERSION FACTORS AND VERTICAL DATUM

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

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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