Water Resources Data
Texas
Water Year 2004

Volume 4. Colorado River Basin, Lavaca River Basin, and Intervening Coastal Basins

By Susan C. Aragon Long, Brian D. Reece, and Deanna R. Eames

Water-Data Report TX-04-4

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

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PREFACE

This edition of the annual hydrologic data report of Texas is one of a series of annual reports that document hydrologic data collected from the U.S. Geological Survey's collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by Federal, State, local agencies, and the private sector for developing and managing land and water resources in Texas which are contained in 6 volumes:

Volume 1.	Arkansas River Basin, Red River Basin, Sabine River Basin, Neches River Basin, and Intervening Coastal Basins
Volume 2.	Trinity River Basin
Volume 3.	San Jacinto River Basin, Brazos River Basin, San Bernard River Basin, and Intervening Coastal Basins
Volume 4.	Colorado River Basin, Lavaca River Basin, and Intervening Coastal Basins
Volume 5.	Guadalupe River Basin, Nueces River Basin, Rio Grande Basin, and Intervening Coastal Basins
Volume 6.	Ground-Water Data

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

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13. ABSTRACT (Maximum 200 words)

Water-resources data for the 2004 water year for Texas are presented in six volumes, and consist of records of stage, discharge, and water quality of streams and canals; stage, contents, and water-quality of lakes and reservoirs; and water levels and water quality of ground-water wells. Volume 4 contains records for water discharge at 68 gaging stations; elevation at 14 lakes and reservoirs; and water quality at 30 gaging stations. Also included are data for 11 partial-record stations comprised of 3 flood-hydrograph, 7 low-flow, and 1 crest-stage station. Also included are lists of discontinued surface-water discharge or stage-only stations and discontinued surface-water-quality stations. Additional water data were collected at various sites, not part of the systematic data-collection program, and are published as miscellaneous measurements. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating Federal, State, and local agencies in Texas. Records for a few pertinent stations in the bordering States also are included.

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CONTENTS

ILLUSTRATIONS

TABLES

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

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

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

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

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Punta De Agua Creek near Channing (d)	07227448	3,568	1968-73
East Cheyenne Creek Tributary near Channing (e)	07227460	1.60	1965-74
Canadian River at Tascosa (d)	07227470	18,536	1969-77
Tecovas Creek Tributary near Bushland (e)	07227480	1.27	1966-74
Dixon Creek near Borger (d)	07227920	134	1974-89
White Woman Creek Tributary near Darrouzett (e)	07234150	4.03	1966-74
Tierra Blanca Creek above Buffalo Lake near Umbarger (d)	07295500	1,968	1939-54, 1967-73
Prairie Dog Town Fork Red River near Canyon (d)	07297500	3,369	1924-26, 1938-49
Palo Duro Creek near Canyon (e)	07297000	982	1942-54
Middle Tule Draw near Tulia (e)	07297920	313	1967-74
North Tule Draw at Reservoir near Tulia (d)	07298000	189	1939-40, 1941-73
Rock Creek Tributary near Silverton (d)	07298150	13.7	1966-74
Tule Creek near Silverton (d)	07298200	1,150	1964-86
Mulberry Creek near Brice (d)	07299000	534	1949-51
Prairie Dog Town Fork Red River near Lakeview (d)	07299200	6,792	1963-80
Little Red River near Turkey (d)	07299300	139	1968-81
Prairie Dog Town Fork Red River near Estelline (d)	07299500	7,293	1924-25, 1938-47
Prairie Dog Town Fork Red River below Mountain Creek near Estelline (e)	07299505	7,341	1974-77
Prairie Dog Town Fork Red River above Jonah Creek near Estelline (e)	07299510	7,533	1974-77
Jonah Creek at Weir near Estelline (d)	07299512	65.5	1974-82
Jonah Creek below Weir near Estelline (d)	07299514	66.6	1974-76
Jonah Creek at mouth near Estelline (d)	07299516	76	1974-76
Salt Creek near Estelline (d)	07299530	142	1974-79
Red River near Quanah (d)	07299570	8,321	1960-82
North Groesbeck Creek Tributary near Kirkland (d)	07299575	0.16	1966-74
Wanderers Creek at Odell (e)	07299750	199	1949-50, 1952-89
Salt Fork Red River near Clarendon (d)	07299850	457	1960-64
Lelia Lake Creek near Hedley (e)	07299900	86.0	1951-70
Salt Fork Red River near Hedley (e)	07299930	744	1951, 1956-62
Oklahoma Draw Tributary near Hedley (e)	07299940	1.15	1965-74
Sweetwater Creek near Wheeler (e)	07301400	164	1951-64
Doodlebug Creek near Wheeler (e)	07301405	0.19	1967-73
Quitaque Creek near Quitaque (d)	07307500	293	1945-59
North Pease River near Childress (d)	07307600	1,434	1973-79
North Pease River near Kirkland (e)	07307660	1,554	1973-79
Roaring Springs near Roaring Springs (e)	07307700	N/A	1937, 1943-95
Cottonwood Creek Tributary near Afton (e)	07307720	0.68	1967-74
Middle Pease River at Highways 62 and 83 near Paducah (d)	07307750	1,086	1973-79
Middle Pease River near Paducah (d)	07307760	1,123	1980-82
Middle Pease River near Kirkland (e)	07307780	1,250	1973-79
Canal Creek near Crowell (e)	07307950	49.0	1968-70, 1978-79
Pease River near Crowell (d)	07308000	3,037	1924-47
Plum Creek near Vernon (e)	07308220	4.99	1967-74
North Fork Wichita River near Crowell (d)	07311622	591	1971-76
Middle Fork Wichita River near Truscott (d)	07311648	161	1971-76

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
South Fork Wichita River near Guthrie (d)	07311780	239	1952-54, 1956-57 1971-76
South Fork Wichita River at Ross Ranch near Benjamin (d)	07311790	499	1971-79
Wichita River at State Highway 25 near Kamay (d)	07312130	2,182	1996-2000
Beaver Creek Tributary near Crowell (e)	07312140	3.43	1966-74
Wolf Creek near Iowa Park (e)	07312300	8.13	1966-74
North Fork Little Wichita River Tributary near Archer City (e)	07314200	0.10	1966-74
Little Wichita River near Henrietta (d)	07315000	1,037	1953-79
Little Wichita River near Ringgold (d)	07315400	1,350	1959-65
Farmers Creek near Saint Jo (e)	07315550	0.82	1966-74
Mineral Creek near Sadler (d)	07316200	26.0	1968-77
Sandy Creek near Sadler (e)	07316230	24.0	1968-74
Bois D'Arc Creek near Randolph (d)	07332600	72.0	1963-85
Cooper Creek near Bonham (e)	07332602	6.21	1966-74
Sanders Creek near Chicota (d)	07335400	175	1968-86
Little Pine Creek near Kanawha (d)	07336750	75.4	1969-80
Pecan Bayou near Clarksville (d)	07336800	100	1962-77
Red River near DeKalb (d)	07336820	47,348	1967-98
McKinney Bayou near Leary (e)	07336940	3.33	1966-73
Barkman Creek near Leary (e)	07336950	37.0	1958-64
Nelson Branch near Leonard (e)	07342450	0.22	1966-74
South Sulphur River near Commerce (d)	07342470*	189	1980-91
Cuthand Creek near Bogata (d)	07343300	69	1964-74
Dial Branch near Bagwell (e)	07343350	1.00	1966-74
White Oak Creek near Mt. Vernon (e)	07343480	434	1966, 1969-75
White Oak Creek below Talco (d)	07343800	579	1938-50
Buck Creek near Cookville (e)	07343900	0.78	1966-74
Sulphur River near Darden (d)	07344000	2,774	1924-56
Sulphur River near Texarkana (d)	07344210	3,443	1980-85
Big Cypress Creek near Winnsboro (d)	07344482	27.2	1974-92
Dragoo Creek near Mt. Pleasant (e)	07344490	4.27	1967-74
Williamson Creek near Pittsburg (e)	07344600	7.11	1967-74
Boggy Creek near Daingerfield (d)	07345000	72.0	1943-77
Ellison Creek Reservoir near Lone Star (e)	07345500	37.0	1943-62, 1974-89
Cypress Creek Tributary near Jefferson (e)	07346010	0.21	1966-74
Taylor Branch near Smithland (e)	07346072	0.73	1966-74
Big Cypress Creek near Karnack (e)	07346085	2,157	1980-85
Frazier Creek near Linden (d)	07346140	48.0	1965-91
Sabine River near Emory (d)	08017500	888	1952-73
Burnett Branch near Canton (e)	08017700	0.33	1966-74
Grand Saline Creek near Grand Saline (d)	08018200	91.4	1968-73
Burke Creek near Yantis (d)	08018730	33.1	1979-89
Dry Creek near Quitman (e)	08018950	63.6	1968-75
Lake Winnsboro near Winnsboro (e)	08019300	27.1	1962-86
Big Sandy Creek near Hawkins (e)	08019430	196	1980-82
Prairie Creek near Gladewater (d)	08020200	48.9	1968-77
Sabine River near Longview (d)	08020500	2,947	1904-07, 1924-33
Rabbit Creek at Kilgore (d)	08020700	75.8	1964-77
Grace Creek Tributary at Longview (e)	08020800	5.05	1967-74
Mill Creek near Henderson (d)	08020960	20.3	1979-81
Mill Creek near Longview (d)	08020980	47.9	1979-81
Tiawichi Creek near Longview (d)	08020990	62.7	1978-81
Cherokee Bayou near Elderville (d)	08021000	120	1940-49
Sabine River near Tatum (d)	08022000	3,493	1939-78,
" " " " (e)			1979-82
Redmon Branch near Hallesville (e)	08022010	0.46	1966-74
Eight Mile Creek near Tatum (e)	08022050	106	1962-71

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Martin Creek near Tatum (d)	08022070	148	1974-96
Martin Creek near Beckville (e)	08022080	192	1962-71
Murvaul Bayou near Gary (d)	08022300	134	1958-83
Socagee Creek near Carthage (d)	08022400	82.6	1962-73
Tenaha Creek near Shelbyville (d)	08023200	97.8	1952-81
Dorsey Branch near Milam (e)	08024290	0.70	1967-74
Patroon Bayou near Milam (e)	08024300	130	1952-54, 1959-63
Sabine River near Milam (d)	08024400	6,508	1924-25, 1939-68
Palo Gaucho Bayou near Hemphill (d)	08024500	123	1952-65
Housen Bayou near Yellowpine (e)	08025250	92.1	1952-54, 1957, 1959-63
Sandy Creek near Yellowpine (e)	08025300	135	1952-54, 1957, 1959-63
Mill Creek near Burkeville (d)	08025307	18.0	1974-79
Little Cow Creek below McGraw Creek near Burkeville (e)	08026500	112	1952-58
Moore Branch near Newton (e)	08028505	3.77	1967-74
Nichols Creek near Buna (e)	08029750	54.4	1959-64
Cypress Creek near Buna (d)	08030000	69.2	1952-83
Adams Bayou Tributary near Deweyville (e)	08030700	12.4	1966-74
Bethlehem Branch near Van (e)	08031100	1.09	1966-74
Kickapoo Creek near Brownsboro (d)	08031200	232	1962-89
Neches River near Reese (d)	08031500	851	1924-27
Hurricane Creek Tributary near Palestine (e)	08032100	0.39	1966-74
One Arm Creek near Maydelle (e)	08032250	6.01	1967-74
Squirrel Creek near Elkhart (e)	08032300	1.57	1967-74
Neches River near Alto (d)	08032500	1,945	1944-79
Piney Creek Tributary near Pennington (e)	08033250	1.17	1967-74
Piney Creek near Groveton (d)	08033300	79 .0	1962-89
Shawnee Creek Tributary near Huntington (e)	08033450	0.52	1966-74
Greenwood Creek Tributary near Colmesneil (e)	08033480	0.15	1966-74
Bowles Creek near Selman City (e)	08033600	14.5	1968-85
Striker Creek near Summerfield (d)	08033700	146	1941-49
Striker Creek Reservoir near New Salem (e)	08033800	148	1941-49
East Fork Angelina River near Cushing (d)	08033900	158	1964-89
Mud Creek at Ponta (d)	08035000	475	1924-27
Angelina River near Lufkin (d)	08037000	1,600	1924-34, 1939-79
Bayou Lanana at Nacogdoches (d)	08037050	31.3	1965-86, 1988-93
Gingham Branch near Mt. Enterprise (e)	08037300	0.90	1967-74
Arenoso Creek near San Augustine (d)	08037500	75.3	1938-40
Angelina River near Zavalla (d)	08038500	2,892	1952-65
Ayish Bayou at San Augustine (d)	08039000	15.8	1924-25
Angelina River at Ebenezer (d)	08039500	3,486	1928-51, 1967-73
Little Sandy Creek Tributary near Jasper (e)	08039900	0.46	1967-74
Drakes Branch near Spurger (e)	08041400	5.03	1967-74
West Fork Double Bayou near Anahuac (e)	08042550	6.25	1967-74
North Creek SWS No. 28-A near Jermyn (e)	08042650	6.82	1972-80
North Creek near Jacksboro (d)	08042700	21.6	1956-80
Beans Creek at Wizard Wells (e)	08042900	29.6	1993-95
West Fork Trinity River at US Highway 380 at Bridgeport (d)	08043100	1,113	1984-89
West Fork Trinity River at Bridgeport (d)	08043500	1,147	1908-30
Big Sandy Creek near Bridgeport (d)	08044000	333	1937-95
Garrett Creek near Paradise (e)	08044135	52.5	1992-95
Salt Creek near Paradise (e)	08044140	52.7	1992-95

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Walker Creek near Boyd (e)	08044200	2.95	1965-74
West Fork Trinity River at Lake Worth, Fort Worth (d)	08045500	2,069	1924-34
Clear Fork Trinity River near Aledo (d)	08046000	251	1947-75
Marine Creek at Fort Worth (d)	08048500	16.8	1950-58
Sycamore Creek at I.H. 35W, Fort Worth (d)	08048520	17.7	1970-76
Sycamore Creek Trib. above Seminary Street Shopping Center, Fort Worth (d)	08048530	0.97	1970-76
Sycamore Creek Trib. at I.H. 35W, Fort Worth (d)	08048540	1.35	1970-76
Dry Branch at Fain Street at Fort Worth (d)	08048600	2.15	1969-76
Big Fossil Creek at Haltom City (d)	08048800*	52.8	1959-73
Little Fossil Creek at I.H. 820, Fort Worth (e)	08048820	5.64	1969-73
Little Fossil Creek at Mesquite Street, Fort Worth (d)	08048850	12.3	1969-76
Deer Creek Tributary near Crowley (e)	08048900	5.86	1967-74
Village Creek at Kennedale (d)	08048980	100	1986-89
Village Creek near Handley (d)	08049000	126	1925-30
Big Bear Creek near Grapevine (d)	08049550	29.6	1967-79
Trigg Branch at DFW Airport near Euless (d)	08049565	1.73	1983-87
Mountain Creek near Cedar Hill (d)	08049600	119	1961-84
Mountain Creek near Duncanville (e)	08049900	225	1971-90
Mountain Creek near Grand Prairie (d)	08050000	273	1925-33
Elm Fork Trinity River SWS 6-O near Muenster (e)	08050200	0.77	1957-73
Elm Fork Trinity River near Muenster (d)	08050300	46 .0	1957-73
Elm Fork Trinity River near Sanger (d)	08050500	381	1949-85
Isle Du Bois Creek near Pilot Point (d)	08051000	266	1949-85
Elm Fork Trinity River near Pilot Point (d)	08051130	692	1985-92
Elm Fork Trinity River above Aubrey (e)	08051190	684	1981-89
Elm Fork Trinity River near Denton (d)	08052000	1,084	1924-27
Lake Dallas near Lake Dallas (e)	08052500	1,165	1929-57
Little Elm Creek SWS #10 near Gunter (e)	08052630	2.10	1966-72
Little Elm Creek near Celina (d)	08052650	46.7	1966-76
Hickory Creek at Denton (d)	08052780	129	1985-87
Indian Creek at Hebron Parkway at Carrollton (d)	08053010	14.7	1987-90
Furneaux Creek at Josey Lane at Carrollton (d)	08053030	4.10	1987-90
Hutton Branch at Broadway at Carrollton (e)	08053090	9.10	1987-90
Jones Valley Creek Tributary near Forestburg (e)	08053100	1.70	1966-74
Denton Creek near Roanoke (d)	08054000	621	1924-28, 1939-55
Gamble Branch near Argyle (e)	08054200	0.50	1965-74
Joe’s Creek at Royal Lane, Dallas (e)	08055580	1.94	1973-78
Joes Creek near Dallas (e)	08055600	7.51	1964-79
Bachman Branch at Dallas (d)	08055700	10 .0	1964-79
Turtle Creek at Dallas (d)	08056500	7.98	1952-80, 1984-91
Coombs Creek at Sylvan Avenue, Dallas (e)	08057020	4.75	1965-78
Cedar Creek at Bonnie View Road, Dallas (e)	08057050	9.42	1965-78
White Rock Creek at Keller Springs Road, Dallas (d)	08057100	29.4	1961-79
McKamey Creek at Preston Road, Dallas (e)	08057120	6.77	1962-78
Rush Branch at Arapaho Road, Dallas (e)	08057130	1.22	1973-78
Cottonwood Creek at Forest Lane, Dallas (e)	08057140	8.50	1962-78
Floyd Branch at Forrest Lane, Dallas (e)	08057160	4.17	1962-78
White Rock Creek at White Rock Lake, Dallas (d)	08057300	100	1963-79
Ash Creek at Highland Road, Dallas (e)	08057320	6.92	1963-78
Forney Creek at Lawnview Avenue, Dallas (e)	08057340	1.84	1963-72
White Rock Creek at Scyene Road, Dallas (d)	08057400	122	1963-79
Elm Creek at Seco Boulevard, Dallas (e)	08057415	1.25	1973-78
Fivemile Creek at US Highway 77 West, Dallas (e)	08057420	14.3	1965-78
Woody Branch at US Highway 77 West, Dallas (e)	08057425	10.3	1965-78
Fivemile Creek at Lancaster Road, Dallas (e)	08057430	37.9	1965-78
Newton Creek at Interstate Highway 635, Dallas (e)	08057435	5.91	1974-78
Whites Branch at Interstate Highway 635, Dallas (e)	08057440	2.53	1974-78
Trinity River near Wilmer (d)	08057448*	6,387	1998-2002
Tenmile Creek at State Highway 342 at Lancaster (d)	08057450	52.8	1970-79

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Honey Creek SWS #11 near McKinney (e)	08057500	2.14	1952-73
Honey Creek SWS #12 near McKinney (e)	08058000	1.26	1952-77
Honey Creek near McKinney (d)	08058500	39	1951-73
East Fork Trinity River near McKinney (d)	08059000	190	1949-75
Arls Branch near Westminster (e)	08059200	0.52	1965-74
Sister Grove Creek near Princeton (d)	08059500	113	1949-75
East Fork Trinity River above Pilot Grove near Lavon (d)	08060000	324	1949-53
East Fork Trinity River near Lavon (d)	08061000	773	1954-89
East Fork Trinity River near Rockwall (d)	08061500	840	1924-54
Duck Creek at Buckingham Road, Garland (e)	08061620	8.05	1969-76
Duck Creek near Garland (d)	08061700	31.6	1958-93
South Mesquite Creek at State Highway 352, Mesquite (e)	08061920	13.4	1969-76
South Mesquite Creek at Mercury Road, North Mesquite (d)	08061950	23 .0	1969-79
Cedar Creek Reservoir Spillway Outflow near Trinidad (d)	08062650	1,007	1966-82
Bachelor Creek near Terrell (e)	08062850	13.0	1967-74
Kings Creek near Kaufman (d)	08062900	233	1963-87
Lacey Fork near Mabank (d)	08062980	118	1983-84
Cedar Creek near Mabank (d)	08063000	733	1939-66
South Twin Creek near Eustace (d)	08063003	27.4	1983-84
Red Oak Branch near Eustace (e)	08063005	0.90	1966-74
Cedar Creek at Trinidad (d)	08063020	1,011	1965-71
Briar Creek Tributary near Corsicana (e)	08063180	0.72	1966-74
Pin Oak Creek near Hubbard (d)	08063200	17.6	1956-72
Richland Creek near Richland (d)	08063500	734	1939-88
Alvarado Branch near Alvarado (e)	08063550	0.84	1966-74
Kings Branch near Reagor Springs (e)	08063620	0.62	1966-74
Chambers Creek near Corsicana (d)	08064500	963	1939-84
Richland Creek near Fairfield (d)	08064600	1,957	1972-83
Saline Branch Tributary near Bethel (e)	08064630	0.22	1967-74
Catfish Creek near Tennessee Colony (d)	08064800	207	1962-89
Mayes Branch near Latexo (e)	08065320	4.26	1967-74
Trinity River near Midway (d)	08065500	14,450	1939-71
Caney Creek near Madisonville (d)	08065700	112	1963-77
Nelson Creek near Riverside (e)	08065950	86.4	1949, 1965, 1970-74
Harmon Creek near Huntsville (e)	08065975	89.2	1973-81
West Carolina Creek near Oakhurst (e)	08066050	15.2	1949, 1966-73
White Rock Creek near Trinity (e)	08066100	222	1974-85
White Rock Creek at Trilady Park near Trinity (e)	08066130	228	1966-74
Tantaboque Creek near Trinity (e)	08066140	61.3	1966-73
Caney Creek near Groveton (e)	08066145	41.4	1966-73
Brushy Creek near Onalaska (d)	08066150	29.1	1966-70
Rocky Creek near Onalaska (e)	08066180	40.6	1966-73
Livingston Reservoir outflow weir near Goodrich (d)	08066191	16,583	1969-94
Long King Creek near Goodrich (d)	08066210	220	1972-81
Bluff Creek Tributary near Livingston (e)	08066280	0.62	1965-74
Big Creek near Shepherd(e)	08066400	38.8	1966-89
Gaylor Creek near Moss Hill (e)	08066800	32.3	1966-73
Devers Canal near Liberty (d)	08067080	N/A	1972-82
Goose Creek near McNair (e)	08067520	6.70	1963-65,
Welch Branch near Huntsville (e)	08067550	2.35	1965-74
Lake Conroe near Montgomery (e)	08067580	445	1973-76
Lake Conroe at Outflow Weir near Conroe (d)	08067610	445	1974, 1977-89
Caney Creek near Dobbin (d)	08067700	40.4	1963-65
Landrum Creek Tributary near Montgomery (e)	08067750	0.13	1965-74
Lake Creek near Conroe (e)	08067900*	291	1969-89
West Fork San Jacinto River near Porter (e)	08068100	970	1970-76

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Mill Creek Tributary near Dobbin (e)	08068300	4.07	1967-73
Swale No. 8 at Woodlands (e)	08068438	0.55	1975-76, 1980-88
Spring Creek at Spring (d)	08068520	419	1975-95
Spring Creek near Humble (e)	08068600	435	1971-76
Cypress Creek at Sharp Road near Hockley (d)	08068700*	80.7	1975-85
Cypress Creek near Cypress (e)	08068750	138	1971-76
Cypress Creek at Stuebner-Airline Road near Westfield (d)	08068900*	248	1982-87
Cypress Creek near Humble (e)	08069200	319	1971-76
West Fork San Jacinto River near Humble (d)	08069500	1,741	1929-54
Bear Creek near Cleveland (e)	08069850	1.46	1967-73
Caney Creek near New Caney (e)	08070600	178	1970-76
Peach Creek near New Caney (e)	08071100	155	1970-76
Tarkington Bayou near Dayton (e)	08071200	142	1964-76
Luce Bayou near Huffman (e)	08071300	226	1971-76
San Jacinto River near Huffman (d)	08071500	2,800	1937-53
Buffalo Bayou near Clodine (e)	08072400	84.2	1974-85
Bettina Street Ditch at Houston (e)	08073630	1.37	1979-85
Stony Brook Street Ditch at Houston (e)	08073750	0.50	1967-72
Bering Ditch at Woodway Drive, Houston (e)	08073800	2.77	1965-73
Cole Creek at Guhn Road at Houston (e)	08074100	7.05	1964-72
Bingle Road Storm Sewer at Houston (e)	08074145	0.21	1980-88
Cole Creek at Deihl Road at Houston (d)	08074150*	7.50	1964-86
Brickhouse Gully at Clarblak Street at Houston (e)	08074200	2.56	1965-83
Brickhouse Gully at Costa Rica Street at Houston (d)	08074250*	11.4	1964-81
Lazybrook Street Storm Sewer, Houston (e)	08074400	0.13	1978-88
Buffalo Bayou at Main St., Houston (d)	08074600	339	1962-94
Buffalo Bayou at McKee Street, Houston (d)	08074610	454	1992-2000
Buffalo Bayou at 69th Street, Houston (e)	08074700	463	1961-86
Brays Bayou at Addicks-Clodine Rd., Houston (e)	08074750	0.87	1974-77
Brays Bayou at Alief Road, Alief (e)	08074760*	12.9	1977-85
Keegans Bayou at Keegans Road near Houston (e)	08074780*	8.63	1964-71
Keegans Bayou at Roark Road near Houston (d)	08074800*	12.7	1964-85
Bintliff Ditch at Bissonnet Street, Houston (e)	08074850	4.29	1968-82
Willow Waterhole Bayou at Landsdowne Street, Houston (e)	08074900	3.81	1965-72
Hummingbird Street Ditch at Mullins Street, Houston (e)	08074910	0.32	1979-84
Brays Bayou at Scott Street, Houston (e)	08075100	106	1971-81
Sims Bayou at Carlsbad Street, Houston (e)	08075300	3.81	1964-72
Sims Bayou at MLK Blvd., Houston (e)	08075470	48.4	1978-89
Sims Bayou at Houston (d)	08075500*	63.0	1953-95
Berry Bayou at Gilpin Street, Houston (e)	08075550	2.87	1965-84
Berry Bayou Tributary at Globe Street, Houston (e)	08075600	1.58	1965-72
Berry Bayou at Galveston Road, Houston (e)	08075700	4.86	1965-72
Hunting Bayou Tributary at Cavalcade Street, Houston (e)	08075750	1.20	1965-72
Hunting Bayou at Falls Street, Houston (e)	08075760	2.75	1964-84
Halls Bayou at Deertrail Street at Houston (e)	08076200	8.69	1965-84
Carpenters Bayou near Channelview (e)	08076900	25.8	1964, 1971-93
Clear Creek near Pearland (d)	08077000	38.8	1944-45, 1946-60, 1963-94
Clear Creek Tributary at Hall Road, Houston (e)	08077100	1.31	1965-86
Clear Creek at Friendswood (d)	08077540	99.6	1994-97
Cowart Creek near Friendswood (e)	08077550	18.0	1965-74
Clear Creek near Friendswood (e)	08077600*	122	1966-94
Armand Bayou near Genoa (e)	08077620	18.2	1968, 1971-73
Highland Bayou at Hitchcock (e)	08077700	15.6	1963-82
Flores Bayou near Danbury (e)	08078700	23.3	1967-72
Oyster Creek near Angleton (d)	08079000	171	1945-80
North Fork Double Mountain Fork Brazos River at Lubbock (d)	08079500	5,300	1940-49,

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
North Fork Double Mountain Fork Brazos River above Buffalo Springs nr Lubbock (e)	08079530	5,578	1952-54, 1957, 1962, 1967-76
Buffalo Springs Lake near Lubbock (e)	08079550	236	1967-77
Barnum Springs Draw near Post (e)	08079570	4.99	1965-73
North Fork Double Mountain Fork Brazos River near Post (d)	08079575	5,790	1984-93
Rattlesnake Creek near Post (e)	08079580	2.77	1966-74
Double Mountain Fork Brazos River near Rotan (d)	08080000	8,536	1950-51
Guest-Flowers Draw near Aspermont (e)	08080510	3.02	1965-74
McDonald Creek near Post (d)	08080540	103	1966-78
Callahan Draw near Lockney (e)	08080750	37.5	1966-77
White River near Crosbytown (e)	08080800	529	1951-64
White River below falls near Crosbytown (e)	08080900	2,683	1951-64
Salt Fork Brazos River at Farm Road 1081 near Clairemont (e)	08080916	3,617	1968-77
Red Mud Creek near Spur (e)	08080918	2,547	1967-74
Salt Fork Brazos River at State Highway 208 near Clairemont (e)	08080940	3,839	1968-77
Duck Creek near Girard (d)	08080950	431	1965-89
Salt Fork Brazos River at U.S. Highway 380 near Jayton (e)	08080959	4,431	1968-77
Salt Fork Brazos River near Peacock (d)	08081000	4,619	1950-51, 1965-86
Short Croton Creek at mouth near Jayton (e)	08081050	18.1	1959-82
Croton Creek below Short Croton Creek near Jayton (e)	08081100	250	1959-82
Croton Creek near Jayton (d)	08081200	290	1959-86
Salt Croton Creek at Weir D near Aspermont (e)	08081400	55.5	1957-76
Haystack Creek at Weir E near Aspermont (e)	08081450	15.1	1957-77
Salt Croton Creek near Aspermont (d)	08081500	64.3	1957-77
Stinking Creek near Aspermont (d)	08082100	88.8	1966-83
North Croton Creek near Knox City (d)	08082180	251	1965-86
North Elm Creek near Throckmorton (e)	08082900	3.58	1965-77
Elm Creek near Profitt (e)	08082950	275	1969-85
Brazos River near Graham (d)	08083000	16,830	1916-20
Clear Fork Brazos River at Hawley (d)	08083240	1,416	1968-89
Mulberry Creek near Hawley (d)	08083245	205	1968-89
Elm Creek near Abilene (d)	08083300	133	1964-79
Little Elm Creek near Abilene (d)	08083400	39.1	1964-79
Elm Creek at Abilene (d)	08083430	422	1980-83
Cedar Creek at Abilene (d)	08083470	119	1971-84
Paint Creek near Haskell (d)	08085000	914	1950-51
Humphries Draw near Haskell (e)	08085300	3.51	1965-77
Clear Fork Brazos River at Crystall Falls (d)	08086000	4,323	1922-29
Hubbard Creek near Sedwick (d)	08086015	128	1964-66
Hubbard Creek at Highway 380 near Moran (e)	08086020	152	1963-76
Deep Creek near Putnam (e)	08086030	33.8	1963-66
Brushy Creek near Putnam (e)	08086040	27.6	1963-66
Mexia Creek near Putnam (e)	08086045	67.0	1963-66
Hubbard Creek near Albany (d)	08086100	454	1962-75
Salt Prong Hubbard Creek below Lake McCarty near Albany (e)	08086110	45.5	1963-66
Salt Prong Hubbard Creek at U.S. 380 near Albany (d)	08086120	65.2	1964-68
Cook Creek near Albany (e)	08086130	11.3	1963-76
North Fork Hubbard Creek near Albany (d)	08086150	39.3	1963-90
Salt Prong Hubbard Creek near Albany (d)	08086200	115	1962-63
Snailum Creek near Albany (d)	08086210	22.9	1964-66
Big Sandy Creek near Eolian (e)	08086220	91.4	1963-76
Battle Creek near Putnam (e)	08086230	32.0	1963-66
Battle Creek near Moran (d)	08086235	108	1967-68
Battle Creek near Eolian (e)	08086240	137	1963-66
Pecan Creek at FM 1853 near Eolian (e)	08086250	6.95	1963-66
Pecan Creek near Eolian (d)	08086260	26.4	1967-75
Big Sandy Creek near Breckenridge (e)	08086300	288	1962-75
Hubbard Creek near Breckenridge (d)	08086500	1,089	1955-86

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Clear Fork Brazos River near Crystal Falls (e)	08087000	5,658	1916-20, 1928-51
Clear Fork Brazos River near Eliasville (d)	08087300	5,697	1916-20, 1924-25, 1928-51, 1962-82
Salt Creek at Olney (d)	08088100	11.8	1958-77
Salt Creek near Newcastle (d)	08088200	120	1958-60
Briar Creek near Graham (d)	08088300	24.2	1958-89
Brazos River at Farm Road 1287 near Graham (e)	08088420	13,432	1970-77
Big Cedar Creek near Ivan (d)	08088450	97	1965-89
Brazos River at Morris Sheppard Dam near Graford (d)	08088600	23,596	1990-94
Elm Creek Tributary near Graford (e)	08089100	1.10	1965-74
Palo Pinto Creek near Santo (d)	08090500	573	1925, 1951-76
Cidwell Branch near Granbury (e)	08090850	3.37	1966-73
Morris Branch near Bluff Dale (e)	08091200	0.06	1965-73
Panter Branch near Tolar (e)	08091700	7.82	1966-74
Nolan River at Blum (d)	08092000*	282	1924-87
Brazos River near Whitney (d)	08093000	27,214	1939-74
Bond Branch near Hillsboro (e)	08093200	0.36	1965-74
Hackberry Creek at Hillsboro (d)	08093250	57.9	1980-92
Hackberry Creek below Hillsboro (e)	08093260	86.8	1980-92
Cobb Creek near Abbott (d)	08093400	12.40	1967-79
Aquilla Creek near Aquilla (d)	08093500#	308	1939-2001
Aquilla Creek at RR bridge near Aquilla (e)	08093530	345	1976-85
Aquilla Creek at Farm Road 2114 near Aquilla (e)	08093540	351	1976-85
Aquilla Creek at Farm Road 1858 near Ross (e)	08093560	392	1976-85
Aquilla Creek at Farm Road 933 near Ross (e)	08093580	397	1976-85
North Bosque River at Stephenville (d)	08093700	95.9	1958-79
Green Creek SWS #1 near Dublin (d)	08094000	4.19	1955-77
Green Creek near Alexander (d)	08094500	45.4	1958-73
South Bosque River near McGregor (e)	08095220	15.9	1967-73
Willow Branch at McGregor (e)	08095250	2.52	1966-73
Middle Bosque River near McGregor (d)	08095300*	182	1959-86
Hog Creek near Crawford (d)	08095400*	78.0	1959-86
South Bosque River near Speegleville (d)	08095500	386	1924-30
Bosque River near Waco (d)	08095600*	1,656	1960-82
Box Branch at Robinson (e)	08096550	0.34	1965-73
Cow Bayou SWS No. 4 (inflow) near Bruceville (e)	08096800	5.04	1958-75
Cow Bayou at Mooreville (d)	08097000	83.5	1958-75
Brazos River near Marlin (d)	08097500	30,211	1939-51
Deer Creek at Chilton (d)	08098000	84.5	1934-36
Leon River near De Leon (d)	08099100*	479	1960-87
Sabana River Tributary near De Leon (e)	08099350	0.48	1966-74
Leon River near Hasse (d)	08099500	1,261	1939-91
Eidson Creek near Hamilton (e)	08100100	2.91	1965-73
Bermuda Branch near Gatesville (e)	08100400	0.50	1966-73
Hoffman Branch near Hamilton (e)	08100800	5.56	1966-74
Cowhouse Creek near Killeen (d)	08101500	667	1925, 1939-42
Nolan Creek at Belton (d)	08102600	112	1974-82
School Branch near Lampasas (e)	08102900	0.90	1966-73
Fleece Branch near Lampasas (e)	08103450	1.08	1965-74
Lampasas River at Youngsport (d)	08104000	1,240	1924-80
Salado Creek above Salado (e)	08104290	134	1985-88
Salado Creek below Salado Springs at Salado (d)	08104310	136	1985-87
N. Fork San Gabriel River upstream from State Highway 418 at Georgetown (e)	08104795*	271	1985-88
North Fork San Gabriel River at Georgetown (d)	08104800	271	1964-68
South Fork San Gabriel River near Bertram (e)	08104850	8.4	1967-74
San Gabriel River at Georgetown (d)	08105000*	405	1924-25,

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
			1934-73, 1984-87
Berry Creek at State Hwy. 971 near Georgetown (d)	08105200*	117	1985-87
San Gabriel River near Weir (d)	08105300*	563	1977-90
San Gabriel River near Circleville (d)	08105400	599	1924-34, 1967-77
Avery Branch near Taylor (e)	08105900	3.52	1966-73
Brushy Creek at Coupland (d)	08106000	205	1924-26
Brushy Creek near Rockdale (d)	08106300	505	1967-80
San Gabriel River near Rockdale (d)	08106310	1,359	1975-92
Big Elm Creek near Temple (d)	08107000	74.7	1934-36
Big Elm Creek near Buckholts (d)	08107500	171	1934-36
North Elm Creek near Ben Arnold (d)	08108000	32.2	1935-36
North Elm Creek near Cameron (d)	08108200	44.8	1963-73
Little Branch near Bryan (e)	08108800	0.14	1966-73
Brazos River near Bryan (d)	08109000	39,515	1899-1903, 1918-92
Brazos River near College Station (d)	08109500	39,599	1899-1902, 1918-25
Yegua Creek near Somerville (d)	08110000	1,009	1924-92
Brazos River at Washington (e)	08110200	41,192	1966-95
Plummers Creek at Mexia (e)	08110350	4.42	1965-73
Navasota River near Groesbeck (d)	08110400	311	1965-79
Navasota River near Bryan (d)	08111000	1,454	1951-94, 1994-97
Navasota River near College Station (d)	08111010	1,809	1977-85
Burton Creek at Villa Maria Road, Bryan (d)	08111025	1.33	1968-70
Hudson Creek near Bryan (d)	08111050	1.94	1968-70
Winkleman Creek near Brenham (e)	08111100	0.75	1965-73
Piney Creek near Bellville (e)	08111600	30.7	1948, 1955, 1958, 1964-89
West Fork Mill Creek near Industry (e)	08111650	15.3	1964-89
Brazos River near San Felipe (d)	08112000	44,666	1939-57
Brazos River near Wallis (e)	08112200	44,684	1974-75
Brazos River Authority Canal A near Fulshear (d)	08112500	N/A	1932-54, 1958-73
Richmond Irrigation Co. Canal near Richmond (d)	08113500	N/A	1932-54, 1956-78
Brazos River near Juliff (d)	08114500	45,189	1949-69
Seabourne Creek near Rosenberg (e)	08114900	5.78	1968-74
Fairchild Creek near Needville (d)	08115500	26.2	1947-55
Big Creek near Guy (d)	08116000	116	1947-50
Dry Creek near Rosenberg (d)	08116400	8.65	1959-79
Dry Creek near Richmond (d)	08116500	12.2	1947-50, 1957-58
San Bernard River near West Columbia (e)	08117700	766	1949, 1971-77
Mound Creek Tributary at Guy (e)	08117800	1.48	1966-73
Big Boggy Creek near Wadsworth (d)	08117900	10.3	1970-77
Bull Creek near Ira (d)	08118500	26.3	1948-54, 1959-62
Colorado River below Bull Creek near Ira (e)	08118600	3,604	1975-78
Bluff Creek near Ira (d)	08119000	42.60	1948-65
Bluff Creek at mouth near Ira (e)	08119100	44.1	1975-78
Colorado River near Ira (d)	08119500	3,483	1948-52, 1959-89
Colorado River near Cuthburt (d)	08120700*	3,912	1965-2002
Morgan Creek near Westbrook (d)	08121500	273	1954-63
Graze Creek near Westbrook (d)	08122000	21.7	1954-59

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Morgan Creek near Colorado City (d)	08122500	313	1947-49
Champlin Creek near Colorado City (d)	08123500	198	1948-59
Sulphur Springs Draw near Wellman (e)	08123620	41.8	1966-74
Beals Creek above Big Spring (d)	08123650	9,319	1959-79
Beals Creek at Big Spring (d)	08123700	9,341	1957-59
Beals Creek near Coahoma (d)	08123720	9,383	1983-88
Coahoma Draw Tributary near Big Spring (e)	08123750	2.38	1966-74
Bull Creek Tributary near Forsan (e)	08123760	0.40	1966-74
Colorado River near Silver (d)	08123900	14,997	1957-70
Bitter Creek near Silver (e)	08123920	4.30	1967-74
Salt Creek Tributary near Hylton (e)	08125450	0.25	1966-74
Fish Creek Tributary near Hylton (e)	08126300	0.25	1966-71
Colorado River at Ballinger (d)	08126500	16,413	1907-79
Dry Creek near Christoval (e)	08127100	0.79	1965-73
South Concho Irrigation Co. Canal at Christoval (d)	08127500	N/A	1940-83
Middle Concho River near Tankersley (d)	08128500	2,653	1930-61
Spring Creek above Tankersley (d)	08129300*	425	1961-95
Dove Creek Springs near Knickerbocker (d)	08129500*	N/A	1944-58
Dove Creek at Knickerbocker (d)	08130500*	226	1961-95
Spring Creek near Tankersley (d)	08131000	699	1930-60
South Concho River above Pecan Creek near San Angelo (e)	08131300	470	1963-84
Tom Green Co. WCID No. 1 Canal near San Angelo (d)	08131600	N/A	1963-81
South Concho River at San Angelo (d)	08132500	3,866	1932-53
Quarry Creek near Sterling City (e)	08133300	3.25	1965-73
North Concho River at Sterling City (d)	08133500*	588	1939-87
Broome Creek near Broome (e)	08133800	0.29	1965-73
Nolke Station Creek near San Angelo (e)	08134300	0.59	1965-73
Gravel Pit Creek near San Angelo (e)	08134400	0.19	1965-74
North Concho River at San Angelo (d)	08135000	1,525	1916-31, 1947-90
Concho River near Veribest (e)	08136150	5,541	1970-74, 1998-2000
Puddle Creek near Veribest (e)	08136200	12.0	1966-73
Frog Pond Creek near Eden (e)	08136300	1.96	1967-73
Mukewater Creek SWS No. 10A near Trickham (e)	08136900	21.8	1965-72
Mukewater Creek SWS No. 9 near Trickham (e)	08137000	4.02	1961-72
Mukewater Creek at Trickham (d)	08137500	70.0	1951-73
Deep Creek SWS No. 3 near Placid (e)	08139000	3.42	1954-60
Deep Creek near Mercury (d)	08139500	43.9	1954-73
Deep Creek SWS No. 8 near Mercury (e)	08140000	5.41	1952-71
Dry Prong Deep Creek near Mercury (d)	08140500	8.31	1951-71
Pecan Bayou near Cross Cut (d)	08140700	532	1968-79
Jim Ned Creek near Coleman (d)	08140800	333	1965-80
McCall Branch near Coleman (e)	08141100	2.17	1966-73
Hords Creek near Valera (d)	08141500	54.2	1947-91
Hords Creek at Coleman (d)	08142000	107	1941-70
Brown County WID No. 1 Canal near Brownwood (d)	08142500	N/A	1950-83
Pecan Bayou at Brownwood (d)	08143500	1,660	1917-18, 1924-83
Brown Creek Tributary near Goldthwaite (e)	08143700	2.48	1966-73
Noyes Canal at Menard (d)	08144000	N/A	1924-83
Brady Creek near Eden (d)	08144800	101	1962-85
Brady Creek Tributary near Brady (e)	08145100	4.05	1967-73
Lake Buchanan near Burnet (e)	08148000	31,910	1937-90
Llano River Tributary near London (e)	08150200	0.58	1966-73
Stone Creek Tributary near Art (e)	08150900	0.40	1966-73
Llano River near Castell (d)	08151000	3,747	1924-39
Johnson Creek near Valley Spring (e)	08151300	5.66	1967-73
Little Flatrock Creek near Marble Falls (e)	08152700	3.20	1966-74
Spring Creek near Fredericksburg (e)	08152800	15.2	1967-73
Pedernales River at Stonewall (d)	08153000	647	1924-34

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Cane Branch at Stonewall (e)	08153100	1.37	1965-71
Pedernales River near Spicewood (d)	08154000	1,294	1924-39
Colorado River below Mansfield Dam, Austin (d)	08154510	38,755	1975-90
West Bull Creek at Loop 360 near Austin (e)	08154750	6.77	1976-82
Bull Creek at FM 2222, Austin (e)	08154760	30.4	1975-78
Bee Creek at West Lake Drive near Austin (e)	08154950	3.28	1980-82
Barton Creek near Camp Craft Road near Austin (d)	08155260	109	1982-89
Skunk Hollow Creek below Pond 1 at Austin (e)	08155370	0.12	1982-84
West Bouldin Creek at Riverside Drive, Austin (e)	08155550	3.12	1976-82
Shoal Creek at Steck Avenue, Austin (e)	08156650	2.79	1975-82
Shoal Creek at Northwest Park at Austin (d)	08156700	6.52	1975-84
Shoal Creek at White Rick Drive, Austin (e)	08156750	6.97	1975-82
Waller Creek at 38th Street, Austin (d)	08157000	2.31	1955-80
Waller Creek at 23rd Street, Austin (d)	08157500	4.13	1955-80
East Bouldin Creek at South 1st Street, Austin (d)	08157600	2.40	1997-2001
Blunn Creek near Little Stacey Park, Austin	08157700	1.20	1997-2001
Boggy Creek at US Highway 183, Austin	08158050	13.1	1977-86 1994-2001
Walnut Creek at Farm-Market 1325 near Austin (e)	08158100	12.6	1975-88
Walnut Creek at Dessau Road, Austin (e)	08158200	26.2	1975-88
Ferguson Branch at Springdale Road, Austin (e)	08158300	1.63	1978-82
Little Walnut Creek at Georgian Drive, Austin (e)	08158380	5.22	1975-88
Little Walnut Creek at IH 35, Austin (e)	08158400	5.57	1975-82
Little Walnut Creek at Manor Road, Austin (e)	08158500	12.1	1975-82
Walnut Creek at Southern Pacific Railroad bridge, Austin (e)	08158640	53.5	1975-86
Onion Creek at Buda (e) “ “ “ (d)	08158800	166	1961-78, 1979-83, 1992-95
Bear Creek at Farm-Market Road 1626 near Manchaca (e)	08158820	24.0	1979-83
Little Bear Creek at Farm-Market Road 1626 near Manchaca (d)	08158825	21.0	1979
Slaughter Creek at FM 2304 near Austin (e)	08158860	23.1	1978-83
Boggy Creek (South) at Circle S Road, Austin (e)	08158880	3.58	1976-88
Fox Branch near Oak Hill (e)	08158900	0.12	1965-73
Williamson Creek at Oak Hill (d)	08158920	6.30	1978-93
Williamson Creek at Jimmy Clay Road, Austin (d)	08158970	27.6	1975-85
Onion Creek below Del Valle (e)	08159100	339	1962-75
Wilbarger Creek near Pflugerville (d)	08159150	4.61	1963-80
Big Sandy Creek near McDade (d)	08159165	38.7	1979-85
Big Sandy Creek near Elgin (d)	08159170	63.8	1979-85
Dogwood Creek near McDade (e)	08159180	0.53	1980-85
Dogwood Creek at Highway 95 near McDade (e)	08159185	5.03	1980-85
Reeds Creek near Bastrop (e)	08159450	5.22	1967-73
Dry Creek at Buescher Lake near Smithville (d)	08160000	1.48	1940-66
Colorado River at La Grange (d)	08160500	40,430	1939-55
Colorado River above Columbus (d)	08160700	41,403	1983-85
Dry Branch Tributary near Altair (e)	08161580	0.68	1966-73
Little Robin Slough near Matagorda (e)	08162530	5.30	1969
Cashs Creek near Blessing (e)	08162650	14.8	1969-77
East Carancahua Creek near Blessing (e)	08162700	81.2	1968, 1970-83
West Carancahua Creek near Laward (e)	08162800	57.1	1970-76
Navidad River near Speaks (d)	08164350	437	1982-89, 1995-2000
Navidad River at Morales (d)	08164370	549	1995-2000
Navidad River near Ganado (d)	08164500	1,062	1939-80
Guadalupe River above Kerrville (e)	08166150	498	1976-79
Turtle Creek Tributary near Kerrville (e)	08166300	0.46	1966-74
Guadalupe River near Comfort (d)	08166500	762	1918-32
Rebecca Creek near Spring Branch (d)	08167600	10.9	1960-79
Blieders Creek at New Braunfels (e)	08168600	16.0	1962-89
Panther Canyon at New Braunfels (e)	08168700	0.73	1962-89

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Trough Creek near New Braunfels (e)	08168720	0.48	1966-74
W.P. Dry Comal Creek Tributary near New Braunfels (e)	08168750	0.32	1966-74
Walnut Branch near Seguin (e)	08169750	5.46	1967-74
East Pecan Branch near Gonzales (e)	08169850	0.24	1965-74
San Marcos River at San Marcos (d)	08169950	83.7	1915-21
West Elm Creek near Niederwald (e)	08172100	0.44	1965-74
San Marcos River at Ottine (d)	08173500	1,249	1915-43
Guadalupe River below Cuero (d)	08176000	4,923	1903-07, 1916-19, 1921-36
Irish Creek near Cuero (e)	08176200	15.5	1967-74
Three Mile Creek near Cuero (e)	08176600	0.48	1966-74
Coleto Creek Reservoir inflow (Guadalupe diversion) near Schroeder (d)	08176990	357	1980-94
Coleto Creek near Schroeder (d)	08177000	369	1930-34, 1953-79
Olmos Creek Tributary at FM 1535 at Savano Park (e)	08177600	0.33	1969-81
Olmos Reservoir at San Antonio (e)	08177800	32.4	1968-71, 1976-89. 1992-95
San Antonio River at Woodlawn Avenue, San Antonio (e)	08177860	36.4	1989-95
San Antonio River at Dolorosa, San Antonio (d)	08177920	38.9	1980-86
Alazan Creek at St. Cloud Street, San Antonio (e)	08178300	3.26	1969-79
San Pedro Creek at Furnish St., San Antonio (d)	08178500*	2.64	1916-29
Harlandale Creek at W. Harding Street, San Antonio (e)	08178555	2.45	1977-81
Panther Springs Creek at FM 2696 near San Antonio (e)	08178600	9.54	1969-77
Lorence Creek at Thousand Oaks Blvd., San Antonio (e)	08178620	4.05	1980-84
West Elm Creek at San Antonio (e)	08178640	2.45	1976-88
East Elm Creek at San Antonio (e)	08178645	2.33	1976-81
Salado Creek Tributary at Bitters Road, San Antonio (e)	08178690	0.26	1969-81
Salado Creek at Rittman Road, San Antonio (e)	08178720	137	1968-81
Salado Creek Tributary at Bee Street, San Antonio (e)	08178736	0.45	1970-77
Salado Creek at E. Houston Street, San Antonio (e)	08178740	181	1968-81
Salado Creek at U.S. Highway 87, San Antonio (e)	08178760	186	1968-81
Salado Creek at Southcross Blvd., San Antonio (e)	08178780	188	1968-81
Bandera Creek Tributary near Bandera (e)	08178900	0.27	1966-74
Medina River near Pipe Creek (d)	08179000	474	1923-35, 1953-82
Red Bluff Creek near Pipe Creek (d)	08179100	56.30	1956-81
Medina River Tributary near Pipe Creek (e)	08179200	0.30	1966-74
Medina River at La Coste (d)	08180640	805	1987-2000
Medio Creek at Pearsall Road, San Antonio (e)	08180750	47.9	1987-95
Leon Creek Tributary at FM 1604, San Antonio (e)	08181000	5.57	1968-80
French Creek Tributary near Helotes (e)	08181200	1.08	1966-74
Ranch Creek near Helotes (d)	08181410	0.39	1978
Leon Creek Tributary at Kelly Air Force Base (d)	08181450	1.19	1969-79
Calaveras Creek SWS No. 6 (inflow) near Elmendorf (e)	08182400	7.01	1957-77
Calaveras Creek near Elmendorf (d)	08182500	77.2	1954-71
San Antonio River at Calaveras (d)	08183000	1,786	1918-25
Cibolo Creek near Boerne (d)	08183900	68.4	1963-95
Cibolo Creek near Bulverde (d)	08184000	198	1946-66
Cibolo Creek above Bracken (d)	08184500	250	1946-51
Cibolo Creek at Sutherland Springs (d)	08185500	665	1924-29
Escondido Creek SWS No. 1 (inflow) near Kenedy (e)	08187000	3.29	1955-73
Escondido Creek at Kenedy (d)	08187500	72.4	1954-73
Escondido Creek SWS No. 11 (inflow) near Kenedy (e)	08187900	8.43	1959-77
Dry Escondido Creek near Kenedy (d)	08188000	9.43	1954-59
Baugh Creek at Goliad (e)	08188400	3.02	1966-74
Guadalupe-Blanco River Authority Calhoun Canal-Flume No. 2 near Long Mott (d)	08188750	N/A	1972-86
Guadalupe River at State Highway 35 near Tivoli (e)	08188810	10,280	1975-82
Olmos Creek Tributary near Skidmore (e)	08189600	0.58	1966-73

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
Chiltipin Creek at Sinton (d)	08189800	128	1970-91
Nueces River near Uvalde (d)	08191500	1,833	1928-39
Nueces River near Cinonia (d)	08192500	2,102	1915-25
Plant Creek near Tilden (e)	08194550	0.36	1965-74
Nueces River at Simmons (d)	08194600	8,561	1965-77
Frio River at Knippa (d)	08195700	N/A	1953
Dry Frio River at Knippa (d)	08196500	179	1953
East Elm Creek near Sabinal (e)	08198900	10.6	1967-74
Frio River near Frio Town (d)	08199700	1,460	1924-27
Hondo Creek near Hondo (d)	08200500	132	1953-64
Bone Creek near Hondo (e)	08200900	0.19	1965-74
Seco Creek near Utopia (d)	08202000	53.2	1952-61
Seco Creek Reservoir inflow near Utopia (d)	08202450	59.5	1991-98
Seco Creek near D'Hanis (d)	08202500	87.4	1952-64
Parkers Creek Reservoir (e)	08202800	10.0	1991-99
Leona River Tributary near Uvalde (e)	08203500	1.21	1966-74
Leona River Spring Flow near Uvalde (d)	08204000*	N/A	1939-65 1966-2002
Leona River near Divot (d)	08204500	565	1924-29
Frio River at Calliham (d)	08207000	5,491	1925-26, 1932-81
Rutledge Hollow Creek at Poteet (e)	08207200	9.33	1966-74
Rutledge Hollow at 7th Street, Poteet (d)	08207220	9.74	1979-2000
Atascoas River at U.S. Highway 281, Pleasanton (d)	08207300	394	1973-2000
Lucas Creek near Pleasanton (e)	08207700	32.8	1966-73
Ramirena Creek near George West (d)	08210300	84.4	1968-72
Nueces River below Mathis (d)	08211100	16,726	1966-67
Rincon Bayou Channel near Calallen (d)	08211503*	N/A	1996-2000
Pintas Creek Tributary near Banquete (e)	08211550	3.28	1966-74
Hamon Creek near Freer (e)	08211600	0.73	1965-73
San Diego Creek at Alice (d)	08211800	319	1964-89
Lake Alice at Alice (e)	08211850	150	1965-86
San Fernando Creek near Alice (d)	08212000	518	1962-63
North Los Animas Creek Tributary near Freer (e)	08212320	0.07	1969-74
Rio Grande at Vinton Bridge near Anthony (d)	08363840	28,680	1969-74
Northgate Reservoir at El Paso (e)	08365540	6.89	1973-75
Range Reservoir at El Paso (e)	08365545	11.9	1973-75
Franklin Canal at El Paso (d)	08365550	N/A	1969-72
McKelligon Canyon at El Paso (d)	08365600	2.30	1958-77
Government Ditch at El Paso (d)	08365800	6.40	1958-77
Riverside Canal near Socorro (d)	08366400	N/A	1969-72
Rio Grande at Island Station near El Paso (d)	08366500	32,683	1938-60
Rio Grande at Tornillo Branch near Fabens (d)	08367000	32,914	1924-38
Tornillo Drain at mouth near Tornillo (d)	08368000	N/A	1969-72
Tornillo Canal near Tornillo (d)	08368300	N/A	1969-72
Hudspeth Feeder Canal near Tornillo (d)	08368900	N/A	1969-72
Rio Grande at County Line Station near El Paso (d)	08369500	33,550	1938-60
Camo Rice Arroyo Tributary near Fort Hancock (e)	08370200	2.35	1966-74
Wild Horse Creek Tributary near Van Horn (e)	08370800	0.74	1966-73
Cibolo Creek near Presidio (d)	08373200	276	1971-77
Rio Grande above Presidio (lower Station) (d)	08373500	64,285	1901-13, 1924-54
Rio Grande at Langtry (d)	08377500	81,429	1900-14, 1920, 1924-60
Rio Grande Tributary near Langtry (e)	08377600	0.32	1966-74
Delaware River Tributary near Orla (e)	08407800	1.6	1966-74
Pecos River near Angeles (d)	08409500	20,540	1914-37
Salt Screwbean Draw near Orla (d)	08411500	464	1939-41, 1944-57
Pecos River near Mentone (d)	08414000	21,650	1922-26,

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
			1969-73
Reeves County WID No. 2 Canal near Mentone (d)	08414500	N/A	1922-25, 1939-57, 1964-90
Ward County WID No. 3 Canal near Barstow (d)	08415000	N/A	1939-57, 1964-90
Pecos River above Barstow (d)	08416500	21,800	1916-21
Ward County Irrigation District No. 1 Canal near Barstow (d)	08418000	N/A	1922-25, 1939-57, 1964-90
Pecos River at Pecos (d)	08420500	22,100	1898-1907, 1914-15, 1922-26, 1939-55
Madera Canyon near Toyahvale (d)	08424500	53.8	1932-49
Phantom Lake Spring near Toyahvale (d)	08425500*	N/A	1932-34, 1942-66
San Solomon Springs at Toyahvale (d)	08427500*	N/A	1932-34, 1941-65
West Sandia Spring at Balmorhea (d)	08429000	N/A	1932-33
East Sandia Spring at Balmorhea (d)	08430000	N/A	1932-33
Toyah Creek near Pecos (d)	08431000	1,024	1940-41, 1944-45
Salt Draw near Pecos (d)	08431500	1,882	1939-41, 1944-45
Limpia Creek below Fort Davis (d)	08431800	227	1962-77
Limpia Creek near Fort Davis (d)	08432000	303	1925-32
Toyah Creek below Toyah Lake near Pecos (d)	08434000	3,709	1939-51
Grandfalls-Big Valley Canal near Barstow (d)	08435000	N/A	1922-26, 1939-57, 1964-76
Pecos River below Barstow (d)	08435500	25,980	1939-41
Toronto Creek near Alpine (d)	08435600	27.9	1971-76
Alpine Creek at Alpine (d)	08435620	18.1	1971-76
Moss Creek near Alpine (d)	08435660	11.3	1971-76
Sunny Glen Canyon near Alpine (d)	08435700	29.7	1968-77
Coyanosa Draw near Fort Stockton (d)	08435800	1,182	1964-77
Pecos County WID No. 2 (Upper Div.) Canal near Grandfalls (d)	08436500	N/A	1922-25, 1939-57, 1964-90
Courtney Creek Tributary near Fort Stockton (e)	08436800	0.44	1966-74
Pecos County WID No. 2 Canal near Imperial (d)	08437500	N/A	1940-57, 1964-90
Lake Leon Tributary near Fort Stockton (e)	08437550	1.59	1966-74
Pecos County WID No. 3 Canal near Imperial (d)	08437600	N/A	1940-57, 1964-90
Monument Draw Tributary at Pyote (e)	08437650	178	1966-74
Ward County WID No. 2 Canal near Grand Falls (d)	08437700	N/A	1939-57, 1964-90
Pecos River near Grand Falls (d)	08438100	27,810	1916-26
Pecos River below Grand Falls (d)	08441500	27,820	1921-26, 1939-56
Three Mile Mesa Creek near Fort Stockton (e)	08444400	1.04	1966-74
Comanche Springs at Fort Stockton (d)	08444500	N/A	1936-64
Pecos River near Sheffield (d)	08447000	31,600	1922-25, 1940-49
Howards Creek Tributary near Ozona (e)	08447200	7.53	1967-73
Pecos River near Shumla (d)	08447400	35,162	1955-60
Goodenough Springs near Comstock (e)	08448500	N/A	1929-60
Sonora Field Creek at Sonora (e)	08448800	2.60	1965-71
Devils River near Juno (d)	08449000	2,730	1925-49,

Station name	Station number	Drainage area (mi^2)	Period of record (water years)
			1964-73
Rough Canyon Tributary near Del Rio (e)	08449470	7.90	1967-73
Devils River near Del Rio (d)	08449500	4,185	1900-14, 1924-57
Evans Creek Tributary near Del Rio (e)	08449600	0.39	1966-73
Devils River near mouth, Del Rio (d)	08450500	4,305	1954-60
Rio Grande near Del Rio (d)	08452500	123,303	1900-15, 1920, 1924-54
San Felipe Creek near Del Rio (e)	08453000	46.0	1931-60
Zorro Creek near Del Rio (e)	08453100	10.0	1966-74
East Perdido Creek near Brackettville (e)	08454900	3.39	1965-74
Pinto Creek near Del Rio (d)	08455000	249	1929-69, 1971-72
Rio Grande at San Antonio Crossing (d)	08458700	129,226	1952-60
Arroyo San Bartolo at Zapata (e)	08459600	0.61	1966-74
Rio Grande near Zapata (d)	08460500	163,344	1932-53
Rio Grande at Roma (d)	08462500	166,464	1900-13, 1923-54
Rio Grande Tributary near Rio Grande City (e)	08466100	1.20	1966-74
Rio Grande Tributary near Sullivan City (e)	08466200	0.40	1966-74
Rio Grande at Hildalgo (d)	08471500	176,100	1928-32, 1935, 1939, 1941-51
Rio Grande near Progreso Bridge (d)	08473300	176,228	1953-60
Rio Grande near San Beniot (d)	08473700	176,304	1953-60
Rio Grande near Brownsville (d)	08475000	176,333	1935-50

The following stations were discontinued as continuous-record surface-water-quality stations prior to the 2000 water year. Daily records of specific conductance, temperature, sediment, color, pH, dissolved oxygen, or chloride were collected and published for the record shown for each station.

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

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Canadian River at Tascosa	07227470	19,200	SC, T, Cl	1948-53,
		18,536	SC, T, pH, Cl	1969-77
Canadian River near Canadian	07228000	22,866	SC, T	1974-81
Prairie Dog Town Fork Red River near Wayside	07297910	4,211	SC, T	1969-81
Tule Creek near Silverton	07298200	1,150	SC, T, pH, Cl	1968-69
Prairie Dog Town Fork Red River near Brice	07298500	6,082	SC, pH, Cl, S	1949-51,
			T	1950-51
Mulberry Creek near Brice	07299000	534	SC, pH, Cl, S	1949-51
Prairie Dog Town Fork Red River near Lakeview	07299200	6,792	SC, T	1968-80,
			S	1979-80
Little Red River near Turkey	07299300	139	SC, T	1968-81,
			S	1979-81
Jonah Creek at Weir near Estelline	07299512	65.5	SC	1974-82
Jonah Creek below Weir near Estelline	07299514	66.6	SC	1974-76
Salt Creek near Estelline	07299530	142	SC	1974-79
Prairie Dog Town Fork Red River near Childress	07299540	7,725	SC, T	1968-82,
				1994-97
Salt Fork Red River near Hedley	07299930	744	SC, T, pH, Cl	1956-61
North Pease River near Childress	07307600	1,434	SC, T	1973-79
Middle Pease River at Highway 62 and 83 near Paducah	07307750	1,086	SC	1973-79,
			T	1973-79,
			S	1994-97
Middle Pease River near Paducah	07307760	1,128	SC	1980-82,
			T	1980
Pease River near Childress	07307800	2,754	SC, T	1968-82,
				1994-97
Pease River near Crowell	07308000	3,037	SC	1942-43
Pease River near Vernon	07308200	3,488	SC, T	1999
North Fork Wichita River near Crowell	07311622	591	SC	1971-76
Middle Fork Wichita River near Truscott	07311648	161	SC	1970-76
Truscott Brine Lake near Truscott	07311669	26.2	SC, T	1985-90
South Fork Wichita River near Guthrie	07311780	219	SC	1970-76
South Fork Wichita River at Ross Ranch near Guthrie	07311790	499	SC	1971-79,
			Cl	1988-97,
			S	1978-79
Beaver Creek near Electra	07312200	652	SC,T	1969-70
				1996-2002
Wichita River at State Highway 25 near Kamay	07312130	2,246	SC, T	1996-2002
Wichita River at Wichita Falls	07312500	3,140	SC, T	1981-89,
				1996-2002
Little Wichita River near Archer City	07314500	481	SC	1953-55,
			T	1953-54
Little Wichita River above Henrietta	07314900	1,037	SC, DO	1999
Little Wichita River near Henrietta	07315000	1,037	SC, T, pH, Cl	1953-56,
			S, T	1959-66,
East Fork Little Wichita River near Henrietta	07315200	178	T	1954
Little Wichita River near Ringgold	07315400	1,350	SC, pH, Cl	1959-62
Red River near Gainesville	07316000	30,782	SC, Cl	1944-46,
			SC, T, pH, Cl	1953-63,
			SC, T	1967-89,
Little Pine Creek near Kanawha	07336750	75.4	T	1980
Red River near De Kalb	07336820	47,348	SC, T	1968-91
Middle Sulphur River at Commerce	07342480	44.1	Cl, pH	1987-2001

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
South Sulphur River near Cooper	07342500	527	SC, T, pH, Cl	1959-66,
				1968-72,
			SC, T	1973-89
Sulphur River near Talco	07343200	1,365	SC, T, pH, Cl	1966-72,
			SC, T	1973-91
White Oak Creek near Talco	07343500	494	SC, T, pH, Cl	1966-72,
			SC, T	1973-91
Sulphur River near Darden	07344000	2,774	SC, T, pH, Cl	1947-50
Big Cypress Creek near Pittsburg	07344500	370	SC, T, pH, Cl	1968-72,
			SC, T	1973-89
Little Cypress Creek near Jefferson	07346070	675	SC, T, pH, Cl	1968-72,
			SC, T	1973-91
Sabine River near Emory	08017500	888	SC, T, pH, Cl	1952-54
Grand Saline Creek near Grand Saline	08018200	91.4	SC, T, pH, Cl	1968-73
Sabine River near Mineola	08018500	1,357	SC, T, pH, Cl	1968-72,
			SC, T	1973-92
Lake Fork Creek near Quitman	08019000	585	SC, T, pH, Cl	1968-72,
			SC, T	1973-89
Big Sandy Creek near Big Sandy	08019500	231	SC, T, S	1985-86
Sabine River near Beckville	08022040	3,589	SC, T	1952-98
Sabine River below Toledo Bend near Burkeville	08026000	7,482	SC, T	1969-86,
			C	1969-75
Sabine River near Bon Wier	08028500	8,229	SC, T, C	1969-84
Sabine River near Ruliff	08030500	9,329	SC	1945,
				1947-98
			T	1947-98
			pH, DO	1968-75,
			C	1970-76,
			Cl	1968
Cow Bayou near Mauriceville	08031000	83.3	SC, T, pH, Cl	1952-54,
			SC, T	1954-56
Neches River near Neches	08032000	1,145	SC, T	1974-91
Neches River near Alto	08032500	1,945	SC, T	1950-69
Neches River near Diboll	08033000	2,724	SC, T	1970-81
Neches River near Rockland	08033500	3,636	SC	1941-42,
				1946-47
Angelina River near Lufkin	08037000	1,600	SC, T, pH, Cl	1955-78,
			SC, T	1955-
Attoyac Bayou near Chireno	08038000	503	SC, T	1984-99
Sam Rayburn Reservoir near Jasper	08039300	3,449	SC, T	1964-84,
				1993-99
Angelina River below Sam Rayburn Dam near Jasper	08039400	3,449	SC, T	1964-79
Angelina River near Ebenezer	08039500	3,486	SC, T	1994-99
Village Creek near Kountze	08041500	860	SC, T	1968-70
Pine Island Bayou near Sour Lake	08041700	336	SC, T, pH, Cl	1968-72,
			SC, T	1973-89
Big Sandy Creek near Bridgeport	08044000	333	SC, T, S	1968-77,
Lake Worth above Fort Worth	08045400	2,064	pH, Cl	
Clear Fork Trinity River at Fort Worth	08047500	518	SC, pH, Cl	1949-52,
			T	1948-62
Village Creek at Everman	08048970	84.5	SC, pH, T, DO	1990
Lake Arlington at Arlington	08049200	143	SC, pH, T, DO	1989-2002
Elm Fork Trinity River SWS # 6-0 near Muenster	08050200	0.77	S	1957-66
Elm Fork Trinity River near Muenster	08050300	46 .0	SC	1967-68,
			T	1957-58,
				1966-68,
			S	1957-68
Clear Creek near Sanger	08051500	295	SC, T, S	1968-77

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Little Elm Creek near Celina	08052650	46.7	SC	1967-75,
			T, S	1966-75
Little Elm Creek near Aubrey	08052700	75.5	SC	1967-75,
			T, S	1967-75
Elm Fork Trinity River near Lewisville	08053000	1,673	SC	1982-86,
			T	1976-86
White Rock Creek at Greenville Avenue, Dallas	08057200	66.4	SC, pH, T, DO	1997-2000
Trinity River below Dallas	08057410	6,278	SC, T	1968-2000,
			S	1972-75,
				1998-2000
			Cl	1970-81,
				1998-99
Lavon Lake near Lavon	08060500	770	SC,T,CL	1969-74,
				1975,82,
				1995-99
Duck Creek near Garland	08061700	31.6	SC, pH, T, DO	1988-89
East Fork Trinity River above Seagoville	08061970	1,183	SC, T, pH, DO	1987-93
East Fork Trinity River at Seagoville	08061980	1,224	SC, pH, T, DO	1987-96
East Fork Trinity River near Crandall	08062000	1,256	SC, T	1968-1981,
				1987-2000
			pH, DO	1977,
				1986-2000
			Cl	1964-81,
				1986-2000
Trinity River at Trinidad	08062700	8,538	SC, T	1967-81
				1986-2000
			pH, DO	1967-81,
				1986-2000
			Cl	1966-94
			S	1978-94
Cedar Creek near Mabank	08063000	733	SC, T, pH, Cl	1956-57
Pin Oak Creek near Hubbard	08063200	17.6	SC	1967-72,
			T	1957-60,
				1965-72,
			S	1957-60,
				1962-72
Richland Creek near Richland	08063500	734	SC, T, pH, Cl	1968-69,
			SC, T	1983-89
Chambers Creek near Corsicana	08064500	963	SC, T, pH, Cl	1961-70
Richland Creek near Fairfield	08064600	1,957	SC, T, pH, Cl	1956-66,
				1972,
			SC, T	1973-83
Trinity River near Oakwood	08065000	12,833	SC, T, pH, Cl	1948-54,
			SC, T, S	1977-81
Bedias Creek near Madisonville	08065800	321	SC, T	1985-87,
			S	1986
Long King Creek at Livingston	08066200	141	SC, T, pH, Cl	1963-72
Trinity River near Goodrich	08066250	16,844	SC, T	1970-73
Old River near Cove	08067200	19.0	SC, pH, Cl	1950-65,
			T	1965
Trinity River at Anahuac	08067300	17,912	SC, pH, Cl	1950-65
Cedar Bayou near Crosby	08067500	64.9	SC, pH, Cl	1971-79
West Fork San Jacinto River near Conroe	08068000	828	SC, T	1962-90,
			DO	1979-81
Panther Branch near Spring	08068450	34.5	S	1975-76
West Fork San Jacinto River near Humble	08069500	1,741	SC, Cl	1945-46
East Fork San Jacinto River near New Caney	08070200	388	SC,T	1984-99
San Jacinto River near Huffman	08071500	2,800	SC	1945-54,

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
			T	1949-54
Buffalo Bayou at West Belt Drive at Houston	08073600	307	SC, T	1979-81
Buffalo Bayou at Houston	08074000	336	SC, pH, T, DO	1986-2000
			Cl	1969-81
Whiteoak Bayou at Main Street, Houston	08074598	127	SC, T, DO	1992-97
Buffalo Bayou at Main Street, Houston	08074600	339	SC, T, DO	1986-92
Buffalo Bayou at McKee Street, Houston	08074610	454	SC, T, DO	1992-2000
			pH	1998-2000
Sims Bayou at Houston	08075500	63.0	SC, T, DO	1994-97
Chocolate Bayou near Alvin	08078000	87.70	SC, T	1978-81
North Fork Double Mountain Fork Brazos River near Post	08079575	438	SC, T	1984-93
Double Mountain Fork Brazos River near Rotan	08080000	8,536	SC, T	1950-51
Double Mountain Fork Brazos River near Aspermont	08080500	8,796	SC, T, S	1949-51
			SC, T	1957-95
				1996-2002
McDonald Creek near Post	08080540	103	SC, T	1964-78
Salt Fork Brazos River near Peacock	08081000	4,619	SC, T	1950-51,
				1965-86
Croton Creek near Jayton	08081200	290	SC, T	1961-80
Salt Croton Creek near Aspermont	08081500	64.3	SC	1969-77,
			T	1972-73
Salt Fork Brazos River near Aspermont	08082000	5,130	SC, T, pH, Cl	1949-51,
			SC, T	1957-82
Stinking Creek near Aspermont	08082100	88.8	T	1950,
			SC, T	1966-69
North Croton Creek near Knox City	08082180	251	SC, T	1966-86
Brazos River at Seymour	08082500	15,538	SC, T	1960-95
				1996-2002
Clear Fork Brazos River at Hawley	08083240	1,416	SC, T	1968-79,
				1982-84
Clear Fork Brazos River at Nugent	08084000	2,199	SC, T, pH, Cl	1948-53
California Creek near Stamford	08084800	478	SC, T	1963-79
Paint Creek near Haskell	08085000	914	SC, T	1950-5
Clear Fork Brazos River at Fort Griffin	08085500	3,988	SC, T, S	1950-51,
			SC, T	1968-79,
				1982-84
Hubbard Creek near Sedwick	08086015	128	SC, T	1964-66
Deep Creek at Moran	08086050	235	SC, T	1963-75
Hubbard Creek near Albany	08086100	454	SC, T	1962-75
Salt Prong Hubbard Creek at U.S. Highway 380 near Albany	08086120	65.2	SC, T	1964-68
North Fork Hubbard Creek near Albany	08086150	39.3	SC, T	1964-90
Salt Prong Hubbard Creek near Albany	08086200	115	SC, T	1962-63
Snailum Creek near Albany	08086210	22.9	SC, T	1964-66
Battle Creek near Moran	08086235	108	SC, T	1967-68
Pecan Creek near Eolian	08086260	26.4	SC, T	1967-75
Big Sandy Creek near Breckenridge	08086300	288	SC, T	1962-77
Hubbard Creek near Breckenridge	08086500	1,089	SC, T	1955-75
Clear Fork Brazos River at Eliasville	08087300	5,697	SC, T	1962-82
Brazos River near South Bend	08088000	22,673	SC, Cl	1942-48,
			SC, T	1978-81
Salt Creek at Olney	08088100	11.8	SC, T	1958-60
Salt Creek near Newcastle	08088200	120	SC, T	1958-60
Brazos River at Morris Sheppard Dam near Graford	08088600	23,596	SC	1942-91,
			T	1950-55,
				1966-91
Brazos River near Dennis	08090800	25,237	SC, T	1971-95
Brazos River at Whitney Dam near Whitney	08092600	27,189	SC, T	1947-97
Aquilla Creek above Aquilla	08093360	255	SC, T	1980-83

Station name	Station number	Drainage area (mi²)	Type of record	Period of record (water years)
Aquilla Creek near Aquilla	08093500	308	SC, T	196066, 1968-82
Bosque River near Waco	08095600	1,656	SC, T	1998-2002
Brazos River near Highbank	08098290	30,436	T	1968-84
Leon River near Eastland	08098500	235	SC, T	1950-53
Leon River near Hasse	08099500	1,261	SC, T	1980-82, 1990-97
Leon River near Belton	08102500	3,542	T	1957-72
South Fork Rocky Creek near Briggs	08103900	33.30	S	1963-65
Lampasas River at Youngsport	08104000	1,240	SC, T	1961-64
Little River near Little River	08104500	5,228	SC, T	1965-73, 1980-82
Little River at Cameron	08106500	7,065	SC, T	1959-97
San Gabriel River near Weir	08105300	563	T	1977-82
San Gabriel River at Laneport	08105700	738	T	1977-82
Brazos River at State Highway 21 near Bryan	08108700	39,049	SC, T	1961-65
Brazos River near Bryan	08109000	39,515	SC, T	1966
Brazos River near College Station	08109500	39,599	SC, T	1961-84
Yegua Creek near Somerville	08110000	1,009	SC, T	1961-67
Navasota River above Groesbeck	08110325	239	SC, T	1968-89
Navasota River near Groesbeck	08110400	311	SC, T	1968-78
Navasota River near Easterly	08110500	968	SC	1942-43, 1947
Navasota River near Bryan	08111000	1,454	SC, T S	1959-81, 1976-81
Brazos River near Richmond	08114000	45,107	S SC T	1966-86, 1942-95, 1951-95
Brazos River near Rosharon	08116650	45,399	SC, T	1969-80
Brazos River at Harris Reservoir near Angleton	08116700	44,000	SC T	1962-77, 1967-77
Brazos River at Brazoria Reservoir near Brazoria	08117200	44,000	SC T	1962-77, 1967-77
San Bernard River near Boling	08117500	727	SC, T	1978-81
Bull Creek near Ira	08118500	26.3	SC, T, pH, Cl	1950-51
Bluff Creek near Ira	08119000	42.6	SC, T, pH, Cl	1950
Colorado River near Ira	08119500	3,483	SC, T Cl	1950-52, 1959-70, 1975-82, 1951-52
Deep Creek near Dunn	08120500	198	SC, T	1953-54
Colorado River near Cuthbert	08120700	3,912	SC, T	1965-99 2001-02
Morgan Creek near Westbrook	08121500	273	T	1954-55
Graze Creek near Westbrook	08122000	21.7	T	1954-55
Morgan Creek near Colorado City	08122500	313	T	1947-49
Lake Colorado City near Colorado City	08123000	345	T	1954-55
Beals Creek above Big Spring	08123650	9,319	SC, T	1973-78
Beals Creek atr Big Spring	08123700	9,341	SC, T	1956-57
Beals Creek near Coahoma	08123720	9,383	SC, T	1983-88
Colorado River near Silver	08123900	14,997	SC, T	1957-68
Colorado River at Robert Lee	08124000	15,307	SC, T, pH, Cl S	1948-51, 1949-51
Colorado River at Ballinger	08126500	16,413	SC, T S	1961-79, 1978-79
Pecan Bayou at Brownwood	08143500	1,660	SC, T	1948-49
Pecan Bayou near Mullin	08143600	2,073	SC, T	1968-91
San Saba River at San Saba	08146000	3,046	SC	1962-69,

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
			T	1963-70
Colorado River near San Saba	08147000	31,217	SC, T	1947-92,
			S	1951-62
Llano River at Llano	08151500	4,197	SC, T	1979-81
Lake Austin at Austin	08154900	38,846	SC, T	1965-80
Barton Creek below Barton Springs at Austin	08155505	125	SC, T,	1965,
				1975-83,
				1989-91,
				1994-97
Waller Creek at 23rd Street at Austin	08157500	4.13	T	1955-60
East Bouldin Creek at South 1st Street, Austin	08157600	2.40	Cl	1997-2000
Blunn Creek near Little Stacey Park, Austin	08157700	1.20		1997-2001
Boggy Creek at US Highway 183, Austin	08158050	13.1	C	1977-86
			C, T	1994-2001
Colorado River at Austin	08158000	39,009	SC, T	1948-91
Colorado River above Columbus	08160700	41,403	SC, T	1983-86
Colorado River at Columbus	08161000	41,640	SC	1967-73,
			T	1957-59,
				1961-68
			S	1957-73
Colorado River at Wharton	08162000	42,003	SC	1945-92,
			T	1946-48,
Lavaca River near Edna	08164000	817	SC, T	1978-81
Navidad River near Speaks	08164350	437	SC, T, pH, Cl	1996-97
Navidad River near Ganado	08164500	1,062	SC, T	1960-80
Guadalupe River near Spring Branch	08167500	1,315	SC	1942-45
Guadalupe River at Sattler	08167800	1,436	T	1984-87
Blanco River at Wimberley	08171000	355	T	1977-78
Plum Creek near Luling	08173000	309	SC, T	1968-86
Sandies Creek near Westhoff	08175000	549	S	1966
			Cl	1962-99
Guadalupe River at Victoria	08176500	5,198	SC	1946-81,
			T	1951-81
Coleto Creek Reservoir (Condenser No. 1) near Fannin	08177360	414	T	1980-94
Coleto Creek Reservoir (outflow) near Victoria	08177410	494	T	1980-94
Olmos Creek at Dresden Drive, San Antonio	08177700	21.2	SC, pH, T, DO	1969-99
			S	1973
San Antonio River at San Antonio	08178000	41.8	SC, T	1991-92,
				1996-97
San Antonio River at Mitchell Street, San Antonio	08178050	42.4	SC, pH, T, DO	1992-99
San Antonio River at Loop 410 at San Antonio	08178565	125	SC, pH, T, DO	1987-2000
Medina River near Macdona	08180700	885	SC, pH, T, DO	1998-2000
Medina River at La Coste	08180640	805	SC, pH, T, DO	1987-95
Medio Creek at Pearsall Rd. at San Antonio	08180750	47.9	SC, pH, T, DO	1987-95
Medina river near Somerset	08180800	967	SC, T, Cl	1998-2000
Medina River at San Antonio	08181500	1,317	SC, pH, T, DO	1987-2000
			Cl	1965-2000
San Antonio River near Falls City	08183500	2,113	SC, pH, T, DO	1987-96
Cibolo Creek near Falls City	08186000	827	SC, T	1969-91
Escondido Creek SWS #1 near Kenedy	08187000	3.29	S	1955-65
Guadalupe River at Tivoli	08188800	10,128	SC, T	1966-82
Mission River at Refugio	08189500	690	SC, T	1961-81
Nueces River at Cotulla	08194000	5,171	SC	1942
Frio River at Calliham	08207000	5,491	SC, T	1968-81
Nueces River at Bluntzer	08211200	16,772	SC, T	1948-91
Los Olmos Creek near Falfurrias	08212400	480	SC, T	1975-81
Rio Grande at El Paso	08364000	32,207	SC, pH, T, DO	1930-2000

Station name	Station number	Drainage area (mi^2)	Type of record	Period of record (water years)
Rio Grande at Fort Quitman	08370500	34,884	SC, T	1975-78.
Rio Grande at Foster Ranch near Langtry	08377200	80,742	SC, T	1975-81
Pecos River below Red Bluff Dam near Orla	08410100	20,720	SC	1937-69,
			T	1953-69
Salt Draw near Orla	08411500	464	SC, T	1943-48
Pecos River near Mentone	08414000	21,650	SC	1939
Pecos River at Pecos	08420500	22,100	SC	1939-41
Toyah Creek near Pecos	08431000	1,024	SC	1940,
				1944
Salt Screwbean Draw near Pecos	08431500	1,882	SC	1940,
				1944
Toyah Creek below Toyah Lake near Pecos	08434000	3,709	SC	1940-50,
			Cl	1940
Pecos River below Grand Falls	08441500	27,820	SC	1939-42,
				1947-56
Pecos River near Girvin	08446500	29,560	SC	1940-41,
				1947,
				1954-82
			T	1954-59,
				1964-82
Pecos River near Sheffield	08447000	31,600	SC	1940-41,
				1947
Pecos River near Langtry	08447410	35,179	SC, T	1971-76,
				1981-85
Devils River at Pafford Crossing near Comstock	08449400	3,961	SC, T	1978-85
Rio Grande at Laredo	08459000	132,578	SC	1975-86,
			T	1974-76
Rio Grande at Roma	08462500	166,464	SC	1942-43
Rio Grande at Fort Ringgold, Rio Grande City	08464700	174,362	SC, pH, T	1959-2000
Rio Grande near Los Ebanos	08466300		SC, pH, T	1977-2000
Rio Grande below Anzalduas Dam near Mission	08469200	176,112	SC, pH, T	1967-72,
				1959-2000
Rio Grande near Brownsville	08475000	176,333	SC	1943-44,
			SC, T	1967-83
			S	1966-83

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WATER RESOURCES DATA—TEXAS, 2004

VOLUME 4

COLORADO RIVER BASIN, LAVACA 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 six volumes of this report series entitled “Water Resources Data - Texas.”

This report series includes records of stage, discharge, and water quality of streams and canals; stage, contents, and water quality of lakes and reservoirs and water levels and water quality of ground water wells. Volume 4 contains records for water discharge at 68 gaging stations; elevation at 14 lakes and reservoirs; and water quality at 30 gaging stations. Also included are data for 11 partial-record stations comprised of 3 flood-hydrograph, 7 low-flow, and 1 crest-stage station. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating Federal, State, and City agencies in Texas.

This series of annual reports for Texas began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report was changed to its present format, with data on quantities and quality of surface water contained in each of three volumes, and expanding to five volumes beginning with the 1999 water year. Ground-water levels and water quality have been published in a separate volume beginning with the 1991 water year.

Prior to introduction of this series and for several water years concurrent with it, water resources data for Texas were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title “Surface-Water Supply of the United States, Parts 7 and 8.” For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title “Quality of Surface Waters of the United States,” and water levels for the 1935 through 1974 water years were published under the title “Ground-Water Levels in the United States.” The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from U.S. Geological Survey, Books and Open-File Reports, Federal Center, Bldg. 41, Box 25425 Denver, CO 80225.

Publications similar to this report are published annually by the U.S. Geological Survey for all States. These official U.S. Geological Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as “U.S. Geological Survey Water Data Report TX-03-4.” For archiving and general distribution, the reports for the 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or may be purchased on microfiche from the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161 (703) 605-6000.

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

COOPERATION

Federal agencies that assisted the U.S. Geological Survey in the collection of data in this report in the form of funds or services in water year 2004 are:

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

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

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

SUMMARY OF HYDROLOGIC CONDITIONS

Precipitation

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

Streamflow across the State averaged normal during water year 2004.

Conservation storage in 77 selected reservoirs throughout the State, with a combined conservation capacity of 34,485,000 acre-feet, increased from 77 percent at the end of September 2003 to 84 percent at the end of September 2004. Records from these reservoirs indicate that storage increased in 54, decreased in 21, and remained the same in 2.

The area for which water resources data are presented in volume 4 includes the Colorado River Basin, Lavaca River Basin, and Intervening Costal Basins. The area described in volume 4 and the location of selected streamflow stations in the area are shown in figure 1.

Streamflow

Monthly mean streamflow was normal in most streams in Texas during the 2004 water year. Comparisons of monthly mean and annual mean discharges in the 2004 water year, with median values for the period 1971-2000, were made for the following four representative index stations in Texas: the Neches River near Rockland (08033500) in southeastern Texas, the North Bosque River near Clifton (08095000) in east central Texas; the North Concho River near Carlsbad (08134000) in west central Texas, and the Guadalupe River near Spring Branch (08167500) in south central Texas (fig. 2).

Annual mean streamflow for the Neches River near Rockland was 2,932 cubic feet per second (ft^3/s) for the 2004 water year, or 162 percent of 1,811 ft^3/s for the reference period 1971-2000. The 2004 water year monthly mean discharges were above the normal range (greater than 75 percent of the median monthly discharge for the reference period) during the months of February, July and September. Monthly mean discharges for other months were within the normal range.

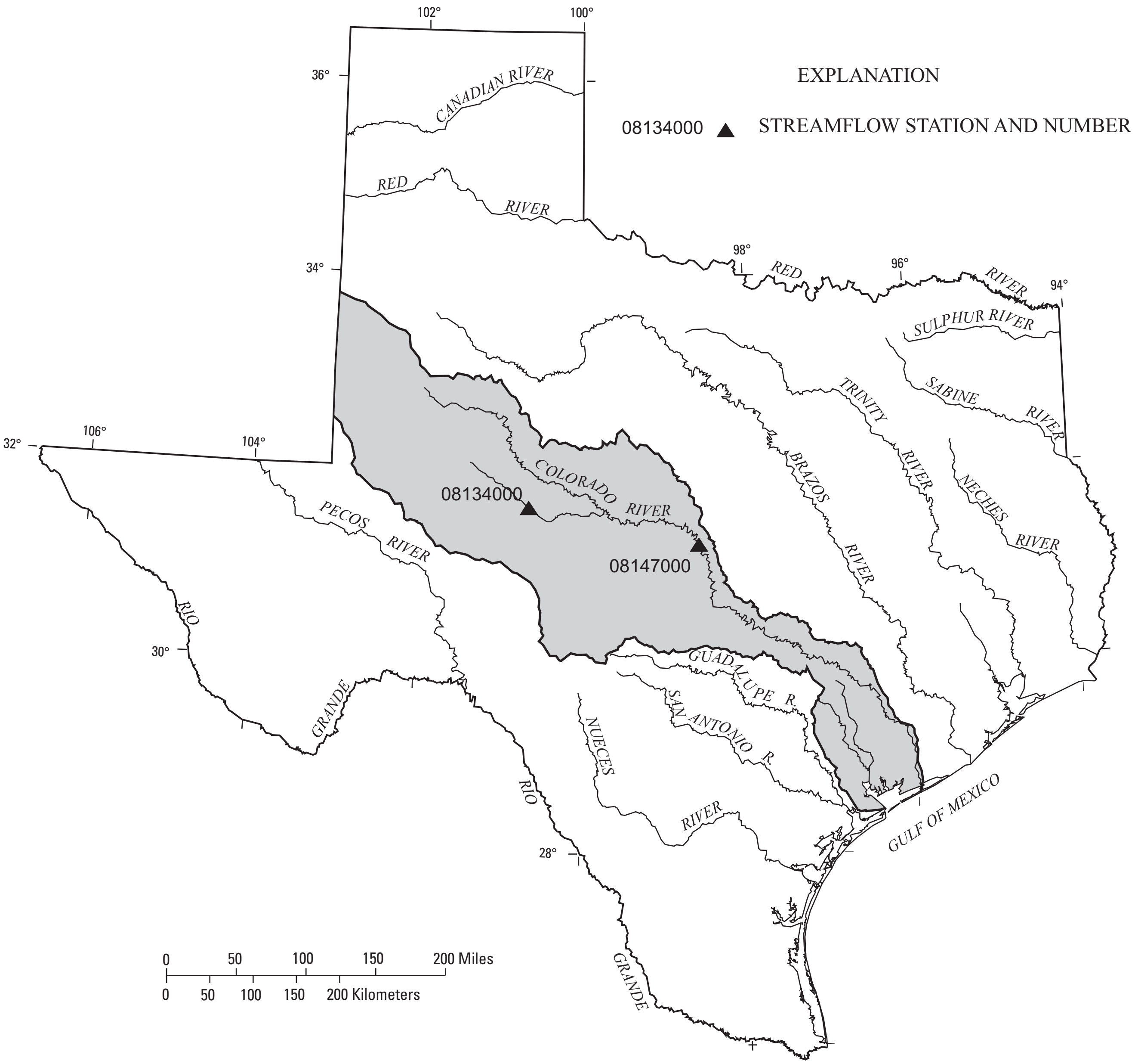
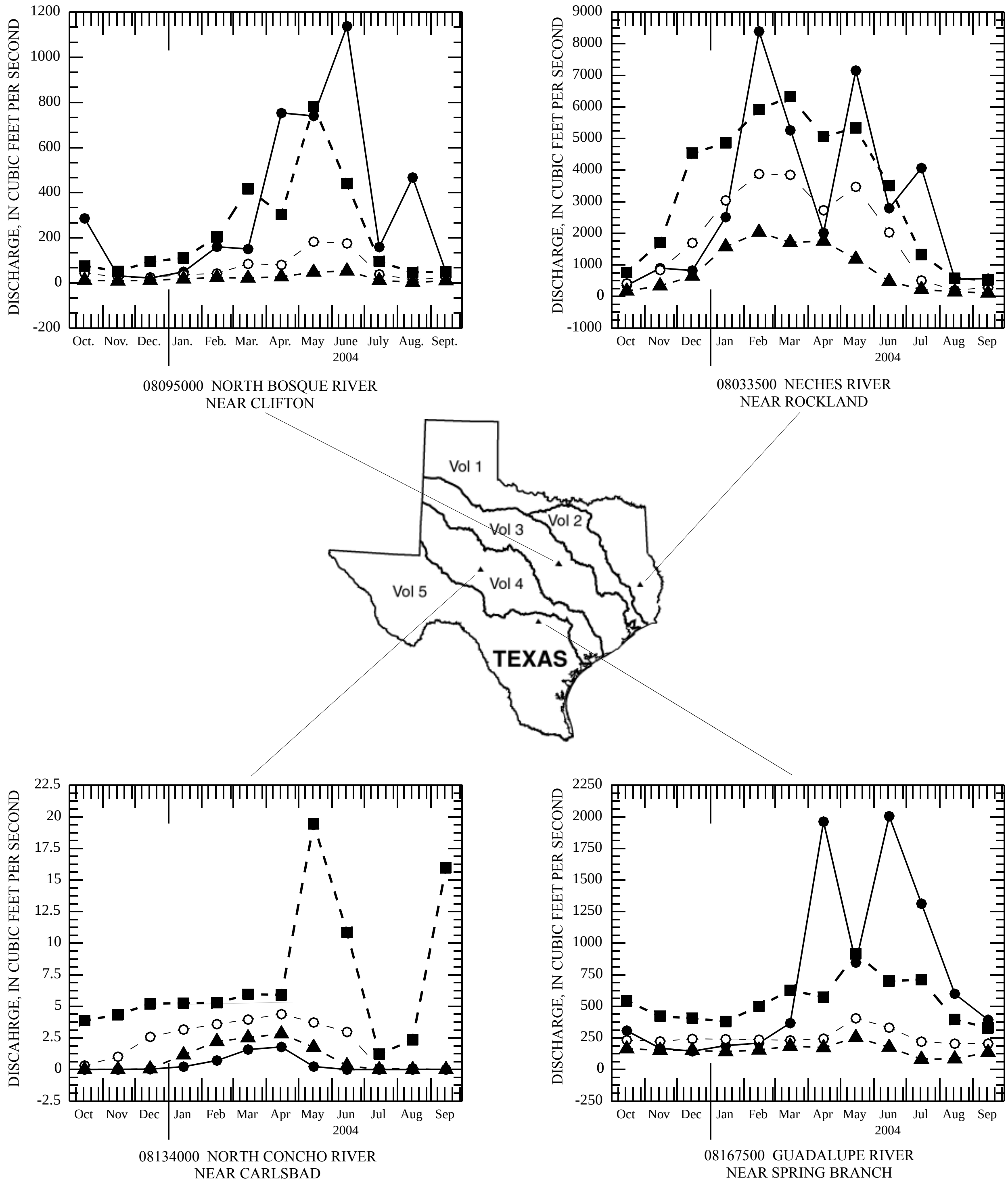


Figure 1. Area of Texas covered by volume 4 (shaded) and location of selected streamflow stations in volume 4.



EXPLANATION

MONTHLY MEAN DISCHARGE FOR 2004 WATER YEAR

MEDIAN OF MONTHLY MEAN DISCHARGE FOR 1971–2000 WATER YEARS

25 PERCENT QUARTILE

75 PERCENT QUARTILE

Figure 2. Monthly mean discharges at four long-term hydrologic index stations during 2004 water year and median of the monthly mean discharges for 1971-2000 water years.

Annual mean streamflow for the North Bosque River near Clifton was 333 ft^3/s for the 2004 water year, or 550 percent of 60.6 ft^3/s for the reference period 1971-2000. the 2004 water year monthly mean discharges for the North Bosque River near Clifton were above the normal range (greater than 75 percent of the median monthly discharge for the reference period) during the months of October, April, June, July and August. Monthly mean discharges for other months were within the normal range.

Annual mean streamflow for the North Concho River near Carlsbad was 0.38 ft^3/s for the 2004 water year, or 18 percent of 2.05 ft^3/s for the reference period 1971-2000. The 2004 water year monthly mean discharges for the North Concho River near Carlsbad were below the normal range (less than 25 percent of the median monthly discharge for the reference period) during the month of December, January, February, March, April, May, and June. Monthly mean discharges for other months were within the normal range.

Annual mean streamflow for the Guadalupe River near Spring Branch was 707 ft^3/s for the 2004 water year or 265 percent of 267 ft^3/s for the reference period 1971-2000. The 2004 water year monthly mean discharges for the Guadalupe River near Spring Branch were above the normal range (greater than 75 percent of the median monthly discharge for the reference period during the months of April, June, July, August and September, and below the normal range (less than 25 percent of the median monthly discharge for the reference period) during December. Monthly mean discharges for other months were within the normal range.

Conservation storage in 12 selected reservoirs in this area of the State, with a total combined conservation capacity of 3,966,000 acre-feet, increased from 59 percent of capacity at the end of September 2003 to 63 percent of capacity at the end of September 2004. Records from these reservoirs indicate that storage decreased in 7 and decreased in 5 during the water year.

Water Quality

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

Table 1. Streamflow at two selected stations

Station no. and name		Discharge during 2004 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
Colorado River Basin							
08134000	North Concho River near Carlsbad, TX 1/	6.8	0	0.38	i94,600	0	27.5 (1924-2004)
08147000	Colorado River near San Saba, TX	52,100	68	686	224,000	0	1,004 (1931-2004)

1/ Hydrologic index station.
i From slope-area measurement of peak flow.

DOWNSTREAM ORDER AND STATION NUMBER

Since October 1, 1950, hydrologic-station records in USGS reports have been listed in order of downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary entering between two main-stream stations is listed between those stations. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is located with respect to the stream to which it is immediately tributary is indicated by an indention in that list of stations in the front of this report. Each indentation represents one rank. This downstream order and system of indentation indicates which stations are on tributaries between any two stations and the rank of the tributary on which each station is located.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These station numbers are in the same downstream order used in this report. In assigning a station number, 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 composed of both types of stations. Gaps are consecutive. The complete 8-digit (or 10-digit) number for each station such as 09004100, which appears just to the left of the station name, includes a 2-digit part number "09" plus the 6-digit (or 8-digit) downstream order number "004100." In areas of high station density, an additional two digits may be added to the station identification number to yield a 10-digit number. The stations are numbered in downstream order as described above between stations of consecutive 8-digit numbers.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 61 sites in small drainage basins in 39 States that was established in 1963 to provide consistent streamflow data representative of undeveloped watersheds nationwide, and from which data could be analyzed on a continuing basis for use in comparison and contrast with conditions observed in basins more obviously affected by human activities. At selected sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program may be accessed from http://water.usgs.gov/hbn/.

National Stream-Quality Accounting Network (NASQAN) is a network of sites used to monitor the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations was operated in the Mississippi, Columbia, Colorado, and Rio Grande River basins. For the period 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia Rivers so that a network of 5 stations could be implemented on the Yukon River. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment (NAWQA) Program; (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals. Additional information about the NASQAN Program may be accessed from http://water.usgs.gov/nasqan/.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) is a network of monitoring sites that provide continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from this network of 250 precipitation-chemistry monitoring sites. The USGS supports 74 of these 250 sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as data from the individual sites, may be accessed from http://bqs.usgs.gov/acidrain/.

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

Assessment activities are being conducted in 42 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 is 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 water-resources managers to use in making decisions and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water-resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies. Additional information about the NAWQA Program may be accessed from *http://water.usgs.gov/nawqa/*.

The USGS National Streamflow Information Program (NSIP) is a long-term program with goals to provide framework streamflow data across the Nation. Included in the program are creation of a permanent Federally funded streamflow network, research on the nature of streamflow, regional assessments of streamflow data and databases, and upgrades in the streamflow information delivery systems. Additional information about NSIP may be accessed from *http://water.usgs.gov/nsip/*.

EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS

Data Collection and Computation

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and volume of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from a water-stage recorder that is either downloaded electronically in the field to a laptop computer or similar device or is transmitted using telemetry such as GOES satellite, land-line or cellular-phone modems, or by radio transmission. Measurements of discharge are made with a current meter or acoustic Doppler current profiler, using the general methods adopted by the USGS. These methods are described in standard textbooks, USGS Water-Supply Paper 2175, and the Techniques of Water-Resources Investigations of the United States Geological Survey (TWRIs), Book 3, Chapters A1 through A19 and Book 8, Chapters A2 and B2, which may be accessed from *http://water.usgs.gov/pubs/twri/*. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standardization (ISO).

For stream-gaging stations, discharge-rating tables for any stage are prepared from stage-discharge curves. If extensions to the rating curves are necessary to express discharge greater than measured, the extensions are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, or computation of flow over dams and weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily values. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features of the stream channel, the daily mean discharge is computed by the shifting-control method in which correction factors based on individual discharge measurements and notes by engineers and observers are used when applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the controlling section, the daily mean discharge is computed by the shifting-control method.

The stage-discharge relation at some stream-gaging stations is affected by backwater from reservoirs, tributary streams, or other sources. Such an occurrence 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 at some distance from the base gage.

An index velocity is measured using ultrasonic or acoustic instruments at some stream-gaging stations and this index velocity is used to calculate an average velocity for the flow in the stream. This average velocity along with a stage-area relation is then used to calculate average discharge.

At some stations, 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.

At some stream-gaging stations in the northern United States, the stage-discharge relation is affected by ice in the winter; therefore, computation of the discharge in the usual manner is impossible. Discharge for periods of ice effect is computed on the basis of gage-height record and occasional winter-discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge from other stations in the same or nearby basins.

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

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

For some stream-gaging stations, periods of time occur when no gage-height record is obtained or the recorded gage height is faulty and cannot be used to compute daily discharge or contents. Such a situation can happen when the recorder stops or otherwise fails to operate properly, the intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records from other stations in the same or nearby basins. Likewise, lake or reservoir volumes may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Data Presentation

The records published for each continuous-record surface-water discharge station (stream-gaging station) consist of five parts: (1) the station manuscript or description; (2) the data table of daily mean values of discharge for the current water year with summary data; (3) a tabular statistical summary of monthly mean flow data for a designated period, by water year; (4) 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; and (5) a hydrograph of discharge.

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 follow that clarify information presented under the various headings of the station description.

LOCATION.—Location information is obtained from the most accurate maps available. The location of the gaging station 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 term indicates the time period for which records have been published 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 its flow reasonably can be considered equivalent to flow at the present station.

REVISED RECORDS.—If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

GAGE.—The type of gage in current use, the datum of the current gage referred to a standard datum, 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 either will be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See section titled Identifying Estimated Daily Discharge.) Information is presented relative to the accuracy of the records, to special methods of computation, and to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, the outlet works and spillway, and the purpose and use of the reservoir.

COOPERATION.—Records provided by a cooperating organization or obtained for the USGS by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.—Information here documents 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 USGS.

REVISIONS.—Records are revised if errors in published records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://water.usgs.gov/nwis/nwis*). Users are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent data updates. Updates to NWISWeb are made on an annual basis.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because no current or, possibly, future station manuscript would be published for these stations 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 District Office (address given on the back of the title page of this report) to determine if the published records were revised after the station was discontinued. If, however, the data for a discontinued station were obtained by computer retrieval, the data would be current. 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 stage-capacity table when daily volumes are given.

Peak Discharge Greater than Base Discharge

Tables of peak discharge above base discharge are included for some stations where secondary instantaneous peak discharge data are used in flood-frequency studies of highway and bridge design, flood-control structures, and other flood-related projects. The base discharge value is selected so an average of three peaks a year will be reported. This base discharge value has a recurrence interval of approximately 1.1 years or a 91-percent chance of exceedence in any 1 year.

Data Table of Daily Mean Values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary for the table, the line headed TOTAL gives the sum of the daily figures for each month; the line headed MEAN gives the arithmetic average flow in cubic feet per second for the month; and the lines headed MAX and MIN give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month is 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). Values for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if extensive regulation or diversion is in effect or if the drainage area includes large noncontributing areas. At some stations, monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversion data or reservoir volumes are given. These values are identified by a symbol and a corresponding footnote.

Statistics of Monthly Mean Data

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

Summary Statistics

A table titled SUMMARY STATISTICS follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, WATER YEARS __-__, will consist of all of the station records within the specified water years, including complete months of record for partial water years, and may coincide with the period of record for the station. The water years for which the statistics are computed are consecutive, unless a break in the station record is indicated in the manuscript. 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 heading. When the dates of occurrence do not fall within the selected water years listed in the heading, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration-curve statistics and runoff data also are given. Runoff data may be omitted if extensive regulation or diversion of flow is in effect in the drainage basin.

The following summary statistics data are provided with each continuous record of discharge. Comments that 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.

ANNUAL MEAN.—The arithmetic mean for the individual daily mean discharges for the year noted or for the designated period.

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.

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

MAXIMUM PEAK STAGE.—The maximum instantaneous peak stage occurring for the water year or designated period. Occasionally the maximum stage for a year may occur at midnight at the beginning or end of the year, on a recession from or rise toward a higher peak in the adjoining year. In this case, the maximum peak stage is given in the table and the maximum stage may be reported in the REMARKS paragraph in the manuscript or in a footnote. If the dates of occurrence of the maximum peak stage and maximum peak flow are different, the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

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

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

> Acre-foot (AC-FT) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.
>
> Cubic feet per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.
>
> Inches (INCHES) indicate 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 table lists annual maximum stage and discharge at crest-stage stations, and the second table lists discharge measurements at low-flow 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 often made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for a 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. This identification is shown either by flagging individual daily values with the letter “e” and noting in a table footnote, “e–Estimated,” or by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of Field Data and Computed Results

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

The degree of accuracy of the records is stated in the REMARKS in the station description. “Excellent” indicates that about 95 percent of the daily discharges are within 5 percent of the true value; “good” within 10 percent; and “fair,” within 15 percent. “Poor” indicates that daily discharges have less than “fair” accuracy. Different accuracies may be attributed to different parts of a given record.

Values of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to the nearest tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 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 discharge values listed for partial-record stations.

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, values 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 Data Records Available

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

Information on the availability of unpublished data or statistical analyses may be obtained from the District office (see address that is shown on the back of the title page of this report).

EXPLANATION OF PRECIPITATION RECORDS

Data Collection and Computation

Rainfall data generally are collected using electronic data loggers that measure the rainfall in 0.01-inch increments every 15 minutes using either a tipping-bucket rain gage or a collection well gage. Twenty-four hour rainfall totals are tabulated and presented. A 24-hour period extends from just past midnight of the previous day to midnight of the current day. Snowfall-affected data can result during cold weather when snow fills the rain-gage funnel and then melts as temperatures rise. Snowfall-affected data are subject to errors. Missing values are indicated by this symbol “---” in the table.

Data Presentation

Precipitation records collected at surface-water gaging stations are identified with the same station number and name as the stream-gaging station. Where a surface-water daily-record station is not available, the precipitation record is published with its own name and latitude-longitude identification number.

Information pertinent to the history of a precipitation station is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, period of record, and general remarks.

The following information is provided with each precipitation station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—See Data Presentation in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

INSTRUMENTATION.—Information on the type of rainfall collection system is given.

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

Surface-water samples for analysis usually are collected at or near stream-gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, water temperature, sediment discharge, and so forth); extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, sampling date, or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water Analysis

Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*.

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 at several verticals to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

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 (carbonate and bicarbonate), 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 carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum and minimum values (and sometimes mean or median values) for each constituent measured, and are based on 15-minute or 1-hour intervals of recorded data beginning at 0000 hours and ending at 2400 hours for the day of record.

SURFACE-WATER-QUALITY RECORDS

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because discharge data is useful in the interpretation of surface-water quality. Records of surface-water quality in this report 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 *continuous-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 continuous- or partial-record station, where 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 *continuous records* as used in this report and *continuous recordings* that refer to a continuous graph or a series of discrete values recorded at short intervals. 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.

Accuracy of the Records

One of four accuracy classifications is applied for measured physical properties at continuous-record stations on a scale ranging from poor to excellent. The accuracy rating is based on data values recorded before any shifts or corrections are made. Additional consideration also is given to the amount of publishable record and to the amount of data that have been corrected or shifted.

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 is assuring that the data obtained represent the naturally occurring quality of the water. To ensure this, certain measurements, such as water temperature, pH, and dissolved oxygen, must be made on site when the samples are taken. To assure that measurements made in the laboratory also represent the naturally occurring water, carefully prescribed procedures must 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 TWRIs Book 1, Chapter D2; Book 3, Chapters A1, A3, and A4; and Book 9, Chapters A1-A9. Most of the methods used for collecting and analyzing water samples are described in the TWRIs, which may be accessed from *http://water.usgs.gov/pubs/twri/*. Also, detailed information on collecting, treating, and shipping samples can be obtained from the USGS District office (see address that is shown on the back of title page in 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 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 section.

During periods of rapidly changing flow or rapidly changing concentration, samples may be 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 are collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observation, 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

Samples for biochemical oxygen demand (BOD) and indicator bacteria are analyzed locally. All other samples are analyzed in the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chapter C1. Methods used by the USGS laboratories are given in the TWRIs, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. The TWRI publications may be accessed from *http://water.usgs.gov/pubs/twri/*. These methods are consistent with ASTM standards and generally follow ISO standards.

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, radiochemical 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 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 information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

DRAINAGE AREA.—See Data Presentation information in the EXPLANATION OF STAGE- AND WATER-DISCHARGE RECORDS section of this report (same comments apply).

PERIOD OF RECORD.—This indicates the time periods for which published water-quality records for the station are available. The 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 USGS by a cooperating organization are identified here.

EXTREMES.—Maximums and minimums are given only for parameters measured daily or more frequently. For parameters measured weekly or less frequently, true maximums or minimums may not have been obtained. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.—Records are revised if errors in published water-quality records are discovered. Appropriate updates are made in the USGS distributed data system, NWIS, and subsequently to its Web-based National data system, NWISWeb (*http://waterdata.usgs.gov/nwis*). Users of USGS water-quality data are encouraged to obtain all required data from NWIS or NWISWeb to ensure that they have the most recent updates. Updates to the NWISWeb are made on an annual basis.

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

Remark Codes

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

Printed Output	Remark
E	Value is estimated.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
M	Presence of material verified, but not quantified.
N	Presumptive evidence of presence of material.
U	Material specifically analyzed for, but not detected.
A	Value is an average.
V	Analyte was detected in both the environmental sample and the associated blanks.
S	Most probable value.

Water-Quality Control Data

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

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

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

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

Blank Samples

Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated in the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. Many types of blank samples are possible; each is designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this district are:

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

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

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

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

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

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

Preservation blank—A blank solution that is treated with the sampler preservatives used for an environmental sample.

Reference Samples

Reference material is a solution or material prepared by a laboratory. The reference material composition is certified for one or more properties so that it can be used to assess a measurement method. Samples of reference material are submitted for analysis to ensure that an analytical method is accurate for the known properties of the reference material. Generally, the selected reference material properties are similar to the environmental sample properties.

Replicate Samples

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

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

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

Split sample—A type of replicate sample in which a sample is split into subsamples, each subsample contemporaneous in time and space.

Spike Samples

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

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed from *http://water.usgs.gov*.

Water-quality data and data also are available through the WWW. In addition, data can be provided in various machine-readable formats on various media. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each Water Discipline District Office (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, and precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting English units to International System (SI) Units. Other glossaries that also define water-related terms are accessible from *http://water.usgs.gov/glossaries.html*.

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

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

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

Adjusted discharge is discharge data that have been mathematically adjusted (for example, to remove the effects of a daily tide cycle or reservoir storage).

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

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

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

Annual 7-day minimum is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 through September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day, 10-year low-flow statistic.)

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

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

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

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

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

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

Base discharge (for peak discharge) is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peak flows per year will be published. (See also “Peak flow”)

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

Bed material is the sediment mixture of which a stream-bed, lake, pond, reservoir, or estuary bottom is composed. (See also “Bedload” and “Sediment”)

Bedload is material in transport that primarily is supported by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to the top of the bedload sampler nozzle (an elevation ranging from 0.25 to 0.5 foot). These particles are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler also may contain a component of the suspended load.

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

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

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

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

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

Blue-green algae (*Cyanophyta*) are a group of phytoplankton and periphyton organisms with a blue pigment in addition to a green pigment called chlorophyll. Blue-green algae can cause nuisance water-quality conditions in lakes and slow-flowing rivers; however, they are found commonly in streams throughout the year. The abundance of blue-green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter ($\mu m^3/mL$). The abundance of blue-green algae in periphyton samples is given in cells per square centimeter ($cells/cm^2$) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also “Phytoplankton”and “Periphyton”)

Bottom material (See “Bed material”)

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

Canadian Geodetic Vertical Datum 1928 is a geodetic datum derived from a general adjustment of Canada's first order level network in 1928.

Cell volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are used frequently in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (μm^3) is determined by obtaining critical cell measurements or cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere $4/3\ \pi r^3$ cone $1/3\ \pi r^2 h$ cylinder $\pi r^2 h$.

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

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

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

Cfs-day (See "Cubic foot per second-day")

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

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

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

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

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

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

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

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

Control designates a feature in the channel that physically affects the water-surface elevation and thereby determines the stage-discharge relation at the gage. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft^3/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily mean discharges reported in the daily value data tables numerically are equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

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

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

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

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

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

Datum is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or Universal Transverse Mercator (UTM) coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

Diatoms *(Bacillariophyta)* are unicellular or colonial algae with a siliceous cell wall. The abundance of diatoms in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of diatoms in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also "Phytoplankton" and "Periphyton")

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

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

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

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

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4917 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

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

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

Dry mass refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

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

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

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

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

***Escherichia coli** (E. coli)* are bacteria present in the intestine and feces of warmblooded animals. *E. coli* are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 °C on mTEC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

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

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

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

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

Fecal streptococcal bacteria are present in the intestines of warmblooded animals and are ubiquitous in the environment. They are characterized as gram-positive, cocci bacteria that are capable of growth in brain-heart infusion broth. In the laboratory, they are defined as all the organisms that produce red or pink colonies within 48 hours at 35 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also “Bacteria”)

Filtered pertains to constituents in a water sample passed through a filter of specified pore diameter, most commonly 0.45 micrometer or less for inorganic analytes and 0.7 micrometer for organic analytes.

Filtered, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that has passed through a filter has been extracted. Complete recovery is not achieved by the extraction procedure and thus the analytical determination represents something less than 95 percent of the total constituent concentration in the sample. To achieve comparability of analytical data, equivalent extraction procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

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

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

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

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

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

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

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

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

Green algae *(Chlorophyta)* are unicellular or colonial algae with chlorophyll pigments similar to those in terrestrial green plants. Some forms of green algae produce mats or floating “moss” in lakes. The abundance of green algae in phytoplankton samples is expressed as the number of cells per milliliter (cells/mL) or biovolume in cubic micrometers per milliliter (μm^3/mL). The abundance of green algae in periphyton samples is given in cells per square centimeter (cells/cm^2) or biovolume per square centimeter ($\mu m^3/cm^2$). (See also “Phytoplankton” and “Periphyton”)

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

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

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

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

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

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

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

Horizontal datum (See “Datum”)

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

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

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

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

International Boundary Commission Survey Datum refers to a geodetic datum established at numerous monuments along the United States-Canada boundary by the International Boundary Commission.

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

Laboratory reporting level (LRL) generally is equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a nondetection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a “less than” (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory (NWQL) collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually on the basis of the most current quality-control data and, therefore, may change. The LRL replaces the term ‘non-detection value’ (NDV).

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Megahertz is a unit of frequency. One megahertz equals one million cycles per second.

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

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

Method code is a one-character code that identifies the analytical or field method used to determine a value stored in the National Water Information System (NWIS).

Method detection limit (MDL) is the minimum concentration of a substance that can be measured and reported with 99-

percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

Method of Cubatures is a method of computing discharge in tidal estuaries based on the conservation of mass equation.

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

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

Micrograms per kilogram (UG/KG, µg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter. One microgram per liter is equivalent to 1 part per billion.

Microsiemens per centimeter (US/CM, µS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

Minimum reporting level (MRL) is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method.

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

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

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

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

National Geodetic Vertical Datum of 1929 (NGVD 29) is a fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It formerly was called “Sea Level Datum of 1929” or “mean sea level.” Although the datum was derived from the mean sea level at 26 tide stations, it does not necessarily represent local mean sea level at any particular place. *See NOAA Web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88* (See “North American Vertical Datum of 1988”)

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

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

Nonfilterable refers to the portion of the total residue retained by a filter.

North American Datum of 1927 (NAD 27) is the horizontal control datum for the United States that was defined by a location and azimuth on the Clarke spheroid of 1866.

North American Datum of 1983 (NAD 83) is the horizontal control datum for the United States, Canada, Mexico, and Central America that is based on the adjustment of 250,000 points including 600 satellite Doppler stations that constrain the system to a geocentric origin. NAD 83 has been officially adopted as the legal horizontal datum for the United States by the Federal government.

North American Vertical Datum of 1988 (NAVD 88) is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the United States. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and United States first-order terrestrial leveling networks.

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

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

Organic mass or **volatile mass** of a living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. Organic mass is expressed in the same units as for ash mass and dry mass. (See also "Ash mass," "Biomass," and "Dry mass")

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

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

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

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

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

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

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

Classification	Size (mm)	Method of analysis
Clay	>0.00024 - 0.004	Sedimentation
Silt	>0.004 - 0.062	Sedimentation
Sand	>0.062 - 2.0	Sedimentation/sieve
Gravel	>2.0 - 64.0	Sieve
Cobble	>64 - 256	Manual measurement
Boulder	>256	Manual measurement

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

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

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

Percent shading is a measure of the amount of sunlight potentially reaching the stream. A clinometer is used to measure left and right bank canopy angles. These values are added together, divided by 180, and multiplied by 100 to compute percentage of shade.

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

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

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

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7.0 standard units are termed “acidic,” and solutions with a pH greater than 7.0 are termed “basic.” Solutions with a pH of 7.0 are neutral. The presence and concentration of many dissolved chemical constituents found in water are affected, in part, by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms also are affected, in part, by the hydrogen-ion activity of water.

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

Picocurie (PC, pCi) is one-trillionth (1×10^{-12}) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields 3.7×10^{10} radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample.

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

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

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

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

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m^2/time)] for periphyton and macrophytes or per volume [mg C/(m^3/time)] for phytoplankton. The carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light- and dark-bottle method and is preferred for use with unenriched water samples. Unit time may be either the hour or day, depending on the incubation period. (See also “Primary productivity”)

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

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

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

Recoverable is the amount of a given constituent that is in solution after a representative water sample has been extracted or digested. Complete recovery is not achieved by the extraction or digestion and thus the determination represents something less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also “Bed material”)

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or nonexceedance of a specified low flow). The terms "return period" and "recurrence interval" do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day, 10-year low flow ($7Q_{10}$) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the nonexceedances of the $7Q_{10}$ occur less than 10 years after the previous nonexceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous nonexceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the $7Q_{10}$.

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

Return period (See "Recurrence interval")

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

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

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

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

Salinity is the total quantity of dissolved salts, measured by weight in parts per thousand. Values in this report are calculated from specific conductance and temperature. Seawater has an average salinity of about 35 parts per thousand (for additional information, refer to: Miller, R.L., Bradford, W.L., and Peters, N.E., 1988, Specific conductance: theoretical considerations and application to analytical quality control: U.S. Geological Survey Water-Supply Paper 2311, 16 p.)

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums.

Sediment is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are affected by environmental and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

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

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

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

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

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

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

Specific electrical conductance (conductivity) is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

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

Stage (See “Gage height”)

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

Surrogate is an analyte that behaves similarly to a target analyte, but that is highly unlikely to occur in a sample. A surrogate is added to a sample in known amounts before extraction and is measured with the same laboratory procedures used to measure the target analyte. Its purpose is to monitor method performance for an individual sample.

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that 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-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results. (See also “Suspended”)

Suspended sediment is sediment carried in suspension by the turbulent components of the fluid or by the Brownian movement (a law of physics). (See also “Sediment”)

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 foot above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also “Sediment” and “Suspended sediment”)

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

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

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

Suspended, total is the total amount of a given constituent in the part of a water-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. Knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, on the basis of determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

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

Taxa (Species) richness is the number of species (taxa) present in a defined area or sampling unit.

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

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

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

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

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water resulting from the mixing of flow proportionally to the duration of the concentration.

Tons per acre-foot (T/acre-ft) is the dry mass (tons) of a constituent per unit volume (acre-foot) of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

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

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of warmblooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 °C. In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 °C plus or minus 1.0 °C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters of sample. (See also "Bacteria")

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

Total in bottom material is the amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

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

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

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

Total recoverable is the amount of a given constituent in a whole-water sample after a sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

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

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

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

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International, Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

NTU (Nephelometric Turbidity Units): white or broadband [400-680 nm] light source, 90 degree detection angle, one detector.

NTRU (Nephelometric Turbidity Ratio Units): white or broadband [400-680 nm] light source, 90 degree detection angle, multiple detectors with ratio compensation.

BU (Backscatter Units): white or broadband [400-680 nm] light source, 30 ± 15 degree detection angle (backscatter).

AU (Attenuation Units): white or broadband [400-680 nm] light source, 180 degree detection angle (attenuation).

NTMU (Nephelometric Turbidity Multibeam Units): white or broadband [400-680 nm] light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

FNU (Formazin Nephelometric Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, one detector.

FNRU (Formazin Nephelometric Ratio Units): near infrared [780-900 nm] or monochrome light source, 90 degree detection angle, multiple detectors, ratio compensation.

FBU (Formazin Backscatter Units): near infrared [780-900 nm] or monochrome light source, 30±15 degree detection angle.

FAU (Formazin Attenuation Units): near infrared [780-900 nm] light source, 180 degree detection angle.

FNMU (Formazin Nephelometric Multibeam Units): near infrared [780-900 nm] or monochrome light source, multiple light sources, detectors at 90 degrees and possibly other angles to each beam.

For more information please see http://water.usgs.gov/owq/FieldManual/Chapter6/6.7_contents.html.

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

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

Unfiltered pertains to the constituents in an unfiltered, representative water-suspended sediment sample.

Unfiltered, recoverable is the amount of a given constituent in a representative water-suspended sediment sample that has been extracted or digested. Complete recovery is not achieved by the extraction or digestion treatment and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different procedures are likely to produce different analytical results.

Vertical datum (See "Datum")

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

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

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

Water year in USGS reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 2002, is called the "2002 water year."

Watershed (See "Drainage basin")

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

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

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

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

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

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

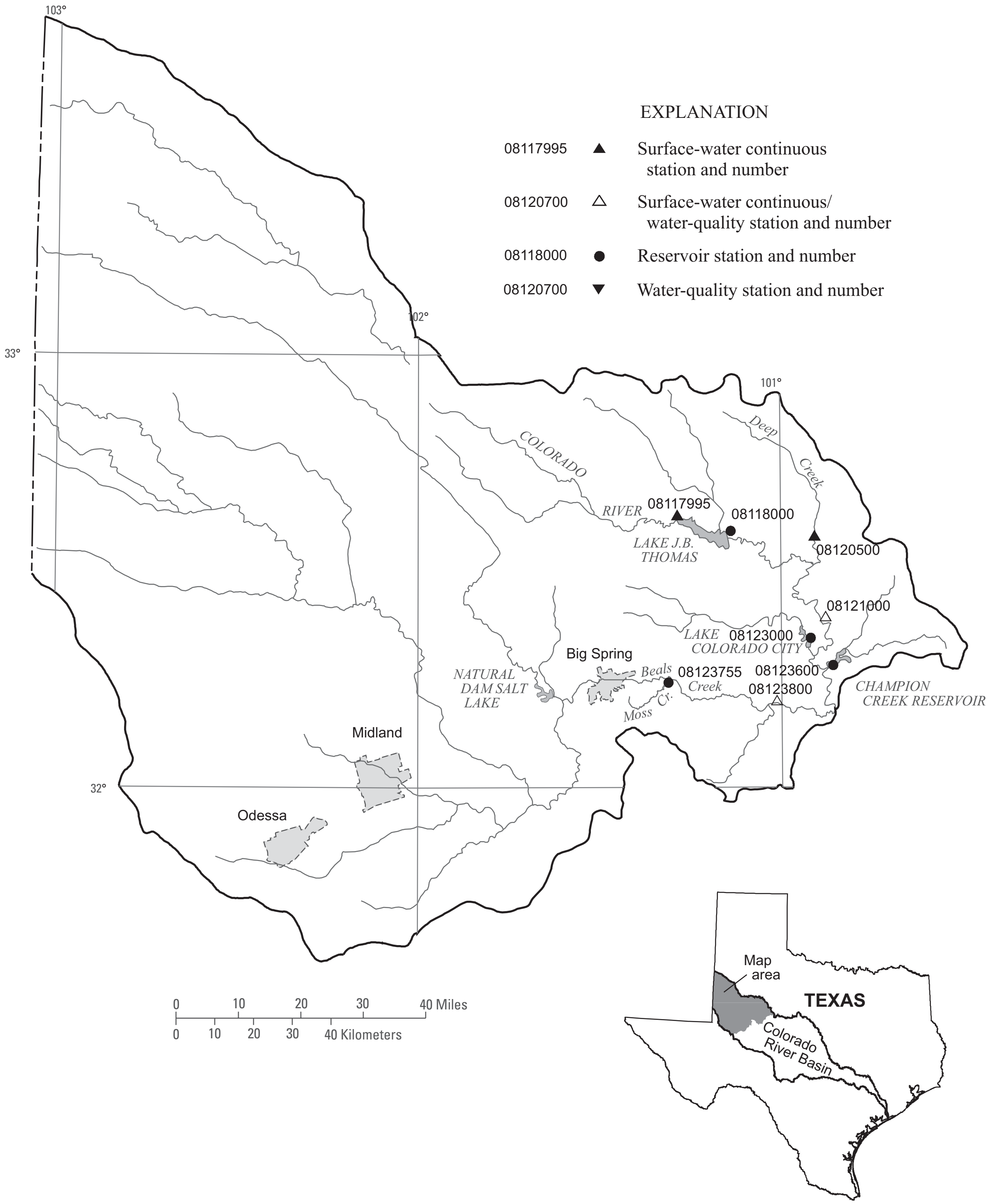


Figure 3.--Map showing location of gaging stations in the first section of the Colorado River Basin

08117995 Colorado River near Gail, TX

LOCATION.--Lat 32°37'43", long 101°17'06", Borden County, Hydrologic Unit 12080002, near right downstream end of bridge on FM 1205, 5.0 mi north of junction with FM 1785, 13 mi southeast of Gail, 14 mi northwest of Vincent, and 25 mi west of Ira.

DRAINAGE AREA.--498 mi^2.

PERIOD OF RECORD.--Mar. 1988 to current year.

REVISED RECORDS.--WRD TX-01-4: 1988-91 (maximum only, 1989-91). WRD TX-02-4: 1988-2001 (M).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,240 ft above NGVD of 1929, from topographic map. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59	7.3	10
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.4	1.8	3.3
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.73	0.54
4	0.00	0.00	0.00	0.00	0.00	73	0.00	0.00	0.00	0.07	0.10	0.15
5	0.00	0.00	0.00	0.00	0.00	156	0.40	0.00	0.00	0.00	0.01	0.03
6	109	0.00	0.00	0.00	0.00	39	228	0.00	0.00	0.00	0.00	0.01
7	18	42	0.00	0.00	0.00	5.3	112	0.00	0.00	0.01	2.5	0.00
8	94	7.7	0.00	0.00	0.00	0.37	11	0.00	0.00	0.02	e209	0.00
9	60	0.14	0.00	0.00	0.00	0.04	1.3	0.00	0.00	0.00	e344	0.00
10	2.1	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	92	0.00
11	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.00
12	0.04	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	5.0	0.00
13	0.24	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	2.0	0.00
14	0.11	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.65	0.00
15	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.21	0.00
16	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.11	0.00
17	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00
19	0.00	0.00	0.00	2.5	0.00	0.00	0.00	0.00	58	0.00	2.3	0.00
20	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	227	1.3	4.0	0.00
21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	132	0.10	0.50	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	0.00	0.10	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.00	0.01	5.0
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.7	4.8	0.00	0.37
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.1	151	0.00	0.75
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.1	174	0.00	8.9
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.7	59	0.00	78
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	49	0.00	297
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.3	194	0.00	344
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	14	74	45	214
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	23	84	---
TOTAL	283.81	49.85	0.00	2.63	0.00	274.46	352.73	0.00	492.10	799.62	814.37	962.05
MEAN	9.16	1.66	0.00	0.08	0.00	8.85	11.8	0.00	16.4	25.8	26.3	32.1
MAX	109	42	0.00	2.5	0.00	156	228	0.00	227	194	344	344
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	563	99	0.00	5.2	0.00	544	700	0.00	976	1,590	1,620	1,910

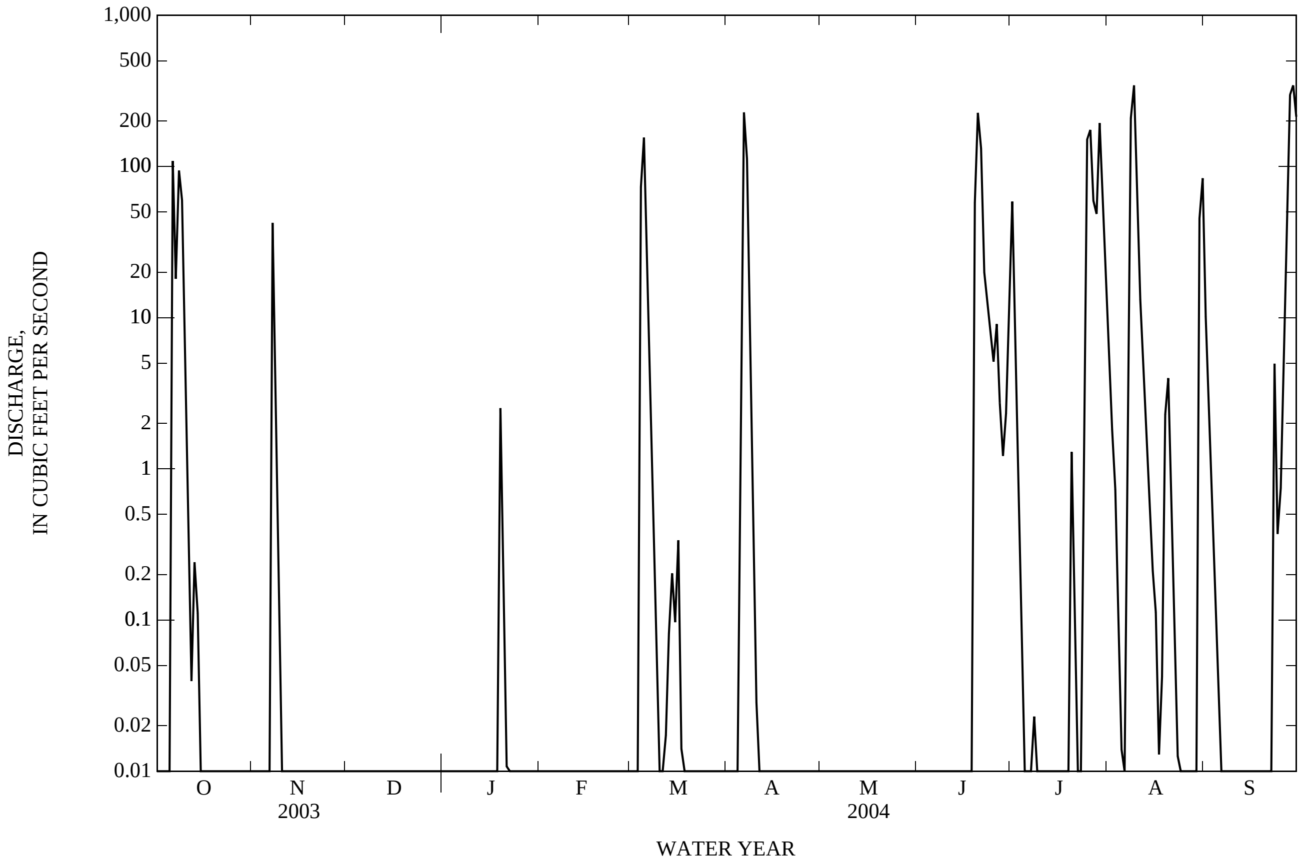
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	8.72	2.59	1.27	1.06	2.57	5.82	5.40	26.7	43.2	13.0	7.00	17.2
MAX	78.9	24.9	15.6	8.42	23.8	51.2	51.5	263	166	76.1	26.3	49.1
(WY)	(2001)	(2002)	(1992)	(1992)	(1992)	(2000)	(1990)	(1992)	(1992)	(1988)	(2004)	(1989)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1990)	(1990)	(1990)	(1995)	(1991)	(1991)	(1991)	(1993)	(1990)	(1994)	(1994)	(1997)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	3,698.45		4,031.62			
ANNUAL MEAN	10.1		11.0		11.1	
HIGHEST ANNUAL MEAN					46.2	1992
LOWEST ANNUAL MEAN					0.48	1998
HIGHEST DAILY MEAN	447	Sep 1	344	Aug 9	2,060	May 25, 1992
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jun 7, 1988
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 15	0.00	Jun 7, 1988
MAXIMUM PEAK FLOW			498	Aug 9	2,320	May 26, 1992
MAXIMUM PEAK STAGE			p9.12	Aug 9	m16.43	May 26, 1992
ANNUAL RUNOFF (AC-FT)	7,340		8,000		8,060	
10 PERCENT EXCEEDS	6.2		9.6		6.2	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

m Result of earthen dam.
p Observed.
e Estimated

08117995 Colorado River near Gail, TX—Continued



08118000 Lake J.B. Thomas near Vincent, TX

LOCATION.--Lat 32°35'35", long 101°08'16", Scurry County, Hydrologic Unit 12080002, on upstream edge of dam 500 ft right of valve tower for Snyder pump station near center of dam on Colorado River, 8.5 mi west of Ira, 9.2 mi northeast of Vincent, and at mile 837.0.

DRAINAGE AREA.--3,389 mi^2 of which 2,455 mi^2 probably is noncontributing. Drainage area includes 455 mi^2 above Bull Creek diversion dam, of which 38 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1953 to Sept. 1986, Feb. 1999 to Sept. 2002 (contents), Oct. 2002 to current year. Water-quality records: Chemical data: Feb. 1970 to May 1984.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Water-stage recorder and nonrecording gage read once daily from Oct. 1953 to Sept. 1986 at site 4.0 mi upstream at same datum. Nov. 4, 1953, to Feb. 7, 1955, Colorado River Municipal Water District nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records fair. The lake is formed by a rolled earthfill dam, 14,500 ft long. Storage began in July 1952 and the dam was completed in Sept. 1952. There was no appreciable storage prior to July 1953. There are two uncontrolled emergency spillways, both cut through natural ground and are located as follows: the first is a 500 ft wide cut located at the left end of dam, and the second cut is 1,600 ft wide located at the right end of the dam. These spillways are designed to discharge 161,000 ft^3/s (elevation, 2,275.0 ft). An uncontrolled rectangular concrete drop inlet, 38.0 by 53.0 ft at the crest, discharges into two 10.0 ft concrete conduits. In addition, there is an outlet that can release water through a 24-inch gate into a 30-inch concrete pipe. The dam was built by the Colorado River Municipal Water District to impound water for municipal and industrial supply for the cities of Big Spring, Odessa, and Snyder. A diversion dam on Bull Creek diverts water through a 13,000 ft long gravity canal into Lake J.B. Thomas. These diversions began in Nov. 1953. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	2,280.0
Crest of right spillway (south)	2,267.0
Crest of left spillway (north)	2,264.0
Crest of drop inlet	2,258.0
Lowest gated outlet (invert)	2,200.0

COOPERATION.--Records of diversions may be obtained from the Colorado River Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 218,600 acre-ft, Sept. 8, 1962, elevation, 2,259.85 ft; minimum contents, 4,960 acre-ft, May 28, 1971, elevation, 2,206.43 ft.

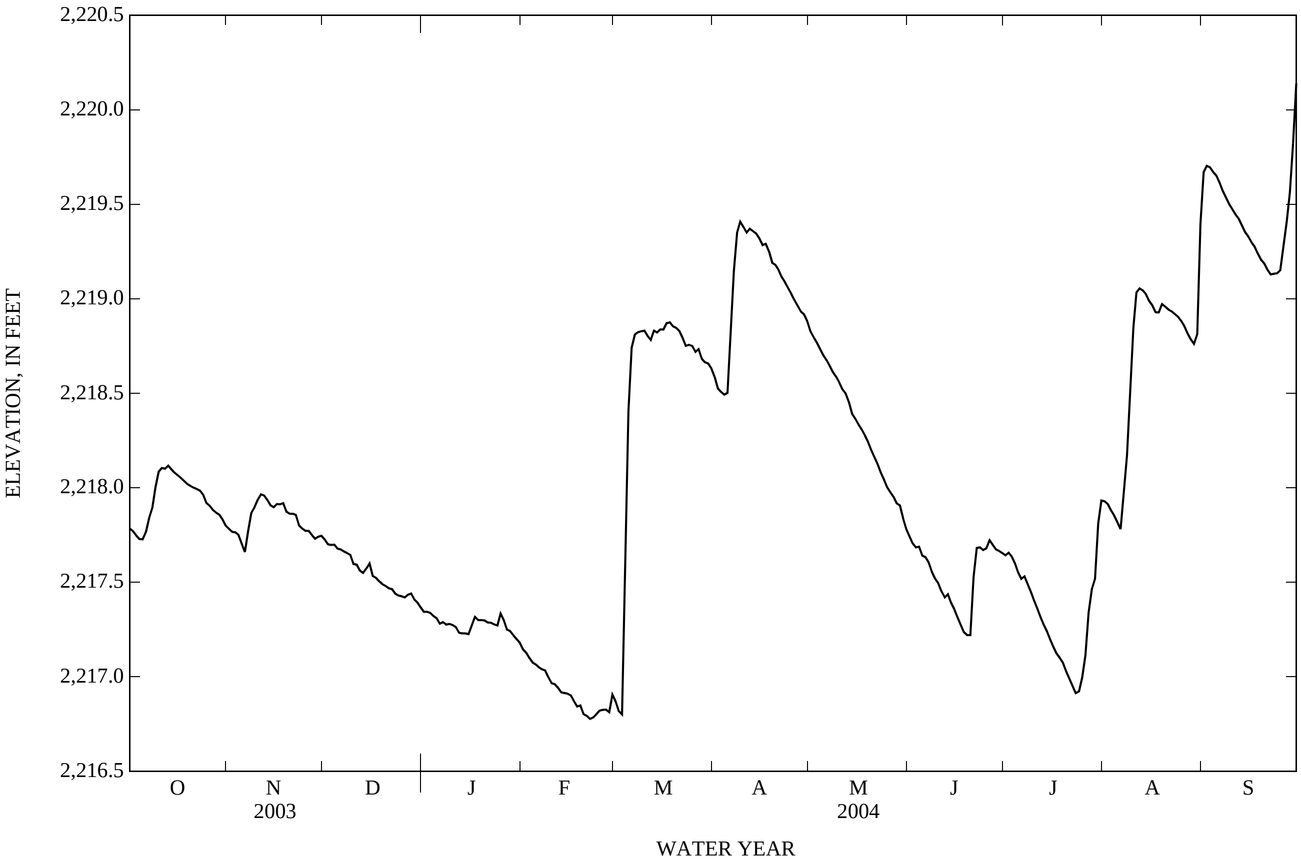
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,220.28 ft, Sept. 30; minimum elevation, 2,216.74 ft, Feb. 23.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,217.78	2,217.78	2,217.73	2,217.34	2,217.15	2,216.87	2,218.59	2,218.83	2,217.74	2,217.64	2,217.93	2,219.67
2	2,217.77	2,217.77	2,217.70	2,217.34	2,217.13	2,216.82	2,218.53	2,218.80	2,217.70	2,217.66	2,217.91	2,219.70
3	2,217.75	2,217.76	2,217.70	2,217.34	2,217.10	2,216.80	2,218.51	2,218.77	2,217.68	2,217.64	2,217.88	2,219.70
4	2,217.73	2,217.75	2,217.70	2,217.32	2,217.07	2,217.46	2,218.49	2,218.74	2,217.69	2,217.60	2,217.85	2,219.67
5	2,217.73	2,217.71	2,217.68	2,217.31	2,217.07	2,218.41	2,218.50	2,218.70	2,217.64	2,217.55	2,217.82	2,219.65
6	2,217.76	2,217.66	2,217.67	2,217.28	2,217.05	2,218.74	2,218.77	2,218.68	2,217.63	2,217.52	2,217.78	2,219.61
7	2,217.84	2,217.77	2,217.66	2,217.29	2,217.04	2,218.81	2,219.15	2,218.64	2,217.60	2,217.53	2,217.99	2,219.57
8	2,217.89	2,217.87	2,217.65	2,217.28	2,217.03	2,218.82	2,219.35	2,218.61	2,217.55	2,217.49	2,218.17	2,219.54
9	2,218.00	2,217.90	2,217.64	2,217.28	2,217.00	2,218.83	2,219.41	2,218.59	2,217.52	2,217.45	2,218.45	2,219.50
10	2,218.09	2,217.94	2,217.60	2,217.27	2,216.97	2,218.83	2,219.38	2,218.56	2,217.49	2,217.40	2,218.85	2,219.47
11	2,218.10	2,217.97	2,217.59	2,217.26	2,216.96	2,218.80	2,219.35	2,218.52	2,217.45	2,217.36	2,219.03	2,219.45
12	2,218.10	2,217.96	2,217.56	2,217.23	2,216.94	2,218.78	2,219.37	2,218.50	2,217.42	2,217.32	2,219.05	2,219.42
13	2,218.12	2,217.94	2,217.55	2,217.23	2,216.92	2,218.83	2,219.36	2,218.45	2,217.44	2,217.28	2,219.05	2,219.39
14	2,218.10	2,217.91	2,217.57	2,217.23	2,216.91	2,218.82	2,219.34	2,218.39	2,217.39	2,217.24	2,219.02	2,219.35
15	2,218.08	2,217.90	2,217.60	2,217.22	2,216.91	2,218.84	2,219.32	2,218.36	2,217.36	2,217.20	2,218.99	2,219.33
16	2,218.07	2,217.91	2,217.53	2,217.27	2,216.90	2,218.84	2,219.28	2,218.34	2,217.32	2,217.16	2,218.96	2,219.30
17	2,218.05	2,217.91	2,217.52	2,217.32	2,216.87	2,218.87	2,219.29	2,218.31	2,217.28	2,217.12	2,218.93	2,219.27
18	2,218.04	2,217.92	2,217.51	2,217.30	2,216.84	2,218.88	2,219.25	2,218.28	2,217.24	2,217.10	2,218.93	2,219.24
19	2,218.02	2,217.87	2,217.49	2,217.30	2,216.85	2,218.85	2,219.19	2,218.24	2,217.22	2,217.07	2,218.97	2,219.21
20	2,218.01	2,217.86	2,217.48	2,217.30	2,216.80	2,218.85	2,219.18	2,218.20	2,217.22	2,217.03	2,218.96	2,219.19
21	2,218.00	2,217.86	2,217.47	2,217.29	2,216.79	2,218.83	2,219.15	2,218.16	2,217.53	2,216.99	2,218.94	2,219.15
22	2,217.99	2,217.86	2,217.46	2,217.29	2,216.78	2,218.79	2,219.12	2,218.12	2,217.68	2,216.95	2,218.93	2,219.13
23	2,217.98	2,217.80	2,217.44	2,217.28	2,216.78	2,218.75	2,219.09	2,218.08	2,217.68	2,216.91	2,218.92	2,219.13
24	2,217.96	2,217.78	2,217.43	2,217.27	2,216.80	2,218.76	2,219.06	2,218.04	2,217.67	2,216.92	2,218.91	2,219.14
25	2,217.92	2,217.77	2,217.43	2,217.33	2,216.82	2,218.75	2,219.03	2,218.00	2,217.68	2,217.00	2,218.88	2,219.15
26	2,217.91	2,217.77	2,217.42	2,217.30	2,216.82	2,218.72	2,218.99	2,217.97	2,217.72	2,217.11	2,218.86	2,219.28
27	2,217.88	2,217.75	2,217.43	2,217.25	2,216.83	2,218.73	2,218.96	2,217.95	2,217.70	2,217.34	2,218.82	2,219.41
28	2,217.87	2,217.73	2,217.44	2,217.24	2,216.81	2,218.68	2,218.93	2,217.92	2,217.67	2,217.46	2,218.78	2,219.56
29	2,217.86	2,217.74	2,217.41	2,217.22	2,216.91	2,218.66	2,218.92	2,217.91	2,217.66	2,217.52	2,218.76	2,219.82
30	2,217.83	2,217.75	2,217.39	2,217.20	---	2,218.66	2,218.88	2,217.84	2,217.65	2,217.81	2,218.81	2,220.14
31	2,217.80	---	2,217.37	2,217.18	---	2,218.63	---	2,217.78	---	2,217.93	2,219.39	---
MEAN	2,217.94	2,217.83	2,217.54	2,217.28	2,216.93	2,218.54	2,219.06	2,218.33	2,217.54	2,217.33	2,218.66	2,219.44
MAX	2,218.12	2,217.97	2,217.73	2,217.34	2,217.15	2,218.88	2,219.41	2,218.83	2,217.74	2,217.93	2,219.39	2,220.14
MIN	2,217.73	2,217.66	2,217.37	2,217.18	2,216.78	2,216.80	2,218.49	2,217.78	2,217.22	2,216.91	2,217.78	2,219.13

CAL YR 2003 MEAN 2,217.36 MAX 2,219.48 MIN 2,215.53
WTR YR 2004 MEAN 2,218.04 MAX 2,220.14 MIN 2,216.78

08118000 Lake J.B. Thomas near Vincent, TX—Continued



08120500 Deep Creek near Dunn, TX

LOCATION.--Lat 32°34'25", long 100°54'27", Scurry County, Hydrologic Unit 12080002, at right end of downstream side of bridge on Farm Road 1606, 1.5 mi northwest of Dunn, 2.7 mi upstream from Sulphur Draw, and 9.6 mi upstream from mouth.

DRAINAGE AREA.--198 mi^2 of which 10 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Apr. 1953 to Sept. 1986, July 2001 to current year. Water-quality records: Specific conductance: Mar. 1953 to Sept. 1954. Water temperature: Mar. 1953 to Sept. 1954.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,172.17 ft (Texas Department of Transportation bridge plans, vertical control datum unknown). Prior to Apr. 21, 1955, nonrecording gage at site 128 ft left. Water-stage recorder 128 ft left from Apr. 1953 to Sept. 1986. Datum of previous gages was 2,172.17 ft above NGVD of 1929 and has not been tied to present gage datum. Satellite telemeter at station.

REMARKS.--Records good except those for discharges above 200 ft^3/s, which are fair, and estimated daily discharges, which are poor. No known regulation or diversions. No flow many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1881, 36,400 ft^3/s June 19, 1939, by slope-area measurement at site 8.0 mi upstream from gage. Flood in 1892 reached about same stage as that of June 19, 1939, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	1.1	0.66	1.2	3.5	2.3	0.69	0.23	2.5	1.3	0.00
2	0.00	0.00	0.92	0.59	1.2	2.0	6.1	0.57	0.09	1.5	0.98	0.83
3	0.00	0.00	0.96	0.55	1.2	1.7	6.5	0.55	0.06	1.1	0.85	0.84
4	0.00	0.00	1.2	1.1	1.1	551	3.1	0.45	0.04	0.69	0.86	0.68
5	0.00	0.00	1.2	1.0	1.2	456	12	0.91	2.7	0.36	0.59	0.81
6	12	0.00	1.2	0.64	1.1	14	e170	1.0	4.2	0.11	0.44	0.76
7	3.6	5.5	1.3	0.44	1.1	5.8	&8.5	0.77	2.6	0.04	26	0.55
8	1.4	8.1	1.2	0.54	1.0	4.0	4.1	0.68	1.3	0.00	12	0.44
9	0.96	5.2	0.79	1.2	1.1	3.3	2.8	0.66	0.97	0.00	8.0	0.36
10	0.87	2.0	0.41	1.2	1.0	2.9	2.2	0.55	0.78	0.00	2.0	0.36
11	0.46	1.5	0.33	1.2	1.3	2.7	1.9	0.41	0.63	0.00	1.3	0.25
12	0.62	1.5	0.23	1.3	0.87	2.7	1.9	0.33	2.2	0.00	0.99	0.14
13	0.67	1.1	0.58	1.2	0.67	6.1	1.9	0.64	9.5	0.00	0.78	0.05
14	0.50	0.87	1.3	1.0	1.2	5.6	1.9	0.78	2.3	0.00	0.82	0.01
15	0.48	1.1	1.3	1.3	1.4	3.3	1.8	0.74	1.1	0.00	0.68	0.00
16	0.45	1.1	1.1	4.2	1.3	2.9	1.7	0.95	0.80	0.00	0.37	0.00
17	0.34	1.0	1.2	7.3	1.3	2.7	1.6	1.2	0.64	0.00	0.16	0.00
18	0.17	0.91	1.2	2.9	1.2	2.4	1.8	1.1	0.56	0.25	0.54	0.00
19	0.10	0.86	1.3	2.1	0.94	2.5	2.0	1.0	0.63	0.00	0.34	0.00
20	0.06	0.70	1.1	1.7	1.3	2.4	2.0	0.73	0.42	0.00	0.19	0.00
21	0.10	0.85	1.3	1.4	1.1	2.0	2.0	0.47	0.35	0.00	2.8	0.00
22	0.13	1.1	1.4	1.2	0.89	1.9	1.5	0.27	0.49	0.00	1.3	0.00
23	0.07	0.96	1.2	1.2	3.7	2.2	1.1	0.19	0.30	0.00	0.99	71
24	0.04	0.98	0.95	1.4	7.3	23	1.3	0.15	0.28	0.00	0.88	9.6
25	0.01	0.93	1.4	1.4	5.5	13	1.2	0.17	0.21	3.4	0.73	3.3
26	0.00	1.00	1.3	1.3	4.1	3.4	1.5	13	0.08	2.5	0.49	11
27	0.00	1.1	1.3	1.0	2.0	3.0	1.6	2.5	0.01	1.8	0.27	3.3
28	0.00	1.1	1.4	1.1	1.6	2.7	1.4	1.3	17	20	0.17	5.8
29	0.00	0.92	1.1	1.2	2.1	2.4	1.5	0.77	1.9	7.8	0.10	6.8
30	0.00	1.1	0.79	1.2	---	2.3	1.2	0.78	7.3	3.4	0.02	3.1
31	0.00	---	0.61	1.2	---	2.3	---	0.57	---	2.1	0.00	---
TOTAL	23.03	41.48	32.67	45.72	50.97	1,135.7	250.4	34.88	59.67	47.55	66.94	119.98
MEAN	0.74	1.38	1.05	1.47	1.76	36.6	8.35	1.13	1.99	1.53	2.16	4.00
MAX	12	8.1	1.4	7.3	7.3	551	170	13	17	20	26	71
MIN	0.00	0.00	0.23	0.44	0.67	1.7	1.1	0.15	0.01	0.00	0.00	0.00
AC-FT	46	82	65	91	101	2,250	497	69	118	94	133	238

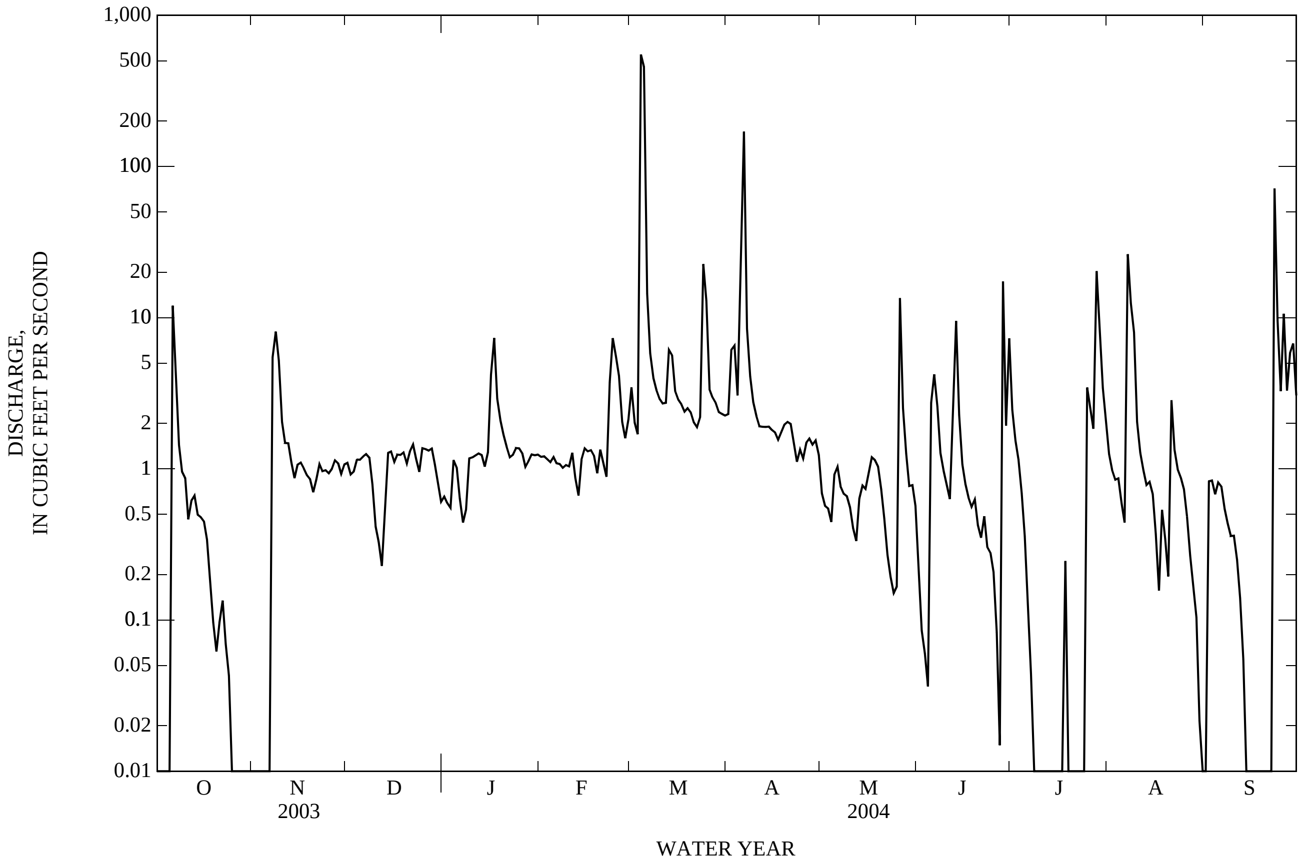
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	9.17	2.38	1.53	1.43	3.18	3.31	9.04	36.8	24.2	7.01	20.4	14.1
MAX	96.9	18.8	5.92	5.55	58.3	36.6	88.3	253	252	66.0	316	214
(WY)	(1956)	(1985)	(1985)	(1983)	(1957)	(2004)	(1957)	(1957)	(1967)	(1959)	(1972)	(1980)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1955)	(1955)	(1954)	(1955)	(1965)	(1954)	(1955)	(1967)	(1953)	(1954)	(1956)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004h	
ANNUAL TOTAL	461.48		1,908.99			
ANNUAL MEAN	1.26		5.22		11.3	
HIGHEST ANNUAL MEAN					38.5	1957
LOWEST ANNUAL MEAN					1.14	1970
HIGHEST DAILY MEAN	80	Jun 5	551	Mar 4	6,990	Aug 14, 1972
LOWEST DAILY MEAN	0.00	May 9	0.00	Oct 1	0.00	Apr 1, 1953
ANNUAL SEVEN-DAY MINIMUM	0.00	May 9	0.00	Oct 26	0.00	Apr 1, 1953
MAXIMUM PEAK FLOW			2,230	Mar 5	20,700	Aug 14, 1972
MAXIMUM PEAK STAGE			a17.79	Mar 5	a31.28	Aug 14, 1972
ANNUAL RUNOFF (AC-FT)	915		3,790		8,170	
10 PERCENT EXCEEDS	2.2		4.1		3.9	
50 PERCENT EXCEEDS	0.62		1.1		0.60	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

h See Period of Record paragraph.
a From floodmark.
e Estimated
& Value was computed from affected unit values

08120500 Deep Creek near Dunn, TX—Continued



08121000 Colorado River at Colorado City, TX

LOCATION.--Lat 32°23'33", long 100°52'42", Mitchell County, Hydrologic Unit 12080002, on right bank at Colorado City, 3,517 ft upstream from bridge on State Highway 377, 4,100 ft upstream from the Texas and Pacific Railroad Company bridge, 1.3 mi downstream from bridge on Interstate Highway 20 and U.S. Highway 80, 1.6 mi upstream from Lone Wolf Creek, and at mile 796.3.

DRAINAGE AREA.--3,966 mi^2 of which 2,381 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Nov. 1923 to Aug. 1925 (published as "at Colorado"), May 1946 to current year.

REVISED RECORDS.--WSP 1512: 1946(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,030.16 ft above NGVD of 1929. Nov. 28, 1923, to Aug. 31, 1925, nonrecording gage at site 1.4 mi downstream at different datum. May 9 to Aug. 5, 1946, nonrecording gage at site 185 ft upstream at present datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since water year 1952, at least 10% of contributing drainage area has been regulated. The Colorado River Municipal Water District diverts low flow into an off channel reservoir 3 mi upstream for brine disposal. There are numerous diversions from Lake J.B. Thomas for municipal use and oil field operations. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--5 years (water years 1947-51) prior to completion of Lake J.B. Thomas, 102 ft^3/s (73,660 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1910, 35.9 ft, June 20, 1939, present site and datum, based on floodmarks 1,000 ft upstream and 3,740 ft downstream from gage; discharge, 66,000 ft^3/s, by slope-area measurement of peak flow at site 2.5 mi upstream from gage.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1947-1951: Maximum discharge, 24,900 ft^3/s, July 6, 1948, gage height, 22.37 ft, from floodmark; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	0.12	0.09	1.8	0.62	0.83	0.33	0.24	0.04	1.3	17	44
2	0.04	0.15	0.13	2.9	0.62	0.43	5.3	0.12	0.02	0.06	10	5.5
3	0.04	0.15	0.14	2.6	0.62	0.54	1.7	0.07	0.04	0.02	6.5	0.11
4	0.04	0.13	0.13	0.51	0.62	18	0.79	0.06	0.09	0.01	3.7	0.05
5	1.6	0.09	0.11	0.24	0.63	468	8.3	0.06	0.07	0.00	2.5	0.03
6	11	0.13	0.12	0.15	0.62	925	152	0.08	0.04	0.00	1.6	0.44
7	108	0.34	0.14	0.15	0.62	551	360	0.08	0.03	2.8	29	0.74
8	87	0.20	0.14	0.17	4.7	70	112	0.08	0.02	0.10	181	0.03
9	39	0.15	0.15	0.14	6.6	40	52	0.08	0.02	0.02	160	0.02
10	24	0.17	0.12	0.15	1.0	8.1	30	0.07	0.02	0.01	467	0.02
11	15	0.18	0.13	0.16	0.41	1.3	23	0.03	0.04	0.00	356	0.02
12	9.8	0.39	0.15	0.19	0.39	6.5	15	0.03	0.08	0.00	58	0.02
13	7.2	0.15	0.17	0.21	0.24	1.7	1.00	0.03	0.06	0.00	32	0.02
14	5.2	0.15	0.15	0.39	0.29	13	0.36	0.02	6.2	0.00	24	0.02
15	3.4	0.15	0.17	0.70	0.27	19	0.85	0.03	0.99	0.00	18	0.01
16	2.8	0.15	0.11	0.95	0.26	1.6	0.26	0.03	0.17	0.00	21	0.00
17	0.24	0.15	0.09	0.81	0.28	1.0	0.33	0.04	0.08	0.00	11	0.01
18	0.09	0.16	0.11	0.89	0.30	1.1	1.1	0.03	0.05	0.02	21	0.01
19	0.09	0.12	0.11	0.70	0.29	0.84	0.26	0.03	0.02	0.01	26	0.01
20	0.08	0.11	0.12	0.53	0.26	0.74	0.17	0.03	0.02	0.00	61	0.01
21	0.07	0.11	0.15	0.38	0.31	1.2	2.3	0.02	7.6	0.00	23	0.01
22	0.06	0.13	0.18	0.58	3.9	1.7	0.44	0.01	0.42	0.00	13	0.01
23	0.06	0.13	0.24	2.2	9.0	1.2	0.17	0.01	0.18	0.00	8.9	0.01
24	0.06	0.07	0.19	9.1	1.6	19	0.13	0.01	0.13	0.00	8.6	0.01
25	0.06	0.06	0.15	8.8	1.2	96	0.11	0.01	0.09	0.00	8.0	3.1
26	e0.08	0.06	0.17	7.6	0.67	180	0.10	1.0	0.26	0.00	4.9	0.24
27	0.09	0.07	0.17	1.1	0.47	35	0.10	1.3	0.76	15	3.5	3.5
28	0.09	0.05	0.15	0.69	9.0	23	0.10	0.17	0.24	11	3.0	28
29	0.09	0.06	0.10	0.62	4.4	17	0.11	6.9	0.71	23	2.6	29
30	0.10	0.06	0.12	0.62	---	12	1.1	0.49	16	52	4.3	47
31	0.12	---	0.13	0.62	---	1.3	---	0.10	---	32	2.3	---
TOTAL	315.54	4.14	4.33	46.65	50.19	2,516.08	769.41	11.26	34.49	137.35	1,588.4	161.95
MEAN	10.2	0.14	0.14	1.50	1.73	81.2	25.6	0.36	1.15	4.43	51.2	5.40
MAX	108	0.39	0.24	9.1	9.0	925	360	6.9	16	52	467	47
MIN	0.04	0.05	0.09	0.14	0.24	0.43	0.10	0.01	0.02	0.00	1.6	0.00
AC-FT	626	8.2	8.6	93	100	4,990	1,530	22	68	272	3,150	321

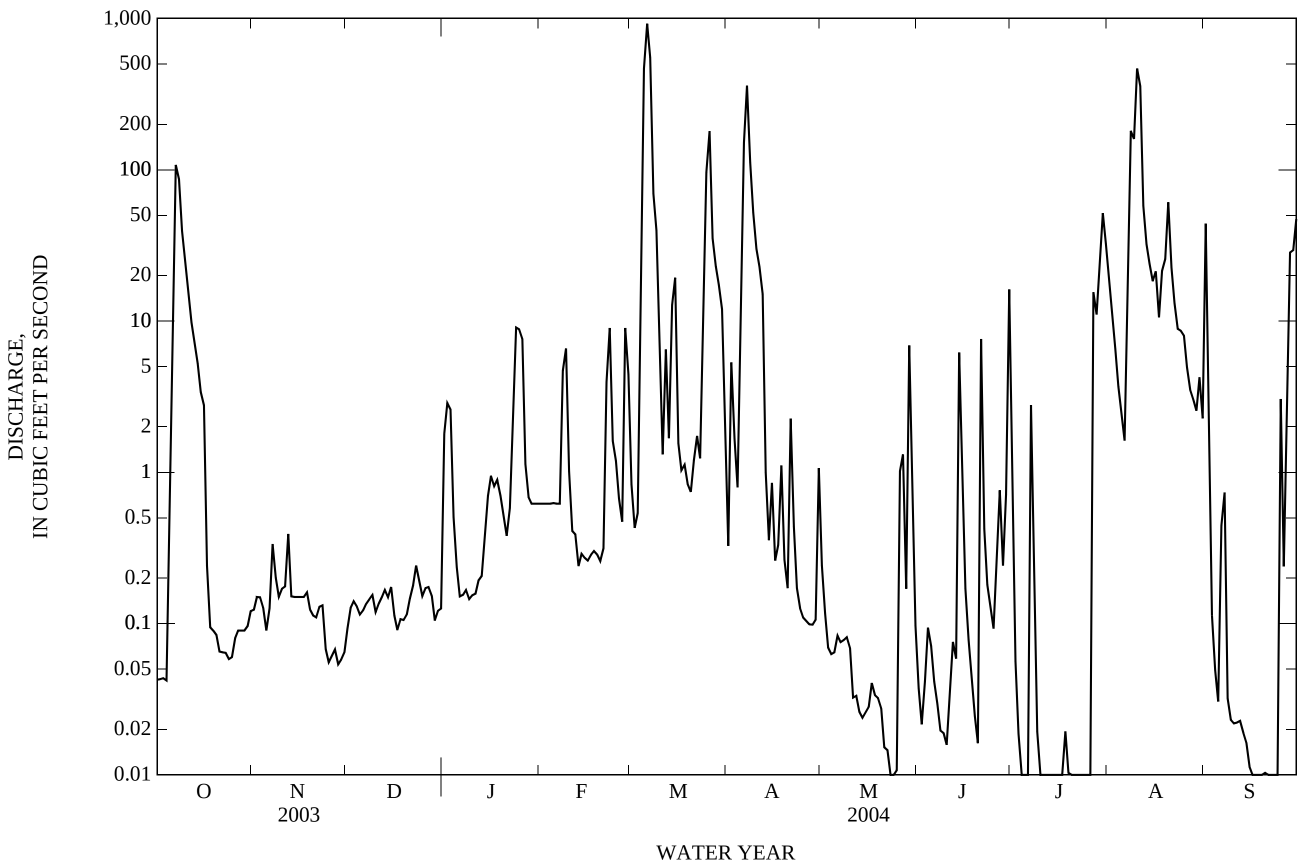
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.4	7.48	5.14	4.01	9.14	19.6	33.2	89.1	76.2	19.5	36.9	51.6
MAX	339	61.1	49.6	33.6	99.0	595	332	1,047	745	197	684	817
(WY)	(1987)	(1985)	(1992)	(1992)	(1957)	(2000)	(1957)	(1957)	(1982)	(1961)	(1971)	(1962)
MIN	0.00	0.00	0.03	0.05	0.06	0.00	0.01	0.00	0.00	0.00	0.00	0.00
(WY)	(1969)	(1956)	(1955)	(1971)	(1971)	(1956)	(1955)	(1970)	(1953)	(1974)	(1954)	(1954)

08121000 Colorado River at Colorado City, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1952 - 2004z	
ANNUAL TOTAL	3,647.17		5,639.79			
ANNUAL MEAN	9.99		15.4		32.2	
HIGHEST ANNUAL MEAN					143	1957
LOWEST ANNUAL MEAN					0.34	1998
HIGHEST DAILY MEAN	762	Jun 6	925	Mar 6	9,560	May 25, 1957
LOWEST DAILY MEAN	0.00	May 2	0.00	Jul 5	0.00	Oct 1, 1951
ANNUAL SEVEN-DAY MINIMUM	0.00	May 2	0.00	Jul 11	0.00	Oct 1, 1951
MAXIMUM PEAK FLOW			1,100	Mar 5	17,700	Mar 24, 2000
MAXIMUM PEAK STAGE			12.58	Mar 5	28.58	Mar 24, 2000
ANNUAL RUNOFF (AC-FT)	7,230		11,190		23,300	
10 PERCENT EXCEEDS	4.3		23		23	
50 PERCENT EXCEEDS	0.12		0.22		0.43	
90 PERCENT EXCEEDS	0.01		0.02		0.00	

z Period of regulated streamflow.
e Estimated



08121000 Colorado River at Colorado City, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: May 1946 to Sept. 1954, Nov. 1956 to July 2003.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1946 to Sept. 1954 and Nov. 1956 to Oct. 2003 (local observer), Nov. 2003 to Sept. 2004 (discontinued).
WATER TEMPERATURE: Nov. 1952 to Sept. 1954 and Nov. 1956 to Oct. 2003 (local observer), Nov. 2003 to Sept. 2004 (discontinued).

INSTRUMENTATION.--Water-quality monitor Nov. 8, 2003 to Sept. 30, 2004 (discontinued).

REMARKS.--Specific conductance record fair. Water temperature record good. Interruptions in the record were due to malfunction of the instrument and to no flow. No flow for several days. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using the daily (or continuous) records of specific conductance and a regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 76,000 microsiemens/cm, Sept. 21, 1998; minimum daily, 240 microsiemens/cm, Sept. 29, 1980.
WATER TEMPERATURE: Maximum daily, 39.0°C, July 21, 1995; minimum daily, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 37,300 microsiemens/cm, Jan. 1; minimum recorded, 315 microsiemens/cm, Mar. 6.
WATER TEMPERATURE: Maximum, 36.8°C, July 19; minimum, 0.9°C, Jan. 6.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

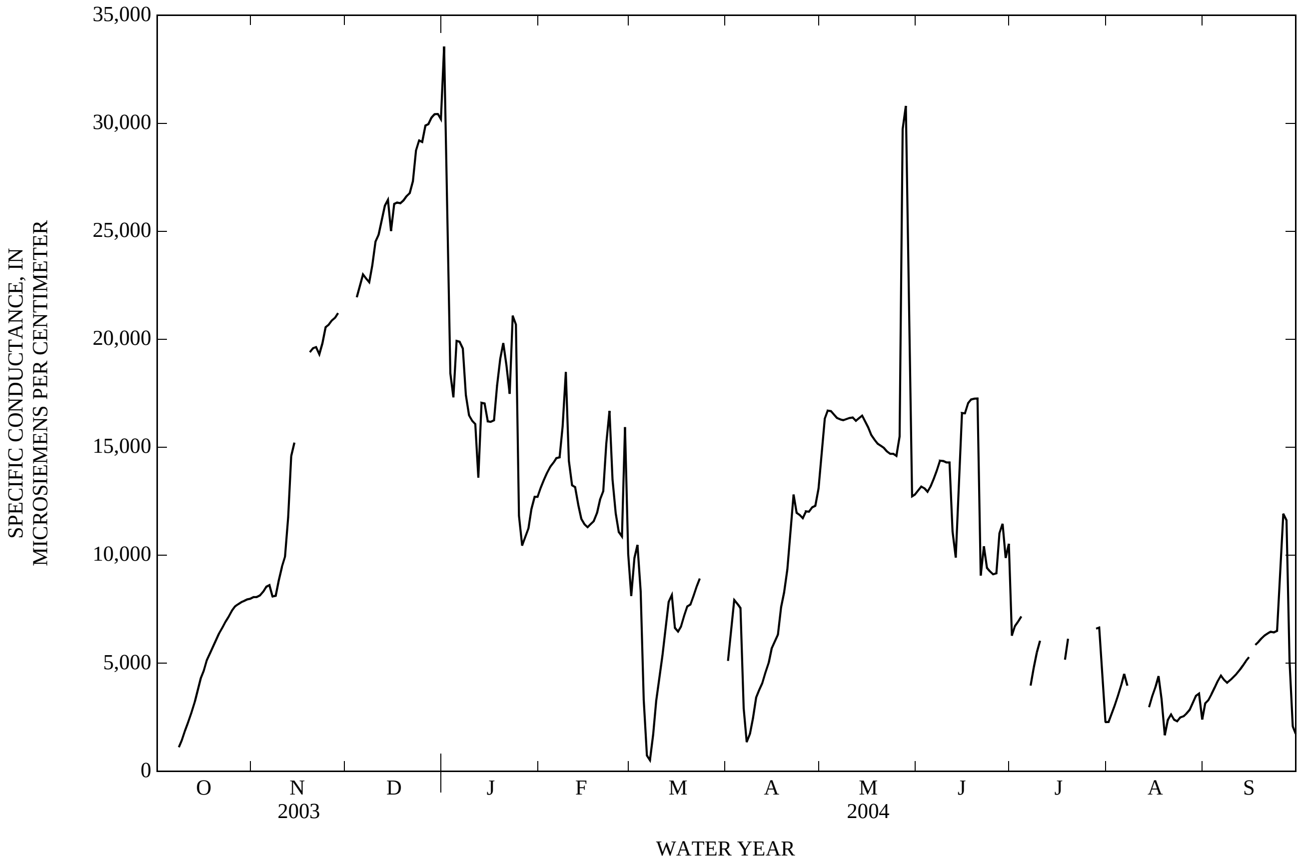
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	8,090	8,020	8,060	---	---	---	37,300	29,900	33,600
2	---	---	---	8,110	8,000	8,060	---	---	---	36,000	19,400	24,700
3	---	---	---	8,250	8,060	8,140	---	21,200	---	23,200	16,200	18,400
4	---	---	---	8,420	8,250	8,300	22,300	21,700	21,900	18,700	16,700	17,300
5	---	---	---	8,660	8,410	8,530	22,900	21,900	22,400	20,500	18,700	19,900
6	---	---	---	8,730	7,540	8,610	23,300	22,800	23,000	20,200	19,500	19,900
7	---	1,600	---	8,920	7,360	8,090	23,400	22,300	22,800	20,300	18,500	19,600
8	1,600	924	1,110	8,590	7,490	8,120	22,900	22,400	22,600	18,500	16,800	17,400
9	1,710	1,240	1,450	9,090	8,550	8,820	24,200	22,800	23,400	16,800	16,100	16,500
10	2,060	1,710	1,890	9,800	9,090	9,460	24,800	24,100	24,500	16,500	15,100	16,200
11	2,500	2,060	2,260	10,200	9,800	9,920	25,200	24,200	24,800	16,500	14,500	16,100
12	2,890	2,500	2,700	13,600	10,200	11,800	26,000	25,100	25,500	16,600	11,200	13,600
13	3,440	2,890	3,150	15,300	13,600	14,600	26,800	25,600	26,200	17,400	16,600	17,100
14	4,000	3,440	3,720	15,400	14,900	15,200	27,200	25,200	26,400	17,400	16,200	17,000
15	4,410	4,000	4,290	---	---	---	26,300	22,700	25,000	16,800	14,800	16,200
16	4,960	4,400	4,660	---	---	---	26,400	25,900	26,300	16,800	14,700	16,200
17	5,310	4,960	5,140	---	---	---	26,700	25,900	26,300	16,800	15,900	16,200
18	5,610	5,310	5,460	---	---	---	26,500	26,000	26,300	18,800	16,800	17,800
19	5,950	5,610	5,790	19,700	19,200	19,400	26,700	25,900	26,400	19,500	18,700	19,100
20	6,270	5,950	6,110	19,700	19,400	19,600	26,800	26,200	26,600	20,100	19,400	19,800
21	6,550	6,270	6,400	19,800	19,400	19,600	27,100	26,400	26,800	20,100	17,600	18,800
22	6,830	6,550	6,670	19,800	18,700	19,300	27,900	26,900	27,300	19,800	15,800	17,500
23	7,080	6,830	6,930	20,400	19,100	19,800	29,300	27,900	28,700	25,200	19,800	21,100
24	7,280	7,080	7,170	20,800	20,200	20,600	29,500	28,800	29,200	28,500	13,400	20,700
25	7,570	7,280	7,430	20,800	20,400	20,700	29,500	28,900	29,100	13,400	10,700	11,800
26	7,710	7,570	7,620	21,100	20,600	20,900	30,200	29,400	29,900	10,700	10,200	10,400
27	7,800	7,680	7,730	21,300	20,600	21,000	30,200	29,600	30,000	11,100	10,600	10,800
28	7,870	7,780	7,830	21,400	20,800	21,200	30,700	29,900	30,300	11,500	11,100	11,200
29	7,940	7,820	7,880	---	---	---	30,800	29,800	30,400	12,700	11,500	12,100
30	8,000	7,920	7,960	---	---	---	30,700	30,000	30,400	12,800	12,600	12,700
31	8,060	7,920	7,990	---	---	---	30,600	29,700	30,200	12,900	12,500	12,700
MONTH	8,060	924	5,390	21,400	7,360	14,100	30,800	21,200	26,500	37,300	10,200	17,200

08121000 Colorado River at Colorado City, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13,400	12,900	13,100	8,980	7,690	8,110	5,470	4,830	5,110	15,900	13,800	14,800
2	13,800	13,300	13,500	10,400	8,980	9,880	8,130	5,090	6,570	16,700	15,900	16,300
3	14,000	13,700	13,800	10,600	10,100	10,500	8,180	7,580	7,930	17,000	16,200	16,700
4	14,200	13,900	14,100	10,500	2,650	8,330	7,880	7,590	7,760	17,000	16,200	16,700
5	14,500	14,000	14,300	5,950	325	3,320	8,420	1,850	7,550	16,900	16,000	16,500
6	14,700	14,300	14,500	1,200	315	723	4,240	1,690	2,910	16,600	15,900	16,300
7	14,700	14,300	14,500	878	395	510	1,760	967	1,350	16,500	15,800	16,300
8	20,400	14,500	16,000	2,560	878	1,690	1,870	1,320	1,720	16,500	15,900	16,300
9	21,000	15,400	18,500	3,840	2,560	3,250	3,220	1,630	2,450	16,500	16,000	16,300
10	15,400	13,800	14,400	4,770	3,840	4,290	3,600	3,220	3,410	16,700	15,900	16,400
11	13,900	13,000	13,200	5,960	4,770	5,350	3,910	3,600	3,750	16,800	16,000	16,400
12	13,400	13,000	13,200	8,010	5,700	6,690	4,280	3,910	4,080	16,500	15,900	16,200
13	13,000	11,900	12,300	8,050	7,600	7,840	4,770	4,280	4,550	16,700	15,900	16,300
14	11,900	11,500	11,700	9,550	7,560	8,150	5,270	4,770	5,000	16,800	16,000	16,500
15	11,600	11,000	11,400	7,560	6,350	6,640	5,960	5,270	5,680	16,500	15,800	16,200
16	11,500	11,100	11,300	6,570	6,360	6,470	6,220	5,750	6,000	16,200	15,600	15,900
17	11,700	11,100	11,400	6,930	6,550	6,700	6,560	6,210	6,310	15,900	15,200	15,600
18	11,700	11,400	11,600	7,590	6,930	7,210	7,940	6,560	7,600	15,700	14,900	15,300
19	12,300	11,700	12,000	7,700	7,530	7,630	8,820	7,850	8,290	15,500	14,800	15,200
20	12,800	12,300	12,600	7,920	7,600	7,720	9,680	8,820	9,340	15,400	14,700	15,100
21	13,200	12,700	13,000	8,370	7,920	8,120	12,900	9,680	10,900	15,400	14,700	15,000
22	18,600	13,200	15,200	8,760	8,360	8,560	13,500	12,000	12,800	15,100	14,500	14,800
23	21,200	13,400	16,700	10,100	8,580	8,920	12,300	11,600	12,000	15,000	14,400	14,700
24	14,000	12,700	13,500	---	---	---	12,100	11,500	11,900	15,000	14,400	14,700
25	12,700	11,300	11,900	---	---	---	12,200	11,300	11,700	14,900	14,300	14,600
26	11,600	10,400	11,100	---	---	---	12,200	11,700	12,000	25,600	13,900	15,500
27	11,000	10,500	10,900	---	---	---	12,200	11,800	12,000	31,400	25,600	29,700
28	20,400	10,800	15,900	---	---	---	12,300	12,100	12,200	31,400	30,100	30,800
29	15,200	7,040	10,100	---	---	---	12,500	12,000	12,300	31,000	12,900	20,500
30	---	---	---	---	---	---	13,800	12,500	13,100	12,900	12,500	12,700
31	---	---	---	---	---	---	---	---	---	13,100	12,600	12,800
MONTH	21,200	7,040	13,300	10,600	315	6,370	13,800	967	7,610	31,400	12,500	16,700
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13,200	12,600	13,000	6,520	6,060	6,270	2,480	2,120	2,280	3,380	2,620	3,150
2	13,700	12,900	13,200	6,910	6,290	6,730	2,880	2,480	2,660	3,450	3,250	3,290
3	13,900	12,100	13,100	7,140	6,840	6,930	3,180	2,880	3,060	3,690	3,450	3,560
4	13,100	12,700	12,900	7,210	7,120	7,170	3,670	3,180	3,480	4,000	3,690	3,860
5	13,600	13,000	13,200	---	---	---	4,270	3,670	3,960	4,310	4,000	4,170
6	13,800	13,300	13,500	---	---	---	4,820	4,270	4,510	4,560	4,300	4,430
7	14,400	13,800	13,900	8,010	2,280	3,960	5,150	1,980	3,960	4,560	4,040	4,230
8	14,600	14,100	14,400	5,260	3,810	4,800	4,190	---	---	4,180	4,050	4,090
9	14,600	14,000	14,400	5,860	5,260	5,500	2,410	---	---	4,310	4,180	4,220
10	14,600	14,000	14,300	6,190	5,980	6,040	2,090	---	---	4,450	4,300	4,360
11	14,700	12,700	14,300	---	---	---	---	---	---	4,610	4,450	4,510
12	13,500	9,340	11,100	---	---	---	---	---	---	4,800	4,610	4,680
13	10,100	9,450	9,890	---	---	---	2,610	---	---	5,030	4,800	4,890
14	20,000	9,950	13,300	---	---	---	3,190	2,610	2,960	5,230	5,030	5,090
15	18,000	16,000	16,600	---	---	---	3,730	3,190	3,470	5,340	5,230	5,280
16	17,000	16,300	16,600	---	---	---	4,030	3,730	3,870	---	---	---
17	17,400	16,800	17,000	---	---	---	4,760	3,980	4,400	5,940	5,780	5,850
18	17,500	16,800	17,200	8,100	4,380	5,160	5,020	469	3,330	6,090	5,910	5,980
19	17,600	16,800	17,300	7,040	4,890	6,130	2,260	1,140	1,670	6,220	6,120	6,150
20	17,600	16,900	17,300	---	---	---	2,560	2,180	2,380	6,360	6,220	6,290
21	17,200	2,180	9,060	---	---	---	2,660	2,560	2,630	6,440	6,350	6,390
22	11,200	9,590	10,400	---	---	---	2,590	2,250	2,380	6,490	6,430	6,460
23	9,600	9,220	9,420	---	---	---	2,420	2,260	2,310	6,510	6,350	6,430
24	9,390	9,100	9,250	---	---	---	2,560	2,420	2,490	6,550	6,430	6,490
25	9,230	8,950	9,120	---	---	---	2,620	2,490	2,540	11,400	6,570	8,980
26	9,320	8,960	9,160	---	---	---	2,710	2,620	2,670	12,200	11,400	11,900
27	11,400	9,320	11,000	8,670	---	---	3,010	2,690	2,840	12,800	11,200	11,600
28	11,700	10,700	11,500	6,970	6,140	6,600	3,370	3,010	3,160	12,800	2,520	5,090
29	12,100	4,000	9,880	13,300	1,960	6,650	3,600	3,370	3,490	2,520	1,910	2,090
30	16,400	6,490	10,500	8,040	2,770	4,440	3,770	2,820	3,590	2,240	1,450	1,740
31	---	---	---	2,770	2,100	2,270	2,820	2,230	2,390	---	---	---
MONTH	20,000	2,180	12,900	13,300	1,960	5,620	5,150	469	3,060	12,800	1,450	5,350
YEAR	37,300	315	11,700									

08121000 Colorado River at Colorado City, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

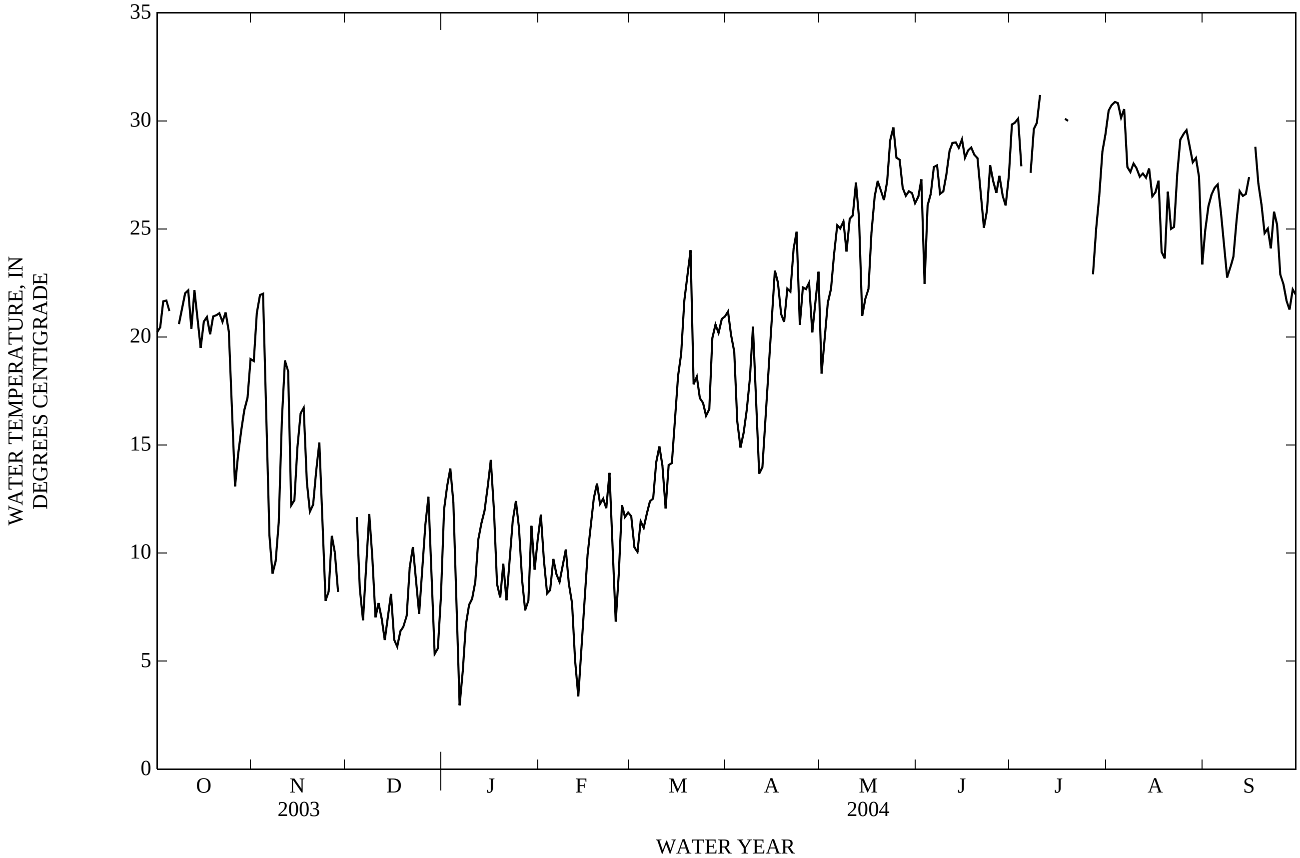
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	24.3	17.9	20.2	22.5	16.4	18.9	---	---	---	14.5	9.6	12.0
2	26.3	16.4	20.4	25.1	18.9	21.1	---	---	---	16.3	10.3	13.1
3	27.6	17.8	21.6	26.2	19.5	21.9	16.0	---	---	16.7	11.2	13.9
4	25.5	19.2	21.7	26.1	18.9	22.0	15.7	8.3	11.7	14.8	8.5	12.3
5	25.8	19.2	21.2	18.9	13.0	16.1	11.0	6.1	8.4	8.9	4.5	6.7
6	---	---	---	13.0	8.9	10.8	10.3	4.2	6.9	5.4	0.9	3.0
7	22.4	---	---	9.8	8.5	9.1	13.9	6.0	9.4	8.5	1.5	4.6
8	21.6	19.9	20.6	10.4	8.9	9.6	15.7	8.7	11.8	10.8	2.9	6.7
9	22.9	20.1	21.3	12.6	10.2	11.4	12.3	6.5	9.8	12.6	3.8	7.6
10	22.9	21.2	22.0	20.9	12.5	16.2	11.1	4.0	7.0	12.3	4.5	7.9
11	23.4	21.5	22.2	22.5	16.7	18.9	12.0	4.6	7.7	12.7	5.4	8.7
12	21.7	19.4	20.4	21.5	14.7	18.4	7.8	5.2	7.0	13.6	8.6	10.6
13	25.7	19.4	22.2	14.7	11.0	12.2	10.1	3.0	6.0	15.0	8.0	11.4
14	23.6	18.1	20.8	14.3	10.8	12.4	11.2	3.8	7.0	15.9	8.4	12.0
15	22.4	16.2	19.5	18.1	12.5	14.9	11.3	6.2	8.1	13.6	12.5	13.1
16	24.3	17.1	20.7	21.2	12.7	16.5	9.4	3.6	6.0	15.8	13.4	14.3
17	24.9	17.6	20.9	18.1	14.6	16.7	10.0	2.5	5.7	14.3	9.1	12.0
18	25.5	15.5	20.1	16.0	10.8	13.3	10.6	3.7	6.4	10.1	7.2	8.6
19	26.3	16.5	20.9	16.8	8.4	11.9	11.2	3.5	6.6	12.1	4.3	7.9
20	26.1	16.9	21.0	16.8	8.6	12.2	11.5	3.8	7.1	14.3	6.0	9.5
21	26.6	16.8	21.1	18.6	10.3	13.8	13.7	6.2	9.3	12.6	3.4	7.8
22	25.7	16.5	20.7	18.8	12.5	15.1	13.7	8.6	10.3	15.4	6.0	9.8
23	27.0	16.7	21.1	15.0	7.9	11.8	11.8	6.2	8.9	12.9	9.8	11.5
24	25.3	16.5	20.3	11.7	5.1	7.8	9.4	4.6	7.2	13.5	11.1	12.4
25	19.2	12.5	16.4	11.7	5.7	8.2	13.0	6.3	9.1	13.3	8.9	11.2
26	16.4	11.6	13.1	14.8	8.3	10.8	15.4	8.4	11.3	11.0	6.9	8.7
27	21.1	9.6	14.6	13.2	7.6	10.0	15.2	10.1	12.6	11.3	3.8	7.3
28	20.7	11.8	15.7	12.9	5.1	8.2	10.4	5.3	8.6	12.0	3.8	7.8
29	21.7	12.9	16.6	---	---	---	9.4	2.4	5.3	15.7	8.3	11.3
30	20.6	14.9	17.2	---	---	---	9.8	2.6	5.6	13.3	5.9	9.2
31	23.9	15.6	19.0	---	---	---	12.6	4.7	8.0	14.9	7.6	10.6
MONTH	27.6	9.6	19.8	26.2	5.1	13.9	16.0	2.4	8.2	16.7	0.9	9.8

08121000 Colorado River at Colorado City, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	14.9	9.7	11.8	16.8	7.1	11.7	27.8	15.5	21.2	22.5	14.8	18.3
2	14.2	5.9	9.7	12.5	9.5	10.3	22.8	18.2	20.1	28.6	13.1	20.0
3	10.8	6.3	8.1	10.9	9.2	10.1	23.4	16.4	19.3	28.9	15.4	21.6
4	10.4	6.8	8.3	13.7	7.5	11.5	18.0	14.9	16.1	30.3	16.1	22.2
5	14.7	6.2	9.7	12.3	9.7	11.2	16.8	13.7	14.9	32.3	17.2	23.8
6	13.1	5.7	9.0	13.2	10.6	11.8	17.8	13.2	15.6	33.2	19.7	25.2
7	14.0	4.2	8.7	13.7	11.4	12.4	18.9	14.4	16.6	32.0	20.8	25.0
8	12.3	6.8	9.4	14.5	10.6	12.5	20.1	15.9	18.1	32.9	20.8	25.3
9	11.9	8.3	10.2	17.7	11.5	14.2	23.5	18.1	20.5	30.5	20.4	23.9
10	9.7	7.8	8.6	18.9	11.2	14.9	20.1	15.2	17.4	33.7	20.2	25.5
11	8.4	7.0	7.7	16.0	12.2	14.0	15.2	12.3	13.7	33.7	20.5	25.6
12	7.2	3.6	5.0	12.9	11.2	12.1	18.0	10.6	14.0	35.1	21.9	27.1
13	4.7	2.5	3.4	18.3	11.3	14.1	22.6	10.0	15.8	33.5	18.5	25.5
14	11.0	1.2	5.6	14.6	13.6	14.2	25.2	12.3	18.2	30.0	14.9	21.0
15	14.0	2.9	8.1	19.8	13.5	16.3	28.2	15.3	20.8	29.0	15.9	21.7
16	15.5	5.2	9.9	23.3	13.8	18.2	29.9	17.7	23.1	26.7	18.7	22.2
17	17.6	6.3	11.4	25.0	14.5	19.2	26.9	18.8	22.5	33.8	17.9	24.8
18	18.5	8.0	12.5	28.4	16.5	21.7	24.0	19.2	21.1	34.2	20.7	26.5
19	18.2	10.5	13.2	28.2	18.9	22.8	24.6	18.5	20.7	34.9	21.3	27.2
20	16.4	8.9	12.3	31.0	20.0	24.0	27.6	17.9	22.2	33.1	21.6	26.8
21	17.2	9.1	12.5	20.7	15.4	17.8	26.5	18.0	22.1	32.9	21.5	26.3
22	13.6	10.0	12.1	23.4	15.1	18.2	30.7	19.2	24.1	34.6	21.8	27.2
23	15.9	11.9	13.7	18.6	15.9	17.2	31.6	21.0	24.9	35.3	22.8	29.1
24	13.9	6.7	10.8	25.6	5.1	16.9	25.5	16.9	20.6	34.5	22.8	29.7
25	9.3	5.2	6.8	22.8	7.1	16.3	30.4	16.6	22.3	34.5	23.4	28.3
26	16.3	3.3	9.0	18.0	15.1	16.7	28.1	18.0	22.2	34.8	22.6	28.2
27	18.4	7.1	12.2	23.5	17.6	19.9	28.2	17.3	22.5	31.2	23.5	26.9
28	12.8	10.8	11.7	24.0	18.1	20.6	23.1	18.2	20.2	34.6	20.0	26.5
29	14.6	9.7	11.9	24.1	16.8	20.2	28.0	16.5	21.5	30.8	24.1	26.7
30	---	---	---	25.2	16.9	20.8	28.1	19.7	23.0	32.0	23.4	26.7
31	---	---	---	26.2	16.1	20.9	---	---	---	33.0	20.3	26.2
MONTH	18.5	1.2	9.8	31.0	5.1	16.2	31.6	10.0	19.8	35.3	13.1	25.2
		JUNE			JULY			AUGUST			SEPTEMBER	
1	33.4	20.5	26.5	35.3	25.9	29.8	33.5	27.8	30.5	27.7	22.8	24.9
2	34.8	21.5	27.3	35.9	25.7	29.9	34.5	27.3	30.7	31.4	21.8	26.1
3	26.2	20.1	22.5	36.0	25.6	30.1	34.8	27.3	30.9	31.9	22.6	26.6
4	33.3	20.4	26.1	31.2	25.2	27.9	35.5	26.6	30.8	32.4	22.9	26.9
5	33.3	21.6	26.6	---	---	---	33.6	26.9	30.1	31.0	23.9	27.1
6	35.3	21.9	27.9	---	---	---	35.5	27.3	30.5	29.0	23.0	25.8
7	33.7	23.4	27.9	33.7	22.2	27.6	32.2	22.8	27.9	28.1	20.7	24.1
8	32.3	22.4	26.6	35.3	25.2	29.6	30.3	22.1	27.6	27.8	18.1	22.7
9	32.0	23.0	26.7	35.5	25.7	29.9	29.9	25.6	28.0	29.6	17.7	23.2
10	33.3	23.6	27.5	35.8	25.2	31.2	29.7	25.8	27.8	30.2	18.4	23.7
11	33.6	23.9	28.6	---	---	---	28.9	26.0	27.4	31.6	20.3	25.4
12	35.9	24.3	29.0	---	---	---	29.8	25.7	27.6	33.0	22.1	26.8
13	36.6	22.9	29.0	---	---	---	30.5	24.4	27.4	31.9	22.5	26.5
14	32.8	24.4	28.7	---	---	---	30.0	25.8	27.8	33.0	22.1	26.6
15	33.9	25.4	29.1	---	---	---	28.1	24.8	26.5	34.7	22.9	27.4
16	33.4	24.5	28.3	---	---	---	30.1	24.2	26.7	---	---	---
17	33.4	25.1	28.6	---	---	---	31.4	24.1	27.2	34.1	23.4	28.8
18	34.5	24.4	28.8	34.9	22.8	30.1	27.4	21.9	23.9	31.5	23.4	27.1
19	34.6	23.1	28.4	36.8	25.1	30.0	28.0	22.7	23.6	30.0	23.4	26.1
20	33.1	23.8	28.3	---	---	---	30.5	25.7	26.7	27.4	23.2	24.8
21	32.3	22.4	26.7	---	---	---	26.3	23.2	25.0	29.5	22.2	25.0
22	28.9	21.7	25.1	---	---	---	29.3	22.0	25.1	26.8	21.6	24.1
23	29.5	22.2	25.8	---	---	---	32.5	23.6	27.6	30.9	21.4	25.8
24	33.4	23.3	27.9	---	---	---	33.4	25.4	29.1	31.2	21.1	25.2
25	32.1	24.7	27.2	---	---	---	33.0	26.3	29.4	26.0	20.9	22.9
26	32.3	22.4	26.7	---	---	---	34.0	25.6	29.6	25.3	20.1	22.5
27	32.5	23.7	27.5	24.0	22.5	22.9	33.0	25.0	28.8	23.1	21.2	21.7
28	29.2	24.6	26.6	29.4	22.3	25.0	31.8	24.8	28.1	22.5	20.2	21.3
29	30.2	22.6	26.1	31.8	21.5	26.5	31.9	25.0	28.3	25.0	20.0	22.2
30	31.7	23.7	27.5	32.2	25.4	28.6	32.0	23.7	27.4	23.1	20.4	22.0
31	---	---	---	32.4	26.2	29.4	24.8	22.1	23.4	---	---	---
MONTH	36.6	20.1	27.3	36.8	21.5	28.6	35.5	21.9	27.8	34.7	17.7	24.9
YEAR	36.8	0.9	19.0									

08121000 Colorado River at Colorado City, TX—Continued



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08123000 Lake Colorado City near Colorado City, TX

LOCATION.--Lat 32°20'41", long 100°55'10", Mitchell County, Hydrologic Unit 12080002, on left bank at municipal water-intake structure, 1.7 mi upstream from Colorado City Dam on Morgan Creek, 2.2 mi downstream from the Texas and Pacific Railway Co. bridge, 2.5 mi upstream from mouth, and 4.0 mi southwest of Colorado City.

DRAINAGE AREA.--345 mi^2 of which 43 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Apr. 1949 to Sept. 2002 (contents), Oct. 2002 to current year. Water-quality records: Chemical data: Dec. 1969 to May 1984.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Aug. 23, 1950, nonrecording gages at or near powerplant about 0.7 mi downstream at same datum. Satellite telemeter at station.

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 4,800 ft long. Storage began in Apr. 1949, and the dam was completed in Sept. 1949. The dam and lake are owned by the Texas Electric Service Co. to operate their thermal electric powerplant. The uncontrolled spillway is an excavated cut channel through natural ground 1,200 ft wide located 600 ft upstream and to the left of left end of dam. The spillway is designed to discharge 150,000 ft^3/s at the maximum design flood elevation. The service spillway is an uncontrolled rectangular drop inlet located 100 ft upstream from dam with two uncontrolled openings of 10.0 by 12.0 ft. The spillway is designed for a maximum discharge of 5,000 ft^3/s. A service outlet is provided for small releases downstream through a 30-inch valve-controlled concrete pipe. Record of pumpage from Champion Creek Reservoir (station 08123600), into Lake Colorado City can be obtained from the Texas Electric Service Co. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	2,090.0
Design flood	2,086.7
Crest of spillway	2,073.7
Crest of service spillway	2,069.6
Lowest gated outlet (invert)	2,024.3

COOPERATION.--Record of diversions for municipal use can be obtained from the city of Colorado City.

EXTREMES FOR PERIOD OF RECORD.--Apr. 1949 to Sept. 2002: Maximum contents, 40,280 acre-ft, Sept. 7, 1962; minimum contents after initial filling, 9,740 acre-ft, Aug. 30, 31 and Sept. 1, 1953; Apr. 1949 to current year: Maximum elevation, 2,075.10 ft, Sept. 7, 1962; minimum elevation, 2,051.30 ft, Aug. 30, 31 and Sept. 1, 1953.

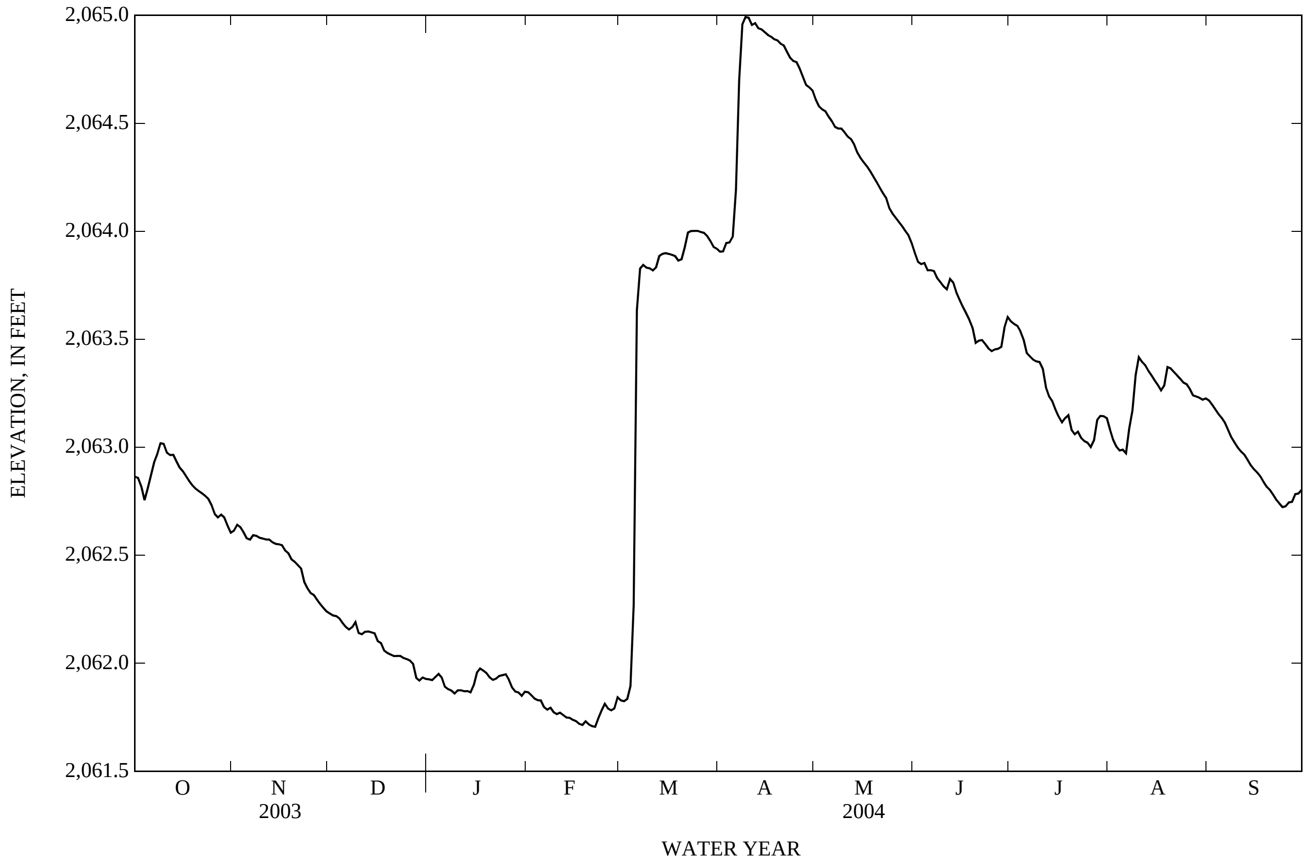
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,065.01 ft, Apr. 9, 10; minimum elevation, 2,061.70 ft, Feb. 21-23.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,062.86	2,062.61	2,062.23	2,061.93	2,061.87	2,061.83	2,063.91	2,064.61	2,063.90	2,063.58	2,063.08	2,063.22
2	2,062.86	2,062.64	2,062.22	2,061.92	2,061.85	2,061.82	2,063.91	2,064.58	2,063.86	2,063.57	2,063.03	2,063.20
3	2,062.82	2,062.63	2,062.22	2,061.94	2,061.84	2,061.84	2,063.95	2,064.57	2,063.85	2,063.56	2,063.00	2,063.17
4	2,062.76	2,062.61	2,062.21	2,061.95	2,061.83	2,061.89	2,063.95	2,064.56	2,063.85	2,063.54	2,062.99	2,063.15
5	2,062.81	2,062.58	2,062.19	2,061.93	2,061.83	2,062.27	2,063.97	2,064.53	2,063.82	2,063.50	2,062.99	2,063.14
6	2,062.87	2,062.57	2,062.17	2,061.89	2,061.80	2,063.64	2,064.19	2,064.51	2,063.82	2,063.44	2,062.97	2,063.11
7	2,062.93	2,062.59	2,062.16	2,061.88	2,061.78	2,063.83	2,064.70	2,064.48	2,063.82	2,063.42	2,063.09	2,063.08
8	2,062.97	2,062.59	2,062.17	2,061.87	2,061.79	2,063.84	2,064.96	2,064.48	2,063.78	2,063.41	2,063.17	2,063.05
9	2,063.02	2,062.58	2,062.19	2,061.86	2,061.77	2,063.83	2,064.99	2,064.48	2,063.76	2,063.40	2,063.33	2,063.02
10	2,063.02	2,062.58	2,062.14	2,061.88	2,061.76	2,063.83	2,064.99	2,064.46	2,063.74	2,063.39	2,063.42	2,063.00
11	2,062.97	2,062.57	2,062.13	2,061.88	2,061.77	2,063.82	2,064.96	2,064.44	2,063.73	2,063.36	2,063.40	2,062.98
12	2,062.96	2,062.57	2,062.15	2,061.87	2,061.76	2,063.83	2,064.96	2,064.43	2,063.78	2,063.28	2,063.38	2,062.97
13	2,062.97	2,062.56	2,062.15	2,061.87	2,061.75	2,063.89	2,064.94	2,064.40	2,063.76	2,063.24	2,063.36	2,062.94
14	2,062.93	2,062.55	2,062.14	2,061.86	2,061.75	2,063.89	2,064.93	2,064.36	2,063.72	2,063.21	2,063.33	2,062.92
15	2,062.91	2,062.55	2,062.14	2,061.90	2,061.74	2,063.90	2,064.92	2,064.34	2,063.68	2,063.17	2,063.31	2,062.90
16	2,062.89	2,062.55	2,062.10	2,061.96	2,061.73	2,063.89	2,064.91	2,064.32	2,063.65	2,063.14	2,063.29	2,062.88
17	2,062.87	2,062.52	2,062.09	2,061.97	2,061.72	2,063.89	2,064.90	2,064.30	2,063.62	2,063.11	2,063.26	2,062.86
18	2,062.84	2,062.51	2,062.06	2,061.97	2,061.71	2,063.89	2,064.89	2,064.28	2,063.59	2,063.14	2,063.29	2,062.84
19	2,062.82	2,062.48	2,062.05	2,061.95	2,061.73	2,063.86	2,064.88	2,064.25	2,063.55	2,063.15	2,063.37	2,062.82
20	2,062.81	2,062.47	2,062.04	2,061.93	2,061.72	2,063.87	2,064.87	2,064.23	2,063.48	2,063.08	2,063.36	2,062.80
21	2,062.80	2,062.45	2,062.03	2,061.92	2,061.71	2,063.93	2,064.86	2,064.20	2,063.49	2,063.06	2,063.35	2,062.78
22	2,062.79	2,062.44	2,062.03	2,061.93	2,061.71	2,063.99	2,064.83	2,064.18	2,063.50	2,063.07	2,063.33	2,062.76
23	2,062.78	2,062.38	2,062.03	2,061.94	2,061.75	2,064.00	2,064.80	2,064.15	2,063.48	2,063.04	2,063.32	2,062.74
24	2,062.76	2,062.35	2,062.02	2,061.95	2,061.78	2,064.00	2,064.79	2,064.11	2,063.46	2,063.03	2,063.30	2,062.72
25	2,062.73	2,062.32	2,062.02	2,061.95	2,061.81	2,064.00	2,064.78	2,064.08	2,063.45	2,063.02	2,063.29	2,062.73
26	2,062.69	2,062.32	2,062.01	2,061.92	2,061.79	2,064.00	2,064.75	2,064.06	2,063.45	2,063.00	2,063.27	2,062.74
27	2,062.68	2,062.29	2,062.00	2,061.89	2,061.78	2,063.99	2,064.71	2,064.04	2,063.46	2,063.03	2,063.24	2,062.75
28	2,062.69	2,062.27	2,061.93	2,061.87	2,061.79	2,063.98	2,064.68	2,064.02	2,063.47	2,063.13	2,063.24	2,062.78
29	2,062.67	2,062.26	2,061.92	2,061.86	2,061.84	2,063.95	2,064.67	2,064.00	2,063.55	2,063.14	2,063.23	2,062.79
30	2,062.64	2,062.24	2,061.93	2,061.85	---	2,063.93	2,064.65	2,063.98	2,063.60	2,063.14	2,063.22	2,062.80
31	2,062.61	---	2,061.93	2,061.87	---	2,063.92	---	2,063.95	---	2,063.14	2,063.23	---
MEAN	2,062.83	2,062.49	2,062.09	2,061.91	2,061.77	2,063.58	2,064.67	2,064.30	2,063.66	2,063.24	2,063.24	2,062.92
MAX	2,063.02	2,062.64	2,062.23	2,061.97	2,061.87	2,064.00	2,064.99	2,064.61	2,063.90	2,063.58	2,063.42	2,063.22
MIN	2,062.61	2,062.24	2,061.92	2,061.85	2,061.71	2,061.82	2,063.91	2,063.95	2,063.45	2,063.00	2,062.97	2,062.72

WTR YR 2004 MEAN 2,063.06 MAX 2,064.99 MIN 2,061.71

08123000 Lake Colorado City near Colorado City, TX—Continued



08123600 Champion Creek Reservoir near Colorado City, TX

LOCATION.--Lat 32°16'53", long 100°51'30", Mitchell County, Hydrologic Unit 12080002, 50 ft downstream from service outlet structure at Champion Creek Dam on Champion Creek, 1.0 mi upstream from mouth, 4.8 mi downstream from State Highway 208, and 7.2 mi south of Colorado City.

DRAINAGE AREA.--207 mi^2 of which 21 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1959 to Sept. 1987 and May 1997 to Sept. 2002 (contents), Oct. 2002 to current year. Water-quality records: Chemical data: Aug. 1967 to May 1984.

REVISED RECORDS.--WRD TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Sept. 29, 1959, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records good except those for Feb. 28 to Mar. 8, which are fair. Interruptions in the record were due to malfunction of the instrument. The reservoir is formed by a rolled earthfill dam about 6,800 ft long. The dam was completed on Apr. 30, 1959. Closure and storage began in Feb. 1959. The capacity curve is based on U.S. Geological Survey topographic map surveyed in 1950: excavation for borrow, estimated not to exceed 1,200 acre-ft, is not included. The dam and reservoir are owned and operated by the Texas Electric Service Company. Water may be pumped from the reservoir through a 24-inch pipeline to Lake Colorado City (station 08123000) for municipal use and for cooling operations of a steam generating powerplant. There are two spillways. The uncontrolled emergency spillway, 450 ft wide and 800 ft long, is located at the right end of dam. The controlled service spillway is a cut channel 50 ft wide, about 1,800 ft long and 8 ft deep, and cut into the emergency spillway at the extreme right end. There is a controlled drop-inlet structure, 4.0 by 5.0 ft, with a side opening of 1.5 by 3.0 ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	2,109.0
Design flood	2,104.0
Crest of emergency spillway	2,091.0
Crest of service spillway	2,082.4
Lowest gated outlet (invert)	2,020.0

COOPERATION.--Record of diversions into Lake Colorado City may be obtained from Texas Utilities Electric Co.

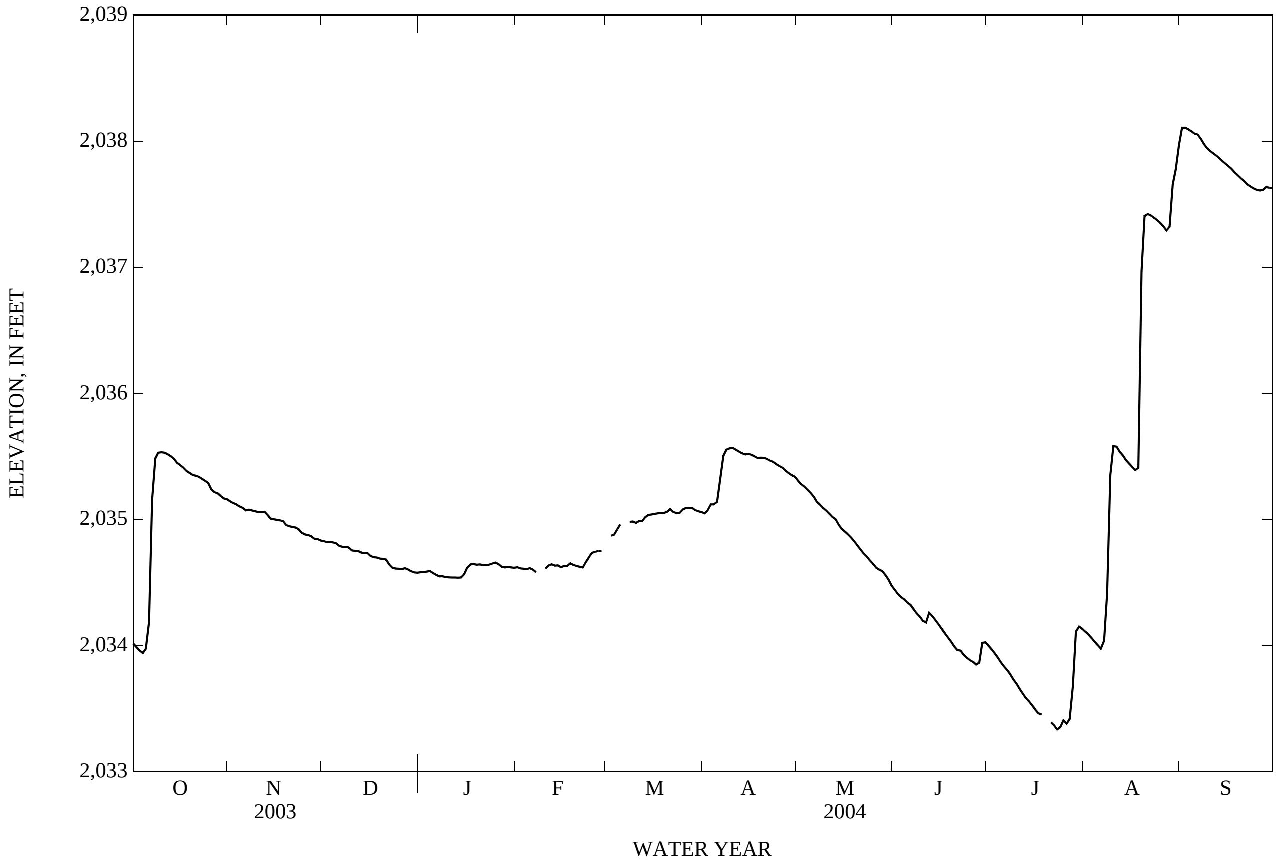
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 47,060 acre-ft, June 29, 1982, elevation, 2,085.79 ft; minimum contents, 1,720 acre-ft, Apr. 11-15, 1971, elevation, 2,026.75 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,038.12 ft, Sept. 1, 2; minimum elevation, 2,033.30 ft, July 24.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,034.01	2,035.14	2,034.83	2,034.58	2,034.62	---	2,035.05	2,035.31	2,034.44	2,034.00	2,034.11	2,038.11
2	2,033.99	2,035.13	2,034.82	2,034.58	2,034.61	2,034.87	2,035.07	2,035.28	2,034.41	2,033.97	2,034.09	2,038.11
3	2,033.96	2,035.12	2,034.82	2,034.59	2,034.61	2,034.88	2,035.12	2,035.26	2,034.38	2,033.94	2,034.06	2,038.09
4	2,033.94	2,035.10	2,034.82	2,034.59	2,034.61	2,034.92	2,035.12	2,035.23	2,034.36	2,033.90	2,034.03	2,038.08
5	2,033.97	2,035.09	2,034.81	2,034.57	2,034.61	2,034.96	2,035.14	2,035.21	2,034.34	2,033.87	2,034.00	2,038.06
6	2,034.19	2,035.07	2,034.79	2,034.56	2,034.60	---	2,035.33	2,035.18	2,034.32	2,033.83	2,033.97	2,038.05
7	2,035.15	2,035.08	2,034.78	2,034.55	2,034.58	---	2,035.50	2,035.14	2,034.29	2,033.80	2,034.04	2,038.02
8	2,035.48	2,035.07	2,034.78	2,034.55	---	2,034.98	2,035.55	2,035.12	2,034.25	2,033.77	2,034.41	2,037.98
9	2,035.53	2,035.06	2,034.78	2,034.54	---	2,034.98	2,035.56	2,035.09	2,034.23	2,033.73	2,035.35	2,037.94
10	2,035.53	2,035.06	2,034.75	2,034.54	2,034.61	2,034.97	2,035.57	2,035.07	2,034.19	2,033.69	2,035.58	2,037.92
11	2,035.53	2,035.06	2,034.75	2,034.54	2,034.63	2,034.99	2,035.55	2,035.05	2,034.18	2,033.65	2,035.58	2,037.90
12	2,035.52	2,035.06	2,034.75	2,034.54	2,034.64	2,034.98	2,035.54	2,035.02	2,034.26	2,033.61	2,035.54	2,037.88
13	2,035.50	2,035.04	2,034.74	2,034.54	2,034.63	2,035.02	2,035.52	2,035.00	2,034.23	2,033.58	2,035.51	2,037.86
14	2,035.48	2,035.01	2,034.73	2,034.54	2,034.64	2,035.04	2,035.52	2,034.96	2,034.20	2,033.56	2,035.47	2,037.84
15	2,035.45	2,035.00	2,034.73	2,034.57	2,034.62	2,035.04	2,035.52	2,034.92	2,034.17	2,033.52	2,035.44	2,037.82
16	2,035.43	2,035.00	2,034.71	2,034.62	2,034.63	2,035.04	2,035.51	2,034.90	2,034.13	2,033.49	2,035.42	2,037.80
17	2,035.41	2,034.99	2,034.70	2,034.64	2,034.63	2,035.05	2,035.50	2,034.88	2,034.10	2,033.46	2,035.39	2,037.78
18	2,035.38	2,034.98	2,034.70	2,034.64	2,034.65	2,035.05	2,035.49	2,034.85	2,034.06	2,033.45	2,035.41	2,037.75
19	2,035.37	2,034.95	2,034.69	2,034.64	2,034.64	2,035.05	2,035.49	2,034.83	2,034.03	---	2,036.97	2,037.72
20	2,035.35	2,034.94	2,034.69	2,034.64	2,034.63	2,035.06	2,035.49	2,034.79	2,033.99	---	2,037.41	2,037.70
21	2,035.35	2,034.94	2,034.68	2,034.64	2,034.62	2,035.08	2,035.48	2,034.76	2,033.96	2,033.39	2,037.42	2,037.68
22	2,035.34	2,034.93	2,034.64	2,034.64	2,034.62	2,035.06	2,035.46	2,034.73	2,033.96	2,033.37	2,037.41	2,037.66
23	2,035.32	2,034.92	2,034.62	2,034.64	2,034.66	2,035.05	2,035.46	2,034.70	2,033.93	2,033.33	2,037.39	2,037.64
24	2,035.31	2,034.89	2,034.61	2,034.65	2,034.70	2,035.05	2,035.44	2,034.67	2,033.90	2,033.35	2,037.37	2,037.62
25	2,035.29	2,034.88	2,034.61	2,034.66	2,034.73	2,035.08	2,035.42	2,034.65	2,033.88	2,033.40	2,037.35	2,037.61
26	2,035.24	2,034.88	2,034.61	2,034.64	2,034.74	2,035.09	2,035.41	2,034.62	2,033.87	2,033.38	2,037.33	2,037.61
27	2,035.21	2,034.86	2,034.61	2,034.62	2,034.75	2,035.09	2,035.39	2,034.60	2,033.85	2,033.42	2,037.29	2,037.61
28	2,035.21	2,034.85	2,034.60	2,034.62	2,034.75	2,035.09	2,035.37	2,034.59	2,033.86	2,033.68	2,037.32	2,037.63
29	2,035.18	2,034.84	2,034.59	2,034.62	---	2,035.07	2,035.35	2,034.56	2,034.02	2,034.11	2,037.66	2,037.63
30	2,035.17	2,034.83	2,034.58	2,034.62	---	2,035.06	2,035.34	2,034.52	2,034.02	2,034.15	2,037.78	2,037.63
31	2,035.16	---	2,034.58	2,034.62	---	2,035.06	---	2,034.47	---	2,034.13	2,037.97	---
MEAN	2,035.10	2,034.99	2,034.71	2,034.60	---	---	2,035.41	2,034.90	2,034.13	---	2,035.94	2,037.82
MAX	2,035.53	2,035.14	2,034.83	2,034.66	---	---	2,035.57	2,035.31	2,034.44	---	2,037.97	2,038.11
MIN	2,033.94	2,034.83	2,034.58	2,034.54	---	---	2,035.05	2,034.47	2,033.85	---	2,033.97	2,037.61

08123600 Champion Creek Reservoir near Colorado City, TX—Continued



08123755 Moss Creek Lake near Coahoma, TX

LOCATION.--Lat 32°14'37", long 101°18'41", Howard County, Hydrologic Unit 12080007, 195 ft left of service outlet structure at Moss Creek Dam on Moss Creek, 1.4 mi upstream from mouth, 3.4 mi south of Coahoma, and 7.4 mi east of Big Spring.

DRAINAGE AREA.--26.0 mi^2.

PERIOD OF RECORD.--Feb. 1999 to Sept. 2002 (contents), Oct. 2002 to current year.

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

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 2,450 ft long. The dam was completed in 1939. The dam and reservoir are owned by the city of Big Spring. The city of Big Spring operates the reservoir for recreational purposes. The Colorado River Municipal Water District owns the water rights for municipal and industrial use. The uncontrolled south emergency spillway is 250 ft wide through natural ground at right end of dam. The uncontrolled north emergency spillway is 400 ft wide with concrete sill at left end of dam. The service spillway is gate operated with a rectangular shaped inlet feeding into a pipe fitted inside the west conduit. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	2,343.5
Crest of south emergency spillway	2,338.7
Crest of north emergency spillway	2,337.5
Crest of service outlet	2,330.5

COOPERATION.--Records of diversions may be obtained from the Colorado River Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Feb. 1999 to Sept. 2002: Maximum contents, 4,090 acre-ft, Mar. 23, 2000; minimum contents, 536 acre-ft, Sept. 21, 2001; Feb. 1999 to current year: Maximum elevation, 2,340.86 ft, Mar. 23, 2000; minimum elevation, 2,311.65 ft, Sept. 21, 2001.

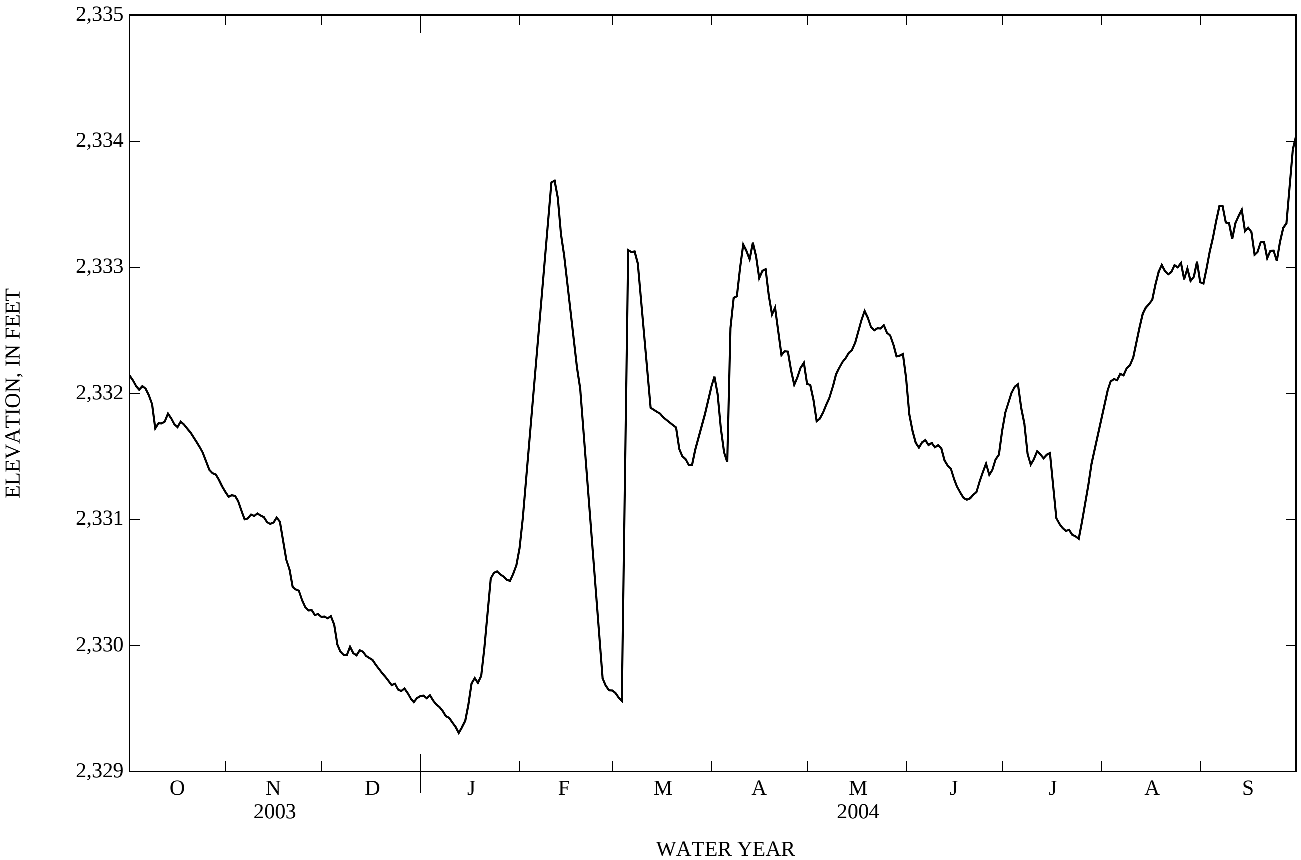
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 2,334.10 ft, Sept. 30; minimum elevation, 2,329.29 ft, Jan. 12.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,332.14	2,331.18	2,330.23	2,329.60	2,331.01	2,329.62	2,332.13	2,332.07	2,331.83	2,331.84	2,331.91	2,332.87
2	2,332.10	2,331.19	2,330.22	2,329.58	2,331.30	2,329.59	2,331.99	2,331.95	2,331.70	2,331.93	2,332.02	2,332.99
3	2,332.06	2,331.19	2,330.23	2,329.60	2,331.62	2,329.56	2,331.72	2,331.78	2,331.61	2,332.01	2,332.09	2,333.13
4	2,332.03	2,331.14	2,330.17	2,329.56	2,331.93	2,331.40	2,331.53	2,331.80	2,331.57	2,332.05	2,332.11	2,333.24
5	2,332.06	2,331.07	2,330.01	2,329.53	2,332.24	2,333.14	2,331.45	2,331.85	2,331.61	2,332.07	2,332.10	2,333.37
6	2,332.04	2,331.00	2,329.95	2,329.51	2,332.55	2,333.12	2,332.52	2,331.91	2,331.63	2,331.89	2,332.15	2,333.49
7	2,331.99	2,331.01	2,329.92	2,329.48	2,332.85	2,333.12	2,332.76	2,331.96	2,331.59	2,331.76	2,332.14	2,333.49
8	2,331.92	2,331.04	2,329.92	2,329.44	2,333.16	2,333.03	2,332.77	2,332.05	2,331.61	2,331.52	2,332.20	2,333.35
9	2,331.72	2,331.03	2,329.99	2,329.43	2,333.43	2,332.75	2,332.99	2,332.14	2,331.57	2,331.43	2,332.22	2,333.35
10	2,331.76	2,331.05	2,329.94	2,329.39	2,333.67	2,332.45	2,333.18	2,332.20	2,331.59	2,331.48	2,332.28	2,333.22
11	2,331.76	2,331.03	2,329.92	2,329.35	2,333.69	2,332.15	2,333.13	2,332.24	2,331.56	2,331.54	2,332.39	2,333.35
12	2,331.78	2,331.02	2,329.96	2,329.31	2,333.55	2,331.89	2,333.07	2,332.28	2,331.47	2,331.52	2,332.52	2,333.40
13	2,331.84	2,330.98	2,329.95	2,329.35	2,333.26	2,331.87	2,333.20	2,332.32	2,331.43	2,331.48	2,332.63	2,333.45
14	2,331.80	2,330.96	2,329.92	2,329.40	2,333.09	2,331.85	2,333.09	2,332.34	2,331.40	2,331.51	2,332.68	2,333.28
15	2,331.75	2,330.97	2,329.90	2,329.53	2,332.86	2,331.84	2,332.91	2,332.40	2,331.32	2,331.53	2,332.71	2,333.31
16	2,331.73	2,331.01	2,329.89	2,329.70	2,332.63	2,331.81	2,332.97	2,332.49	2,331.25	2,331.28	2,332.74	2,333.28
17	2,331.78	2,330.98	2,329.85	2,329.74	2,332.42	2,331.79	2,332.98	2,332.58	2,331.21	2,331.01	2,332.86	2,333.10
18	2,331.75	2,330.83	2,329.81	2,329.70	2,332.20	2,331.77	2,332.77	2,332.65	2,331.17	2,330.96	2,332.96	2,333.12
19	2,331.72	2,330.68	2,329.78	2,329.76	2,332.04	2,331.75	2,332.62	2,332.60	2,331.16	2,330.93	2,333.02	2,333.20
20	2,331.69	2,330.60	2,329.75	2,329.98	2,331.72	2,331.73	2,332.68	2,332.53	2,331.16	2,330.91	2,332.97	2,333.20
21	2,331.65	2,330.46	2,329.72	2,330.26	2,331.35	2,331.56	2,332.49	2,332.50	2,331.20	2,330.91	2,332.94	2,333.07
22	2,331.61	2,330.44	2,329.68	2,330.53	2,330.99	2,331.50	2,332.30	2,332.52	2,331.22	2,330.88	2,332.96	2,333.13
23	2,331.57	2,330.43	2,329.70	2,330.57	2,330.66	2,331.48	2,332.33	2,332.51	2,331.30	2,330.86	2,333.02	2,333.13
24	2,331.52	2,330.36	2,329.65	2,330.59	2,330.32	2,331.43	2,332.33	2,332.54	2,331.37	2,330.84	2,333.00	2,333.05
25	2,331.46	2,330.30	2,329.64	2,330.56	2,330.00	2,331.43	2,332.18	2,332.48	2,331.44	2,330.98	2,333.03	2,333.20
26	2,331.39	2,330.28	2,329.66	2,330.55	2,329.74	2,331.55	2,332.07	2,332.46	2,331.35	2,331.13	2,332.90	2,333.31
27	2,331.36	2,330.28	2,329.62	2,330.52	2,329.68	2,331.65	2,332.13	2,332.39	2,331.39	2,331.27	2,332.99	2,333.35
28	2,331.36	2,330.24	2,329.58	2,330.51	2,329.64	2,331.74	2,332.20	2,332.29	2,331.48	2,331.44	2,332.89	2,333.64
29	2,331.31	2,330.25	2,329.55	2,330.57	2,329.64	2,331.83	2,332.24	2,332.30	2,331.51	2,331.55	2,332.92	2,333.93
30	2,331.26	2,330.23	2,329.58	2,330.63	---	2,331.94	2,332.07	2,332.31	2,331.70	2,331.67	2,333.04	2,334.04
31	2,331.22	---	2,329.60	2,330.77	---	2,332.05	---	2,332.12	---	2,331.79	2,332.88	---
MEAN	2,331.71	2,330.77	2,329.85	2,329.90	2,331.84	2,331.76	2,332.49	2,332.28	2,331.45	2,331.42	2,332.62	2,333.30
MAX	2,332.14	2,331.19	2,330.23	2,330.77	2,333.69	2,333.14	2,333.20	2,332.65	2,331.83	2,332.07	2,333.04	2,334.04
MIN	2,331.22	2,330.23	2,329.55	2,329.31	2,329.64	2,329.56	2,331.45	2,331.78	2,331.16	2,330.84	2,331.91	2,332.87

WTR YR 2004 MEAN 2,331.61 MAX 2,334.04 MIN 2,329.31

08123755 Moss Creek Lake near Coahoma, TX—Continued



08123800 Beals Creek near Westbrook, TX

LOCATION.--Lat 32°11'57", long 101°00'49", Mitchell County, Hydrologic Unit 12080007, on right bank, 220 ft upstream from right end of bridge on State Highway 163, 2.1 mi downstream from Hackberry Creek, 10.8 mi south of Westbrook, 15.7 mi southwest of Colorado City, and 19.1 mi upstream from mouth.

DRAINAGE AREA.--9,802 mi^2 of which 7,814 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1958 to current year.

REVISED RECORDS.--WRD TX-72-1: 1971. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,048.74 ft above NGVD of 1929. Prior to Nov. 18, 2002, at site 222 ft downstream and 193 ft left at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation. Low flow is affected by diversion upstream from station. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1908, about 24.5 ft in 1922, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	0.13	0.00	0.00	0.00	0.25	0.17	0.02	0.00	22	3.0	0.63
2	0.80	0.17	0.00	0.00	0.00	0.24	0.54	0.02	0.00	6.1	1.8	0.26
3	0.30	0.30	0.00	0.00	0.00	0.23	4.2	0.02	0.00	1.4	2.8	0.03
4	0.20	0.28	0.00	0.00	0.00	45	1.2	0.02	0.00	0.18	0.20	0.02
5	0.17	0.19	0.00	0.00	0.00	1,180	5.3	0.02	0.00	0.02	0.02	0.01
6	0.16	0.12	0.00	0.00	0.00	305	470	0.03	0.00	0.01	0.01	0.01
7	2.6	0.50	0.00	0.00	0.00	49	521	0.03	0.00	0.00	0.01	0.01
8	2.0	0.47	0.00	0.00	0.00	11	39	0.03	0.00	0.00	29	0.00
9	1.1	0.33	0.00	0.00	0.00	6.7	14	0.03	0.00	0.00	33	0.00
10	0.59	0.34	0.00	0.00	0.00	4.4	8.3	0.04	0.00	0.00	8.2	0.00
11	0.47	0.39	0.00	0.00	0.00	3.0	5.0	0.03	0.00	0.00	2.3	0.00
12	0.33	0.31	0.00	0.00	0.00	3.3	2.8	0.02	0.00	0.00	0.23	0.00
13	0.27	0.20	0.00	0.00	0.00	6.6	1.8	0.02	0.00	0.00	0.02	0.00
14	0.18	0.13	0.00	0.00	0.00	11	1.4	0.02	0.00	0.00	0.01	0.00
15	0.11	0.13	0.00	0.00	0.00	10	1.1	0.01	0.00	0.00	0.00	0.00
16	0.10	0.18	0.00	1.2	0.00	5.7	0.79	0.01	0.00	0.00	0.00	0.00
17	0.10	0.27	0.00	0.33	0.00	3.6	0.59	0.00	0.00	0.00	0.00	0.00
18	0.08	0.22	0.00	0.19	0.00	2.5	0.41	0.00	0.00	0.00	16	0.00
19	0.09	0.07	0.00	0.08	0.00	1.6	0.37	0.00	0.00	0.00	64	0.00
20	0.10	0.08	0.00	0.06	0.00	1.3	0.30	0.00	0.00	0.00	83	0.00
21	0.11	0.05	0.00	0.04	0.00	82	0.17	0.00	0.00	0.00	39	0.00
22	0.10	0.02	0.00	0.02	0.00	29	0.12	0.00	1.8	0.00	10	0.00
23	0.09	0.01	0.00	0.01	0.48	13	0.10	0.00	0.03	0.00	3.5	0.00
24	0.09	0.00	0.00	0.00	0.28	6.4	0.05	0.00	0.00	0.00	0.66	0.00
25	0.08	0.00	0.00	0.00	0.73	3.4	0.03	0.00	0.00	0.00	0.06	0.00
26	0.04	0.00	0.00	0.00	0.28	1.9	0.03	0.00	0.00	0.00	32	0.00
27	0.04	0.00	0.00	0.00	0.08	1.3	0.03	0.00	0.00	0.34	24	0.00
28	0.07	0.00	0.00	0.00	0.05	0.78	0.02	0.00	5.4	15	90	116
29	0.13	0.00	0.00	0.00	2.3	0.57	0.02	0.00	77	22	3.1	210
30	0.22	0.00	0.00	0.00	---	0.37	0.02	0.00	86	38	0.15	59
31	0.20	---	0.00	0.00	---	0.23	---	0.00	---	10	0.03	---
TOTAL	14.02	4.89	0.00	1.93	4.20	1,789.37	1,078.86	0.37	170.23	115.05	446.10	385.97
MEAN	0.45	0.16	0.00	0.06	0.14	57.7	36.0	0.01	5.67	3.71	14.4	12.9
MAX	3.1	0.50	0.00	1.2	2.3	1,180	521	0.04	86	38	90	210
MIN	0.04	0.00	0.00	0.00	0.00	0.23	0.02	0.00	0.00	0.00	0.00	0.00
AC-FT	28	9.7	0.00	3.8	8.3	3,550	2,140	0.7	338	228	885	766

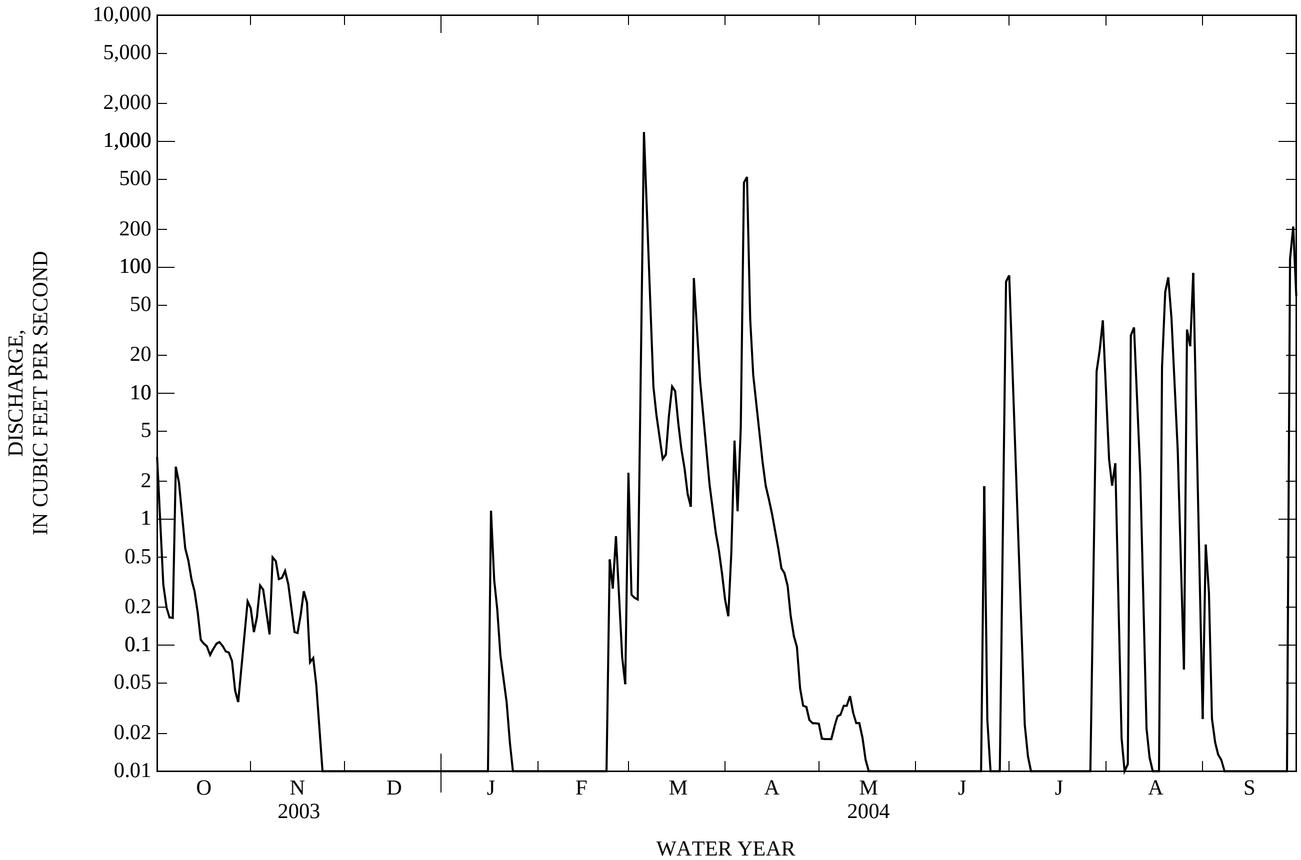
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	35.5	8.56	4.77	4.50	7.75	19.3	19.2	52.9	45.0	23.0	17.6	56.5
MAX	572	137	49.2	47.0	94.9	544	256	334	300	258	168	680
(WY)	(1987)	(2002)	(1992)	(1987)	(1992)	(2000)	(1966)	(1994)	(2003)	(1961)	(1971)	(1980)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
(WY)	(1964)	(2000)	(1999)	(1999)	(1999)	(2001)	(2003)	(2004)	(2001)	(1964)	(2000)	(1998)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1959 - 2004	
ANNUAL TOTAL	10,847.53		4,010.99			
ANNUAL MEAN	29.7		11.0		24.6	
HIGHEST ANNUAL MEAN					107	1987
LOWEST ANNUAL MEAN					1.20	2001
HIGHEST DAILY MEAN	3,160	Jun 5	1,180	Mar 5	7,340	Mar 23, 2000
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Nov 24	0.00	Oct 1, 1958
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 24	0.00	Oct 1, 1958
MAXIMUM PEAK FLOW			1,580	Mar 5	13,000	Mar 23, 2000
MAXIMUM PEAK STAGE			14.05	Mar 5	a23.70	Mar 23, 2000
ANNUAL RUNOFF (AC-FT)	21,520		7,960		17,810	
10 PERCENT EXCEEDS	3.5		7.1		21	
50 PERCENT EXCEEDS	0.00		0.02		1.8	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.

08123800 Beals Creek near Westbrook, TX—Continued



08123800 Beals Creek near Westbrook, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Nov. 1958 to June 2003.
BIOCHEMICAL DATA: Nov. 1974 to Oct. 1977.
SEDIMENT DATA: Oct. 1974 to Oct. 1977.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Nov. 1958 to Feb. 1981 (local observer) and Mar. 1981 to current year.
WATER TEMPERATURE: Nov. 1958 to Feb. 1981 (local observer) and Mar. 1981 to current year.

INSTRUMENTATION.--Water-quality monitor since Mar. 5, 1981.

REMARKS.--No estimated daily specific conductance or water temperature. Records good. Interruptions in the record were due to malfunction of the instrument and to no flow. No flow for many days. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using the daily (or continuous) records of specific conductance and a regression relation between each chemical constituent and specific conductance. The computations of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 24,500 microsiemens/cm, Aug. 9, 1989; minimum, 49 microsiemens/cm, June 27, 2002.
WATER TEMPERATURE: Maximum daily, 37.0°C, June 28, 1960, and July 3, 1976; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 9,120 microsiemens/cm, June 22; minimum, 160 microsiemens/cm, June 29.
WATER TEMPERATURE: Maximum, 35.2°C, Aug. 6; minimum, 2.9°C, Feb. 26.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	4,750	4,720	4,740	---	---	---	---	---	---
2	---	---	---	4,770	4,720	4,750	---	---	---	---	---	---
3	---	---	---	4,790	4,740	4,770	---	---	---	---	---	---
4	---	---	---	4,850	4,770	4,810	---	---	---	---	---	---
5	---	---	---	4,900	4,830	4,870	---	---	---	---	---	---
6	---	---	---	4,940	4,850	4,910	---	---	---	---	---	---
7	---	---	---	4,940	4,870	4,900	---	---	---	---	---	---
8	---	---	---	5,040	4,940	5,000	---	---	---	---	---	---
9	---	---	---	5,130	5,040	5,090	---	---	---	---	---	---
10	---	---	---	5,170	5,110	5,140	---	---	---	---	---	---
11	---	---	---	5,250	5,170	5,210	---	---	---	---	---	---
12	---	---	---	5,300	5,250	5,270	---	---	---	---	---	---
13	---	---	---	5,360	5,300	5,340	---	---	---	---	---	---
14	---	---	---	5,400	5,350	5,380	---	---	---	---	---	---
15	---	---	---	5,410	5,360	5,390	---	---	---	---	---	---
16	---	---	---	5,430	5,380	5,400	---	---	---	7,470	6,290	7,270
17	---	---	---	5,480	5,410	5,430	---	---	---	7,630	7,460	7,560
18	---	---	---	5,570	5,480	5,520	---	---	---	7,710	7,610	7,660
19	---	---	---	5,610	5,560	5,590	---	---	---	7,760	7,680	7,720
20	---	---	---	5,660	5,570	5,620	---	---	---	7,800	7,720	7,760
21	---	---	---	5,680	5,600	5,650	---	---	---	7,830	7,760	7,800
22	---	---	---	5,670	5,610	5,660	---	---	---	7,840	7,790	7,820
23	---	---	---	5,690	5,650	5,670	---	---	---	7,850	7,820	7,840
24	4,520	4,460	4,480	---	---	---	---	---	---	---	---	---
25	4,570	4,500	4,520	---	---	---	---	---	---	---	---	---
26	4,600	4,560	4,580	---	---	---	---	---	---	---	---	---
27	4,640	4,580	4,610	---	---	---	---	---	---	---	---	---
28	4,650	4,590	4,620	---	---	---	---	---	---	---	---	---
29	4,700	4,630	4,660	---	---	---	---	---	---	---	---	---
30	4,740	4,680	4,710	---	---	---	---	---	---	---	---	---
31	4,740	4,700	4,730	---	---	---	---	---	---	---	---	---
MONTH	4,740	4,460	4,610	5,690	4,720	5,220	---	---	---	7,850	6,290	7,680

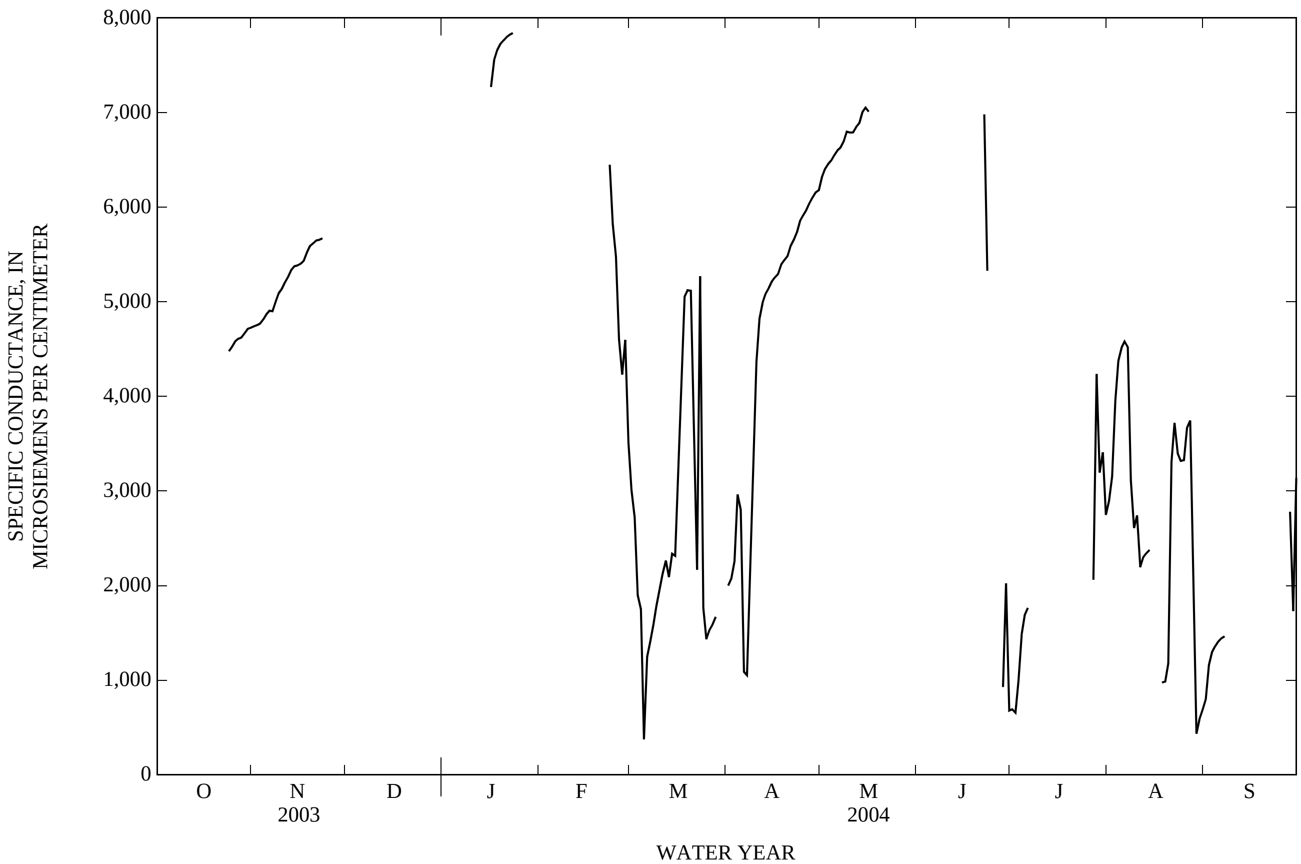
08123800 Beals Creek near Westbrook, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	3,080	2,910	3,010	2,050	1,970	2,000	6,380	6,230	6,320
2	---	---	---	3,050	2,150	2,720	2,140	2,040	2,070	6,440	6,340	6,410
3	---	---	---	2,160	1,660	1,900	2,680	1,790	2,260	6,540	6,360	6,460
4	---	---	---	5,780	372	1,750	3,080	2,590	2,960	&6,570	&6,390	&6,500
5	---	---	---	3,730	185	375	3,080	572	2,800	6,600	6,450	6,550
6	---	---	---	1,390	832	1,250	4,330	305	1,090	6,670	6,510	6,600
7	---	---	---	1,480	1,380	1,400	1,410	392	1,050	6,680	6,530	6,630
8	---	---	---	1,690	1,480	1,580	2,800	1,410	2,050	6,760	6,650	6,700
9	---	---	---	1,880	1,690	1,790	4,010	2,800	3,480	6,860	6,740	6,800
10	---	---	---	2,050	1,850	1,960	4,670	4,010	4,360	6,870	6,650	6,790
11	---	---	---	2,210	2,040	2,130	4,950	4,670	4,820	6,840	6,730	6,790
12	---	---	---	2,310	2,210	2,260	5,060	4,940	4,990	6,930	6,780	6,850
13	---	---	---	2,440	1,320	2,090	5,120	5,050	5,090	6,990	6,820	6,890
14	---	---	---	2,590	2,070	2,340	5,190	5,110	5,150	7,040	6,960	7,010
15	---	---	---	2,830	1,970	2,310	5,250	5,170	5,220	7,090	7,000	7,050
16	---	---	---	4,100	2,830	3,610	5,300	5,210	5,260	7,060	6,870	7,010
17	---	---	---	4,800	4,100	4,440	5,350	5,260	5,290	---	---	---
18	---	---	---	5,170	4,800	5,050	5,430	5,350	5,400	---	---	---
19	---	---	---	5,170	5,050	5,120	5,460	5,420	5,440	---	---	---
20	---	---	---	5,190	5,050	5,120	5,540	5,430	5,480	---	---	---
21	---	---	---	8,190	606	3,580	5,660	5,520	5,590	---	---	---
22	---	---	---	6,390	519	2,170	&5,750	&5,550	&5,660	---	---	---
23	7,280	6,090	6,450	7,060	2,420	5,270	5,810	5,680	5,730	---	---	---
24	6,090	5,670	5,820	2,420	1,430	1,760	5,900	5,800	5,860	---	---	---
25	5,680	5,320	5,480	1,490	1,400	1,430	5,950	5,850	5,910	---	---	---
26	5,700	4,030	4,610	1,560	1,490	1,530	6,030	5,900	5,970	---	---	---
27	4,730	3,790	4,230	1,630	1,560	1,590	6,090	6,000	6,040	---	---	---
28	4,610	4,580	4,600	1,710	1,630	1,670	6,150	6,050	6,100	---	---	---
29	4,910	2,960	3,520	---	---	---	6,220	6,080	6,160	---	---	---
30	---	---	---	---	---	---	6,260	6,100	6,180	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	7,280	2,960	4,960	8,190	185	2,540	6,260	305	4,520	7,090	6,230	6,710
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	888	567	691	3,030	2,790	2,900	1,000	725	794
2	---	---	---	785	568	655	3,390	3,030	3,150	1,240	1,000	1,160
3	---	---	---	1,280	785	998	4,230	3,390	3,950	1,340	1,240	1,290
4	---	---	---	1,620	1,280	1,490	4,460	4,230	4,380	1,390	1,340	1,360
5	---	---	---	1,760	1,620	1,690	4,580	4,450	4,510	1,430	1,390	1,410
6	---	---	---	1,790	1,750	1,760	4,620	4,540	4,580	1,460	1,420	1,440
7	---	---	---	---	---	---	4,630	4,430	4,520	1,500	1,440	1,460
8	---	---	---	---	---	---	4,670	799	3,110	---	---	---
9	---	---	---	---	---	---	4,620	858	2,610	---	---	---
10	---	---	---	---	---	---	4,490	2,120	2,740	---	---	---
11	---	---	---	---	---	---	2,260	2,120	2,190	---	---	---
12	---	---	---	---	---	---	2,320	2,260	2,300	---	---	---
13	---	---	---	---	---	---	2,360	2,320	2,340	---	---	---
14	---	---	---	---	---	---	2,400	2,360	2,380	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	2,220	334	974	---	---	---
19	---	---	---	---	---	---	3,870	199	985	---	---	---
20	---	---	---	---	---	---	4,110	368	1,180	---	---	---
21	---	---	---	---	---	---	3,970	1,970	3,300	---	---	---
22	9,120	5,100	6,980	---	---	---	3,940	3,500	3,720	---	---	---
23	5,470	5,150	5,330	---	---	---	3,500	3,330	3,400	---	---	---
24	---	---	---	---	---	---	3,350	3,280	3,320	---	---	---
25	---	---	---	---	---	---	3,360	3,290	3,330	---	---	---
26	---	---	---	---	---	---	5,440	3,350	3,670	---	---	---
27	---	---	---	2,090	2,040	2,060	4,720	2,780	3,740	---	---	---
28	2,510	176	927	7,100	596	4,240	3,290	195	1,730	4,760	1,600	2,780
29	5,750	160	2,020	7,110	949	3,200	516	379	434	3,080	1,200	1,730
30	2,250	476	678	4,830	1,460	3,410	638	516	587	3,570	2,540	3,140
31	---	---	---	2,790	2,730	2,750	725	638	686	---	---	---
MONTH	9,120	160	3,190	7,110	567	2,090	5,440	195	2,740	4,760	725	1,660
YEAR	9,120	160	4,020									

& Value was computed from affected unit values

08123800 Beals Creek near Westbrook, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.4	19.9	21.7	21.0	16.8	18.5	---	---	---	---	---	---
2	23.4	18.3	20.9	22.8	18.6	20.0	---	---	---	---	---	---
3	24.5	19.4	21.7	24.3	19.6	21.2	---	---	---	---	---	---
4	23.6	19.9	21.6	24.8	19.8	21.5	---	---	---	---	---	---
5	26.1	20.8	23.1	19.8	15.8	17.9	---	---	---	---	---	---
6	24.5	21.7	22.8	15.8	12.2	13.9	---	---	---	---	---	---
7	24.0	21.2	22.4	12.2	10.3	11.1	---	---	---	---	---	---
8	22.6	21.4	22.0	10.3	9.9	10.1	---	---	---	---	---	---
9	23.0	21.3	22.0	11.5	10.2	10.7	---	---	---	---	---	---
10	22.8	21.7	22.3	17.6	11.2	13.9	---	---	---	---	---	---
11	23.2	21.7	22.2	19.7	15.2	16.9	---	---	---	---	---	---
12	21.8	20.1	20.7	18.5	15.7	17.0	---	---	---	---	---	---
13	25.7	20.0	22.1	15.7	12.7	14.0	---	---	---	---	---	---
14	23.0	18.7	20.5	14.0	12.1	13.0	---	---	---	---	---	---
15	22.1	16.8	19.0	16.4	12.6	14.2	---	---	---	---	---	---
16	24.7	17.5	20.4	18.6	12.8	15.3	---	---	---	12.9	11.2	11.9
17	21.5	17.7	19.5	16.5	14.5	15.5	---	---	---	12.3	10.2	11.5
18	23.4	16.4	19.3	14.5	11.9	13.3	---	---	---	10.2	7.4	9.0
19	23.9	16.5	19.5	16.3	10.0	12.5	---	---	---	11.8	5.8	8.2
20	23.3	16.7	19.7	16.4	9.8	12.2	---	---	---	11.4	6.2	8.3
21	23.4	16.7	19.6	17.3	10.6	13.2	---	---	---	9.4	5.9	7.6
22	22.1	16.3	19.0	16.7	12.0	14.0	---	---	---	11.3	7.0	8.6
23	23.3	16.3	19.2	14.1	11.5	12.7	---	---	---	11.2	8.9	9.8
24	22.6	16.5	19.0	---	---	---	---	---	---	---	---	---
25	18.6	14.6	16.8	---	---	---	---	---	---	---	---	---
26	14.6	12.6	13.8	---	---	---	---	---	---	---	---	---
27	17.5	11.3	13.8	---	---	---	---	---	---	---	---	---
28	16.8	12.6	14.5	---	---	---	---	---	---	---	---	---
29	19.3	12.6	15.4	---	---	---	---	---	---	---	---	---
30	18.0	14.6	16.1	---	---	---	---	---	---	---	---	---
31	21.4	15.3	17.8	---	---	---	---	---	---	---	---	---
MONTH	26.1	11.3	19.6	24.8	9.8	14.9	---	---	---	12.9	5.8	9.4

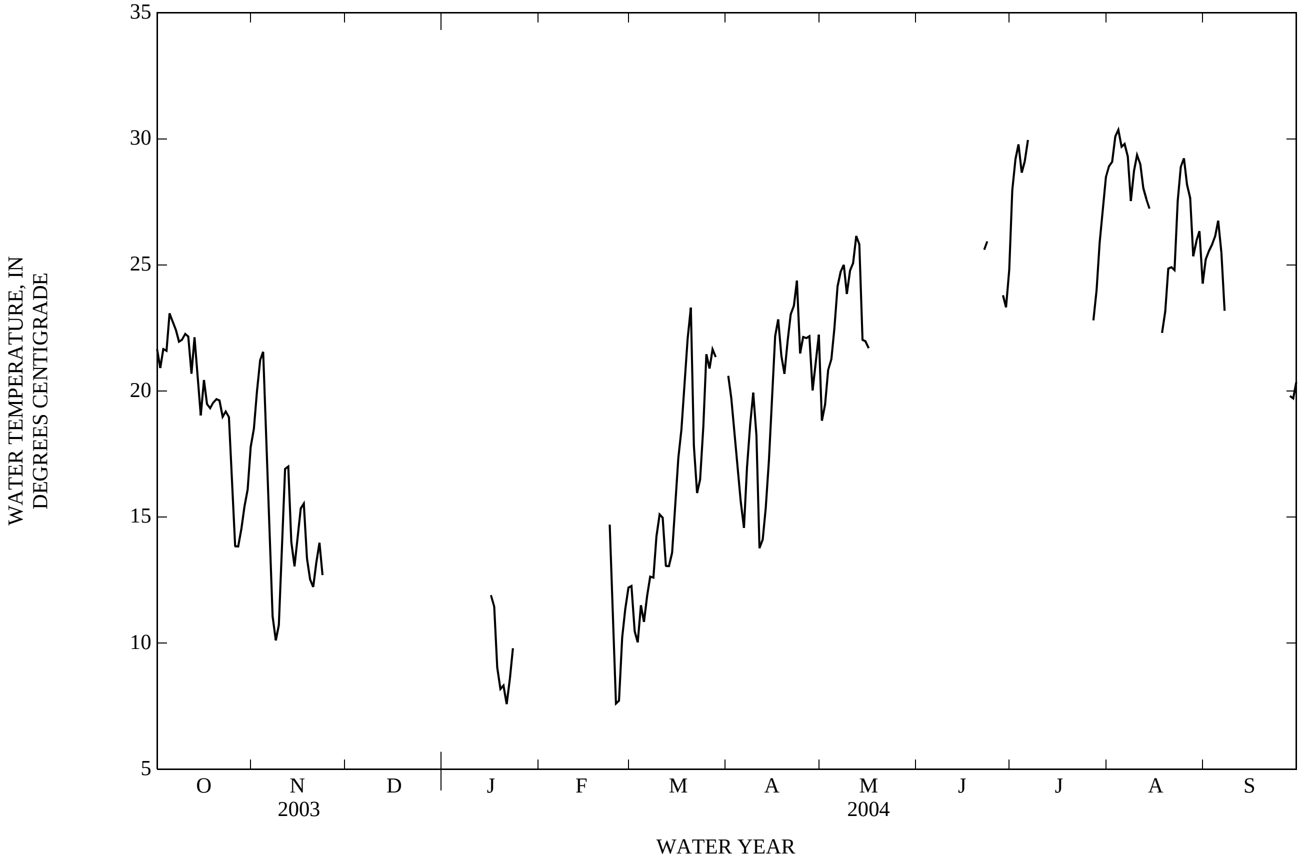
08123800 Beals Creek near Westbrook, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	15.7	9.9	12.3	25.1	16.7	20.6	20.6	17.2	18.8
2	---	---	---	11.7	9.7	10.5	21.7	18.2	19.7	25.0	15.2	19.5
3	---	---	---	10.8	9.5	10.0	20.0	16.5	18.2	26.5	16.6	20.8
4	---	---	---	12.7	10.2	11.5	18.4	16.2	17.0	26.7	17.3	21.2
5	---	---	---	11.7	10.1	10.8	16.5	14.7	15.6	28.6	18.1	22.5
6	---	---	---	13.7	10.2	11.9	15.3	13.8	14.6	29.5	20.6	24.2
7	---	---	---	13.9	11.2	12.6	19.2	15.0	17.0	28.5	22.3	24.7
8	---	---	---	14.5	10.4	12.6	21.1	16.4	18.7	28.8	22.5	25.0
9	---	---	---	17.2	11.7	14.2	22.4	17.3	19.9	26.6	22.0	23.9
10	---	---	---	18.0	12.3	15.1	21.0	15.2	18.2	29.8	21.7	24.8
11	---	---	---	16.5	13.3	15.0	15.2	12.6	13.8	29.8	22.4	25.1
12	---	---	---	14.5	12.2	13.1	18.1	11.0	14.1	31.7	23.0	26.1
13	---	---	---	15.1	11.7	13.1	19.7	11.3	15.4	31.5	22.8	25.8
14	---	---	---	13.9	13.4	13.6	21.2	13.4	17.2	25.6	19.3	22.0
15	---	---	---	18.2	13.1	15.3	24.4	15.8	19.8	26.1	19.2	22.0
16	---	---	---	20.4	14.5	17.4	26.8	18.5	22.2	23.9	20.2	21.7
17	---	---	---	22.2	15.2	18.5	25.5	20.5	22.8	---	---	---
18	---	---	---	24.3	16.8	20.3	22.7	20.2	21.4	---	---	---
19	---	---	---	26.1	19.1	22.1	21.7	19.7	20.7	---	---	---
20	---	---	---	27.5	20.6	23.3	26.3	18.6	22.0	---	---	---
21	---	---	---	22.4	14.8	17.8	27.4	19.7	23.0	---	---	---
22	---	---	---	18.0	14.3	16.0	28.3	19.9	23.4	---	---	---
23	16.0	13.4	14.7	17.4	16.1	16.5	29.2	21.7	24.4	---	---	---
24	13.4	8.8	11.3	22.2	16.0	18.6	23.7	19.6	21.5	---	---	---
25	9.1	6.0	7.6	24.9	18.8	21.5	27.8	18.2	22.1	---	---	---
26	13.0	2.9	7.7	22.4	20.2	20.9	25.9	19.4	22.1	---	---	---
27	15.2	5.2	10.2	25.6	19.1	21.7	26.1	19.2	22.2	---	---	---
28	11.9	10.9	11.3	24.1	18.9	21.4	21.6	19.1	20.0	---	---	---
29	14.3	10.5	12.2	---	---	---	26.0	17.6	21.0	---	---	---
30	---	---	---	---	---	---	25.9	19.8	22.2	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	16.0	2.9	10.7	27.5	9.5	16.0	29.2	11.0	19.7	31.7	15.2	23.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	30.6	25.4	28.0	30.5	27.1	28.9	28.2	23.1	25.2
2	---	---	---	32.3	26.6	29.2	32.5	26.2	29.1	29.6	22.1	25.5
3	---	---	---	33.8	26.7	29.8	32.9	27.5	30.1	30.1	23.0	25.8
4	---	---	---	30.3	26.9	28.7	34.7	26.8	30.4	30.6	23.1	26.1
5	---	---	---	34.1	25.7	29.1	33.1	27.4	29.7	30.8	24.2	26.8
6	---	---	---	35.1	26.1	30.0	35.2	27.2	29.8	27.7	24.0	25.5
7	---	---	---	---	---	---	34.0	25.9	29.3	25.9	21.3	23.2
8	---	---	---	---	---	---	30.1	23.0	27.5	---	---	---
9	---	---	---	---	---	---	30.5	26.8	28.7	---	---	---
10	---	---	---	---	---	---	31.8	27.0	29.4	---	---	---
11	---	---	---	---	---	---	31.7	26.7	29.0	---	---	---
12	---	---	---	---	---	---	31.5	25.0	28.0	---	---	---
13	---	---	---	---	---	---	30.7	25.0	27.6	---	---	---
14	---	---	---	---	---	---	30.5	24.7	27.2	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	23.9	21.7	22.3	---	---	---
19	---	---	---	---	---	---	25.4	21.4	23.2	---	---	---
20	---	---	---	---	---	---	26.3	23.7	24.9	---	---	---
21	---	---	---	---	---	---	25.8	24.2	24.9	---	---	---
22	28.4	23.4	25.6	---	---	---	27.6	22.3	24.8	---	---	---
23	29.4	23.1	25.9	---	---	---	30.9	24.8	27.5	---	---	---
24	---	---	---	---	---	---	32.5	25.8	28.9	---	---	---
25	---	---	---	---	---	---	32.6	26.8	29.2	---	---	---
26	---	---	---	---	---	---	30.8	25.9	28.2	---	---	---
27	---	---	---	22.9	22.6	22.8	29.6	25.7	27.7	---	---	---
28	25.9	22.3	23.8	26.2	22.4	24.0	28.2	21.4	25.4	20.4	19.2	19.8
29	26.4	20.9	23.3	28.2	23.9	25.9	29.2	23.6	25.9	20.9	18.8	19.7
30	28.3	22.2	24.8	29.8	25.2	27.3	28.7	24.6	26.3	21.2	19.6	20.3
31	---	---	---	31.2	25.8	28.5	25.1	23.4	24.3	---	---	---
MONTH	29.4	20.9	24.7	35.1	22.4	27.6	35.2	21.4	27.4	30.8	18.8	23.8
YEAR	35.2	2.9	20.0									

08123800 Beals Creek near Westbrook, TX—Continued



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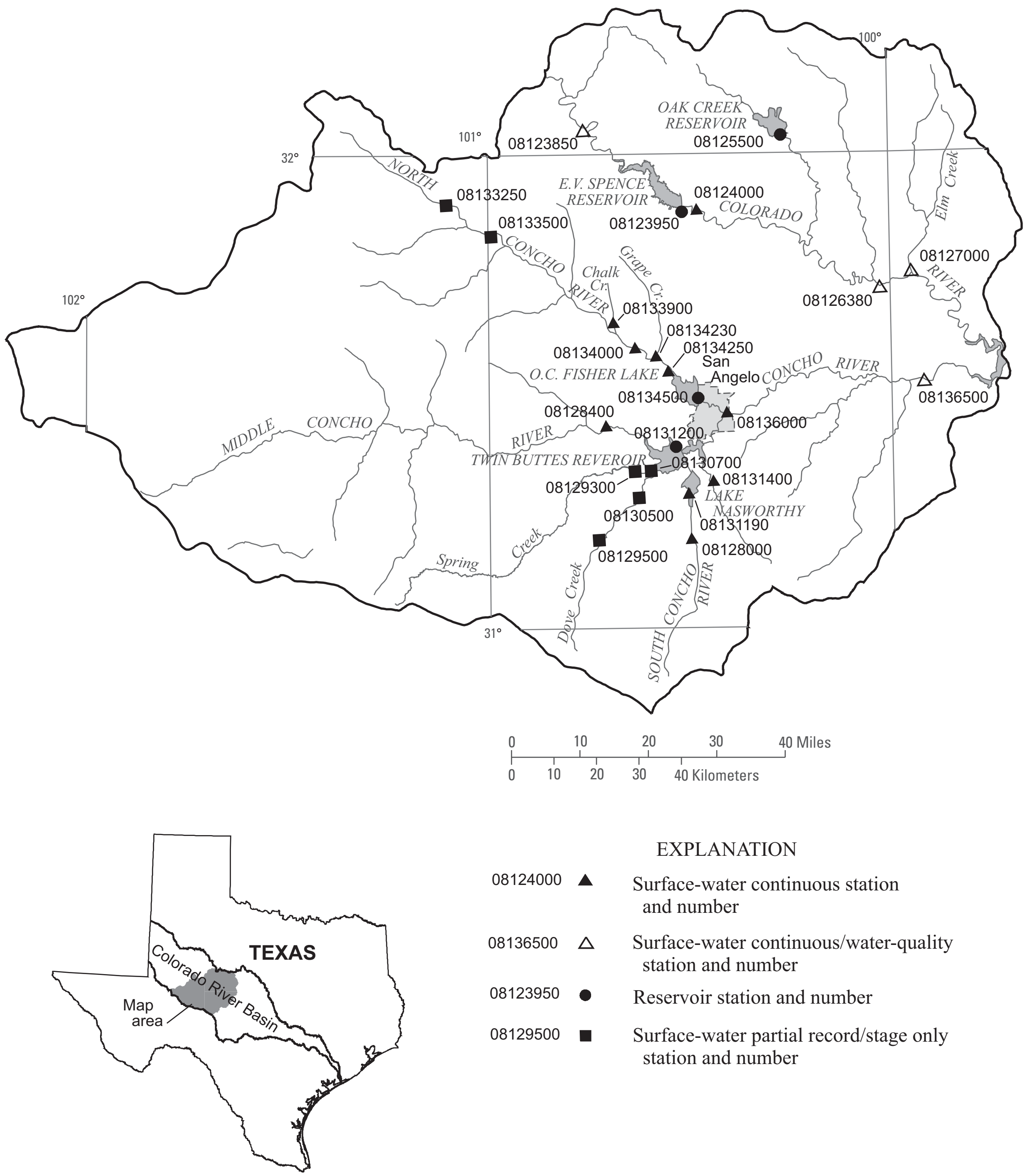


Figure 4.--Map showing location of gaging stations in the second section of the Colorado River Basin

08123850 Colorado River above Silver, TX

LOCATION.--Lat 32°03'13", long 100°45'42", Coke County, Hydrologic Unit 12080008, on right bank 25 ft downstream from Pan American Oil Co. bridge, 4.7 mi west of Silver, and at mile 756.0.

DRAINAGE AREA.--14,910 mi^2 of which 10,260 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,907.66 ft above NGVD of 1929. Prior to Oct. 4, 1972, water-stage recorder at site 0.5 mi downstream at same datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since installation of gage in Aug. 1967, at least 10% of contributing drainage area has been regulated. The Colorado River Municipal Water District diverts low flow into an off channel reservoir 3.0 mi above Colorado River at Colorado City (station 08121000) for brine disposal. There are numerous diversions from Lake J.B. Thomas (station 08118000) for municipal use and for oil field operations. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	0.96	0.73	0.88	4.2	10	16	2.0	0.01	78	41	8.1
2	8.7	0.97	0.93	0.85	3.2	7.3	14	1.9	0.00	28	34	7.0
3	6.7	0.93	0.79	1.0	3.2	9.7	12	1.7	0.06	18	23	11
4	4.6	0.64	0.65	0.92	2.5	15	17	1.6	0.17	11	15	22
5	3.2	0.45	0.51	0.74	2.0	179	14	1.1	0.13	6.5	11	11
6	43	0.49	e0.60	0.68	1.6	1,250	67	0.92	0.11	3.4	9.0	e8.0
7	45	0.98	0.63	0.84	1.7	799	787	0.88	0.09	1.3	16	5.3
8	28	1.1	0.80	0.91	1.9	951	619	0.91	0.05	0.60	320	3.9
9	110	1.1	0.62	2.1	1.4	412	309	0.89	0.05	0.37	278	3.0
10	75	1.4	e0.70	2.3	1.2	97	129	0.77	0.04	0.27	259	2.5
11	46	1.1	e0.75	2.2	1.8	65	66	0.53	0.02	0.19	196	2.0
12	33	0.82	e0.80	2.0	1.6	44	45	0.52	0.01	0.13	381	1.9
13	25	0.90	e0.85	1.6	1.8	34	35	0.38	0.00	0.07	278	1.6
14	e20	1.4	e0.90	1.4	2.1	28	29	0.21	0.00	0.05	68	1.4
15	e15	1.2	0.63	2.9	4.1	29	22	0.26	0.00	0.03	38	1.2
16	10	1.0	0.37	4.5	3.7	30	16	0.29	0.00	0.01	34	0.85
17	8.5	1.1	e0.40	5.7	3.0	34	13	0.29	0.00	0.00	19	0.73
18	7.2	0.69	0.44	4.1	2.9	26	12	0.28	0.00	0.00	20	0.61
19	6.3	0.70	0.44	3.7	2.6	18	11	0.24	0.00	0.13	238	0.53
20	5.5	0.96	0.49	5.0	1.5	15	9.6	0.20	0.00	0.14	205	0.44
21	4.7	1.1	0.56	4.7	1.5	11	8.0	0.17	1.6	0.06	163	0.39
22	3.7	1.2	0.54	4.1	1.6	77	e7.5	0.15	3.1	0.03	100	0.33
23	2.9	0.73	0.52	3.6	9.1	46	e6.5	0.13	8.8	0.01	43	0.31
24	2.3	0.60	0.56	3.2	7.5	28	5.1	0.10	4.6	0.00	25	5.6
25	1.6	e0.65	0.61	2.9	5.8	18	4.9	0.09	1.9	0.00	16	2.2
26	1.4	e0.70	0.75	1.7	5.5	15	4.6	0.08	11	0.00	12	1.2
27	1.3	0.66	0.70	1.6	10	130	4.4	0.08	7.9	7.2	15	0.89
28	1.1	0.67	0.59	1.7	8.7	119	4.0	0.09	5.4	7.3	40	0.81
29	1.2	0.79	0.57	1.5	12	45	3.8	0.08	6.7	18	134	99
30	1.1	0.80	0.81	4.0	---	30	3.2	0.05	88	27	26	231
31	0.96	---	0.79	5.5	---	21	---	0.02	---	49	11	---
TOTAL	535.96	26.79	20.03	78.82	109.7	4,593.0	2,294.6	16.91	139.74	256.79	3,068.0	434.79
MEAN	17.3	0.89	0.65	2.54	3.78	148	76.5	0.55	4.66	8.28	99.0	14.5
MAX	110	1.4	0.93	5.7	12	1,250	787	2.0	88	78	381	231
MIN	0.96	0.45	0.37	0.68	1.2	7.3	3.2	0.02	0.00	0.00	9.0	0.31
AC-FT	1,060	53	40	156	218	9,110	4,550	34	277	509	6,090	862

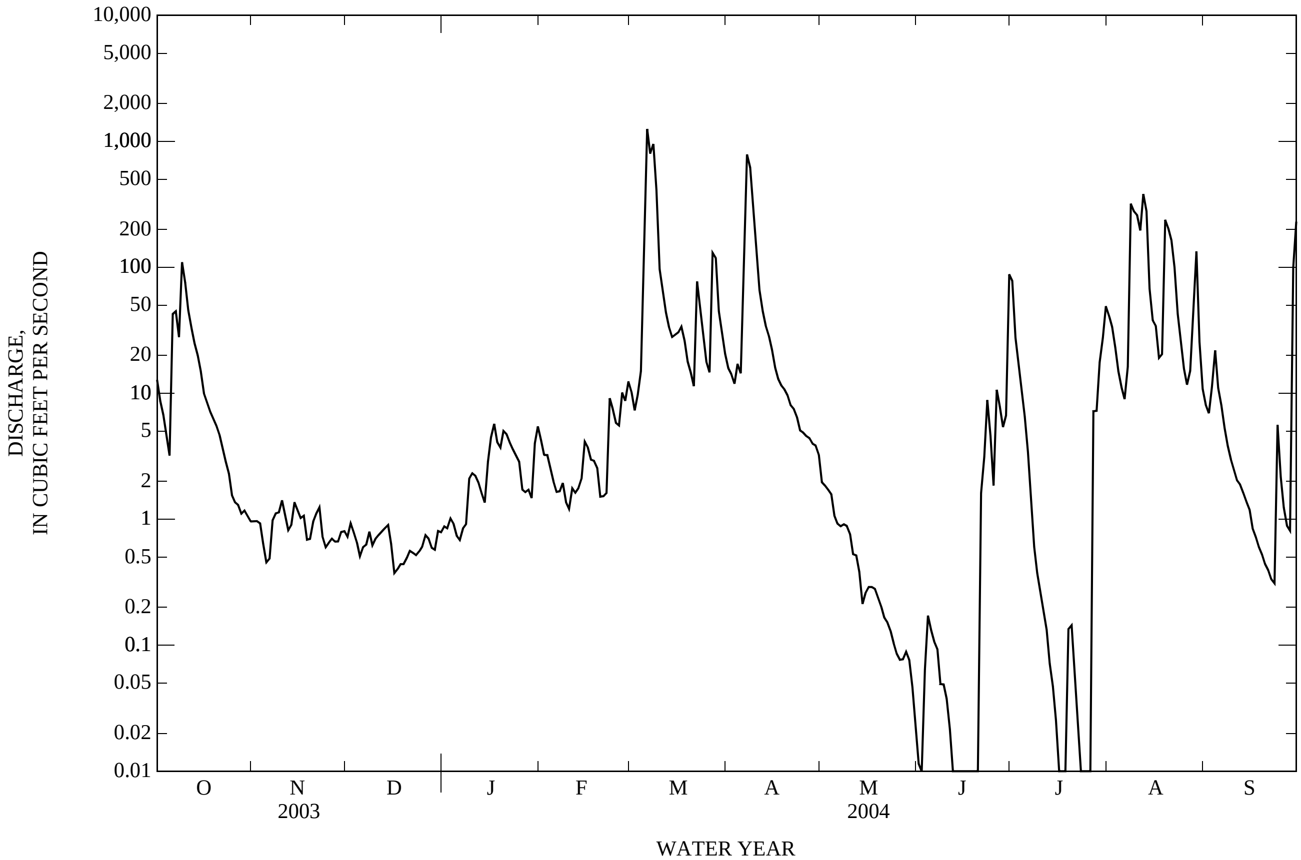
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	107	21.5	16.5	15.5	26.9	55.3	48.9	136	158	46.8	76.4	133
MAX	1,834	152	120	90.7	256	999	599	681	1,242	313	1,122	1,853
(WY)	(1987)	(2002)	(1992)	(1987)	(1992)	(2000)	(1981)	(1994)	(1982)	(1988)	(1971)	(1980)
MIN	0.00	0.00	0.30	1.10	1.02	0.36	0.54	0.55	0.05	0.00	0.00	0.00
(WY)	(1969)	(1971)	(1971)	(2002)	(1971)	(1971)	(2003)	(2004)	(2001)	(1970)	(2002)	(1968)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	15,898.73		11,575.13			
ANNUAL MEAN	43.6		31.6		70.5	
HIGHEST ANNUAL MEAN					298	1987
LOWEST ANNUAL MEAN					4.69	1998
HIGHEST DAILY MEAN	2,390	Jun 6	1,250	Mar 6	15,900	Sep 30, 1980
LOWEST DAILY MEAN	0.00	May 9	0.00	Jun 2	0.00	Aug 2, 1968
ANNUAL SEVEN-DAY MINIMUM	0.00	May 9	0.00	Jun 13	0.00	Aug 2, 1968
MAXIMUM PEAK FLOW			1,540	Mar 6	18,900	Sep 9, 1980
MAXIMUM PEAK STAGE			7.62	Mar 6	22.73	Sep 9, 1980
ANNUAL RUNOFF (AC-FT)	31,540		22,960		51,050	
10 PERCENT EXCEEDS	34		46		88	
50 PERCENT EXCEEDS	1.3		2.0		7.4	
90 PERCENT EXCEEDS	0.04		0.10		0.08	

e Estimated

08123850 Colorado River above Silver, TX—Continued



08123850 Colorado River above Silver, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Aug. 1967 to Sept. 2003.
BIOCHEMICAL DATA: Nov. 1977 to Sept. 2003.
PESTICIDE DATA: Oct. 1969 to Aug. 1981.
SEDIMENT DATA: Aug. 1977 to Aug. 1994.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Dec. 1967 to current year.
WATER TEMPERATURE: Dec. 1967 to May 1981 (local observer) and June 1981 to current year.

INSTRUMENTATION.--Specific conductance monitor since Dec. 1967. Water-temperature monitor since June 1981.

REMARKS.--No estimated daily specific conductance or water temperature. Records good. Interruptions in the record were due to malfunction of the instrument and no flow. No flow June 2, 13-20, July 17, 18, 24-26. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using the daily (or continuous) records of specific conductance and a regression relation between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 19,900 microsiemens/cm, Sept. 10, 1988; minimum, 154 microsiemens/cm, Sept. 21, 1990.
WATER TEMPERATURE: Maximum, 35.5°C, Aug. 2, 7, 1985; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 9,920 microsiemens/cm, Mar. 5; minimum, 155 microsiemens/cm, Aug. 19.
WATER TEMPERATURE: Maximum, 33.6°C, Aug. 3; minimum recorded, 3.2°C, Feb. 14.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	3,590	3,180	3,340	3,110	3,070	3,090	4,610	4,560	4,580	5,540	5,500	5,520
2	3,820	3,230	3,560	3,170	3,110	3,140	4,600	4,570	4,590	5,550	5,500	5,530
3	3,880	3,680	3,810	3,220	3,170	3,190	4,630	4,580	4,610	5,540	5,520	5,530
4	3,680	3,310	3,510	3,300	3,220	3,260	4,660	4,630	4,650	5,580	5,530	5,550
5	3,340	3,160	3,250	3,400	3,290	3,350	4,740	4,650	4,690	5,650	5,570	5,610
6	3,160	2,520	2,910	3,480	3,400	3,450	4,770	4,720	4,740	5,710	5,640	5,680
7	4,630	2,780	3,780	3,490	3,460	3,480	4,800	4,740	4,760	5,740	5,700	5,720
8	2,780	1,940	2,110	3,550	3,470	3,520	4,820	4,760	4,790	5,760	5,700	5,740
9	3,180	1,050	1,820	3,540	3,460	3,500	---	4,800	---	5,800	5,730	5,780
10	4,210	2,470	3,340	3,460	3,420	3,440	---	---	---	5,840	5,770	5,810
11	4,160	3,040	3,720	3,530	3,440	3,480	---	---	---	5,880	5,820	5,850
12	3,040	1,880	2,330	3,600	3,500	3,550	---	---	---	5,910	5,860	5,890
13	1,880	1,540	1,690	3,720	3,600	3,660	---	---	---	5,970	5,900	5,940
14	1,540	1,470	1,500	3,790	3,710	3,760	5,040	4,970	4,990	6,030	5,970	6,010
15	1,510	1,470	1,490	3,810	3,780	3,800	5,100	4,960	5,020	6,030	5,710	5,950
16	1,580	1,510	1,540	3,840	3,790	3,810	5,090	5,060	5,070	5,820	5,660	5,720
17	1,680	1,580	1,630	3,900	3,830	3,860	---	---	---	6,070	5,740	5,930
18	1,790	1,680	1,740	4,030	3,890	3,970	5,110	5,060	5,080	6,240	6,060	6,160
19	1,900	1,790	1,840	4,130	4,030	4,080	5,120	5,070	5,100	6,400	6,230	6,310
20	2,010	1,900	1,950	4,160	4,120	4,140	5,160	5,100	5,140	6,640	6,380	6,510
21	2,080	2,000	2,050	4,200	4,150	4,180	5,180	5,140	5,160	6,950	6,640	6,850
22	2,190	2,080	2,150	4,230	4,190	4,210	5,230	5,160	5,190	7,030	6,940	7,000
23	2,300	2,190	2,250	4,300	4,230	4,260	5,280	5,220	5,250	7,060	6,880	7,000
24	---	---	---	4,360	4,290	4,330	5,340	5,280	5,310	6,890	6,450	6,690
25	---	---	---	4,400	4,360	4,380	5,350	5,310	5,330	6,450	6,240	6,350
26	---	---	---	4,430	4,360	4,400	5,360	5,310	5,330	6,380	6,280	6,330
27	---	---	---	4,460	4,410	4,430	5,350	5,300	5,320	6,470	6,380	6,430
28	2,860	2,800	2,840	4,520	4,450	4,490	5,410	5,330	5,370	6,500	6,430	6,480
29	2,920	2,860	2,890	4,550	4,500	4,520	5,490	5,400	5,460	6,570	6,500	6,530
30	3,030	2,920	2,960	4,580	4,530	4,550	5,530	5,480	5,510	6,730	6,550	6,660
31	3,070	3,000	3,020	---	---	---	5,550	5,510	5,530	6,800	6,710	6,760
MONTH	4,630	1,050	2,560	4,580	3,070	3,840	5,550	4,560	5,060	7,060	5,500	6,120

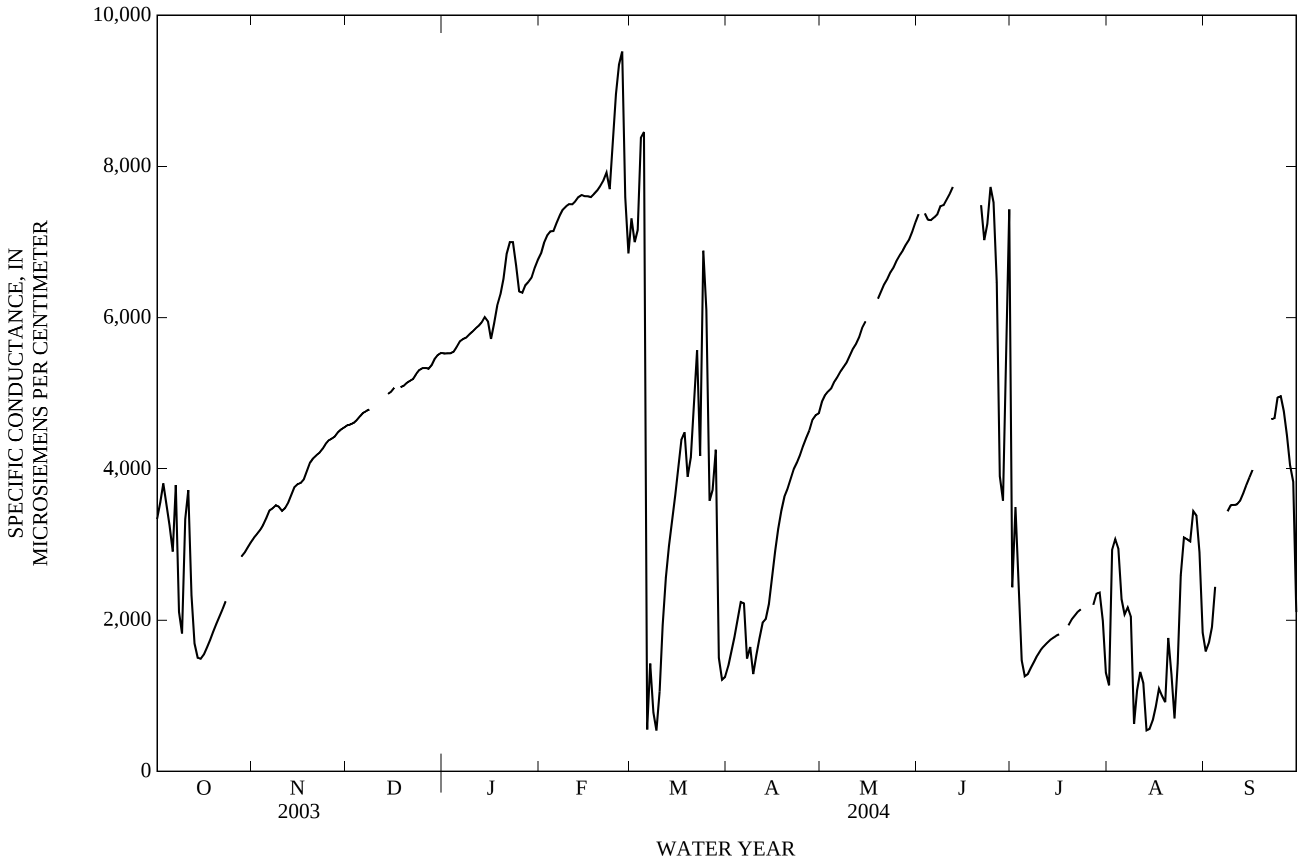
08123850 Colorado River above Silver, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6,930	6,780	6,850	7,460	7,120	7,310	1,480	1,310	1,390	4,960	4,830	4,890
2	7,050	6,910	6,990	7,120	6,920	7,000	1,690	1,480	1,580	5,030	4,940	4,970
3	7,130	7,030	7,090	7,860	6,930	7,160	1,870	1,690	1,780	5,070	4,980	5,020
4	7,150	7,120	7,140	8,700	7,860	8,380	2,140	1,870	2,000	5,140	5,020	5,070
5	7,200	7,110	7,150	9,920	1,280	8,460	2,290	2,110	2,240	5,190	5,110	5,150
6	7,330	7,190	7,250	1,480	251	550	2,990	1,960	2,220	5,260	5,190	5,220
7	7,380	7,320	7,350	3,730	441	1,430	3,280	503	1,490	5,320	5,260	5,290
8	7,460	7,380	7,430	1,200	447	777	2,120	608	1,640	5,390	5,300	5,350
9	7,500	7,450	7,470	734	440	537	1,720	1,060	1,280	5,450	5,370	5,410
10	7,510	7,470	7,500	1,490	734	1,060	1,640	1,450	1,540	5,550	5,450	5,500
11	7,520	7,490	7,500	2,310	1,490	1,930	1,920	1,520	1,760	5,630	5,550	5,590
12	7,580	7,490	7,540	2,770	2,310	2,560	1,990	1,920	1,960	5,720	5,600	5,660
13	7,620	7,580	7,600	3,180	2,770	2,970	2,090	1,980	2,010	5,810	5,680	5,750
14	7,670	7,580	7,620	3,480	3,180	3,340	2,390	2,090	2,210	5,940	5,810	5,880
15	7,670	7,550	7,610	3,820	3,480	3,640	2,750	2,380	2,550	5,980	5,920	5,950
16	7,670	7,560	7,610	4,190	3,810	4,020	3,080	2,750	2,910	---	---	---
17	7,680	7,540	7,600	4,520	4,190	4,380	3,340	3,080	3,200	---	---	---
18	7,720	7,570	7,640	4,670	4,030	4,480	3,540	3,340	3,450	---	---	---
19	7,710	7,660	7,680	4,030	3,830	3,900	3,690	3,540	3,630	6,310	6,200	6,250
20	7,790	7,690	7,740	4,490	3,960	4,150	3,820	3,690	3,740	6,400	6,300	6,350
21	7,870	7,780	7,820	5,150	4,490	4,840	3,960	3,810	3,870	6,490	6,400	6,440
22	7,940	7,860	7,920	6,500	5,130	5,570	4,060	3,940	4,000	6,560	6,480	6,520
23	7,980	7,280	7,700	5,990	3,190	4,170	4,150	4,030	4,080	6,650	6,560	6,600
24	8,840	7,450	8,310	7,650	5,640	6,890	4,250	4,130	4,180	6,730	6,630	6,670
25	9,090	8,830	8,960	7,630	4,240	6,100	4,410	4,220	4,300	6,800	6,730	6,760
26	9,510	9,080	9,350	4,260	3,210	3,580	4,480	4,380	4,410	6,880	6,800	6,830
27	9,700	8,910	9,520	5,930	2,920	3,720	4,580	4,480	4,510	6,920	6,820	6,890
28	8,910	6,970	7,600	6,620	1,970	4,250	4,720	4,580	4,650	7,020	6,910	6,970
29	7,250	6,620	6,850	1,970	1,260	1,500	4,780	4,620	4,710	7,090	6,990	7,040
30	---	---	---	1,260	1,180	1,210	4,840	4,700	4,740	7,220	7,080	7,140
31	---	---	---	1,310	1,200	1,250	---	---	---	7,330	7,210	7,260
MONTH	9,700	6,620	7,670	9,920	251	3,910	4,840	503	2,930	7,330	4,830	6,020

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7,430	7,320	7,370	3,740	1,680	2,430	1,400	832	1,140	1,610	1,550	1,580
2	---	---	---	3,950	2,850	3,490	3,880	1,160	2,930	1,780	1,610	1,700
3	7,640	7,280	7,380	3,620	1,710	2,470	3,310	2,910	3,070	2,070	1,780	1,910
4	7,360	7,210	7,300	1,710	1,300	1,460	3,220	2,540	2,950	2,620	2,070	2,440
5	7,340	7,240	7,290	1,300	1,240	1,260	2,540	2,130	2,280	2,600	---	---
6	7,370	7,270	7,330	1,320	1,250	1,290	2,140	2,040	2,070	---	---	---
7	7,440	7,330	7,370	1,410	1,320	1,370	2,360	2,080	2,170	3,350	---	---
8	7,510	7,430	7,480	1,490	1,410	1,450	3,250	645	2,050	3,490	3,350	3,440
9	7,530	7,450	7,490	1,560	1,490	1,530	918	532	623	3,540	3,480	3,520
10	7,620	7,520	7,560	1,630	1,560	1,600	1,520	759	1,070	3,580	3,490	3,520
11	7,690	7,580	7,640	1,670	1,620	1,650	1,420	1,180	1,310	3,580	3,490	3,530
12	7,760	7,690	7,730	1,720	1,670	1,690	1,420	606	1,170	3,640	3,520	3,580
13	---	---	---	1,750	1,720	1,730	606	497	539	3,740	3,610	3,680
14	---	---	---	1,820	1,750	1,760	607	518	559	3,850	3,730	3,780
15	---	---	---	1,840	1,770	1,790	748	607	673	3,940	3,850	3,890
16	---	---	---	1,850	1,780	1,810	979	748	855	4,060	3,920	3,980
17	---	---	---	---	---	---	1,150	979	1,090	---	4,020	---
18	---	---	---	---	---	---	1,280	862	999	---	---	---
19	---	---	---	1,980	1,870	1,930	1,550	155	915	---	---	---
20	---	---	---	2,050	1,960	2,010	2,140	1,130	1,760	---	---	---
21	8,270	7,080	7,490	2,120	2,010	2,060	2,110	834	1,280	---	---	---
22	7,230	6,810	7,030	2,160	2,080	2,110	1,020	566	701	4,670	4,620	4,660
23	8,170	6,480	7,240	2,180	2,120	2,140	2,120	832	1,430	4,710	4,610	4,670
24	8,140	7,520	7,730	---	---	---	3,000	2,120	2,590	5,070	4,650	4,940
25	7,580	7,450	7,520	---	---	---	3,130	3,000	3,090	4,990	4,930	4,960
26	7,470	4,440	6,470	---	---	---	3,100	3,030	3,070	4,930	4,580	4,760
27	4,550	3,550	3,900	2,320	2,080	2,200	3,070	2,990	3,040	4,590	4,220	4,440
28	3,990	3,270	3,580	2,390	2,150	2,350	3,970	3,030	3,440	4,220	3,880	4,050
29	6,440	3,970	5,200	3,160	1,920	2,360	4,040	1,580	3,380	5,340	2,680	3,830
30	9,540	2,650	7,430	2,330	1,430	1,990	3,510	2,220	2,900	2,900	1,520	2,100
31	---	---	---	1,640	1,000	1,300	2,220	1,600	1,830	---	---	---
MONTH	9,540	2,650	6,930	3,950	1,000	1,890	4,040	155	1,840	5,340	1,520	3,590
YEAR	9,920	155	4,320									

08123850 Colorado River above Silver, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.5	19.8	21.6	21.9	19.4	20.6	11.4	8.6	10.0	12.5	9.1	10.8
2	23.2	18.9	21.1	22.0	20.2	21.0	12.7	11.0	11.8	14.4	11.3	12.8
3	23.6	19.3	21.4	23.2	20.2	21.7	14.0	11.7	12.7	15.2	13.4	14.2
4	23.0	20.2	21.2	24.5	21.5	22.5	12.9	10.8	12.0	14.9	12.0	13.7
5	24.1	20.9	22.1	22.2	17.8	20.0	12.2	8.9	10.3	12.0	8.6	9.8
6	24.0	21.3	22.7	17.8	12.7	15.1	8.9	7.1	8.1	8.6	5.2	6.3
7	23.9	21.8	22.7	12.7	10.3	11.0	10.4	7.2	8.8	5.8	4.0	5.0
8	22.7	21.5	21.9	10.5	10.1	10.3	12.7	9.1	10.7	7.7	4.8	6.2
9	22.1	21.1	21.6	11.7	10.4	10.9	11.8	---	---	8.4	5.7	7.1
10	22.5	21.5	22.0	16.5	11.7	13.9	---	---	---	8.6	5.8	7.4
11	22.2	21.5	21.8	19.7	16.0	17.4	---	---	---	9.2	7.0	8.2
12	21.6	20.3	20.8	20.1	17.8	18.7	---	---	---	10.9	8.6	9.6
13	24.7	20.1	21.9	17.8	13.4	15.3	---	---	---	12.7	9.6	11.0
14	23.1	19.2	21.0	13.9	12.4	13.2	8.2	---	---	11.9	10.4	11.2
15	21.8	17.5	19.7	16.3	13.8	14.8	9.8	6.9	8.1	13.4	11.6	12.3
16	23.7	18.1	20.3	17.1	14.4	15.8	7.8	5.9	6.8	14.2	13.0	13.7
17	22.6	19.3	21.1	17.3	16.2	16.9	---	---	---	14.1	10.7	12.7
18	21.4	17.6	19.4	16.2	12.6	14.1	7.3	5.0	6.3	10.7	7.8	9.0
19	22.9	18.4	20.0	13.2	10.5	11.9	7.2	5.1	6.3	8.7	5.9	7.5
20	23.9	18.7	20.5	13.7	10.8	12.4	8.0	5.2	6.7	9.8	6.2	8.2
21	21.3	18.8	20.0	15.8	11.9	13.7	10.0	6.8	8.4	9.7	6.9	8.5
22	21.5	18.4	20.0	15.9	13.3	14.6	11.2	9.0	10	10.8	7.7	9.2
23	21.6	18.4	19.7	15.2	10.8	12.9	9.7	8.2	9.1	11.3	10.1	10.7
24	---	---	---	10.8	8.4	9.3	8.7	6.9	8.0	12.3	11.0	11.7
25	---	---	---	8.9	7.4	8.3	9.7	7.1	8.4	12.7	10.2	11.6
26	---	---	---	11.2	8.0	9.5	12.1	8.8	10.4	11.5	7.9	9.6
27	15.7	---	---	10.4	9.1	9.8	14.0	11.7	12.8	8.4	5.8	7.2
28	17.7	13.9	15.5	9.4	7.5	8.6	13.1	9.8	11.5	9.4	6.4	7.9
29	18.3	14.6	16.5	9.4	7.1	8.3	9.8	6.9	8.0	12.4	8.6	9.9
30	19.6	16.1	17.6	10.7	7.3	9.0	7.8	5.5	6.8	10.8	7.7	9.4
31	20.7	17.7	19.1	---	---	---	9.2	6.1	7.6	11.6	7.3	9.5
MONTH	24.7	13.9	20.5	24.5	7.1	14.1	14.0	5.0	9.2	15.2	4.0	9.7

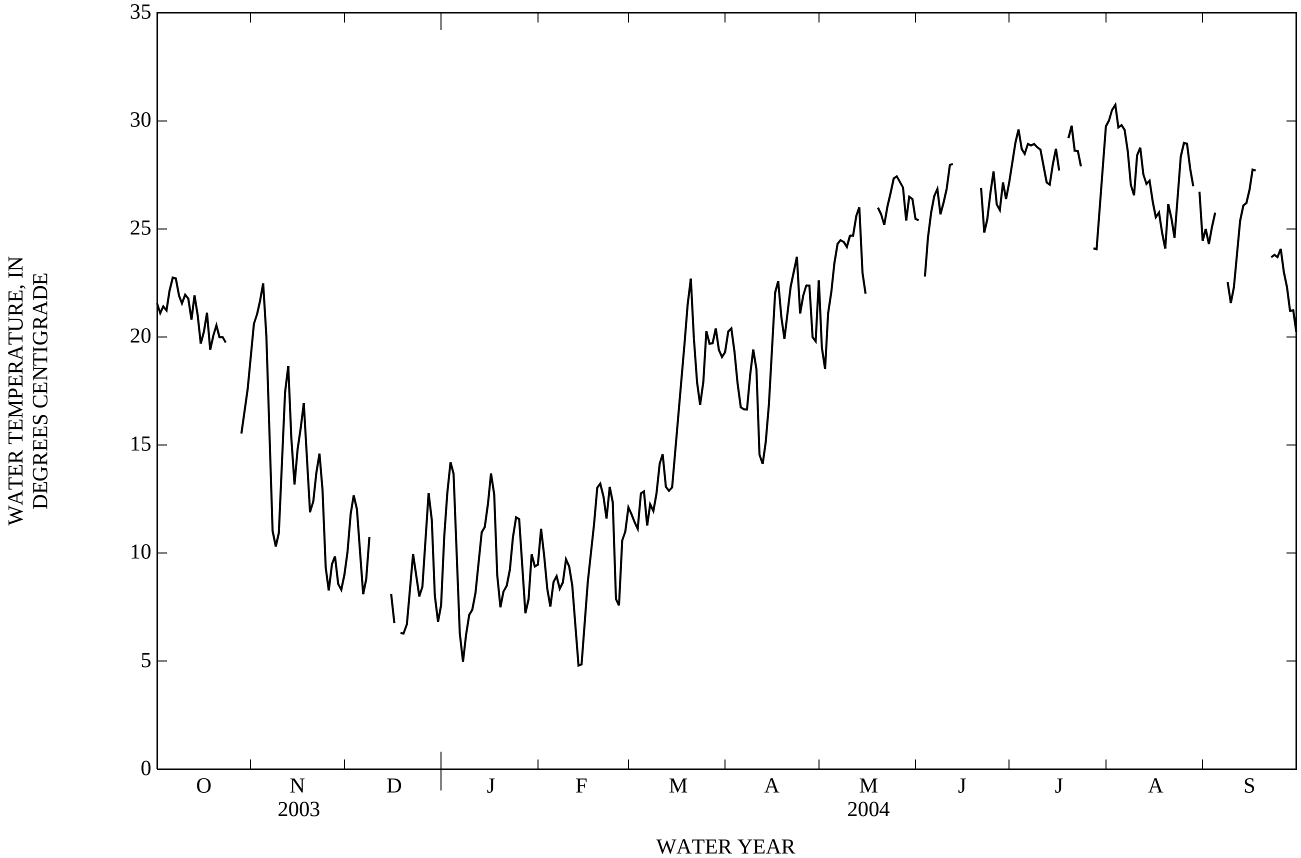
08123850 Colorado River above Silver, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	12.1	10.0	11.1	14.1	9.3	11.8	23.8	16.9	20.3	22.6	17.7	19.5
2	11.2	7.9	9.9	13.1	10.8	11.4	21.5	18.9	20.4	21.7	16.1	18.5
3	10.1	7.3	8.3	11.6	10.8	11.1	21.3	17.4	19.3	25.0	18.2	21.1
4	7.9	7.2	7.5	14.5	11.3	12.8	19.6	16.7	17.9	25.3	19.2	22.1
5	10.5	7.1	8.7	16.3	11.1	12.9	17.6	16.1	16.8	25.9	21.0	23.4
6	9.7	8.1	8.9	12.2	10.3	11.3	18.7	15.2	16.7	26.5	22.4	24.3
7	10.1	6.6	8.3	13.1	11.7	12.3	17.5	15.6	16.6	26.1	23.1	24.5
8	9.6	7.4	8.6	12.9	10.8	12.0	20.2	16.7	18.3	26.3	22.8	24.4
9	10.8	8.7	9.7	14.4	11.2	12.7	21.2	17.6	19.4	25.8	22.5	24.2
10	10.3	9.0	9.4	15.9	12.3	14.1	20.5	16.0	18.5	27.0	22.6	24.7
11	9.2	8.2	8.5	15.6	13.5	14.6	16.0	13.5	14.6	26.9	22.8	24.7
12	8.3	5.7	6.9	14.2	12.1	13.1	16.7	12.0	14.1	30.3	23.2	25.6
13	5.7	4.4	4.8	14.6	11.7	12.9	18.3	12.4	15.1	29.2	24.6	26.0
14	6.7	3.2	4.8	13.5	12.6	13.0	20.5	13.8	16.9	25.1	20.9	23.0
15	8.9	4.3	6.8	18.0	12.8	14.9	23.5	16.2	19.4	23.7	20.8	22.0
16	10.6	6.4	8.7	19.4	14.2	16.6	25.8	19.0	22.1	---	---	---
17	12.1	8.2	10.1	21.4	15.7	18.2	24.8	20.3	22.6	---	---	---
18	13.3	9.2	11.3	23.4	17.0	19.7	22.9	19.9	20.9	28.3	---	---
19	14.7	11.5	13.0	24.3	19.3	21.5	20.7	19.1	19.9	28.5	23.6	26.0
20	14.2	12.0	13.2	26.1	20.1	22.7	24.5	18.7	21.1	27.2	24.2	25.7
21	13.4	11.3	12.6	23.0	18.1	19.9	25.0	20.1	22.3	27.2	23.3	25.2
22	12.5	10.5	11.6	19.1	16.0	17.9	26.8	20.8	23.1	29.0	23.6	26.0
23	15.1	11.8	13.1	17.7	16.2	16.9	25.8	22.2	23.7	29.7	25.0	26.7
24	14.1	9.7	12.4	20.8	15.9	17.9	23.5	19.0	21.1	29.7	25.1	27.3
25	9.7	7.1	7.9	23.4	17.9	20.3	25.7	18.9	21.9	29.6	25.7	27.4
26	10.9	5.2	7.6	21.5	19.1	19.7	24.7	20.0	22.4	29.1	25.5	27.2
27	13.4	8.1	10.6	21.4	18.4	19.7	24.7	19.7	22.4	29.7	25.7	26.9
28	11.8	10.5	11.0	22.0	19.4	20.4	23.1	18.5	20.0	28.5	23.2	25.4
29	14.3	10.4	12.1	21.8	17.3	19.4	23.0	16.9	19.8	29.4	24.3	26.5
30	---	---	---	22.1	16.4	19.1	25.0	20.6	22.6	28.2	24.8	26.4
31	---	---	---	22.2	16.7	19.3	---	---	---	27.6	23.0	25.5
MONTH	15.1	3.2	9.6	26.1	9.3	16.1	26.8	12.0	19.7	30.3	16.1	24.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	29.0	22.7	25.4	30.9	25.8	28.1	32.0	28.1	30.0	27.9	23.1	25.0
2	---	---	---	32.2	26.4	29.0	33.2	28.4	30.5	27.5	22.3	24.3
3	23.3	22.2	22.8	32.5	27.1	29.6	33.6	28.6	30.7	27.6	23.0	25.1
4	28.2	21.6	24.6	30.4	26.6	28.7	32.4	27.3	29.7	28.1	23.9	25.8
5	27.9	23.7	25.8	31.2	26.0	28.5	31.4	28.1	29.8	---	24.3	---
6	29.4	24.5	26.5	31.2	26.5	28.9	30.9	28.2	29.6	---	---	---
7	28.9	25.0	26.8	31.4	26.7	28.9	31.4	27.1	28.6	25.4	---	---
8	27.2	24.2	25.7	31.3	26.6	28.9	30.2	23.9	27.0	24.8	20.1	22.5
9	28.4	24.5	26.2	30.7	26.8	28.8	28.3	25.0	26.6	23.3	19.7	21.6
10	29.6	24.8	26.9	30.4	27.1	28.7	30.3	26.8	28.4	25.3	20.0	22.3
11	31.3	25.6	28.0	29.7	26.0	27.9	29.9	27.7	28.8	26.4	21.7	23.8
12	30.7	26.1	28.0	28.7	25.7	27.2	28.4	26.6	27.5	28.6	23.4	25.4
13	---	---	---	28.8	25.6	27.0	28.2	25.9	27.1	27.6	24.2	26.1
14	---	---	---	31.8	25.6	28.0	28.5	26.0	27.2	28.4	24.3	26.2
15	---	---	---	32.1	26.3	28.7	27.3	25.1	26.3	30.3	24.7	26.8
16	---	---	---	33.1	26.4	27.7	27.1	24.3	25.5	30.7	25.8	27.7
17	---	---	---	---	---	---	28.3	23.7	25.8	29.8	26.2	27.7
18	---	---	---	---	---	---	26.1	24.0	24.8	---	---	---
19	---	---	---	32.8	26.7	29.2	26.3	21.7	24.1	---	---	---
20	---	---	---	32.4	27.8	29.8	27.3	25.4	26.1	---	---	---
21	27.7	25.6	26.9	32.2	26.6	28.6	26.4	24.1	25.5	25.5	---	---
22	26.4	23.4	24.8	31.9	26.6	28.6	26.9	22.7	24.6	24.7	22.6	23.7
23	27.4	23.8	25.5	29.5	26.9	27.9	29.6	24.6	26.6	25.9	22.5	23.8
24	29.5	24.8	26.7	---	---	---	31.5	25.9	28.3	25.1	22.3	23.7
25	29.4	26.2	27.7	---	---	---	31.6	27.4	29.0	25.2	22.8	24.1
26	28.7	24.8	26.1	---	---	---	31.7	26.5	28.9	23.9	22.1	23.0
27	28.0	24.2	25.9	24.7	23.7	24.1	29.5	25.7	27.8	23.1	21.6	22.3
28	28.2	26.1	27.2	26.7	22.9	24.1	28.3	25.7	27.0	21.8	20.6	21.2
29	28.1	25.1	26.4	29.1	24.2	26.2	---	25.1	---	22.3	20.3	21.2
30	30.1	25.3	27.2	31.5	25.7	28.0	28.0	25.4	26.7	21.2	19.8	20.2
31	---	---	---	32.3	27.5	29.7	25.4	23.9	24.5	---	---	---
MONTH	31.3	21.6	26.2	33.1	22.9	28.1	33.6	21.7	27.4	30.7	19.7	24.1
YEAR	33.6	3.2	18.8									

08123850 Colorado River above Silver, TX—Continued



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08123950 E.V. Spence Reservoir near Robert Lee, TX

LOCATION.--Lat 31°52'46", long 100°31'01", Coke County, Hydrologic Unit 12080008, in outlet works of Robert Lee Dam on the Colorado River, 2.2 mi west of Robert Lee, and at mile 716.0.

DRAINAGE AREA.--15,278 mi^2 of which 10,260 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Dec. 1968 to Sept. 2003 (contents), Oct. 2003 to current year. Water-quality records: Chemical data: Nov. 1969 to Aug. 1988. Biochemical data: Jan. 1978 to Aug. 1988.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to June 24, 1969, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records good except those for May 7-21, which are fair. Interruptions in the record were due to malfunction of the instrument. The reservoir is formed by a rolled earthfill dam 21,500 ft long. Closure was made Dec. 30, 1968, and dam was completed in June 1969. The dam is the property of the Colorado River Municipal Water District, which has a permit to divert 50,000 acre-ft annually for municipal, mining, and industrial uses. Inflow into the reservoir is partially regulated by Lake J.B. Thomas (station 08118000), Lake Colorado City (station 08123000), and Champion Creek Reservoir (station 08123600). There are two spillways: The controlled service spillway is a morning-glory type that is partially controlled by 12 lift gates, 14.48 by 22.0 ft, and discharges through a 28.0 ft diameter concrete conduit. The uncontrolled spillway is a 3,200 ft wide cut through natural ground near the right end of dam. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,928.00
Crest of spillway	1,908.00
Top of gates	1,900.00
Crest of spillway	1,878.00
Lowest gated outlet (invert)	1,815.85

COOPERATION.--Records of diversions can be obtained from the city of San Angelo and from the Colorado River Municipal Water District.

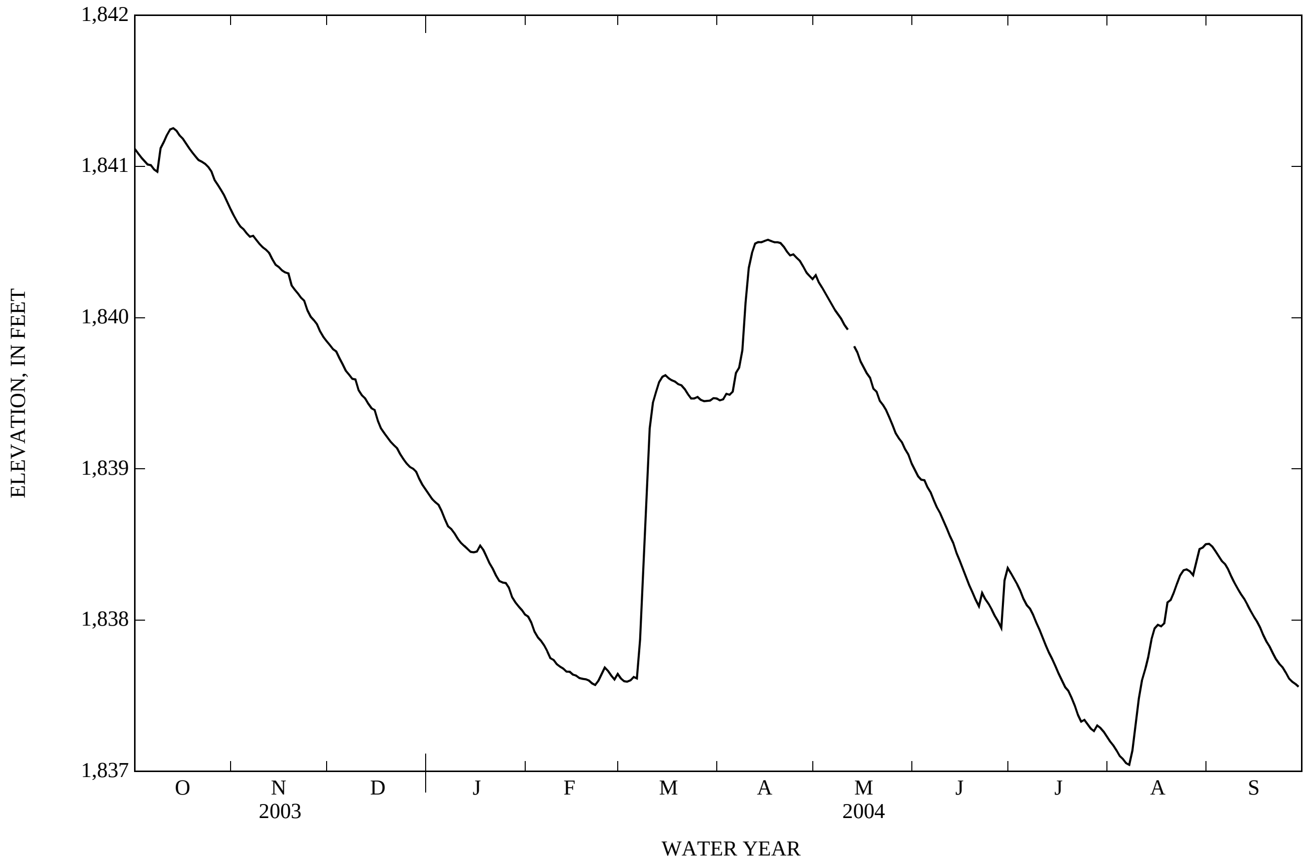
EXTREMES FOR PERIOD OF RECORD.--Dec. 1968 to Sept. 2003: Maximum contents, 355,300 acre-ft, June 16, 1987; minimum contents after initial filling, 31,640 acre-ft, June 1, 2003; Dec. 1968 to current year: Maximum elevation, 1,887.03 ft, June 16, 1987; minimum elevation, 1,832.67 ft, June 1, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,841.27 ft, Oct. 13; minimum elevation, 1,837.00 ft, Aug. 8.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,841.12	1,840.67	1,839.82	1,838.83	1,838.02	1,837.61	1,839.45	1,840.28	1,838.99	1,838.31	1,837.20	1,838.50
2	1,841.09	1,840.63	1,839.79	1,838.80	1,837.98	1,837.60	1,839.46	1,840.23	1,838.95	1,838.27	1,837.17	1,838.49
3	1,841.06	1,840.60	1,839.78	1,838.78	1,837.92	1,837.59	1,839.50	1,840.20	1,838.93	1,838.23	1,837.14	1,838.45
4	1,841.04	1,840.59	1,839.73	1,838.76	1,837.89	1,837.60	1,839.49	1,840.16	1,838.92	1,838.19	1,837.10	1,838.42
5	1,841.01	1,840.56	1,839.69	1,838.72	1,837.86	1,837.62	1,839.51	1,840.12	1,838.88	1,838.14	1,837.08	1,838.39
6	1,841.01	1,840.54	1,839.65	1,838.67	1,837.83	1,837.61	1,839.63	1,840.09	1,838.84	1,838.10	1,837.05	1,838.37
7	1,840.98	1,840.54	1,839.62	1,838.62	1,837.79	1,837.87	1,839.67	1,840.05	1,838.79	1,838.08	1,837.04	1,838.33
8	1,840.97	1,840.51	1,839.60	1,838.60	1,837.75	1,838.34	1,839.78	1,840.02	1,838.74	1,838.04	1,837.14	1,838.29
9	1,841.12	1,840.49	1,839.59	1,838.57	1,837.74	1,838.87	1,840.10	1,839.99	1,838.70	1,837.98	1,837.30	1,838.24
10	1,841.16	1,840.46	1,839.52	1,838.54	1,837.71	1,839.27	1,840.33	1,839.95	1,838.65	1,837.94	1,837.48	1,838.20
11	1,841.21	1,840.45	1,839.49	1,838.51	1,837.69	1,839.43	1,840.43	1,839.92	1,838.61	1,837.88	1,837.60	1,838.17
12	1,841.24	1,840.43	1,839.47	1,838.49	1,837.68	1,839.51	1,840.49	---	1,838.55	1,837.83	1,837.67	1,838.14
13	1,841.25	1,840.39	1,839.43	1,838.47	1,837.66	1,839.58	1,840.50	1,839.81	1,838.51	1,837.78	1,837.76	1,838.10
14	1,841.24	1,840.35	1,839.40	1,838.45	1,837.66	1,839.61	1,840.50	1,839.77	1,838.44	1,837.74	1,837.87	1,838.06
15	1,841.21	1,840.34	1,839.39	1,838.45	1,837.64	1,839.62	1,840.51	1,839.71	1,838.39	1,837.69	1,837.94	1,838.02
16	1,841.18	1,840.31	1,839.32	1,838.45	1,837.63	1,839.60	1,840.52	1,839.67	1,838.34	1,837.64	1,837.97	1,837.99
17	1,841.15	1,840.30	1,839.27	1,838.49	1,837.62	1,839.59	1,840.51	1,839.63	1,838.29	1,837.60	1,837.96	1,837.95
18	1,841.12	1,840.29	1,839.24	1,838.46	1,837.61	1,839.58	1,840.50	1,839.60	1,838.23	1,837.56	1,837.98	1,837.90
19	1,841.09	1,840.21	1,839.21	1,838.42	1,837.61	1,839.56	1,840.50	1,839.53	1,838.18	1,837.53	1,838.12	1,837.86
20	1,841.07	1,840.18	1,839.18	1,838.37	1,837.60	1,839.55	1,840.49	1,839.51	1,838.13	1,837.49	1,838.13	1,837.82
21	1,841.04	1,840.16	1,839.16	1,838.34	1,837.58	1,839.53	1,840.47	1,839.45	1,838.09	1,837.43	1,838.18	1,837.78
22	1,841.03	1,840.13	1,839.14	1,838.29	1,837.57	1,839.49	1,840.44	1,839.42	1,838.18	1,837.37	1,838.24	1,837.74
23	1,841.02	1,840.11	1,839.10	1,838.26	1,837.60	1,839.47	1,840.41	1,839.39	1,838.14	1,837.33	1,838.30	1,837.71
24	1,841.00	1,840.05	1,839.06	1,838.25	1,837.64	1,839.47	1,840.42	1,839.34	1,838.11	1,837.34	1,838.33	1,837.69
25	1,840.97	1,840.01	1,839.04	1,838.24	1,837.68	1,839.47	1,840.40	1,839.29	1,838.07	1,837.31	1,838.34	1,837.65
26	1,840.91	1,839.98	1,839.01	1,838.21	1,837.66	1,839.46	1,840.38	1,839.23	1,838.03	1,837.28	1,838.32	1,837.61
27	1,840.88	1,839.96	1,839.00	1,838.15	1,837.63	1,839.45	1,840.34	1,839.20	1,837.99	1,837.27	1,838.30	1,837.59
28	1,840.84	1,839.91	1,838.98	1,838.12	1,837.61	1,839.45	1,840.30	1,839.17	1,837.95	1,837.30	1,838.38	1,837.58
29	1,840.81	1,839.87	1,838.93	1,838.09	1,837.64	1,839.45	1,840.28	1,839.13	1,838.26	1,837.29	1,838.47	1,837.56
30	1,840.76	1,839.84	1,838.89	1,838.07	---	1,839.47	1,840.26	1,839.09	1,838.34	1,837.26	1,838.48	---
31	1,840.72	---	1,838.86	1,838.04	---	1,839.47	---	1,839.04	---	1,837.23	1,838.50	---
MEAN	1,841.04	1,840.30	1,839.33	1,838.44	1,837.71	1,839.03	1,840.19	---	1,838.44	1,837.69	1,837.82	---
MAX	1,841.25	1,840.67	1,839.82	1,838.83	1,838.02	1,839.62	1,840.52	---	1,838.99	1,838.31	1,838.50	---
MIN	1,840.72	1,839.84	1,838.86	1,838.04	1,837.57	1,837.59	1,839.45	---	1,837.95	1,837.23	1,837.04	---

08123950 E.V. Spence Reservoir near Robert Lee, TX—Continued



08124000 Colorado River at Robert Lee, TX

LOCATION.--Lat 31°53'07", long 100°28'49", Coke County, Hydrologic Unit 12080008, on left bank 190 ft upstream from bridge on State Highway 208 in Robert Lee, 0.4 mi upstream from Mountain Creek, 2.7 mi downstream from Messbox Creek, 3.6 mi downstream from Robert Lee Dam, and at mile 712.4.

DRAINAGE AREA.--15,307 mi^2 of which 10,260 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1923 to Dec. 1927, Apr. 1939 to May 1956, Oct. 1968 to current year. Prior to Dec. 1927, published as "near Robert Lee". Water-quality records: Chemical data: Oct. 1947 to Sept. 1957.

REVISED RECORDS.--WSP 1723: 1925(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,771.70 ft above NGVD of 1929. Prior to Dec. 31, 1927, nonrecording gage at site 9.0 mi downstream at different datum. Apr. 18 to Sept. 26, 1939, nonrecording gage, and Sept. 27, 1939 to May 9, 1956, water-stage recorder at site 200 ft downstream at same datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for affected daily discharges, which are fair. Since July 1952, at least 10% of contributing drainage area has been regulated. There are many diversions above station for municipal, mining, agricultural, and industrial uses. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--16 years (water years 1924-27, 1940-51) prior to completion of Lake J.B. Thomas, 234 ft^3/s (169,400 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1907, 26.7 ft, Oct. 13, 1957, from floodmarks. Flood in Apr. 1922 reached a stage of 25.5 ft, present datum, from information by local resident.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS, 1924-1927, 1940-1951: Maximum discharge, 32,500 ft^3/s, Sept. 6, 1926, gage height, 20.20 ft, site and datum then in use, from rating curve extended above 15,000 ft^3/s; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	&10	9.9	12	9.1	10	10	13	9.6	8.0	9.6	7.1
2	8.1	&10	9.9	12	9.0	11	11	12	9.5	8.0	9.6	6.9
3	7.9	&11	10	11	9.1	10	12	12	12	8.4	9.3	7.0
4	7.8	&11	10	11	9.3	12	11	12	10	8.5	9.0	7.0
5	8.0	&11	10	11	9.4	10	13	12	10	8.3	9.0	6.9
6	8.9	&11	11	11	9.0	9.8	16	13	10	8.3	9.1	6.8
7	8.5	10	11	11	9.1	9.9	12	12	9.9	8.4	10	6.4
8	9.3	9.5	10	10	9.3	10	12	12	10	8.3	17	6.4
9	20	9.3	11	10	9.4	10	12	12	10	8.3	8.6	6.6
10	9.7	9.2	11	10	9.6	11	12	12	10	8.3	8.4	6.4
11	13	9.0	11	9.9	9.6	11	12	12	11	8.3	8.2	6.6
12	9.9	9.0	10	9.9	9.4	11	12	11	10	8.4	8.1	7.1
13	9.6	8.9	11	10	9.6	12	12	12	10	8.4	7.8	7.1
14	9.3	8.9	11	9.7	9.9	11	12	12	10	8.5	7.4	7.0
15	9.4	9.0	11	10	9.5	11	12	12	9.7	8.5	7.5	7.0
16	9.4	9.0	10	11	9.3	10	12	12	9.7	8.7	7.6	6.9
17	9.6	9.0	11	11	9.9	9.8	12	12	10	8.8	7.3	6.9
18	9.8	8.7	11	9.6	9.9	9.3	13	11	9.1	9.6	12	6.9
19	9.6	9.0	11	10	10	9.7	13	11	9.3	9.1	12	7.1
20	10	9.5	11	9.9	9.8	9.7	13	11	9.3	8.9	7.5	7.1
21	&10	9.1	11	9.5	9.6	9.5	12	10	9.5	9.0	7.5	7.0
22	&10	9.1	11	9.4	9.7	9.6	12	10	11	9.1	7.6	6.9
23	&10	9.1	12	9.2	11	9.8	12	10	9.9	9.1	7.6	9.0
24	&10	9.1	12	9.7	12	10	12	10	9.8	9.2	7.5	7.7
25	&10	9.2	12	9.3	11	9.7	12	10	9.7	9.3	7.3	6.9
26	&10	9.3	12	9.3	10	9.8	12	10	9.8	9.7	7.2	6.9
27	&10	9.6	13	9.4	10	11	12	10	9.7	11	7.1	7.3
28	&10	9.8	12	9.6	10	9.7	12	9.7	9.4	10	11	7.1
29	&10	10	12	9.2	12	10	12	9.6	106	9.9	7.3	7.2
30	&9.7	9.7	12	9.2	---	9.7	12	9.6	10	9.5	7.2	6.8
31	&10	---	12	9.2	---	9.8	---	9.6	---	9.5	7.2	---
TOTAL	305.6	286.0	342.8	313.0	284.5	316.8	364	346.5	393.9	275.3	269.5	210.0
MEAN	9.86	9.53	11.1	10.1	9.81	10.2	12.1	11.2	13.1	8.88	8.69	7.00
MAX	20	11	13	12	12	12	16	13	106	11	17	9.0
MIN	7.8	8.7	9.9	9.2	9.0	9.3	10	9.6	9.1	8.0	7.1	6.4
AC-FT	606	567	680	621	564	628	722	687	781	546	535	417

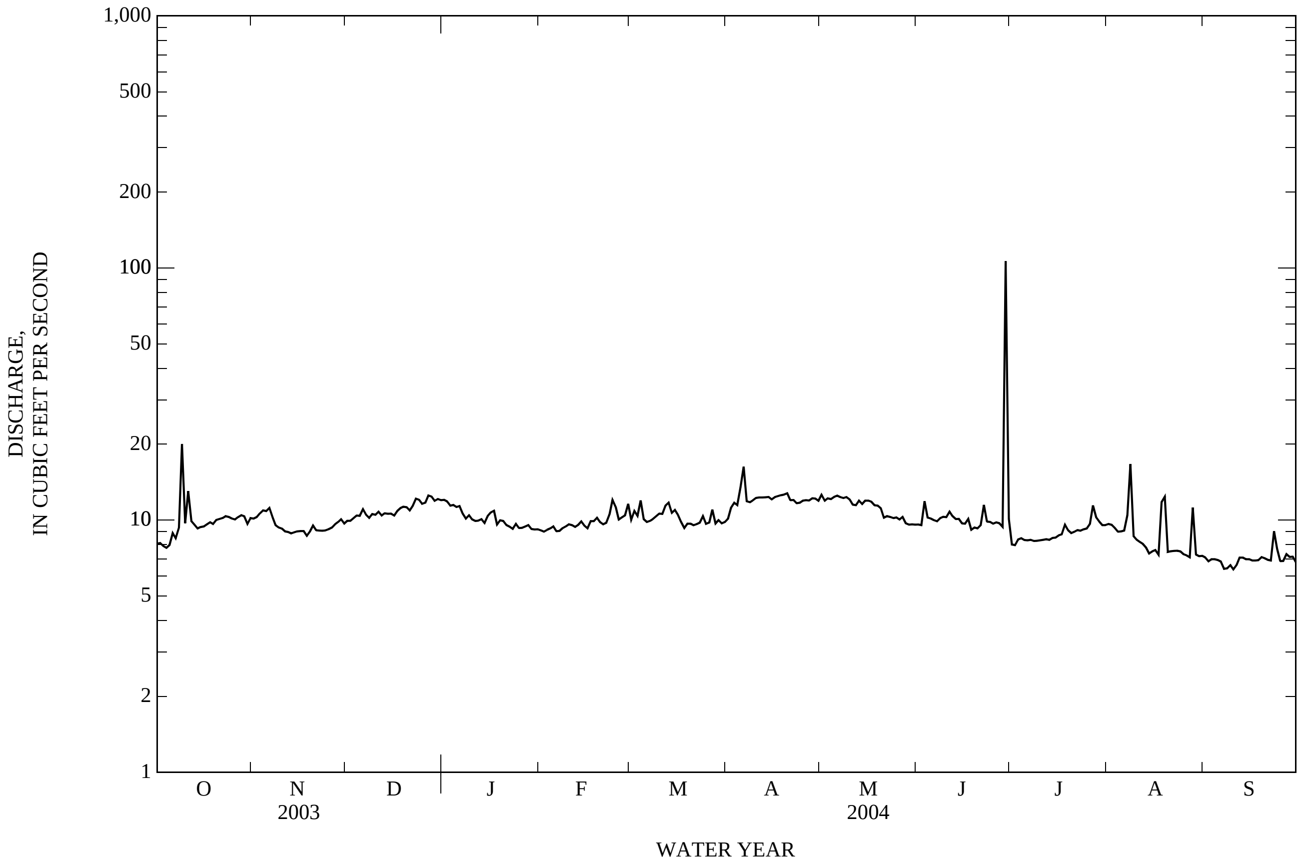
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004hz, BY WATER YEAR (WY)

MEAN	35.4	10.1	3.57	2.90	5.12	9.31	26.8	83.7	39.4	38.3	47.2	32.0
MAX	578	219	16.9	12.2	102	250	714	1,540	473	495	578	438
(WY)	(1987)	(1987)	(2000)	(2001)	(1998)	(1998)	(1954)	(1954)	(1989)	(1988)	(1953)	(1986)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
(WY)	(1955)	(1955)	(1952)	(1952)	(1952)	(1952)	(1956)	(1971)	(1980)	(1952)	(1952)	(1954)

08124000 Colorado River at Robert Lee, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1952 - 2004hz	
ANNUAL TOTAL	7,145.1		3,707.9			
ANNUAL MEAN	19.6		10.1		27.7	
HIGHEST ANNUAL MEAN					237	1954
LOWEST ANNUAL MEAN					1.04	1969
HIGHEST DAILY MEAN	1,870	Jun 13	106	Jun 29	13,400	May 12, 1954
LOWEST DAILY MEAN	2.0	Aug 11	6.4	Sep 7	0.00	Oct 1, 1951
ANNUAL SEVEN-DAY MINIMUM	6.0	Aug 9	6.6	Sep 5	0.00	Oct 1, 1951
MAXIMUM PEAK FLOW			640	Jun 29	24,500	Sep 9, 1980
MAXIMUM PEAK STAGE			18.00	Jun 29	20.63	Sep 9, 1980
ANNUAL RUNOFF (AC-FT)	14,170		7,350		20,030	
10 PERCENT EXCEEDS	11		12		15	
50 PERCENT EXCEEDS	9.3		9.8		1.1	
90 PERCENT EXCEEDS	7.6		7.5		0.00	

h See PERIOD OF RECORD paragraph.
z Period of regulated streamflow.
& Value was computed from affected unit values



08125500 Oak Creek Reservoir near Blackwell, TX

LOCATION.--Lat 32°02'26", long 100°16'05", Coke County, Hydrologic Unit 12080008, on upstream side of dam, 20.0 ft upstream from FM 3399, 175 ft left of right end of dam, 1.2 mi downstream from State Highway 70, 4.3 mi southeast of Blackwell, 12.0 mi north of Bronte, and 18.0 mi upstream from mouth.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--May 1953 to Sept. 1983, Mar. 1999 to Sept. 2002 (contents), Oct. 2002 to current year. Water-quality records: Chemical data: Apr. 1964 to Jan. 1967 and Nov. 1970 to Apr. 1983.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. May 1953 to Sept. 1983, nonrecording gage and Mar. 1999 to Mar. 2003, water-stage recorder on left bank at Sweetwater municipal pump station, 1.9 mi upstream at same datum. Satellite telemeter at station.

REMARKS.--Records good. The reservoir is formed by a rolled earthfill dam 3,800 ft long. The dam was completed in May 1952, and deliberate impoundment began May 12, 1953. The uncontrolled emergency spillway is an 800-foot-wide cut through natural ground, located 1,200 ft from right end of dam. The service spillway is an uncontrolled cut channel through natural ground 300 ft wide, located 2,000 ft from right end of dam. The reservoir and dam are the property of city of Sweetwater. The dam was built to impound water for municipal and industrial uses by the cities of Sweetwater, Blackwell, and Bronte. Since Apr. 1962, West Texas Utilities Company has operated a steam generating power plant located on the reservoir. There is a gated outlet at the service spillway that can release water downstream to Oak Creek through a 24-inch concrete pipe. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	2,014.0
Crest of emergency spillway	2,005.0
Crest of service spillway	2,000.0
Lowest gated outlet (invert)	1,951.0

COOPERATION.--Records of diversions may be obtained from the city of Sweetwater.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 49,100 acre-ft, Oct. 13, 1957, elevation, 2,003.80 ft; minimum contents, 3,040 acre-ft, Aug. 27, 28, 2002, elevation, 1,967.48 ft; minimum elevation, 1,965.63 ft, June 4, 5, 2003.

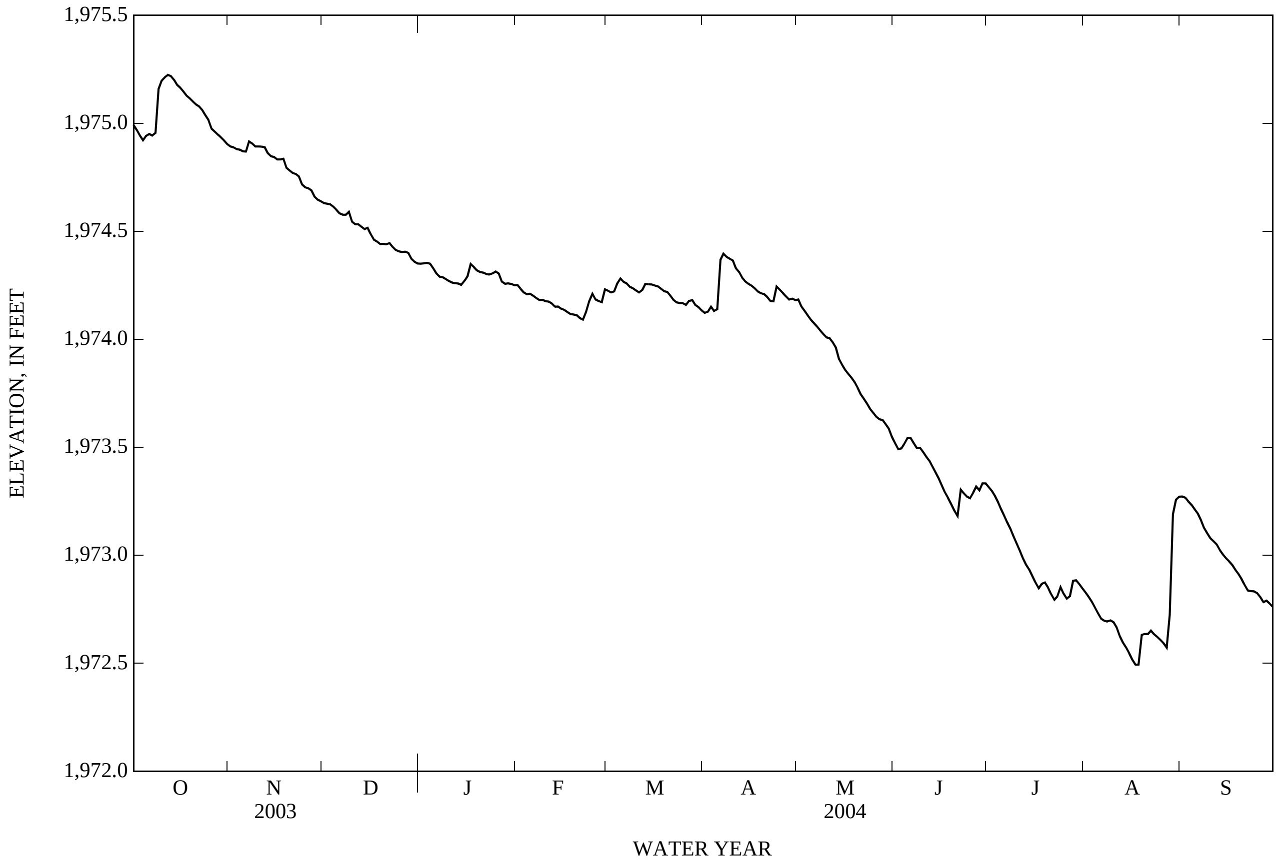
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,975.24 ft, Oct. 11, 12; minimum elevation, 1,972.46 ft, Aug. 18.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,974.99	1,974.89	1,974.63	1,974.35	1,974.25	1,974.22	1,974.12	1,974.18	1,973.52	1,973.32	1,972.83	1,973.27
2	1,974.97	1,974.89	1,974.63	1,974.35	1,974.23	1,974.22	1,974.13	1,974.15	1,973.49	1,973.30	1,972.81	1,973.27
3	1,974.94	1,974.88	1,974.62	1,974.35	1,974.22	1,974.22	1,974.15	1,974.13	1,973.49	1,973.27	1,972.79	1,973.25
4	1,974.92	1,974.88	1,974.61	1,974.35	1,974.21	1,974.26	1,974.13	1,974.11	1,973.52	1,973.24	1,972.76	1,973.23
5	1,974.94	1,974.87	1,974.60	1,974.33	1,974.21	1,974.28	1,974.14	1,974.09	1,973.54	1,973.21	1,972.73	1,973.21
6	1,974.95	1,974.87	1,974.58	1,974.31	1,974.20	1,974.27	1,974.37	1,974.08	1,973.54	1,973.18	1,972.71	1,973.19
7	1,974.94	1,974.92	1,974.58	1,974.29	1,974.19	1,974.26	1,974.40	1,974.06	1,973.52	1,973.15	1,972.70	1,973.16
8	1,974.95	1,974.91	1,974.58	1,974.29	1,974.18	1,974.24	1,974.38	1,974.04	1,973.50	1,973.12	1,972.69	1,973.13
9	1,975.16	1,974.89	1,974.59	1,974.28	1,974.18	1,974.24	1,974.37	1,974.02	1,973.50	1,973.09	1,972.70	1,973.10
10	1,975.20	1,974.89	1,974.54	1,974.27	1,974.18	1,974.23	1,974.37	1,974.01	1,973.48	1,973.05	1,972.69	1,973.08
11	1,975.21	1,974.89	1,974.53	1,974.26	1,974.17	1,974.22	1,974.33	1,974.01	1,973.46	1,973.02	1,972.66	1,973.07
12	1,975.22	1,974.89	1,974.53	1,974.26	1,974.17	1,974.23	1,974.31	1,973.99	1,973.44	1,972.98	1,972.63	1,973.05
13	1,975.22	1,974.86	1,974.52	1,974.26	1,974.15	1,974.26	1,974.29	1,973.96	1,973.41	1,972.95	1,972.60	1,973.02
14	1,975.20	1,974.85	1,974.51	1,974.25	1,974.15	1,974.26	1,974.27	1,973.91	1,973.38	1,972.93	1,972.57	1,973.00
15	1,975.18	1,974.84	1,974.52	1,974.27	1,974.14	1,974.25	1,974.26	1,973.88	1,973.36	1,972.90	1,972.55	1,972.99
16	1,975.16	1,974.83	1,974.49	1,974.29	1,974.14	1,974.25	1,974.25	1,973.86	1,973.32	1,972.87	1,972.52	1,972.97
17	1,975.15	1,974.83	1,974.46	1,974.35	1,974.13	1,974.24	1,974.24	1,973.84	1,973.29	1,972.85	1,972.49	1,972.95
18	1,975.13	1,974.84	1,974.45	1,974.34	1,974.12	1,974.23	1,974.22	1,973.82	1,973.27	1,972.87	1,972.49	1,972.93
19	1,975.12	1,974.79	1,974.44	1,974.32	1,974.12	1,974.22	1,974.21	1,973.80	1,973.24	1,972.87	1,972.63	1,972.91
20	1,975.10	1,974.78	1,974.44	1,974.31	1,974.11	1,974.22	1,974.21	1,973.78	1,973.21	1,972.85	1,972.63	1,972.89
21	1,975.09	1,974.77	1,974.44	1,974.31	1,974.10	1,974.20	1,974.20	1,973.74	1,973.18	1,972.82	1,972.63	1,972.86
22	1,975.08	1,974.77	1,974.44	1,974.30	1,974.09	1,974.18	1,974.18	1,973.72	1,973.30	1,972.79	1,972.65	1,972.84
23	1,975.06	1,974.75	1,974.43	1,974.30	1,974.13	1,974.17	1,974.18	1,973.70	1,973.29	1,972.81	1,972.63	1,972.83
24	1,975.04	1,974.72	1,974.41	1,974.31	1,974.18	1,974.17	1,974.24	1,973.68	1,973.27	1,972.85	1,972.62	1,972.83
25	1,975.02	1,974.70	1,974.41	1,974.31	1,974.21	1,974.17	1,974.23	1,973.66	1,973.26	1,972.82	1,972.61	1,972.82
26	1,974.97	1,974.70	1,974.40	1,974.30	1,974.18	1,974.16	1,974.21	1,973.64	1,973.29	1,972.80	1,972.59	1,972.81
27	1,974.96	1,974.69	1,974.41	1,974.27	1,974.18	1,974.18	1,974.20	1,973.63	1,973.32	1,972.81	1,972.57	1,972.78
28	1,974.95	1,974.66	1,974.40	1,974.26	1,974.17	1,974.18	1,974.18	1,973.63	1,973.30	1,972.88	1,972.72	1,972.79
29	1,974.93	1,974.65	1,974.37	1,974.26	1,974.23	1,974.16	1,974.19	1,973.61	1,973.33	1,972.88	1,973.19	1,972.78
30	1,974.92	1,974.64	1,974.36	1,974.26	---	1,974.15	1,974.18	1,973.59	1,973.33	1,972.87	1,973.26	1,972.76
31	1,974.90	---	1,974.35	1,974.25	---	1,974.13	---	1,973.55	---	1,972.85	1,973.27	---
MEAN	1,975.05	1,974.81	1,974.49	1,974.30	1,974.17	1,974.21	1,974.24	1,973.87	1,973.38	1,972.97	1,972.71	1,972.99
MAX	1,975.22	1,974.92	1,974.63	1,974.35	1,974.25	1,974.28	1,974.40	1,974.18	1,973.54	1,973.32	1,973.27	1,973.27
MIN	1,974.90	1,974.64	1,974.35	1,974.25	1,974.09	1,974.13	1,974.12	1,973.55	1,973.18	1,972.79	1,972.49	1,972.76

WTR YR 2004 MEAN 1,973.93 MAX 1,975.22 MIN 1,972.49

08125500 Oak Creek Reservoir near Blackwell, TX—Continued



08126380 Colorado River near Ballinger, TX

LOCATION.--Lat 31°42'55", long 100°01'34", Runnels County, Hydrologic Unit 12090101, at right downstream end of bridge on Farm Road 2111, 0.4 mi upstream from Rocky Creek, 5.0 mi northwest of Ballinger, and at mile 665.8.

DRAINAGE AREA.--16,358 mi^2 of which 10,260 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1907 to Sept. 1979, Oct. 1979 to current year. Prior to Oct. 1979, published as "at Ballinger", station 08126500. Monthly discharge only for some periods published in WSP 1312. Gage-height records collected in this vicinity from 1903-29 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1118: Drainage area. WSP 1512: 1916-17, 1919-20, 1921(M), 1922-25, 1928(M), 1930(M). WSP 1712: 1935, 1954- 55(M). WDR TX-78-3: 1975-77.

GAGE.--Water-stage recorder. Datum of gage is 1,606.51 ft above NGVD of 1929. Prior to Nov. 29, 1930, nonrecording gages at several sites and at various datums near site 5.4 mi downstream. Nov. 29, 1930, to May 1, 1975, water-stage recorder at site 6.2 mi downstream and May 1, 1975, to Sept. 30, 1979, water-stage recorder at site 5.4 mi downstream, both at datum 12.77 ft lower. Oct. 1, 1979 to June 20, 2001, water-stage recorder at site 300 ft left at same datum. Satellite telemeter at station.

REMARKS.--Records good except those for July 10-20 and estimated daily discharges, which are poor. Since water year 1953, at least 10% of contributing drainage area has been regulated. Many diversions upstream from station for irrigation, municipal supplies, and oil field operations. Flow is also affected by Oak Creek Reservoir (station 08125500), and at times by discharge from the floodwater-retarding structures in the Kickapoo and Valley Creeks drainage basins. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--45 years (water years 1908-52) prior to completion of Lake J.B. Thomas, 387 ft^3/s (280,300 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1882, about 36 ft sometime in 1884, at former site and datum, from information by local residents. Flood of Aug. 6, 1906, reached a stage of about 32.0 ft, at former site and datum, from floodmarks (backwater from Elm Creek).

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS 1908-1952: Maximum discharge, 75,400 ft^3/s, Sept. 18, 1936, gage height, 28.6 ft, at former site and datum; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	10	10	11	17	11	15	4.3	14	13	9.3
2	9.5	13	11	10	11	17	12	13	3.8	35	9.9	10
3	8.9	13	11	10	9.9	15	13	13	5.8	19	7.4	8.2
4	8.6	14	11	10	9.7	18	12	12	7.9	12	5.7	8.0
5	8.8	15	10	9.8	11	24	14	11	9.9	9.1	4.9	7.8
6	9.8	27	10	9.3	11	18	186	9.7	9.9	10	4.5	7.5
7	15	27	10	9.6	11	16	256	9.2	7.3	7.7	4.6	e7.0
8	18	17	10	9.7	11	14	54	9.7	6.0	5.3	7.2	e6.5
9	900	15	11	9.9	11	12	30	11	6.4	3.8	19	6.0
10	785	16	11	10	12	11	22	12	6.2	1.3	50	6.3
11	186	14	10	9.8	12	11	18	10	6.4	0.40	37	6.6
12	490	13	10	9.9	11	13	15	10	5.2	0.12	25	5.9
13	161	11	11	10	11	14	13	9.0	6.2	0.05	16	5.6
14	62	11	11	10	12	14	13	7.8	8.8	0.05	9.9	6.2
15	30	12	11	12	12	14	13	7.6	8.0	0.03	7.1	6.3
16	20	12	11	12	11	14	13	5.6	4.8	0.03	4.1	6.1
17	18	12	11	13	10	13	12	8.3	4.9	0.03	1.9	5.9
18	16	12	10	18	12	13	11	9.6	6.7	0.52	4.5	5.1
19	15	11	8.8	17	11	12	11	7.8	3.8	0.05	80	4.5
20	15	10	9.6	15	10	11	11	7.5	2.0	0.03	119	4.6
21	14	10	9.6	13	10	11	10	8.6	6.0	4.8	96	4.9
22	14	10	9.9	11	11	11	9.7	6.6	7.4	6.7	51	4.8
23	14	10	9.1	11	13	10	10	6.1	10	7.7	27	5.5
24	14	10	10	11	17	10	584	6.3	11	7.2	19	10
25	13	9.8	10	12	22	11	223	6.9	8.1	5.4	15	17
26	13	10	9.7	12	19	10	63	3.8	8.7	4.5	12	12
27	13	10	10	11	17	11	28	5.9	10	10	8.7	12
28	13	10	11	11	15	12	20	6.6	10	72	8.7	17
29	13	10	10	11	16	13	18	6.1	9.4	45	9.0	12
30	13	10	10	11	---	14	15	6.5	9.1	31	7.7	9.1
31	14	---	9.9	11	---	12	---	4.4	---	19	7.6	---
TOTAL	2,935.6	387.8	317.6	350.0	360.6	416	1,720.7	266.6	214.0	331.81	692.4	237.7
MEAN	94.7	12.9	10.2	11.3	12.4	13.4	57.4	8.60	7.13	10.7	22.3	7.92
MAX	900	27	11	18	22	24	584	15	11	72	119	17
MIN	8.6	9.8	8.8	9.3	9.7	10	9.7	3.8	2.0	0.03	1.9	4.5
AC-FT	5,820	769	630	694	715	825	3,410	529	424	658	1,370	471

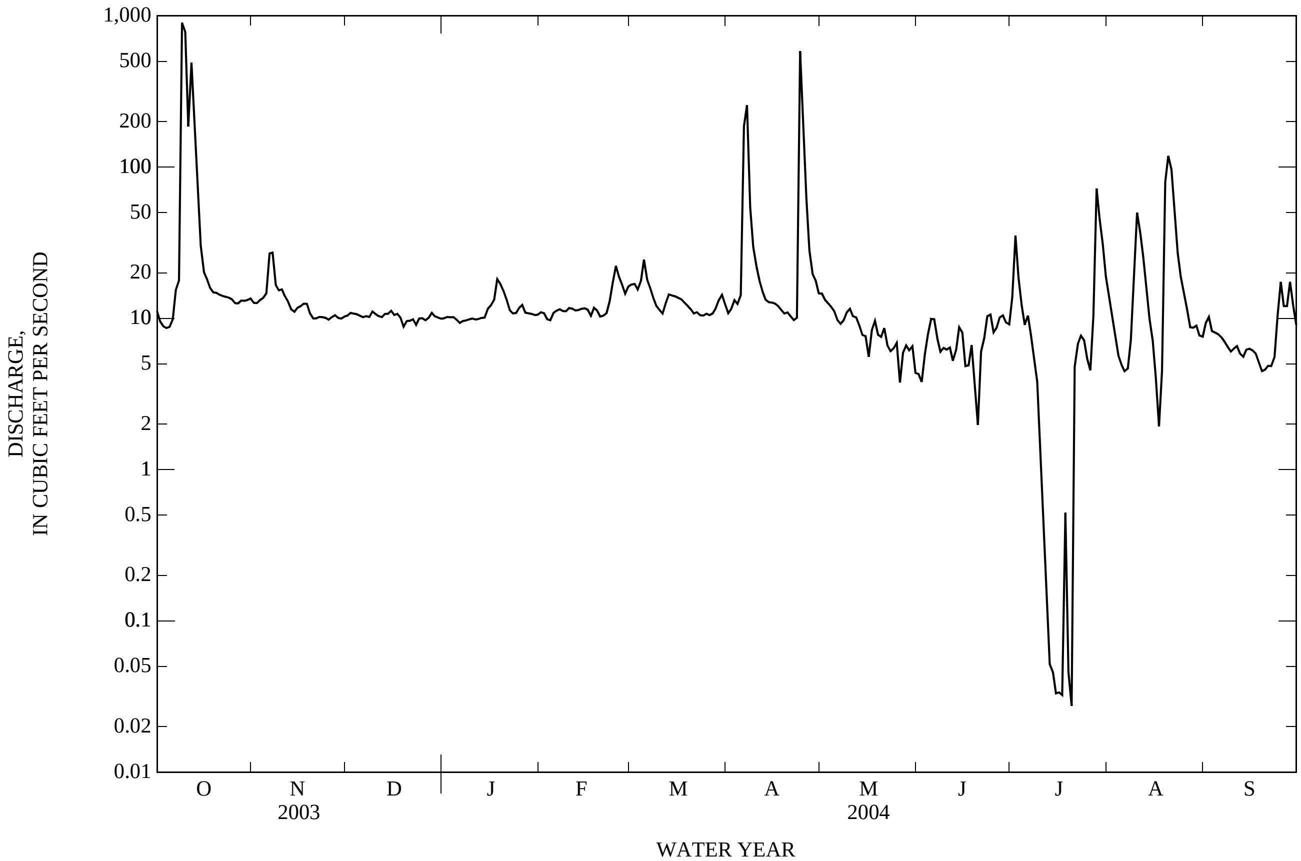
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2004z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	162	38.6	25.4	22.2	40.7	35.8	90.1	316	196	68.4	97.6	147
MAX	2,098	374	259	159	756	299	1,432	5,068	2,392	664	1,224	1,737
(WY)	(1958)	(1987)	(1992)	(1992)	(1992)	(1987)	(1954)	(1957)	(1957)	(1961)	(1953)	(1962)
MIN	0.00	0.66	0.00	0.00	0.05	0.00	0.47	1.07	0.01	0.00	0.00	0.00
(WY)	(1955)	(1956)	(1955)	(1955)	(1953)	(1954)	(1980)	(1971)	(1953)	(1984)	(1984)	(1954)

08126380 Colorado River near Ballinger, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1953 - 2004z	
ANNUAL TOTAL	15,398.1		8,230.81			
ANNUAL MEAN	42.2		22.5		104	
HIGHEST ANNUAL MEAN					813	1957
LOWEST ANNUAL MEAN					7.18	1984
HIGHEST DAILY MEAN	1,540	Jun 14	900	Oct 9	45,800	Oct 14, 1957
LOWEST DAILY MEAN	1.0	Aug 21	0.03	Jul 15	0.00	Oct 15, 1952
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 15	0.10	Jul 11	0.00	Oct 15, 1952
MAXIMUM PEAK FLOW			2,070	Oct 9	g16,600	Aug 3, 1978
MAXIMUM PEAK STAGE			12.41	Oct 9	27.50	Sep 21, 1990
ANNUAL RUNOFF (AC-FT)	30,540		16,330		75,090	
10 PERCENT EXCEEDS	22		19		131	
50 PERCENT EXCEEDS	9.2		11		11	
90 PERCENT EXCEEDS	3.1		5.5		0.46	

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



08126380 Colorado River near Ballinger, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Sept. 1961 to June 2003.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Oct. 1961 to Sept. 1997 (local observer), Feb. 2001 to current year.
WATER TEMPERATURE: Oct. 1961 to Sept. 1997 (local observer), Feb. 2001 to current year.
SUSPENDED SEDIMENT DISCHARGE: Jan. 1978 to Sept. 1981 (local observer).

INSTRUMENTATION.--Water-quality monitor since Feb. 9, 2001.

REMARKS.--Records good except those for specific conductance from Apr. 24-28, which are poor and Apr. 29 to May 19, Aug. 20-27, which are fair. Interruptions in the record were due to malfunction of the instrument. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using daily (or continuous) records of specific conductance and regression relations between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 13,500 microsiemens/cm, May 3, 1963; minimum, 125 microsiemens/cm, Oct. 18, 2002.
WATER TEMPERATURE: Maximum daily, 39.0°C, July 3, 1977; minimum daily, 0.0°C, Jan. 9-11, 1973.
SEDIMENT CONCENTRATION: Maximum daily mean, 3,740 mg/L, Sept. 9 1980; minimum daily mean, 4 mg/L, Feb. 2, 1980.
SEDIMENT LOADS: Maximum daily, 94,100 tons Aug. 3, 1978; minimum daily, 0 tons on many days during 1978 and 1980-81.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 4,590 microsiemens/cm, July 22; minimum, 213 microsiemens/cm, Oct. 10.
WATER TEMPERATURE: Maximum, 36.4°C, July 17; minimum, 4.8°C, Feb. 14.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

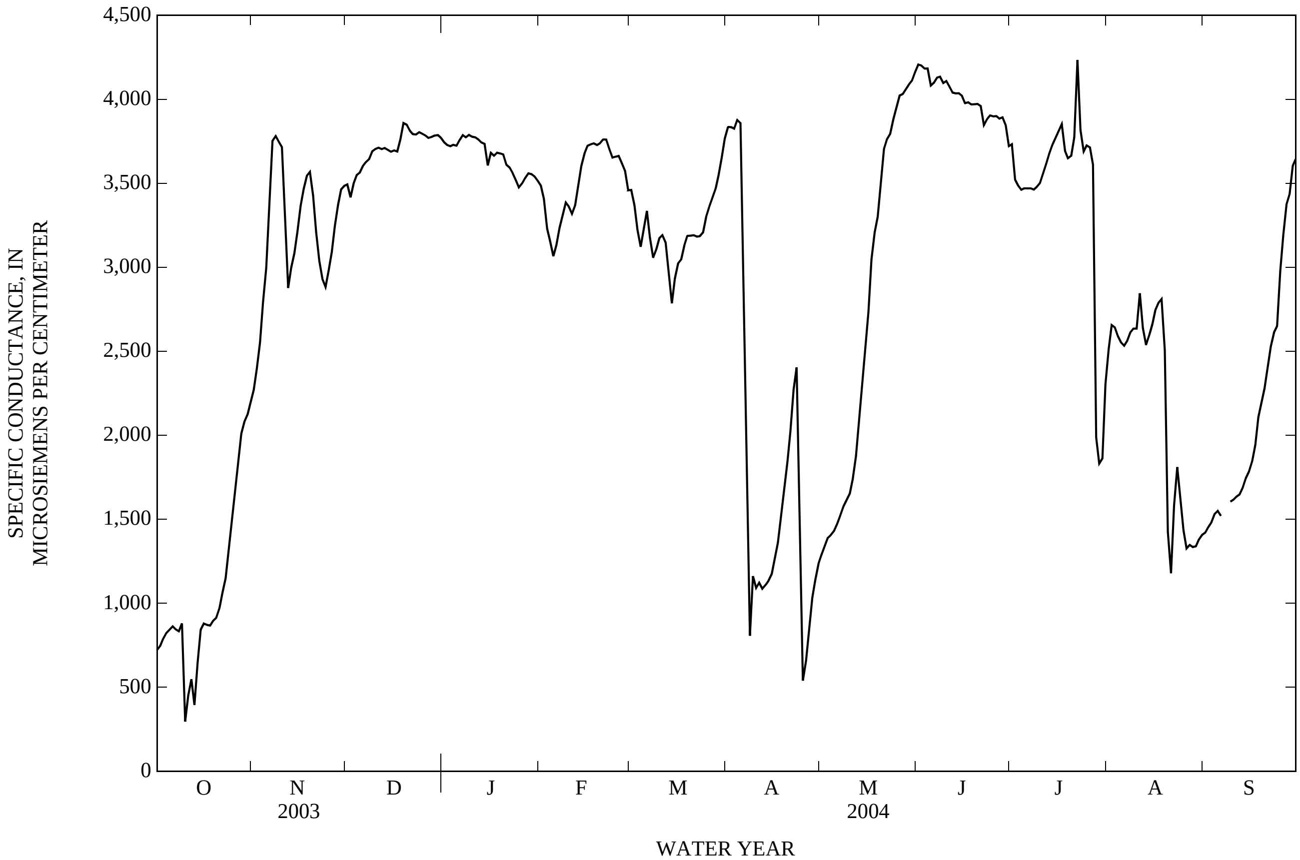
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	733	711	721	2,350	2,230	2,270	3,520	3,410	3,490	3,760	3,720	3,740
2	764	733	745	2,450	2,340	2,400	3,500	3,370	3,420	3,750	3,710	3,730
3	812	764	790	2,640	2,440	2,550	3,540	3,480	3,500	3,730	3,710	3,720
4	842	812	823	2,910	2,640	2,790	3,560	3,530	3,550	3,760	3,710	3,730
5	873	825	842	3,070	2,860	3,000	3,610	3,530	3,560	3,790	3,660	3,720
6	906	825	863	3,630	3,060	3,340	3,630	3,580	3,600	3,810	3,680	3,760
7	897	809	845	3,800	3,630	3,750	3,660	3,610	3,630	3,810	3,770	3,790
8	880	807	833	3,800	3,770	3,780	3,680	3,620	3,650	3,790	3,750	3,770
9	1,790	249	879	3,780	3,730	3,750	3,710	3,660	3,690	3,810	3,770	3,790
10	400	213	295	3,730	3,700	3,720	3,720	3,690	3,700	3,800	3,750	3,780
11	484	400	450	3,700	2,780	3,250	3,730	3,690	3,710	3,800	3,760	3,770
12	903	430	548	2,950	2,790	2,880	3,720	3,680	3,700	3,780	3,740	3,760
13	480	356	394	3,030	2,950	3,000	3,730	3,690	3,710	3,770	3,720	3,740
14	783	480	649	3,140	3,020	3,080	3,720	3,680	3,700	3,750	3,700	3,730
15	882	783	841	3,260	3,140	3,210	3,700	3,670	3,690	3,720	3,510	3,610
16	887	871	879	3,430	3,260	3,370	3,710	3,670	3,700	3,710	3,640	3,680
17	887	860	871	3,500	3,430	3,470	3,710	3,670	3,690	3,680	3,630	3,660
18	882	849	867	3,580	3,500	3,540	3,860	3,680	3,760	3,690	3,660	3,680
19	906	882	896	3,580	3,550	3,570	3,880	3,840	3,860	3,690	3,660	3,680
20	933	902	914	3,560	3,310	3,430	3,880	3,820	3,850	3,690	3,630	3,670
21	1,000	932	968	3,320	3,070	3,210	3,850	3,790	3,810	3,640	3,590	3,610
22	1,100	999	1,070	3,090	2,970	3,040	3,810	3,780	3,790	3,620	3,570	3,590
23	1,200	1,070	1,150	2,990	2,860	2,930	3,810	3,780	3,790	3,580	3,540	3,560
24	1,430	1,160	1,310	2,930	2,850	2,880	3,830	3,790	3,800	3,550	3,470	3,520
25	1,560	1,340	1,460	3,030	2,920	2,980	3,810	3,780	3,800	3,500	3,460	3,480
26	1,740	1,540	1,650	3,220	3,020	3,090	3,800	3,770	3,790	3,510	3,480	3,500
27	1,910	1,740	1,830	3,320	3,200	3,250	3,790	3,750	3,770	3,550	3,510	3,530
28	2,060	1,910	2,010	3,440	3,300	3,370	3,790	3,760	3,780	3,580	3,540	3,560
29	2,100	2,030	2,080	3,500	3,440	3,460	3,800	3,760	3,780	3,580	3,530	3,560
30	2,160	2,080	2,120	3,510	3,440	3,480	3,800	3,760	3,790	3,560	3,520	3,540
31	2,230	2,150	2,200	---	---	---	3,800	3,750	3,770	3,540	3,500	3,520
MONTH	2,230	213	1,060	3,800	2,230	3,190	3,880	3,370	3,700	3,810	3,460	3,660

08126380 Colorado River near Ballinger, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3,510	3,470	3,490	3,490	3,440	3,460	3,860	3,770	3,840	1,300	1,270	1,290
2	3,480	3,320	3,410	3,440	3,280	3,370	3,880	3,700	3,830	1,360	1,300	1,340
3	3,320	3,160	3,230	3,280	3,170	3,220	3,850	3,790	3,830	1,400	1,360	1,390
4	3,170	3,110	3,160	3,190	2,940	3,120	3,900	3,850	3,880	1,420	1,390	1,410
5	3,110	3,050	3,070	3,320	3,100	3,220	3,900	3,300	3,860	1,440	1,410	1,430
6	3,200	3,070	3,130	3,360	3,310	3,340	3,500	1,570	2,600	1,500	1,440	1,470
7	3,320	3,150	3,240	3,310	3,120	3,180	2,730	587	1,420	1,560	1,500	1,520
8	3,360	3,250	3,310	3,120	3,020	3,060	1,080	602	806	1,610	1,560	1,580
9	3,430	3,350	3,390	3,140	3,050	3,100	1,190	1,080	1,160	1,640	1,600	1,610
10	3,420	3,320	3,360	3,200	3,140	3,170	1,180	1,070	1,090	1,670	1,630	1,650
11	3,330	3,310	3,320	3,210	3,180	3,190	1,140	1,100	1,120	1,820	1,670	1,740
12	3,420	3,320	3,370	3,200	3,060	3,150	1,100	1,080	1,090	1,970	1,820	1,870
13	3,560	3,420	3,490	3,120	2,790	2,980	1,120	1,100	1,110	2,240	1,960	2,080
14	3,640	3,560	3,600	2,830	2,760	2,790	1,140	1,120	1,130	2,440	2,220	2,300
15	3,700	3,640	3,680	3,010	2,830	2,930	1,210	1,140	1,170	2,610	2,420	2,490
16	3,740	3,700	3,720	3,040	3,000	3,020	1,330	1,210	1,270	2,800	2,610	2,730
17	3,750	3,720	3,730	3,060	3,020	3,050	1,460	1,310	1,360	3,230	2,780	3,050
18	3,760	3,710	3,740	3,150	3,060	3,130	1,600	1,460	1,530	3,250	3,150	3,210
19	3,750	3,720	3,730	3,210	3,150	3,190	1,760	1,600	1,680	3,420	3,210	3,300
20	3,750	3,720	3,740	3,200	3,170	3,190	1,900	1,760	1,840	3,620	3,420	3,490
21	3,780	3,740	3,760	3,210	3,180	3,190	2,110	1,900	2,020	3,760	3,620	3,700
22	3,780	3,740	3,760	3,200	3,170	3,180	2,360	2,110	2,270	3,790	3,730	3,760
23	3,760	3,580	3,700	3,210	3,170	3,190	2,440	2,350	2,400	3,840	3,760	3,790
24	3,740	3,590	3,650	3,250	3,170	3,210	3,550	470	1,750	3,920	3,820	3,880
25	3,680	3,620	3,660	3,320	3,250	3,300	607	454	539	4,000	3,910	3,950
26	3,700	3,620	3,660	3,400	3,310	3,360	735	607	658	4,040	3,990	4,020
27	3,650	3,590	3,620	3,440	3,400	3,410	931	735	833	4,070	4,000	4,030
28	3,610	3,540	3,580	3,500	3,440	3,470	1,100	931	1,030	4,100	4,010	4,060
29	3,540	3,150	3,460	3,590	3,490	3,550	1,170	1,100	1,140	4,120	4,050	4,090
30	---	---	---	3,690	3,580	3,650	1,280	1,170	1,230	4,140	4,080	4,110
31	---	---	---	3,810	3,680	3,770	---	---	---	4,200	4,110	4,160
MONTH	3,780	3,050	3,510	3,810	2,760	3,230	3,900	454	1,780	4,200	1,270	2,730
	JUNE			JULY			AUGUST			SEPTEMBER		
1	4,250	4,160	4,210	3,770	3,610	3,730	2,600	2,440	2,510	1,450	1,400	1,420
2	4,230	4,150	4,200	3,610	3,490	3,520	2,690	2,600	2,660	1,470	1,440	1,450
3	4,280	4,030	4,180	3,520	3,460	3,490	2,680	2,580	2,640	1,520	1,470	1,480
4	4,230	4,120	4,180	3,510	3,420	3,460	2,630	2,550	2,590	1,540	1,520	1,530
5	4,260	3,800	4,080	3,500	3,440	3,470	2,590	2,520	2,550	1,560	1,540	1,550
6	4,130	4,020	4,100	3,500	3,440	3,470	2,550	2,500	2,530	1,540	1,520	1,520
7	4,150	4,110	4,130	3,500	3,440	3,470	2,590	2,530	2,560	---	---	---
8	4,170	4,090	4,130	3,500	3,420	3,460	2,650	2,580	2,610	---	---	---
9	4,120	4,080	4,100	3,510	3,450	3,480	2,660	2,610	2,640	1,630	1,580	1,600
10	4,140	4,070	4,110	3,530	3,470	3,500	2,810	2,540	2,640	1,640	1,590	1,620
11	4,100	4,040	4,070	3,590	3,520	3,560	2,890	2,760	2,850	1,660	1,600	1,640
12	4,070	4,010	4,040	3,670	3,590	3,620	2,760	2,600	2,640	1,670	1,620	1,650
13	4,060	4,000	4,040	3,720	3,650	3,680	2,620	2,500	2,540	1,720	1,670	1,690
14	4,060	3,990	4,040	3,760	3,680	3,730	2,630	2,560	2,590	1,780	1,700	1,740
15	4,060	3,960	4,020	3,810	3,740	3,770	2,700	2,620	2,660	1,800	1,760	1,780
16	4,020	3,940	3,980	3,860	3,770	3,810	2,780	2,700	2,740	1,890	1,800	1,840
17	4,010	3,950	3,980	3,890	3,820	3,850	2,820	2,760	2,790	1,990	1,880	1,940
18	4,000	3,940	3,970	3,930	3,390	3,690	2,860	2,730	2,810	2,160	1,990	2,110
19	4,000	3,930	3,970	3,700	3,590	3,650	2,800	1,840	2,510	2,220	2,160	2,200
20	4,000	3,940	3,970	3,700	3,630	3,660	1,840	877	1,430	2,330	2,220	2,280
21	4,000	3,900	3,960	4,130	3,690	3,770	1,340	978	1,180	2,470	2,330	2,420
22	3,950	3,770	3,850	4,590	4,000	4,230	1,910	1,240	1,580	2,580	2,460	2,530
23	3,940	3,830	3,880	4,000	3,680	3,820	1,940	1,710	1,810	2,660	2,440	2,610
24	3,940	3,850	3,900	3,740	3,620	3,690	1,720	1,520	1,630	2,800	2,550	2,650
25	3,920	3,880	3,900	3,760	3,690	3,730	1,520	1,350	1,430	3,040	2,800	2,980
26	3,940	3,860	3,900	3,740	3,650	3,710	1,370	1,280	1,330	3,300	3,040	3,190
27	3,920	3,850	3,890	3,700	3,110	3,610	1,410	1,280	1,350	3,460	3,290	3,370
28	3,920	3,860	3,890	3,130	1,150	1,990	1,370	1,300	1,340	3,550	3,380	3,430
29	3,900	3,700	3,850	1,970	1,540	1,830	1,360	1,330	1,340	3,650	3,530	3,600
30	3,740	3,700	3,720	2,110	1,660	1,860	1,420	1,350	1,380	3,660	3,630	3,640
31	---	---	---	2,450	2,110	2,300	1,440	1,380	1,410	---	---	---
MONTH	4,280	3,700	4,010	4,590	1,150	3,440	2,890	877	2,170	3,660	1,400	2,200
YEAR	4,590	213	2,890									

08126380 Colorado River near Ballinger, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

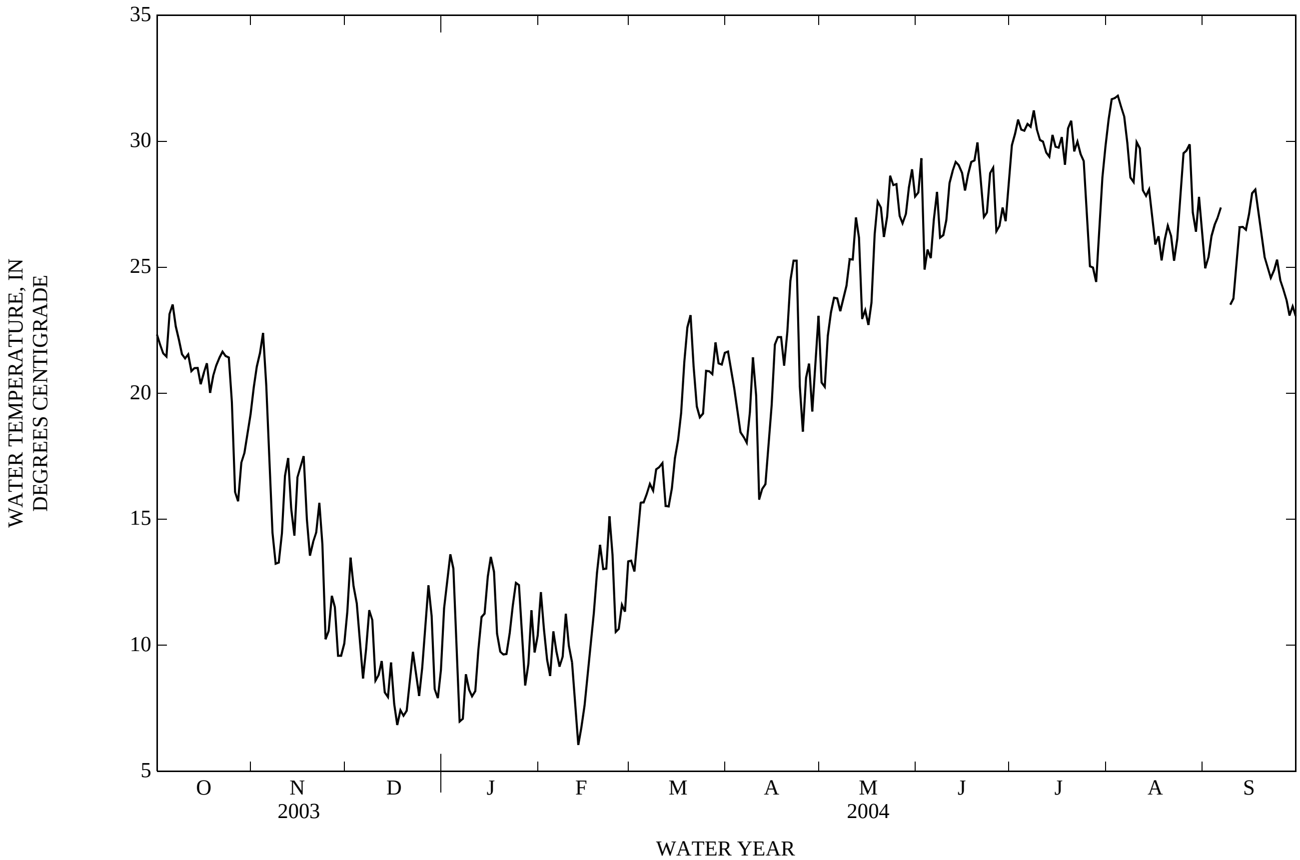
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.9	20.4	22.3	21.8	18.7	20.2	12.8	9.8	11.3	12.6	10.5	11.5
2	23.6	20.4	21.9	22.4	19.7	21.1	14.5	12.7	13.5	14.4	10.8	12.6
3	23.3	20.1	21.6	22.7	20.6	21.6	13.4	11.0	12.3	14.6	12.4	13.6
4	22.4	20.5	21.5	23.9	21.0	22.4	13.0	10.3	11.7	14.3	11.1	13.0
5	25.3	21.5	23.1	22.6	18.1	20.3	12.0	9.0	10.3	11.1	8.2	9.4
6	24.8	22.4	23.5	18.1	15.4	17.1	9.9	7.2	8.7	8.3	6.2	7.0
7	23.5	21.7	22.7	15.4	13.6	14.5	11.4	8.2	9.8	7.9	6.3	7.1
8	22.7	21.5	22.1	13.6	13.0	13.2	13.0	9.9	11.4	10.3	7.7	8.8
9	22.2	21.0	21.6	13.9	12.7	13.3	12.2	8.8	11.0	9.4	6.8	8.2
10	21.8	21.0	21.4	15.7	13.3	14.4	10.0	7.2	8.6	9.4	6.4	8.0
11	21.7	21.3	21.5	18.6	15.1	16.7	10.3	7.3	8.8	9.6	6.5	8.2
12	21.6	20.5	20.9	19.2	15.9	17.4	10.0	9.0	9.4	11.3	8.4	9.8
13	22.0	20.2	21.0	17.0	14.3	15.4	9.1	6.8	8.1	12.6	9.5	11.1
14	22.3	19.8	21.0	15.2	13.7	14.3	9.5	6.2	7.9	12.2	9.9	11.3
15	22.6	18.6	20.4	18.1	15.2	16.7	11.1	8.0	9.3	13.4	12.1	12.7
16	23.2	18.6	20.8	18.1	16.0	17.1	9.1	6.5	7.7	14.3	12.7	13.5
17	22.4	19.8	21.2	17.8	16.8	17.5	8.4	5.1	6.8	14.0	11.5	12.9
18	21.8	17.8	20.0	16.8	13.6	15.0	8.7	6.0	7.4	11.5	9.7	10.5
19	23.1	18.0	20.7	15.2	11.7	13.6	8.4	5.7	7.2	11.4	8.1	9.7
20	23.3	18.4	21.1	15.5	12.5	14.1	8.8	5.9	7.4	11.2	7.9	9.6
21	23.5	19.1	21.4	16.1	12.7	14.5	10.4	6.8	8.6	10.8	8.2	9.6
22	23.6	19.8	21.6	17.4	13.9	15.7	11.1	8.5	9.7	11.6	9.3	10.5
23	23.2	19.8	21.5	16.4	11.0	14.0	9.8	7.9	8.9	12.2	10.8	11.6
24	23.4	19.3	21.4	11.3	8.8	10.2	9.3	6.5	8.0	13.7	11.3	12.5
25	21.4	18.0	19.7	11.7	9.4	10.6	10.6	7.7	9.1	13.7	10.8	12.4
26	18.0	15.1	16.1	13.5	10.5	12.0	12.6	9.6	10.9	12.2	8.5	10.3
27	17.7	13.6	15.7	12.3	10.3	11.5	13.5	11.5	12.4	10.2	6.5	8.4
28	19.1	15.3	17.2	10.8	8.1	9.6	12.6	9.3	11.2	10.9	7.3	9.3
29	19.3	15.8	17.6	10.9	8.1	9.6	9.3	6.8	8.3	12.8	10.3	11.4
30	20.0	16.6	18.4	11.7	8.3	10.1	9.2	6.4	7.9	11.5	8.8	9.7
31	20.3	17.9	19.2	---	---	---	10.7	7.5	9.0	12.6	8.7	10.4
MONTH	25.3	13.6	20.6	23.9	8.1	15.1	14.5	5.1	9.4	14.6	6.2	10.5

08126380 Colorado River near Ballinger, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.6	10.8	12.1	15.9	10.6	13.4	24.3	18.7	21.7	23.2	18.9	20.4
2	11.9	8.9	10.6	14.4	12.3	12.9	22.7	19.0	20.9	24.1	16.6	20.3
3	10.2	8.6	9.4	16.0	13.1	14.3	22.6	17.8	20.2	25.6	19.2	22.3
4	9.3	8.3	8.8	16.8	14.5	15.7	21.4	18.3	19.3	26.6	20.0	23.2
5	12.4	9.1	10.5	18.6	13.2	15.7	19.8	16.9	18.5	26.8	20.9	23.8
6	10.8	8.5	9.8	18.8	13.1	16.0	19.9	16.5	18.3	24.8	22.6	23.8
7	11.2	6.9	9.2	18.5	14.4	16.4	19.2	16.8	18.0	24.9	22.4	23.3
8	10.4	8.3	9.5	18.7	13.4	16.1	22.0	17.5	19.3	26.1	22.1	23.8
9	12.4	10.4	11.3	19.6	14.2	17.0	25.0	18.7	21.4	26.6	22.6	24.3
10	11.2	9.4	10	19.3	14.5	17.1	22.7	16.9	19.9	27.8	22.9	25.3
11	9.6	9.0	9.3	18.1	15.8	17.2	16.9	15.2	15.8	27.2	23.6	25.3
12	9.0	6.8	7.9	17.1	14.7	15.5	19.3	13.6	16.2	30.4	24.9	27.0
13	6.8	5.6	6.0	17.3	14.2	15.5	19.6	13.0	16.4	27.8	23.8	26.2
14	8.8	4.8	6.7	17.1	15.0	16.2	21.4	14.6	17.9	25.9	20.3	22.9
15	9.8	5.3	7.6	19.7	15.5	17.4	23.4	15.5	19.5	26.0	21.0	23.3
16	11.1	6.3	8.8	20.6	15.7	18.1	25.4	18.7	21.9	23.8	21.6	22.7
17	12.4	7.8	10.1	22.2	16.2	19.2	24.6	19.4	22.2	27.2	20.8	23.6
18	13.4	9.2	11.3	24.4	17.9	21.3	24.0	20.3	22.2	29.5	24.0	26.3
19	15.2	10.6	12.9	24.9	20.5	22.6	22.6	20.5	21.1	31.0	25.3	27.6
20	15.6	12.2	14.0	25.0	21.3	23.1	26.4	19.9	22.4	30.1	25.4	27.4
21	13.9	11.7	13.0	23.5	19.7	21.1	28.0	21.6	24.5	28.1	24.6	26.2
22	14.4	11.6	13.0	20.8	17.9	19.5	28.9	22.4	25.3	30.7	24.8	27.0
23	17.1	13.7	15.1	19.9	18.4	19.0	27.0	23.7	25.3	33.8	25.8	28.6
24	15.3	11.8	13.6	20.5	18.2	19.2	24.1	17.1	20.3	31.3	26.1	28.3
25	11.8	9.6	10.5	23.1	19.2	20.9	20.3	17.1	18.5	31.1	26.5	28.3
26	13.5	8.1	10.6	21.9	20.1	20.9	22.5	19.4	20.6	29.1	25.6	27.1
27	14.6	8.5	11.6	22.5	19.7	20.8	24.5	18.8	21.2	30.0	25.5	26.7
28	13.0	10.6	11.3	24.4	20.6	22.0	21.3	18.5	19.3	31.9	23.1	27.1
29	16.0	11.3	13.3	23.8	18.5	21.2	25.0	18.0	21.0	31.8	25.8	28.2
30	---	---	---	24.2	17.8	21.1	26.2	20.4	23.1	32.1	26.6	28.9
31	---	---	---	24.6	18.4	21.6	---	---	---	32.5	24.2	27.8
MONTH	17.1	4.8	10.6	25.0	10.6	18.3	28.9	13.0	20.4	33.8	16.6	25.4
		JUNE			JULY			AUGUST			SEPTEMBER	
1	33.2	23.7	28.0	33.3	27.3	29.8	33.8	28.3	30.9	26.0	24.0	25.0
2	34.0	26.1	29.3	33.1	28.2	30.3	34.9	29.1	31.7	28.4	23.0	25.4
3	28.9	23.7	24.9	34.2	28.2	30.9	35.0	29.1	31.7	28.8	24.1	26.2
4	30.2	22.2	25.7	33.4	27.7	30.5	35.8	28.6	31.8	29.0	24.8	26.7
5	27.0	23.7	25.4	33.1	28.1	30.4	35.2	28.5	31.4	29.3	25.2	27.0
6	30.4	24.1	26.9	33.8	28.4	30.7	34.5	28.5	31.0	29.2	26.1	27.4
7	30.3	26.4	28.0	34.4	27.5	30.6	32.4	27.8	29.9	---	---	---
8	27.4	25.0	26.2	35.6	28.2	31.2	29.8	27.5	28.6	---	---	---
9	28.4	24.8	26.3	34.2	28.2	30.5	30.8	26.3	28.4	27.3	20.2	23.5
10	29.6	25.2	26.9	34.1	27.2	30.1	32.9	27.7	30.0	26.6	20.9	23.7
11	31.3	26.6	28.3	34.9	26.3	30.0	32.5	27.7	29.7	28.2	22.6	25.2
12	31.4	27.0	28.8	33.8	26.0	29.6	30.8	25.4	28.1	29.6	24.0	26.6
13	32.9	26.5	29.2	34.7	25.4	29.4	30.8	25.0	27.8	29.2	24.3	26.6
14	32.4	26.7	29.1	36.2	25.4	30.3	30.8	26.0	28.1	29.3	24.2	26.5
15	31.4	26.7	28.8	35.9	24.8	29.8	28.6	25.5	27.0	30.1	24.7	27.1
16	31.3	25.5	28.0	35.8	24.7	29.7	27.4	24.5	25.9	30.9	25.5	27.9
17	32.1	26.2	28.7	36.4	25.7	30.2	30.8	23.1	26.2	30.9	25.7	28.1
18	32.7	26.8	29.2	33.4	24.8	29.1	26.9	24.0	25.3	29.1	25.4	27.3
19	33.1	26.4	29.2	36.0	26.5	30.5	28.3	23.9	26.1	27.5	25.1	26.3
20	34.8	26.6	30.0	36.3	26.4	30.8	28.2	25.7	26.7	26.9	24.0	25.4
21	30.6	27.0	28.4	32.8	26.7	29.6	27.0	25.1	26.3	26.8	23.8	25.0
22	29.6	24.3	27.0	33.2	27.3	30.0	26.5	24.1	25.3	26.4	22.9	24.6
23	29.2	25.3	27.2	32.7	27.5	29.5	29.1	24.1	26.1	27.3	23.5	24.9
24	31.5	26.4	28.7	32.3	26.9	29.2	31.5	24.3	27.7	27.6	23.2	25.3
25	31.5	27.2	29.0	28.8	26.0	27.2	32.0	27.5	29.5	25.8	22.7	24.5
26	28.0	25.6	26.4	26.0	24.1	25.0	32.5	27.2	29.6	25.2	22.9	24.1
27	29.9	24.2	26.6	26.3	24.2	25.0	32.0	28.1	29.9	24.6	22.9	23.7
28	29.0	25.8	27.4	25.9	23.1	24.4	29.6	25.2	27.2	24.3	22.0	23.1
29	28.6	25.8	26.8	29.8	24.3	26.7	29.6	23.7	26.4	25.8	21.4	23.4
30	32.2	25.6	28.3	31.9	26.0	28.6	30.2	26.1	27.8	23.8	22.3	23.1
31	---	---	---	33.2	26.9	29.8	27.2	25.4	26.3	---	---	---
MONTH	34.8	22.2	27.8	36.4	23.1	29.3	35.8	23.1	28.3	30.9	20.2	25.5
YEAR	36.4	4.8	20.1									

08126380 Colorado River near Ballinger, TX—Continued



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08127000 Elm Creek at Ballinger, TX

LOCATION.--Lat 31°44'57", long 99°56'51", Runnels County, Hydrologic Unit 12090101, on right bank 1,000 ft upstream from storage dam at Ballinger and 1.9 mi upstream from mouth.

DRAINAGE AREA.--450 mi^2.of which 63.5 mi^2 is above Lake Winters Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1932 to current year.

REVISED RECORDS.--WSP 1442: 1935, 1946, 1954. WDR TX-81-3: Drainage area. WDR TX-96-3.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,617.72 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those below 10 ft^3/s, which are fair. The stage-discharge relation during periods of low flow are affected by wind action and by occasional accumulation of drift on dam. Since water year 1983, at least 10% of contributing drainage area has been regulated. No flow at times most years.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--50 years (water years 1933-82) prior to completion of New Lake Winters, 47.6 ft^3/s (34,490 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Aug. 1906 reached a stage of 14.5 ft, affected by backwater from Colorado River.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1933-1982: Maximum discharge, 50,000 ft^3/s, Oct. 13, 1957, gage height, 14.20 ft, from floodmark; no flow at times. Highest stage not affected by backwater from the Colorado River since at least 1904, was that of Oct. 13, 1957, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.93	9.6	4.7	3.0	3.4	7.5	3.0	58	0.41	6.0	2.7	59
2	0.66	9.2	4.4	3.0	3.0	7.4	4.1	48	0.29	3.1	1.1	49
3	0.49	9.2	4.1	3.0	3.0	7.4	4.9	39	0.37	1.3	0.55	38
4	0.43	8.9	5.5	3.7	3.2	9.1	4.0	31	0.54	0.63	0.35	31
5	0.43	8.6	5.2	3.0	3.8	10	3.3	25	3.0	0.34	0.18	27
6	0.59	9.1	4.2	3.0	3.3	9.6	53	21	3.2	0.16	0.11	24
7	1.7	13	4.4	2.8	3.0	8.8	28	18	3.0	0.07	0.06	21
8	14	13	4.7	3.0	3.0	7.7	14	17	3.6	0.02	0.04	18
9	1,110	11	4.3	2.4	3.9	6.3	9.2	16	3.9	0.00	0.01	15
10	606	9.4	3.7	2.2	3.6	5.1	6.9	14	2.2	0.00	0.01	12
11	428	9.2	4.0	2.2	4.0	4.9	4.9	12	1.5	0.00	0.01	11
12	433	9.1	4.5	2.2	3.6	6.3	3.8	9.7	1.1	0.00	0.00	11
13	180	8.3	4.5	2.7	3.1	7.5	3.7	8.8	0.73	0.00	0.00	9.5
14	114	8.2	4.7	e3.0	3.7	7.5	4.0	7.3	0.57	0.00	0.00	8.4
15	87	8.3	4.7	e4.0	3.0	7.4	4.0	6.4	0.42	0.00	0.00	7.5
16	72	9.0	4.0	e5.0	3.0	6.4	4.0	6.1	0.26	0.00	0.00	6.2
17	61	9.1	4.0	6.1	3.0	6.4	3.2	5.0	0.17	0.00	0.00	4.3
18	55	8.1	3.2	4.9	3.0	6.4	2.2	3.9	0.11	0.00	0.01	4.4
19	48	7.3	3.0	4.7	3.0	5.5	2.2	2.7	0.06	0.00	30	4.2
20	39	7.1	3.0	4.3	3.2	5.3	2.1	2.0	0.02	0.00	56	4.1
21	36	7.5	3.0	4.0	3.0	4.5	2.0	1.5	0.01	0.00	40	2.6
22	36	7.5	3.6	4.0	3.0	4.0	1.7	1.3	0.08	0.00	277	1.7
23	33	6.7	3.0	4.0	5.5	3.5	1.4	1.1	0.09	0.00	418	2.3
24	30	5.5	3.5	4.4	8.1	5.3	273	0.96	0.11	0.00	278	2.7
25	25	5.6	3.7	4.4	9.2	4.7	185	0.88	0.09	0.00	184	1.5
26	23	6.3	3.0	3.8	7.7	4.4	177	0.81	0.11	0.00	128	8.6
27	19	6.2	3.0	3.0	7.5	4.3	122	0.90	0.24	0.00	101	8.7
28	16	4.5	2.8	3.3	6.6	4.5	95	0.87	2.2	32	84	6.5
29	14	4.0	2.2	4.0	8.2	4.0	78	0.77	5.2	24	174	4.6
30	12	4.0	2.2	3.7	---	3.6	64	0.68	8.7	15	134	4.7
31	11	---	2.5	4.0	---	3.0	---	0.54	---	7.0	70	---
TOTAL	3,507.23	242.5	117.3	110.8	124.6	188.3	1,163.6	361.21	42.28	89.62	1,979.13	408.5
MEAN	113	8.08	3.78	3.57	4.30	6.07	38.8	11.7	1.41	2.89	63.8	13.6
MAX	1,110	13	5.5	6.1	9.2	10	273	58	8.7	32	418	59
MIN	0.43	4.0	2.2	2.2	3.0	3.0	1.4	0.54	0.01	0.00	0.00	1.5
AC-FT	6,960	481	233	220	247	373	2,310	716	84	178	3,930	810
CFSM	0.25	0.02	0.01	0.01	0.01	0.01	0.09	0.03	0.00	0.01	0.14	0.03
IN.	0.29	0.02	0.01	0.01	0.01	0.02	0.10	0.03	0.00	0.01	0.16	0.03

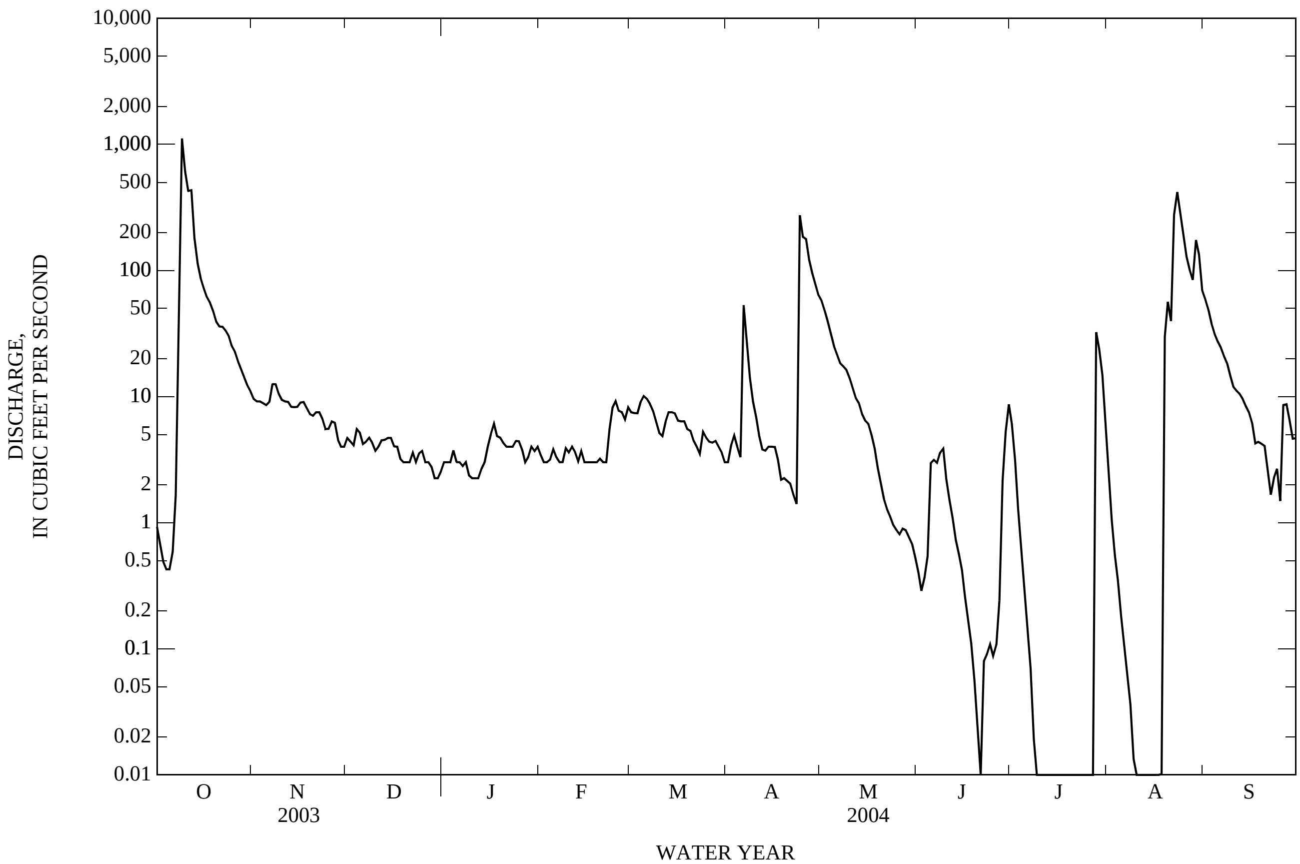
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	29.5	14.0	35.9	16.3	57.2	29.9	19.1	63.2	99.2	13.3	12.4	49.6
MAX	165	59.7	576	164	911	268	76.4	655	770	157	90.1	760
(WY)	(1987)	(1987)	(1992)	(1992)	(1992)	(1992)	(1992)	(1994)	(1997)	(2002)	(1995)	(1996)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1984)	(1989)	(1999)	(2000)	(2000)	(2000)	(2000)	(1984)	(2001)	(1984)	(1983)	(1983)

08127000 Elm Creek at Ballinger, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1983 - 2004z	
ANNUAL TOTAL	6,941.27		8,335.07			
ANNUAL MEAN	19.0		22.8		36.4	
HIGHEST ANNUAL MEAN					188	1992
LOWEST ANNUAL MEAN					0.96	1984
HIGHEST DAILY MEAN	1,110	Oct 9	1,110	Oct 9	12,400	Sep 15, 1996
LOWEST DAILY MEAN	0.00	Jul 28	0.00	Jul 9	0.00	Jul 20, 1983
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 28	0.00	Jul 9	0.00	Jul 20, 1983
MAXIMUM PEAK FLOW			2,820	Oct 9	16,700	Jun 23, 1997
MAXIMUM PEAK STAGE			5.87	Oct 9	9.06	Jun 23, 1997
ANNUAL RUNOFF (AC-FT)	13,770		16,530		26,370	
ANNUAL RUNOFF (CFSM)	0.042		0.051		0.081	
ANNUAL RUNOFF (INCHES)	0.57		0.69		1.10	
10 PERCENT EXCEEDS	28		39		52	
50 PERCENT EXCEEDS	3.0		4.0		1.9	
90 PERCENT EXCEEDS	0.01		0.08		0.00	

z Period of regulated streamflow.
e Estimated



08127000 Elm Creek at Ballinger, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1957 to Sept. 1991, Mar. 2001 to May 2003.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Oct. 1967 to Sept. 1991 (local observer), Feb. 2001 to current year.
WATER TEMPERATURE: Oct. 1967 to Sept. 1997 (local observer), Feb. 2001 to current year.

INSTRUMENTATION.--Water-quality monitor since Feb. 9, 2001.

REMARKS.--Records fair. Interruptions in the record were due to malfunction of the instrument and to no flow. No flow July 9-27, Aug. 12-17. Specific conductance and water temperature are recorded near right bank in a large pool 1,000 ft upstream from a storage dam. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using daily (or continuous) records of specific conductance and regression relations between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 4,220 microsiemens/cm, Sept. 12, 17, 1970; minimum, 74 microsiemens/cm, July 4, 2002.
WATER TEMPERATURE: Maximum daily, 35.0°C, July 19, 1986; minimum daily, 0.0°C, Jan. 8, 1968, Jan. 10, 13, 1973, and Jan. 11, 14, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2,420 microsiemens/cm, Feb. 13-15; minimum, 229 microsiemens/cm, Oct. 9.
WATER TEMPERATURE: Maximum, 34.1°C, Aug. 5; minimum recorded, 5.5°C, Feb. 14, 15.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,630	1,570	1,600	719	706	714	1,680	1,590	1,630	2,230	2,190	2,200
2	1,630	1,580	1,610	737	719	726	1,710	1,640	1,670	2,240	2,190	2,200
3	1,650	1,620	1,640	762	737	745	1,710	1,680	1,700	2,250	2,210	2,240
4	1,660	1,640	1,650	780	758	767	1,710	1,690	1,700	2,280	2,240	2,250
5	1,670	1,640	1,660	795	778	788	1,750	1,700	1,730	2,280	2,260	2,270
6	1,670	1,650	1,660	800	792	796	1,760	1,730	1,740	2,290	2,260	2,280
7	1,700	1,670	1,680	818	799	807	1,780	1,760	1,770	2,300	2,280	2,290
8	1,700	1,680	1,700	832	817	823	1,800	1,770	1,790	2,300	2,290	2,290
9	2,150	229	1,110	888	832	858	1,880	1,800	1,830	2,320	2,280	2,300
10	277	231	261	934	888	907	1,870	1,850	1,860	2,320	2,290	2,310
11	305	277	288	1,130	932	1,000	1,870	1,860	1,870	2,320	2,310	2,320
12	360	291	341	1,110	1,020	1,070	1,910	1,860	1,880	2,340	2,310	2,320
13	393	345	366	1,170	1,110	1,140	1,930	1,900	1,910	2,340	2,320	2,330
14	430	393	414	1,180	1,170	1,170	1,930	---	---	2,350	2,320	2,330
15	462	430	446	1,180	1,160	1,170	1,960	1,900	1,930	2,340	2,310	2,330
16	491	460	478	1,280	1,180	1,210	1,990	1,960	1,970	2,330	2,300	2,320
17	515	490	503	1,310	1,260	1,290	---	---	---	2,330	2,310	2,320
18	528	515	521	1,340	1,290	1,320	---	---	---	2,340	2,310	2,330
19	543	528	537	1,350	1,330	1,340	2,010	1,990	2,000	2,350	2,320	2,340
20	554	541	549	1,350	1,340	1,340	2,030	2,000	2,010	2,350	2,330	2,340
21	560	505	536	1,390	1,340	1,360	2,040	2,030	2,040	2,350	2,330	2,340
22	555	512	535	1,400	1,380	1,390	2,080	2,040	2,050	2,350	2,330	2,350
23	561	551	556	1,470	1,390	1,450	2,100	2,080	2,090	2,350	2,340	2,350
24	591	561	579	1,480	1,460	1,470	2,100	2,080	2,090	2,360	2,340	2,350
25	602	589	594	1,500	1,460	1,470	2,120	2,090	2,100	2,350	2,340	2,350
26	621	601	610	1,510	1,470	1,490	2,140	2,100	2,110	2,380	2,340	2,360
27	644	621	633	1,530	1,490	1,510	2,180	2,130	2,150	2,370	2,350	2,360
28	662	638	647	1,560	1,510	1,540	2,180	2,160	2,170	2,370	2,360	2,360
29	662	650	655	1,570	1,550	1,560	2,210	2,170	2,190	2,370	2,350	2,370
30	688	657	671	---	1,560	---	2,200	2,190	2,200	2,380	2,360	2,370
31	715	681	696	---	---	---	2,210	2,190	2,200	2,380	2,380	2,380
MONTH	2,150	229	830	1,570	706	1,150	2,210	1,590	1,940	2,380	2,190	2,320

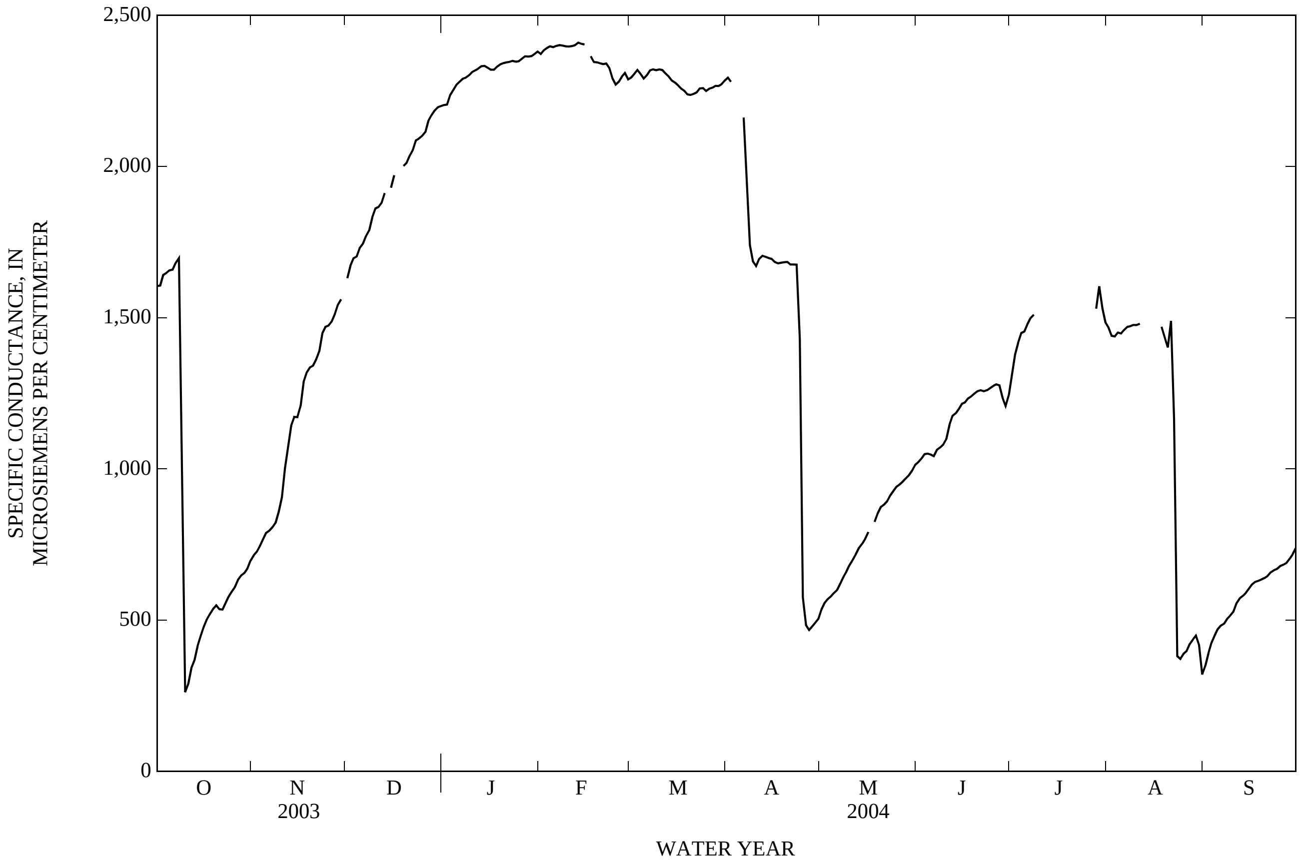
08127000 Elm Creek at Ballinger, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2,380	2,360	2,370	2,320	2,270	2,290	2,320	2,280	2,290	549	520	535
2	2,400	2,380	2,380	2,320	2,300	2,310	2,310	2,240	2,280	567	549	557
3	2,400	2,380	2,390	2,320	2,310	2,320	---	---	---	576	562	569
4	2,400	2,390	2,400	2,330	2,270	2,310	---	---	---	585	572	578
5	2,400	2,390	2,400	2,300	2,270	2,290	---	---	---	597	585	590
6	2,400	2,390	2,400	2,320	2,270	2,300	2,230	2,090	2,160	611	594	600
7	2,410	2,380	2,400	2,330	2,310	2,320	2,240	1,730	1,940	631	611	620
8	2,410	2,390	2,400	2,330	2,310	2,320	1,760	1,720	1,740	653	631	643
9	2,400	2,390	2,400	2,330	2,300	2,320	1,720	1,660	1,690	673	653	661
10	2,400	2,390	2,400	2,340	2,300	2,320	1,690	1,660	1,670	695	673	683
11	2,400	2,390	2,400	2,330	2,310	2,320	1,710	1,680	1,690	707	694	699
12	2,410	2,390	2,400	2,320	2,300	2,310	1,720	1,690	1,700	729	707	718
13	2,420	2,400	2,410	2,310	2,280	2,300	1,720	1,680	1,700	743	726	739
14	2,420	2,400	2,410	2,300	2,260	2,280	1,710	1,690	1,700	760	742	752
15	2,420	2,390	2,400	2,290	2,260	2,280	1,710	1,660	1,690	788	754	768
16	---	---	---	2,280	2,250	2,270	1,700	1,660	1,680	802	784	791
17	2,410	2,330	2,360	2,270	2,240	2,260	1,690	1,660	1,680	812	---	---
18	2,360	2,330	2,350	2,260	2,230	2,250	1,690	1,670	1,680	840	812	825
19	2,360	2,320	2,340	2,250	2,220	2,240	1,690	1,680	1,680	868	838	852
20	2,350	2,330	2,340	2,250	2,230	2,240	1,710	1,660	1,680	880	867	874
21	2,350	2,330	2,340	2,250	2,220	2,240	1,700	1,650	1,680	889	875	881
22	2,350	2,330	2,340	2,250	2,230	2,240	1,680	1,660	1,680	907	886	893
23	2,340	2,280	2,330	2,270	2,240	2,260	1,690	1,660	1,680	926	892	912
24	2,330	2,230	2,290	2,270	2,250	2,260	2,000	684	1,430	933	917	927
25	2,280	2,260	2,270	2,260	2,250	2,250	684	537	575	949	931	941
26	2,300	2,260	2,280	2,260	2,250	2,260	585	460	483	951	941	948
27	2,300	2,280	2,300	2,270	2,250	2,260	474	462	467	968	947	957
28	2,310	2,300	2,310	2,280	2,250	2,270	483	474	479	984	959	969
29	2,310	2,270	2,290	2,280	2,250	2,270	499	483	491	994	971	979
30	---	---	---	2,290	2,260	2,270	520	495	504	1,010	986	994
31	---	---	---	2,300	2,260	2,280	---	---	---	1,030	1,000	1,010
MONTH	2,420	2,230	2,360	2,340	2,220	2,280	2,320	460	1,490	1,030	520	782

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1,030	1,010	1,020	1,340	1,270	1,310	1,510	1,430	1,470	366	320	348
2	1,050	1,020	1,030	1,420	1,330	1,380	1,460	1,430	1,440	411	366	390
3	1,060	1,040	1,050	1,440	1,380	1,420	1,450	1,430	1,440	436	407	424
4	1,060	1,040	1,050	1,460	1,440	1,450	1,460	1,440	1,450	461	435	448
5	1,060	1,040	1,050	1,480	1,440	1,450	1,460	1,430	1,450	481	459	470
6	1,050	1,030	1,040	1,500	1,460	1,480	1,470	1,450	1,460	486	471	482
7	1,070	1,050	1,060	1,520	1,490	1,500	1,480	1,460	1,470	501	455	488
8	1,080	1,060	1,070	1,520	1,500	1,510	1,480	1,470	1,470	512	495	504
9	1,090	1,070	1,080	---	---	---	1,480	1,460	1,480	529	491	515
10	1,110	1,090	1,100	---	---	---	1,480	1,460	1,480	541	502	527
11	1,180	1,110	1,150	---	---	---	1,480	1,470	1,480	572	536	556
12	1,180	1,160	1,180	---	---	---	---	---	---	579	564	571
13	1,190	1,170	1,180	---	---	---	---	---	---	586	572	580
14	1,210	1,180	1,200	---	---	---	---	---	---	595	583	590
15	1,220	1,200	1,220	---	---	---	---	---	---	617	594	604
16	1,230	1,210	1,220	---	---	---	---	---	---	623	607	618
17	1,240	1,220	1,230	---	---	---	---	---	---	632	620	626
18	1,250	1,230	1,240	---	---	---	1,480	1,460	1,470	634	624	629
19	1,260	1,230	1,250	---	---	---	1,480	1,370	1,440	638	628	634
20	1,260	1,250	1,260	---	---	---	1,450	1,380	1,400	646	627	639
21	1,260	1,240	1,260	---	---	---	1,520	1,420	1,490	657	638	646
22	1,260	1,240	1,260	---	---	---	1,550	540	1,170	666	649	658
23	1,270	1,250	1,260	---	---	---	540	358	380	669	656	665
24	1,270	1,260	1,270	---	---	---	376	365	371	675	662	669
25	1,280	1,270	1,270	---	---	---	396	375	388	683	672	679
26	1,280	1,270	1,280	---	---	---	407	393	397	688	680	683
27	1,280	1,260	1,280	---	---	---	436	407	421	692	679	689
28	1,290	1,190	1,230	1,610	1,420	1,530	443	425	435	717	692	702
29	1,230	1,200	1,210	1,700	1,500	1,600	457	443	449	725	710	718
30	1,280	1,220	1,240	1,610	1,390	1,530	522	332	418	754	720	737
31	---	---	---	1,540	1,400	1,480	339	312	320	---	---	---
MONTH	1,290	1,010	1,170	1,700	1,270	1,470	1,550	312	1,070	754	320	583
YEAR	2,420	229	1,450									

08127000 Elm Creek at Ballinger, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

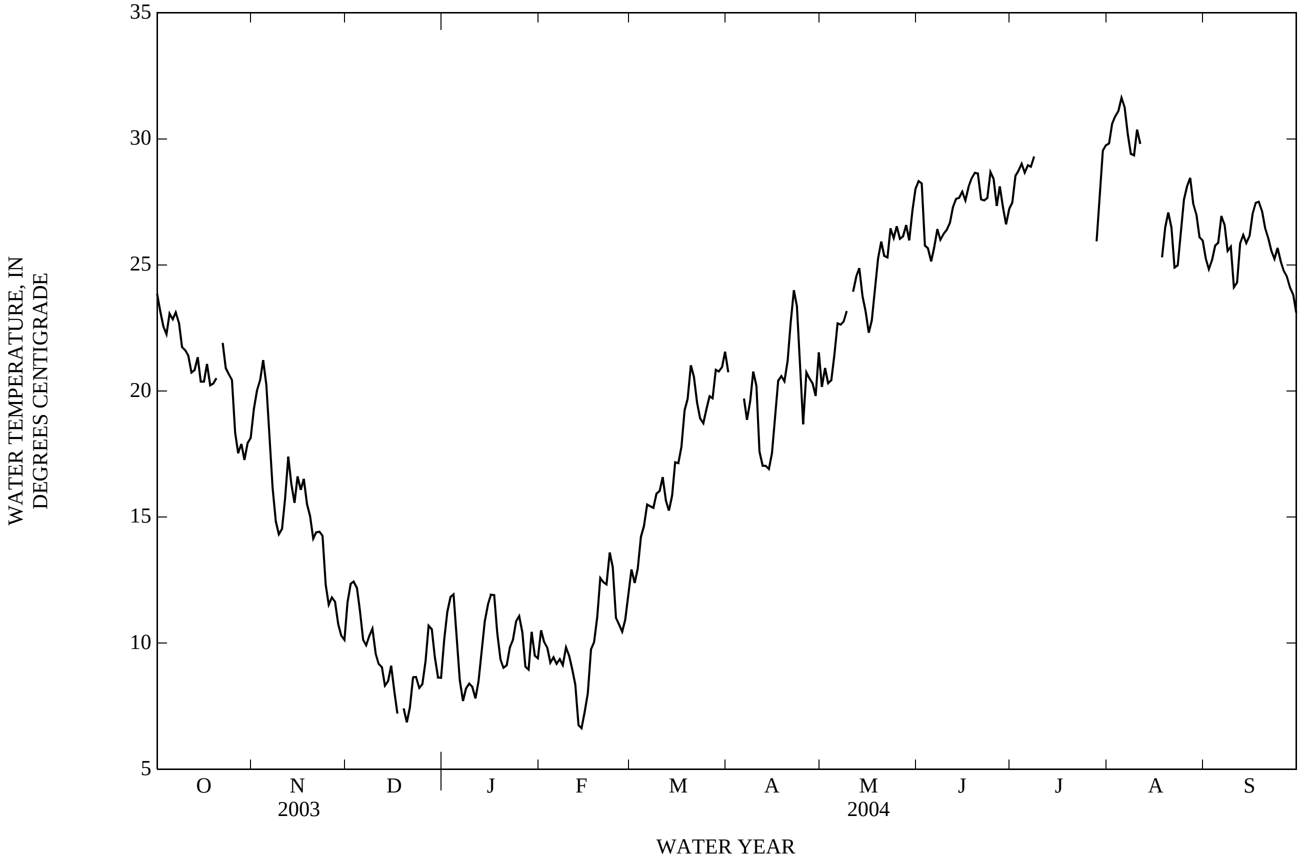
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.4	22.2	23.9	20.1	18.7	19.3	13.9	9.7	11.6	11.9	9.2	10.2
2	24.7	22.2	23.2	20.7	19.4	20.0	12.9	11.5	12.3	13.2	10.2	11.2
3	24.1	21.8	22.6	21.1	20.0	20.4	13.8	11.4	12.4	12.5	11.0	11.8
4	23.5	21.6	22.3	22.5	20.6	21.2	13.2	11.3	12.2	12.4	11.0	11.9
5	25.1	21.9	23.1	21.4	19.3	20.2	12.0	10.2	11.3	11.2	9.4	10.3
6	24.3	22.1	22.8	19.3	17.1	18.2	11.1	9.4	10.1	9.6	7.7	8.5
7	24.3	22.6	23.1	17.1	15.4	16.2	10.8	9.0	9.9	8.2	7.2	7.7
8	23.0	22.5	22.7	15.4	14.3	14.8	11.0	9.5	10.3	9.1	7.6	8.2
9	22.6	20.7	21.7	14.9	14.0	14.3	11.0	9.9	10.6	10.2	6.9	8.4
10	22.0	21.2	21.6	15.1	14.2	14.5	10.9	8.6	9.6	9.8	7.1	8.3
11	21.6	21.0	21.4	16.7	15.0	15.7	10.2	8.3	9.2	8.6	6.8	7.8
12	21.0	20.4	20.7	19.5	15.9	17.4	9.7	8.4	9.0	9.2	7.7	8.5
13	22.1	20.2	20.8	17.3	15.6	16.3	9.3	7.5	8.3	11.6	8.4	9.8
14	22.8	20.4	21.3	15.7	15.4	15.6	10.3	7.1	8.5	13.0	9.3	10.9
15	21.0	19.6	20.4	18.3	15.4	16.6	10.4	8.1	9.1	11.8	11.3	11.5
16	21.4	19.7	20.4	16.8	15.6	16.1	8.7	7.0	8.1	12.6	11.5	11.9
17	22.6	19.9	21.1	16.9	16.1	16.5	9.3	6.2	7.2	12.6	11.2	11.9
18	20.9	19.6	20.2	16.3	14.6	15.5	8.7	---	---	11.2	9.3	10.4
19	21.2	19.5	20.3	17.0	13.8	15.0	9.0	6.3	7.4	10.5	8.6	9.4
20	21.1	19.9	20.5	15.0	13.4	14.1	7.7	5.8	6.9	9.7	8.3	9.0
21	---	20.0	---	16.6	13.3	14.4	8.3	6.5	7.4	10.0	8.3	9.1
22	24.8	19.9	21.9	15.3	13.6	14.4	9.6	7.5	8.6	11.0	9.1	9.8
23	22.0	20.1	20.9	15.1	13.0	14.3	9.1	7.9	8.7	10.4	10.0	10.1
24	21.0	20.2	20.7	13.0	11.5	12.3	9.5	7.3	8.2	11.5	10.2	10.9
25	21.3	19.7	20.4	12.3	10.8	11.5	9.0	7.7	8.4	11.8	10.2	11.1
26	19.7	17.1	18.3	13.4	10.8	11.8	10.3	8.5	9.3	11.0	9.2	10.4
27	19.5	16.2	17.5	12.3	10.9	11.6	12.0	10.0	10.7	10.0	8.2	9.1
28	19.6	16.3	17.9	11.9	9.8	10.8	11.2	9.6	10.6	9.6	8.0	9.0
29	18.1	16.5	17.3	11.2	9.5	10.3	10.7	8.5	9.4	12.2	9.4	10.4
30	20.4	16.7	17.9	11.0	9.2	10.1	9.2	7.9	8.6	10.7	8.6	9.5
31	19.1	17.5	18.1	---	---	---	9.4	7.9	8.6	10.1	8.6	9.4
MONTH	26.4	16.2	20.8	22.5	9.2	15.3	13.9	5.8	9.4	13.2	6.8	9.9

08127000 Elm Creek at Ballinger, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.9	9.7	10.5	15.5	11.1	12.9	22.6	19.4	20.7	21.1	19.4	20.2
2	11.0	9.1	10.0	13.2	12.0	12.4	21.2	---	---	23.9	18.9	20.9
3	10.4	9.1	9.8	13.7	12.4	12.9	---	---	---	23.9	19.3	20.3
4	9.6	8.9	9.2	15.7	13.7	14.2	---	---	---	21.3	19.7	20.4
5	10.2	8.6	9.4	16.5	13.2	14.6	19.9	---	---	23.0	20.4	21.4
6	9.8	8.5	9.2	18.4	13.5	15.5	21.6	18.6	19.7	23.9	21.7	22.7
7	11.5	7.7	9.4	16.8	14.2	15.4	19.5	17.8	18.9	23.5	22.1	22.6
8	9.5	8.4	9.1	17.3	14.0	15.4	21.9	18.2	19.6	24.6	21.7	22.8
9	10.6	9.3	9.8	18.1	14.1	15.9	22.6	19.5	20.8	24.8	22.3	23.2
10	9.9	9.2	9.5	16.9	14.9	16.0	21.7	18.6	20.2	24.9	---	---
11	9.3	8.7	9.0	17.8	15.5	16.6	18.7	16.6	17.6	25.2	23.0	23.9
12	8.9	7.1	8.3	16.7	15.1	15.7	18.8	15.8	17.0	25.6	23.7	24.5
13	7.1	6.2	6.7	16.3	14.8	15.3	19.0	15.2	17.0	25.9	23.9	24.9
14	7.6	5.5	6.6	17.3	14.8	15.9	18.2	15.9	16.9	25.7	22.3	23.8
15	9.7	5.5	7.3	19.5	15.6	17.2	19.3	16.2	17.5	24.8	22.2	23.2
16	10.7	6.2	8.0	18.6	16.0	17.1	20.7	18.2	19.1	23.2	21.6	22.3
17	12.6	7.2	9.7	19.7	16.3	17.8	22.0	19.3	20.4	25.0	21.6	22.8
18	10.9	9.0	10.0	21.0	17.4	19.2	21.4	20.0	20.6	25.4	23.1	24.1
19	13.3	9.7	11.0	20.6	18.9	19.7	20.8	20.0	20.4	27.2	23.9	25.2
20	14.2	11.1	12.6	22.5	20.1	21.0	24.3	19.7	21.2	27.6	24.8	25.9
21	13.1	11.4	12.4	21.7	19.9	20.6	25.6	20.6	22.7	26.3	24.5	25.4
22	13.0	11.6	12.3	20.3	18.8	19.5	26.1	22.2	24.0	26.6	24.6	25.3
23	14.6	12.7	13.6	19.2	18.5	18.9	24.8	22.6	23.4	30.9	24.9	26.4
24	13.8	12.0	13.0	19.2	18.3	18.7	22.8	18.3	20.9	27.3	25.4	26.1
25	12.0	9.6	11.0	20.2	18.6	19.3	20.2	17.6	18.7	28.6	25.7	26.5
26	13.4	8.9	10.8	20.2	19.5	19.8	22.3	19.8	20.7	26.9	25.5	26.0
27	11.7	9.3	10.5	20.2	19.4	19.7	22.1	19.4	20.5	28.4	25.3	26.1
28	11.0	10.8	10.9	22.5	19.6	20.8	21.1	19.4	20.3	30.0	24.8	26.6
29	13.6	10.5	12.0	22.1	19.6	20.8	21.7	18.9	19.8	27.4	25.0	26.0
30	---	---	---	22.9	19.1	20.9	25.1	20.4	21.5	28.5	25.7	27.2
31	---	---	---	23.2	20.1	21.6	---	---	---	29.7	26.3	28.0
MONTH	14.6	5.5	10.1	23.2	11.1	17.5	26.1	15.2	20.0	30.9	18.9	24.2
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.0	26.7	28.3	28.8	26.5	27.5	32.1	28.2	29.8	25.8	25.0	25.3
2	30.3	27.2	28.2	31.3	27.0	28.5	33.5	29.1	30.6	25.3	24.3	24.8
3	27.5	25.1	25.8	30.3	27.4	28.7	32.8	29.6	30.9	26.3	24.5	25.2
4	27.7	24.5	25.7	30.1	28.1	29.0	33.3	29.6	31.1	27.0	25.2	25.8
5	27.0	24.2	25.1	30.3	27.5	28.7	34.1	29.7	31.6	26.5	25.4	25.9
6	27.7	24.6	25.7	30.6	27.7	28.9	33.2	29.9	31.3	28.3	26.0	26.9
7	28.0	25.4	26.4	31.2	27.5	28.9	32.7	28.9	30.2	28.6	25.5	26.6
8	27.1	25.1	26.0	31.9	27.7	29.3	30.6	28.8	29.4	27.0	24.4	25.6
9	27.4	25.4	26.2	---	---	---	31.6	28.2	29.3	28.8	23.8	25.7
10	27.5	25.7	26.4	---	---	---	33.5	28.0	30.4	25.2	23.3	24.1
11	27.9	25.9	26.7	---	---	---	31.4	28.5	29.8	25.3	23.3	24.3
12	29.0	26.3	27.3	---	---	---	---	---	---	27.1	25.0	25.8
13	30.6	26.4	27.6	---	---	---	---	---	---	27.6	25.5	26.2
14	30.5	26.5	27.7	---	---	---	---	---	---	26.8	25.0	25.9
15	30.1	26.8	27.9	---	---	---	---	---	---	27.6	25.2	26.1
16	30.4	26.2	27.6	---	---	---	---	---	---	28.2	26.1	27.0
17	30.4	26.8	28.1	---	---	---	---	---	---	28.5	26.6	27.5
18	31.2	27.2	28.4	---	---	---	25.4	25.2	25.3	28.8	26.6	27.5
19	31.7	26.9	28.7	---	---	---	29.8	24.9	26.5	28.5	26.4	27.1
20	31.4	27.5	28.6	---	---	---	28.2	26.1	27.1	27.5	25.9	26.5
21	29.0	26.9	27.6	---	---	---	27.2	25.5	26.5	27.3	25.4	26.1
22	30.0	26.0	27.6	---	---	---	25.9	24.2	24.9	26.5	24.9	25.6
23	29.1	26.6	27.6	---	---	---	26.4	24.2	25.0	26.8	24.7	25.2
24	32.5	26.1	28.7	---	---	---	27.8	25.3	26.2	28.8	24.2	25.7
25	30.8	27.0	28.4	---	---	---	29.6	26.6	27.6	26.1	24.5	25.1
26	28.5	26.4	27.3	---	---	---	29.5	27.2	28.1	25.6	24.2	24.8
27	31.5	25.9	28.1	---	---	---	29.6	27.6	28.5	25.7	24.0	24.5
28	29.2	26.4	27.3	26.6	25.5	25.9	28.8	26.8	27.4	24.8	23.6	24.1
29	28.5	25.9	26.6	30.1	25.6	27.6	28.8	26.2	27.0	24.7	23.0	23.8
30	29.2	26.1	27.2	32.4	27.2	29.5	27.1	25.7	26.1	23.9	22.6	23.1
31	---	---	---	32.3	28.1	29.7	26.5	25.4	26.0	---	---	---
MONTH	32.5	24.2	27.3	32.4	25.5	28.5	34.1	24.2	28.3	28.8	22.6	25.6
YEAR	34.1	5.5	19.1									

08127000 Elm Creek at Ballinger, TX—Continued



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08128000 South Concho River at Christoval, TX

LOCATION.--Lat 31°11'13", long 100°30'06", Tom Green County, Hydrologic Unit 12090102, on left upstream side of U.S. Highway 277 bridge, 9.5 mi upstream from Twin Buttes Dam, and 23.7 mi upstream from mouth.

DRAINAGE AREA.--413 mi^2 of which 59 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Feb. 1930 to Sept. 1995 (daily mean discharge), Oct. 1995 to Apr. 2001 (peak discharges greater than base discharge), May 2001 to current year.

REVISED RECORDS.--WSP 1118: 1943(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 2,010.22 ft above NGVD of 1929. Prior to July 17, 1930, nonrecording gage at same site and datum. Water-stage recorder at same site and datum from July 17, 1930, to Nov. 15, 1977, at site 160 ft downstream at same datum from Nov. 16, 1977, to May 5, 1987. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation. Low flow is affected by diversions to the South Concho Irrigation Company canal 800 ft upstream from station. No flow Feb. 28 and Mar. 1, 1955.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1882, about 23 ft, Aug. 6, 1906 (discharge, 115,000 ft^3/s), from rating curve extended above 15,100 ft^3/s on basis of slope-area measurement of 80,100 ft^3/s, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	8.9	8.0	6.3	7.6	7.7	10	12	5.1	4.9	4.2	4.9
2	4.2	8.5	7.8	6.1	7.6	7.7	11	10	5.1	4.9	4.0	4.9
3	4.3	8.2	7.6	6.5	7.1	8.0	10	9.7	6.0	4.6	4.0	5.7
4	4.4	8.3	7.7	6.2	7.4	9.5	11	9.7	5.4	5.0	3.9	5.5
5	4.7	10	6.7	5.7	7.9	8.3	11	9.1	5.0	4.1	3.8	5.7
6	5.0	8.5	7.4	5.7	7.3	8.2	12	9.0	5.1	4.1	4.0	5.4
7	5.6	8.5	9.0	6.0	7.3	8.2	10	9.0	4.9	4.0	4.5	5.1
8	6.6	8.5	7.2	6.2	7.4	8.3	11	9.5	4.8	4.0	4.9	5.0
9	11	8.8	6.6	6.2	7.6	8.3	11	8.2	4.8	4.1	5.1	5.0
10	5.8	8.8	6.7	6.4	7.9	8.3	14	8.3	4.8	4.1	4.9	5.1
11	7.7	8.5	6.9	6.7	7.7	8.3	12	9.2	4.6	4.1	4.4	5.4
12	7.9	8.4	6.9	6.4	7.4	11	11	8.2	4.5	4.0	4.2	5.6
13	8.2	8.0	6.9	6.9	7.2	9.6	12	8.0	4.6	4.1	4.3	5.1
14	8.2	8.2	7.5	7.0	7.6	9.5	11	7.7	4.6	4.0	3.9	5.3
15	8.5	8.2	7.5	11	7.3	10	12	7.6	4.5	3.9	3.1	5.4
16	8.3	8.5	7.3	7.6	7.8	10	12	7.9	4.3	3.9	3.2	5.4
17	8.3	8.6	7.5	7.4	7.6	11	11	7.8	4.2	3.9	3.1	5.7
18	8.4	8.3	7.6	7.0	7.6	11	11	7.7	4.1	4.1	2.8	5.7
19	8.9	8.2	7.5	7.1	7.5	11	12	7.5	4.1	5.6	3.4	5.7
20	9.0	8.3	7.6	7.2	7.3	11	12	6.8	4.1	4.0	3.4	5.7
21	8.9	8.6	7.2	6.9	7.2	10	11	6.7	4.1	4.0	4.5	5.7
22	8.9	8.6	6.9	6.9	7.8	10	11	6.3	9.7	4.1	3.8	5.7
23	9.0	8.3	6.8	7.2	9.1	10	11	5.6	5.1	4.1	3.6	6.1
24	9.8	8.1	6.7	7.9	9.1	11	12	5.6	5.1	4.0	3.7	5.9
25	9.9	8.5	6.6	7.6	8.2	11	11	5.7	5.3	4.3	3.6	5.6
26	10	8.8	6.6	7.5	7.7	10	11	5.7	5.6	5.2	3.6	5.9
27	9.9	8.2	6.1	7.4	7.8	11	11	5.7	5.5	5.5	3.5	6.2
28	9.7	8.1	5.5	7.4	7.9	10	11	5.5	5.2	5.1	4.2	6.2
29	9.4	8.0	5.8	7.6	7.8	10	11	5.5	5.8	4.5	4.0	5.8
30	9.0	7.4	5.9	7.4	---	10	11	5.3	5.2	4.4	4.0	5.7
31	9.0	---	6.2	7.6	---	10	---	5.1	---	4.1	4.8	---
TOTAL	242.7	252.8	218.2	217.0	222.7	297.9	338	235.6	151.2	134.7	122.4	166.1
MEAN	7.83	8.43	7.04	7.00	7.68	9.61	11.3	7.60	5.04	4.35	3.95	5.54
MAX	11	10	9.0	11	9.1	11	14	12	9.7	5.6	5.1	6.2
MIN	4.2	7.4	5.5	5.7	7.1	7.7	10	5.1	4.1	3.9	2.8	4.9
AC-FT	481	501	433	430	442	591	670	467	300	267	243	329

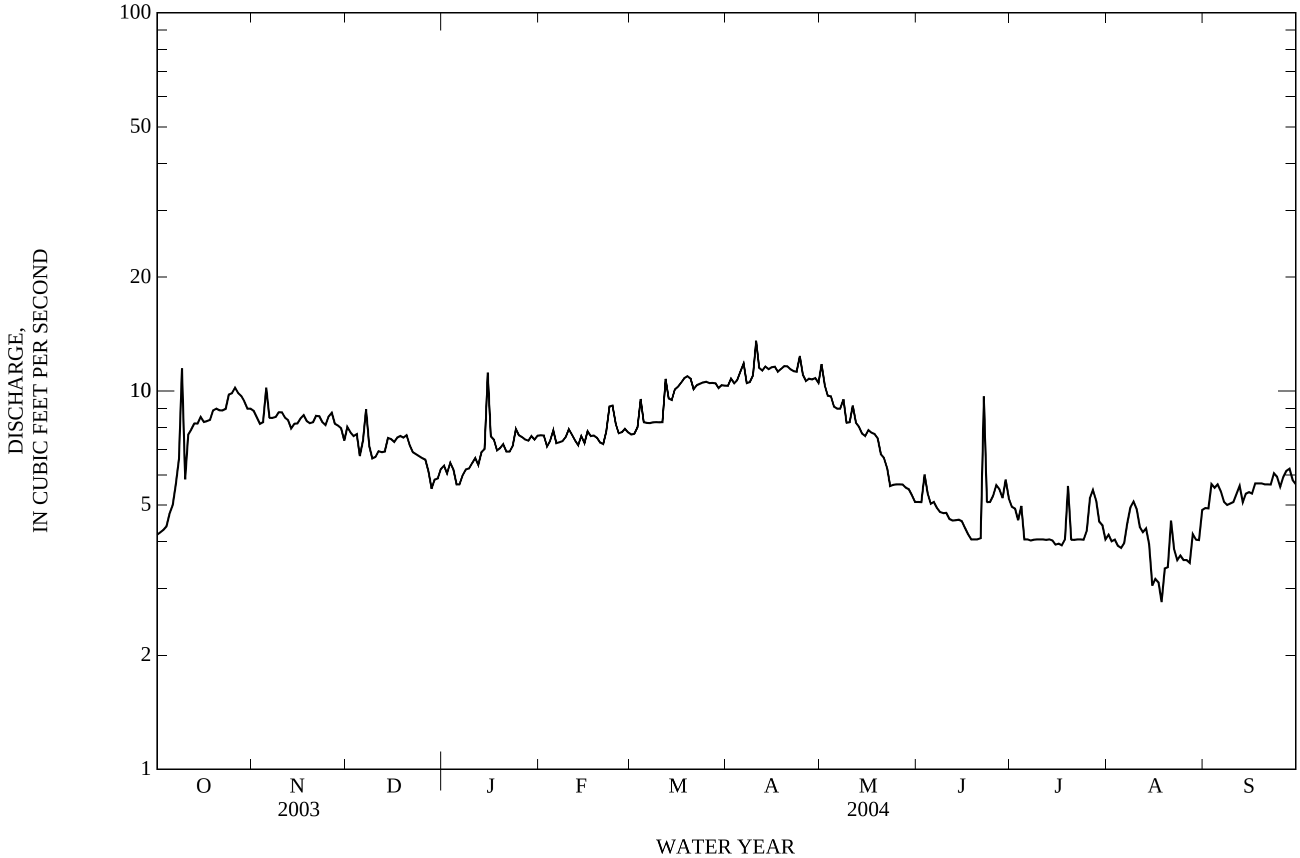
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	46.5	21.3	20.9	19.5	20.2	19.8	27.5	40.4	26.2	38.9	19.6	62.2
MAX	851	146	126	100	91.5	88.4	479	1,116	189	1,445	162	2,352
(WY)	(1931)	(1975)	(1975)	(1975)	(1975)	(1992)	(1957)	(1957)	(1958)	(1938)	(1971)	(1936)
MIN	0.54	0.51	0.57	0.40	0.35	0.39	1.09	2.83	1.08	1.08	1.08	0.85
(WY)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1955)	(1954)	(1954)	(1952)	(1952)	(1954)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004h	
ANNUAL TOTAL	3,279.6		2,599.3			
ANNUAL MEAN	8.99		7.10		30.4	
HIGHEST ANNUAL MEAN					207	1936
LOWEST ANNUAL MEAN					3.20	1952
HIGHEST DAILY MEAN	16	Jan 19	14	Apr 10	29,500	Jul 23, 1938
LOWEST DAILY MEAN	3.6	Sep 13	2.8	Aug 18	0.10	Feb 27, 1955
ANNUAL SEVEN-DAY MINIMUM	4.0	Sep 7	3.3	Aug 14	0.19	Feb 25, 1955
MAXIMUM PEAK FLOW			30	Jun 22	100,000	Jul 23, 1938
MAXIMUM PEAK STAGE			2.10	Jun 22	a21.95	Jul 23, 1938
ANNUAL RUNOFF (AC-FT)	6,510		5,160		22,050	
10 PERCENT EXCEEDS	15		11		40	
50 PERCENT EXCEEDS	8.2		7.2		14	
90 PERCENT EXCEEDS	5.0		4.1		3.6	

h See PERIOD OF RECORD paragraph.
a From floodmark.

08128000 South Concho River at Christoval, TX—Continued



08128400 Middle Concho River above Tankersley, TX

LOCATION.--Lat 31°25'38", long 100°42'39", Irion County, Hydrologic Unit 12090103, on left bank 0.3 mi upstream from East Rocky Creek, 0.5 mi southwest of Tullos Ranch Headquarters, 6.7 mi northwest of Tankersley, and 20.9 mi upstream from mouth.

DRAINAGE AREA.--2,084 mi^2 of which 968 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Mar. 1961 to Sept. 1995 (daily mean discharge), Oct. 1995 to Mar. 2001 (peak discharges greater than base discharge), Apr. 2001 to current year. Water-quality records: Chemical data: Aug. 1964 to Apr. 1965.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,986.47 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good. No known regulation or diversions. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1900, 29.5 ft, Sept. 26, 1936. A flood in 1900 reached the same stage, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.4	8.10	7.50	7.65	12.6	10.7	14.8	17.6	17.5	2.94	8.62	50.8
MAX	363	107	59.4	44.3	169	86.7	143	134	375	27.2	115	1,181
(WY)	(1975)	(1975)	(1975)	(1975)	(1992)	(1987)	(1992)	(1965)	(1986)	(1992)	(1974)	(1974)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1961)	(1961)	(1962)	(1961)	(1961)	(1962)

08128400 Middle Concho River above Tankersley, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004h	
ANNUAL TOTAL	137.28		0.00			
ANNUAL MEAN	0.38		0.00		15.3	
HIGHEST ANNUAL MEAN					110	1974
LOWEST ANNUAL MEAN					0.00	1962
HIGHEST DAILY MEAN	81	Sep 26	0.00	Oct 1	12,900	Sep 21, 1974
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Apr 1, 1961
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Apr 1, 1961
MAXIMUM PEAK FLOW					15,500	Sep 21, 1974
MAXIMUM PEAK STAGE					24.98	Sep 21, 1974
ANNUAL RUNOFF (AC-FT)	272		0.00		11,090	
10 PERCENT EXCEEDS	0.00		0.00		18	
50 PERCENT EXCEEDS	0.00		0.00		1.1	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

h See PERIOD OF RECORD paragraph.
e Estimated

08129300 Spring Creek above Tankersley, TX
(Flood-hydrograph partial-record station)

LOCATION.--Lat 31°19'48", long 100°38'24", Tom Green County, Hydrologic Unit 12090102, on right bank at downstream side of bridge on Farm Road 2335, 1.4 mi south of Tankersley, 2.5 mi upstream from Dove Creek, and 10.4 mi upstream from mouth.

DRAINAGE AREA.--425 mi^2 of which 20 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1960 to Sept. 1995 (daily mean discharge), Oct. 1995 to current year (peak discharges greater than base discharge). Water-quality records: Chemical data: Sept. 1964 to May 1967.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,964.72 ft above NGVD of 1929. Prior to Nov. 10, 1960, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records good. No known regulation. There are many small diversions above station for irrigation.

AVERAGE DISCHARGE.--35 years (water years 1961-95), 13.1 ft^3/s (9,490 acre-ft/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,400 ft^3/s, Aug. 12, 1971, gage height, 16.57 ft; no flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Notable floods since at least 1853 occurred in 1882 and 1884. Flood of Oct. 3, 1959, reached a stage of 18.4 ft, from floodmarks. At former gage near Tankersley 8.0 mi downstream, the flood of Oct. 3, 1959, had a discharge of 82,100 ft^3/s and was found to be about 3.0 ft lower than the 1882 flood, the greatest at that location since at least 1853.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
No peak greater than base discharge.				Apr. 6	0215	*15.0	*4.18

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08130500 Dove Creek at Knickerbocker, TX

LOCATION.--Lat 31°16'26", long 100°37'50", Tom Green County, Hydrologic Unit 12090102, on left downstream end of bridge on Farm Road 2335, 0.5 mi west of Knickerbocker, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--226 mi^2 of which 8 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1960 to Sept. 1995 (daily mean discharge), Oct. 1995 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,001.45 ft above NGVD of 1929. Prior to Nov. 10, 1960, nonrecording gage, Nov. 10, 1960, to Mar. 17, 1986, water-stage recorder, both at site 278 ft to the right at present datum. Satellite telemeter at station.

REMARKS.--Records good. No known regulation. Flow is affected by diversions from two small upstream channel dams, and by small upstream diversions (for irrigation). Flow is sustained by springflow from Dove Creek Spring about 9.0 mi upstream.

AVERAGE DISCHARGE.--35 years (water years 1961-95), 16.2 ft^3/s (11,740 acre-ft/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,500 ft^3/s, Aug. 12, 1971, gage height, 20.66 ft; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1882, 30.4 ft in 1906 and Oct. 3, 1959; floods in 1882 and 1884 reached about the same stage, from information by local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 9	1630	133	4.86	Aug. 31	2130	*136	*4.88
June 21	2345	126	4.78				

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08130700 Spring Creek above Twin Buttes Reservoir near San Angelo, TX

LOCATION.--Lat 31°19'51", long 100°36'02", Tom Green County, Hydrologic Unit 12090102, on right bank at confluence of Spring and Dove Creeks, 2.3 mi downstream from Spring Creek above Tankersley (station 08129300), 4.3 mi downstream from Dove Creek at Knickerbocker (station 08130500), 4.9 mi upstream from Twin Buttes Reservoir Dam, and 13.2 mi southwest of San Angelo.

DRAINAGE AREA.--688 mi^2 of which 31 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 2001 to Sept. 2003 (daily mean discharges less than 12 ft^3/s), Oct. 2003 to current year (daily mean discharges less than 57 ft^3/s).

GAGE.--Water-stage recorder and concrete dam. Elevation of gage is 1,950 ft above NGVD of 1929, from topographic map. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for discharges below 10 ft^3/s, which are poor. No known regulation or diversions. No flow many days.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 2.54 ft, Oct. 26, 2002 (discharge not determined); minimum, no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 1.75 ft, June 22 (discharge not determined); minimum, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.06	0.12	0.07	3.8	9.2	5.5	1.7	0.00	1.5	0.00	0.00
2	0.00	0.08	0.12	0.07	2.2	9.0	14	1.7	0.00	0.73	0.00	0.00
3	0.00	0.08	0.18	0.07	2.0	9.0	15	1.3	0.00	0.27	0.00	0.00
4	0.00	0.06	0.15	0.08	1.8	11	12	0.74	0.00	0.11	0.00	0.00
5	0.00	0.20	0.10	0.05	2.3	11	12	0.21	0.00	0.04	0.00	0.00
6	0.00	0.55	0.09	0.03	2.1	9.0	21	0.00	0.00	0.02	0.00	0.00
7	0.00	1.1	0.05	0.01	1.9	7.5	17	0.00	0.00	0.01	0.00	0.00
8	0.00	1.8	0.06	0.01	2.7	6.7	13	0.00	0.00	0.01	0.00	0.00
9	0.00	3.4	0.02	0.01	4.4	7.4	12	0.00	0.00	0.00	0.00	0.00
10	0.00	2.8	0.02	0.01	4.7	7.7	12	0.00	0.00	0.00	0.00	0.00
11	0.00	1.9	0.05	0.05	6.3	8.5	10	0.00	0.00	0.00	0.00	0.00
12	0.02	2.2	0.09	0.59	6.6	16	9.3	0.00	0.00	0.00	0.00	0.00
13	0.11	1.0	0.20	0.44	7.0	21	8.3	0.00	0.00	0.00	0.00	0.00
14	0.08	0.49	0.23	0.33	8.0	17	7.5	0.00	0.00	0.00	0.00	0.00
15	0.04	0.34	0.11	4.0	7.8	14	7.1	0.00	0.00	0.00	0.00	0.00
16	0.02	0.66	0.11	2.0	7.5	12	8.2	0.00	0.00	0.00	0.00	0.00
17	0.04	1.5	0.31	1.1	7.0	11	7.7	0.00	0.00	0.00	0.00	0.00
18	0.09	0.87	0.45	1.6	5.4	11	6.3	0.00	0.00	0.00	0.00	0.00
19	0.18	0.59	0.32	2.3	2.7	10	6.7	0.00	0.00	0.00	0.00	0.00
20	0.16	0.52	0.21	1.2	2.1	10	6.4	0.00	0.00	0.00	0.00	0.00
21	0.10	0.45	0.17	2.3	1.6	10	5.6	0.00	0.04	0.00	0.00	0.00
22	0.05	0.39	0.12	3.3	1.0	9.3	3.6	0.00	---	0.00	0.00	0.00
23	0.02	0.26	0.10	4.7	3.3	9.4	2.7	0.00	5.7	0.00	0.00	0.00
24	0.01	0.09	0.10	5.5	5.7	10	1.7	0.00	1.4	0.00	0.00	0.00
25	0.01	0.05	0.09	6.4	8.1	11	2.2	0.00	1.5	0.00	0.00	0.00
26	0.00	0.08	0.10	5.6	9.2	10	4.9	0.00	1.1	0.00	0.00	0.00
27	0.00	0.06	0.09	4.6	8.2	9.8	4.1	0.00	0.65	0.00	0.00	0.00
28	0.01	0.07	0.07	4.8	7.9	8.8	3.4	0.00	1.3	0.00	0.00	0.00
29	0.01	0.07	0.05	5.5	9.7	7.9	2.4	0.00	1.3	0.00	0.00	0.00
30	0.01	0.06	0.04	5.4	---	7.1	1.2	0.00	1.5	0.00	0.00	0.00
31	0.04	---	0.06	4.7	---	6.2	---	0.00	---	0.00	0.00	---
TOTAL	1.00	21.78	3.98	66.82	143.0	317.5	242.8	5.65	---	2.69	0.00	0.00
MEAN	0.03	0.73	0.13	2.16	4.93	10.2	8.09	0.18	---	0.09	0.00	0.00
MAX	0.18	3.4	0.45	6.4	9.7	21	21	1.7	---	1.5	0.00	0.00
MIN	0.00	0.05	0.02	0.01	1.0	6.2	1.2	0.00	---	0.00	0.00	0.00
AC-FT	2.0	43	7.9	133	284	630	482	11	---	5.3	0.00	0.00

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08131190 South Concho River above Gardner Dam near San Angelo, TX

LOCATION.--Lat 31°16'58", long 100°30'27", Tom Green County, Hydrologic Unit 12090102, on left bank 0.2 mi above Gardner Dam, 2.5 mi above Twin Buttes Dam, 6.0 mi south of Mathis Field Airport, and 10.0 mi south of San Angelo.

DRAINAGE AREA.--434 mi^2.

PERIOD OF RECORD.--Oct. 1999 to Sept. 2000, Oct. 2001 to Sept. 2003 (gage heights only), Oct. 2003 to June 21, 2004 (daily mean discharge), June 22, 2004 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 1,922.42 ft above NGVD of 1929. Prior to Oct. 2001, datum 4.28 ft higher. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Interruptions in the record were due to malfunction of the instrument. On June 22, 2004 the temporary earthern dam at the right end of the masonary dam washed away. From Oct. 1965 to Dec. 1971 periodic discharge measurements were made and from Apr. 1971 to Jan. 1974 there was a recording gage at site on left bank 0.2 mi downstream from present gage at datum 2.78 ft higher, data not published. No known regulations. There are diversions above station for agricultural use.

EXTREMES FOR PERIOD OF RECORD.--Maximum estimated daily discharge, 60 ft^3/s, June 21, 2004; maximum gage height, 8.47 ft, June 22, 2004; minimum gage height, 0.73 ft, Sept. 10, 2000; no flow May 12, 2003 as a result of earthern dam.

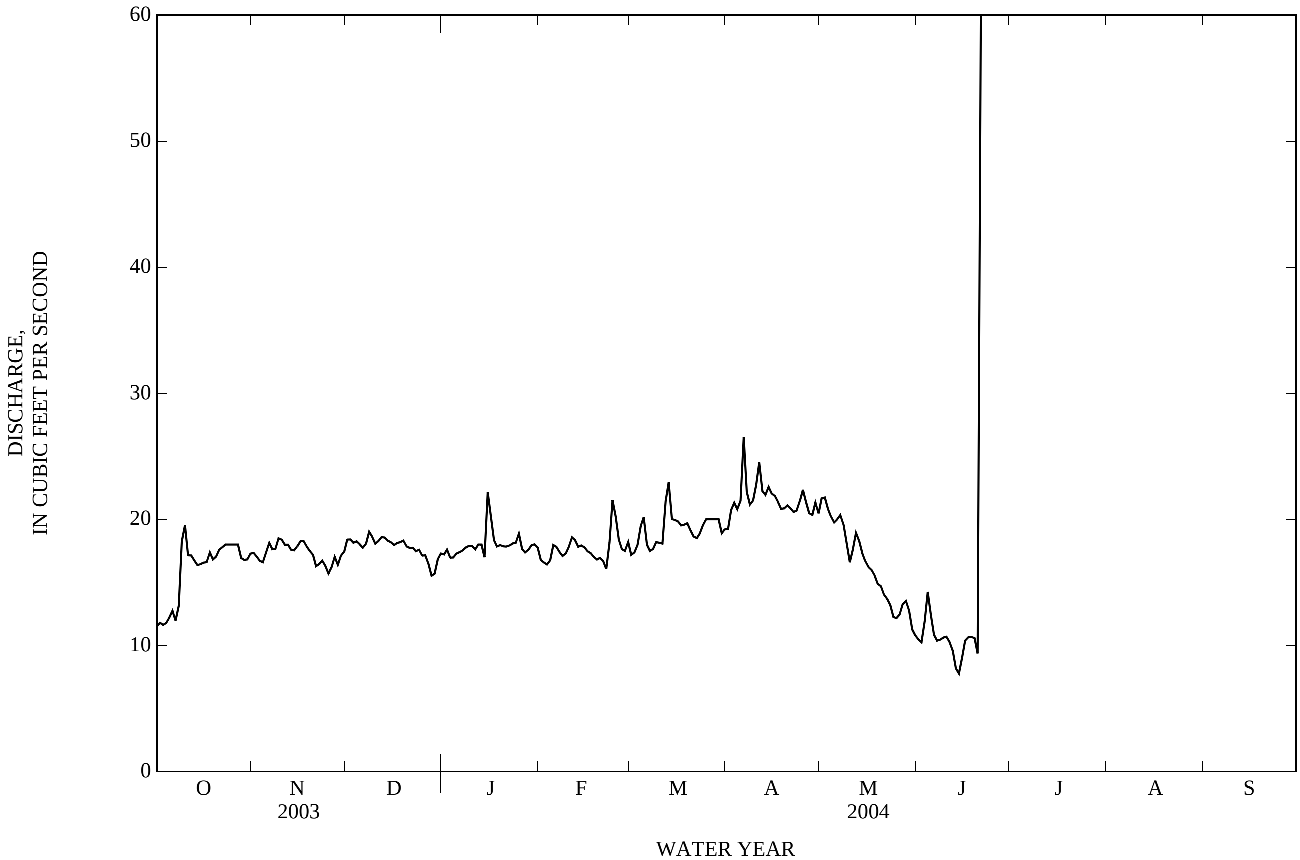
EXTREMES FOR CURRENT YEAR.--Maximum estimated daily discharge, 60 ft^3/s, June 21; maximum gage height, 8.47 ft, June 22; minimum daily discharge, 7.8 ft^3/s, June 14; minimum gage height, 1.43 ft, Aug. 18.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	17	18	17	17	17	19	22	10	---	---	---
2	12	17	18	18	17	17	21	22	10	---	---	---
3	12	17	18	17	16	18	21	21	12	---	---	---
4	12	17	18	17	17	19	21	20	14	---	---	---
5	12	17	18	17	18	20	21	20	12	---	---	---
6	13	18	18	17	18	18	27	20	11	---	---	---
7	12	18	18	18	17	17	22	20	10	---	---	---
8	13	18	19	18	17	18	21	20	10	---	---	---
9	18	18	19	18	17	18	21	18	11	---	---	---
10	20	18	18	18	18	18	23	17	11	---	---	---
11	17	18	18	18	19	18	25	18	10	---	---	---
12	17	18	19	18	18	21	22	19	9.6	---	---	---
13	17	18	19	18	18	23	22	18	8.2	---	---	---
14	16	18	18	17	18	20	23	17	7.8	---	---	---
15	16	18	18	22	18	20	22	17	9.0	---	---	---
16	17	18	18	20	17	20	22	16	10	---	---	---
17	17	18	18	18	17	20	21	16	11	---	---	---
18	17	18	18	18	17	20	21	16	11	---	---	---
19	17	17	18	18	17	20	21	15	11	---	---	---
20	17	17	18	18	17	19	21	15	9.3	---	---	---
21	18	16	18	18	17	19	21	14	e60	---	---	---
22	18	16	18	18	16	19	21	14	---	---	---	---
23	18	17	17	18	18	19	21	13	---	---	---	---
24	e18	16	18	18	22	20	21	12	---	---	---	---
25	e18	16	17	19	20	20	22	12	---	---	---	---
26	e18	16	17	18	18	e20	21	12	---	---	---	---
27	18	17	16	17	18	e20	20	13	---	---	---	---
28	17	16	16	18	17	e20	20	14	---	---	---	---
29	17	17	16	18	18	20	21	13	---	---	---	---
30	17	17	17	18	---	19	20	11	---	---	---	---
31	17	---	17	18	---	19	---	11	---	---	---	---
TOTAL	497	517	551	558	512	596	645	506	---	---	---	---
MEAN	16.0	17.2	17.8	18.0	17.7	19.2	21.5	16.3	---	---	---	---
MAX	20	18	19	22	22	23	27	22	--	---	---	---
MIN	11	16	16	17	16	17	19	11	--	---	---	---
AC-FT	986	1,030	1,090	1,110	1,020	1,180	1,280	1,000	---	---	---	---

e Estimated

08131190 South Concho River above Gardner Dam near San Angelo, TX—Continued



GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
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	---	---	---	---	---	---	---	---	---	---	---	---

08131190 South Concho River above Gardner Dam near San Angelo, TX—Continued

GAGE HEIGHT, FEET—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	---	---	---	---	---	---	1.51	1.49	1.59	1.56
2	---	---	---	---	---	---	---	---	1.52	1.49	1.57	1.54
3	---	---	---	---	---	---	---	---	1.52	1.49	1.57	1.54
4	---	---	---	---	---	---	---	---	1.51	1.48	1.58	1.55
5	---	---	---	---	---	---	---	---	1.48	1.46	1.58	1.56
6	---	---	---	---	---	---	---	---	1.49	1.45	1.60	1.56
7	---	---	---	---	---	---	---	---	1.51	1.46	1.58	1.55
8	---	---	---	---	---	---	1.60	1.56	1.53	1.49	1.58	1.54
9	---	---	---	---	---	---	1.58	1.55	1.52	1.49	1.57	1.54
10	---	---	---	---	---	---	1.59	1.56	1.52	1.50	1.57	1.54
11	---	---	---	---	---	---	1.56	1.54	1.51	1.47	1.57	1.54
12	---	---	---	---	---	---	1.56	1.54	1.48	1.45	1.56	1.53
13	---	---	---	---	---	---	1.54	1.50	1.51	1.46	1.56	1.51
14	---	---	---	---	---	---	1.51	1.49	1.50	1.47	1.53	1.51
15	---	---	---	---	---	---	1.51	1.48	1.47	1.46	1.55	1.52
16	---	---	---	---	---	---	1.49	1.47	1.47	1.45	1.56	1.53
17	---	---	---	---	---	---	1.54	1.49	1.48	1.45	1.55	1.52
18	---	---	---	---	---	---	1.52	1.49	1.46	1.43	1.53	1.50
19	---	---	---	---	---	---	1.65	1.50	1.50	1.45	1.52	1.49
20	---	---	---	---	---	---	1.64	1.54	1.58	1.46	1.52	1.49
21	---	---	---	---	---	---	---	---	1.62	1.53	1.51	1.48
22	---	---	---	---	8.44	1.94	---	---	1.58	1.55	1.51	1.49
23	---	---	---	---	1.95	1.92	---	---	1.55	1.52	1.89	1.50
24	---	---	---	---	---	---	---	---	1.54	1.52	1.73	1.55
25	---	---	---	---	---	---	---	---	1.55	1.52	1.57	1.54
26	---	---	---	---	---	---	---	---	1.53	1.51	1.57	1.53
27	---	---	---	---	---	---	---	---	1.53	1.50	1.59	1.54
28	---	---	---	---	---	---	---	---	1.56	1.51	1.62	1.59
29	---	---	---	---	---	---	---	---	1.56	1.54	1.60	1.58
30	---	---	---	---	---	---	---	---	1.55	1.53	1.59	1.57
31	---	---	---	---	---	---	1.56	1.49	1.57	1.53	---	---
MONTH	---	---	---	---	---	---	---	---	1.62	1.43	1.89	1.48

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08131200 Twin Buttes Reservoir near San Angelo, TX

LOCATION.--Lat 31°22'55", long 100°32'17", Tom Green County, Hydrologic Unit 12090102, in outlet control tower near left end of Twin Buttes Dam on Middle Concho River, Spring Creek, and South Concho River, 3.8 mi upstream from Lake Nasworthy Dam, 8.1 mi southwest of San Angelo, and 75.0 mi upstream from mouth.

DRAINAGE AREA.--3,868 mi^2 of which 1,055 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1962 to Sept. 2003 (contents), Oct. 2003 to current year. Water-quality records: Chemical data: May 1965 to Nov. 1966 and July 1970 to Apr. 1984.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and nonrecording gage on Middle Concho-Spring Creek pool and nonrecording gage on South Concho pool. Datum of gage is NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair. Water-stage recorder on Middle Concho-Spring Creek pool was isolated at an elevation of 1,888.08 ft for entire year. Records were computed from once-daily readings by City of San Angelo employee. The reservoir is formed by a rolled earthfill dam 8.1 mi long, including a 200-foot-wide uncontrolled off-channel concrete gravity spillway with ogee weir section. Outlet works consist of three 15.5-foot concrete conduits, each controlled by a 12.0- by 15.0-foot fixed-wheel gate and a 12.0- by 15.0-foot radial gate, located in the Middle Concho-Spring Creek pool. Low-flow releases are made through 2.0- by 2.0-foot gates located in the center of three fixed-wheel gates. The South Concho and Middle Concho-Spring Creek pools are connected by a 3.22-mile equalizing channel. The South Concho and Middle Concho-Spring Creek pools were not equalized at an elevation of 1,926.5 ft during the year. Deliberate impoundment of water began on Dec. 1, 1962; dam was completed Feb. 13, 1963. In June 1999, construction of a cutoff wall to stop seepage was completed. Capacity curve is based on a survey made in 1958. Reservoir is owned by the city of San Angelo and was built for flood control, irrigation, and municipal uses. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,991.0
Crest of spillway	1,969.1
Bottom of equalizing channel (Middle Concho-Spring Creek pool)	1,926.5
Dead storage in South Concho pool	1,926.5
Lowest gated outlet (invert at Middle Concho-Spring Creek pool)	1,885.0

COOPERATION.--Records of diversion may be obtained from the city of San Angelo.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 205,200 acre-ft, May 12, 1975, elevation, 1,942.20 ft; minimum since first appreciable storage, 2,120 acre-ft, Apr. 15, 1971.

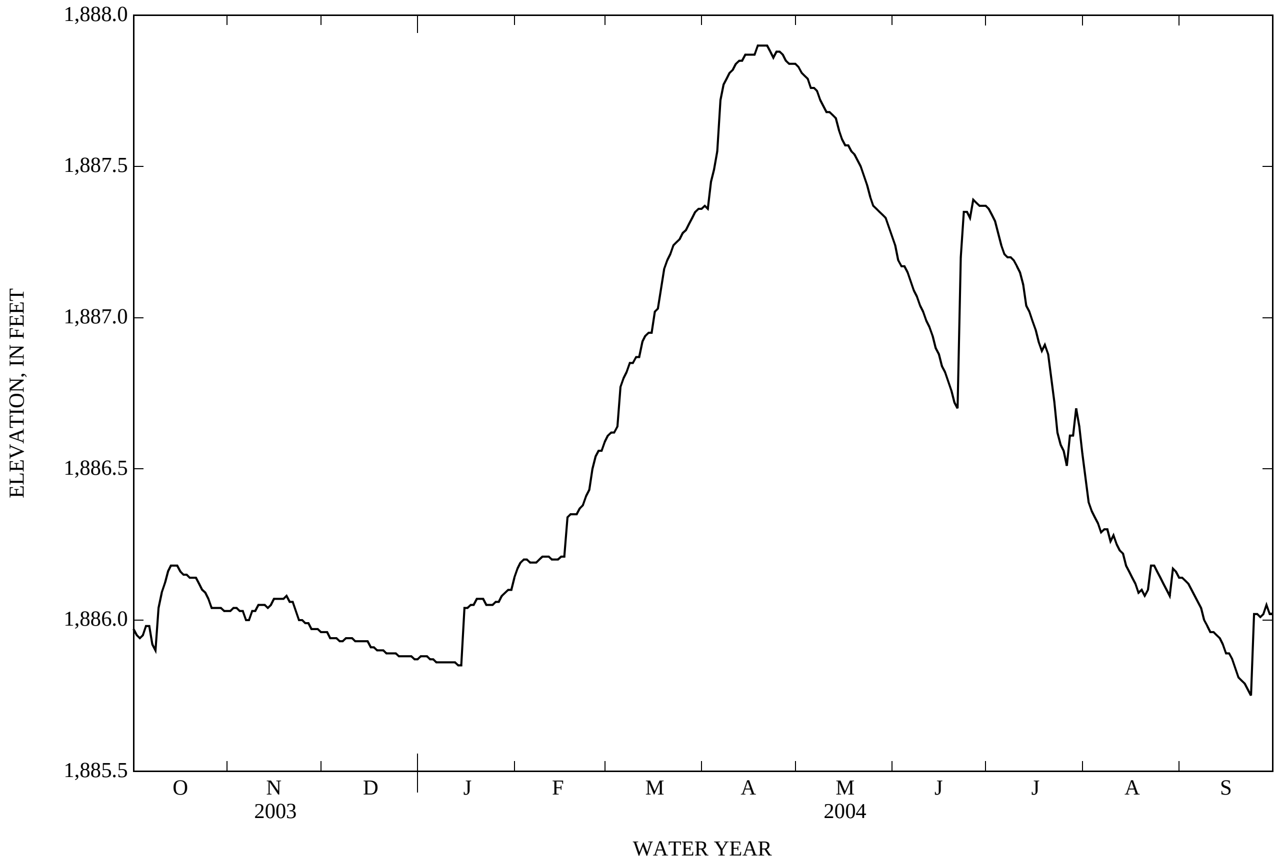
EXTREMES FOR CURRENT YEAR.--Middle Concho-Spring Creek pool: maximum elevation observed, 1,887.90 ft, Apr. 18-21 and minimum elevation observed, 1,885.75 ft, Sept. 23; South Concho pool: maximum elevation observed, 1,925.71 ft, May 5 and minimum elevation observed, 1,917.04 ft, Oct. 1.

ELEVATION ABOVE NGVD 1929, FEET, MIDDLE CONCHO-SPRING CREEK POOL
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,885.97	1,886.03	1,885.96	1,885.88	1,886.17	1,886.61	1,887.37	1,887.83	1,887.24	1,887.36	1,886.47	1,886.14
2	1,885.95	1,886.04	1,885.96	1,885.88	1,886.19	1,886.62	1,887.36	1,887.81	1,887.19	1,887.34	1,886.39	1,886.13
3	1,885.94	1,886.04	1,885.94	1,885.88	1,886.20	1,886.62	1,887.45	1,887.80	1,887.17	1,887.32	1,886.36	1,886.12
4	1,885.95	1,886.03	1,885.94	1,885.87	1,886.20	1,886.64	1,887.49	1,887.79	1,887.17	1,887.28	1,886.34	1,886.10
5	1,885.98	1,886.03	1,885.94	1,885.87	1,886.19	1,886.77	1,887.55	1,887.76	1,887.15	1,887.24	1,886.32	1,886.08
6	1,885.98	1,886.00	1,885.93	1,885.86	1,886.19	1,886.80	1,887.72	1,887.76	1,887.12	1,887.21	1,886.29	1,886.06
7	1,885.92	1,886.00	1,885.93	1,885.86	1,886.19	1,886.82	1,887.77	1,887.75	1,887.09	1,887.20	1,886.30	1,886.04
8	1,885.90	1,886.03	1,885.94	1,885.86	1,886.20	1,886.85	1,887.79	1,887.72	1,887.07	1,887.20	1,886.30	1,886.00
9	1,886.04	1,886.03	1,885.94	1,885.86	1,886.21	1,886.85	1,887.81	1,887.70	1,887.04	1,887.19	1,886.26	1,885.98
10	1,886.09	1,886.05	1,885.94	1,885.86	1,886.21	1,886.87	1,887.82	1,887.68	1,887.02	1,887.17	1,886.28	1,885.96
11	1,886.12	1,886.05	1,885.93	1,885.86	1,886.21	1,886.87	1,887.84	1,887.68	1,886.99	1,887.15	1,886.25	1,885.96
12	1,886.16	1,886.05	1,885.93	1,885.86	1,886.20	1,886.92	1,887.85	1,887.67	1,886.97	1,887.11	1,886.23	1,885.95
13	1,886.18	1,886.04	1,885.93	1,885.85	1,886.20	1,886.94	1,887.85	1,887.66	1,886.94	1,887.04	1,886.22	1,885.94
14	1,886.18	1,886.05	1,885.93	1,885.85	1,886.20	1,886.95	1,887.87	1,887.62	1,886.90	1,887.02	1,886.18	1,885.92
15	1,886.18	1,886.07	1,885.93	1,886.04	1,886.21	1,886.95	1,887.87	1,887.59	1,886.88	1,886.99	1,886.16	1,885.89
16	1,886.16	1,886.07	1,885.91	1,886.04	1,886.21	1,887.02	1,887.87	1,887.57	1,886.84	1,886.96	1,886.14	1,885.89
17	1,886.15	1,886.07	1,885.91	1,886.05	1,886.34	1,887.03	1,887.87	1,887.57	1,886.82	1,886.92	1,886.12	1,885.87
18	1,886.15	1,886.07	1,885.90	1,886.05	1,886.35	1,887.10	1,887.90	1,887.55	1,886.79	1,886.89	1,886.09	1,885.84
19	1,886.14	1,886.08	1,885.90	1,886.07	1,886.35	1,887.16	1,887.90	1,887.54	1,886.76	1,886.91	1,886.10	1,885.81
20	1,886.14	1,886.06	1,885.90	1,886.07	1,886.35	1,887.19	1,887.90	1,887.52	1,886.72	1,886.88	1,886.08	1,885.80
21	1,886.14	1,886.06	1,885.89	1,886.07	1,886.37	1,887.21	1,887.90	1,887.50	1,886.70	1,886.80	1,886.10	1,885.79
22	1,886.12	1,886.03	1,885.89	1,886.05	1,886.38	1,887.24	1,887.88	1,887.47	1,887.20	1,886.72	1,886.18	1,885.77
23	1,886.10	1,886.00	1,885.89	1,886.05	1,886.41	1,887.25	1,887.86	1,887.44	1,887.35	1,886.62	1,886.18	1,885.75
24	1,886.09	1,886.00	1,885.89	1,886.05	1,886.43	1,887.26	1,887.88	1,887.40	1,887.35	1,886.58	1,886.16	1,886.02
25	1,886.07	1,885.99	1,885.88	1,886.06	1,886.50	1,887.28	1,887.88	1,887.37	1,887.33	1,886.56	1,886.14	1,886.02
26	1,886.04	1,885.99	1,885.88	1,886.06	1,886.54	1,887.29	1,887.87	1,887.36	1,887.39	1,886.51	1,886.12	1,886.01
27	1,886.04	1,885.97	1,885.88	1,886.08	1,886.56	1,887.31	1,887.85	1,887.35	1,887.38	1,886.61	1,886.10	1,886.02
28	1,886.04	1,885.97	1,885.88	1,886.09	1,886.56	1,887.33	1,887.84	1,887.34	1,887.37	1,886.61	1,886.08	1,886.05
29	1,886.04	1,885.97	1,885.88	1,886.10	1,886.59	1,887.35	1,887.84	1,887.33	1,887.37	1,886.70	1,886.17	1,886.02
30	1,886.03	1,885.96	1,885.87	1,886.10	---	1,887.36	1,887.84	1,887.30	1,887.37	1,886.64	1,886.16	1,886.02
31	1,886.03	---	1,885.87	1,886.14	---	1,887.36	---	1,887.27	---	1,886.55	1,886.14	---
MEAN	1,886.07	1,886.03	1,885.91	1,885.98	1,886.31	1,887.03	1,887.78	1,887.57	1,887.09	1,886.94	1,886.21	1,885.96
MAX	1,886.18	1,886.08	1,885.96	1,886.14	1,886.59	1,887.36	1,887.90	1,887.83	1,887.39	1,887.36	1,886.47	1,886.14
MIN	1,885.90	1,885.96	1,885.87	1,885.85	1,886.17	1,886.61	1,887.36	1,887.27	1,886.70	1,886.51	1,886.08	1,885.75

WTR YR 2004 MEAN 1,886.57 MAX 1,887.90 MIN 1,885.75

08131200 Twin Buttes Reservoir near San Angelo, TX—Continued



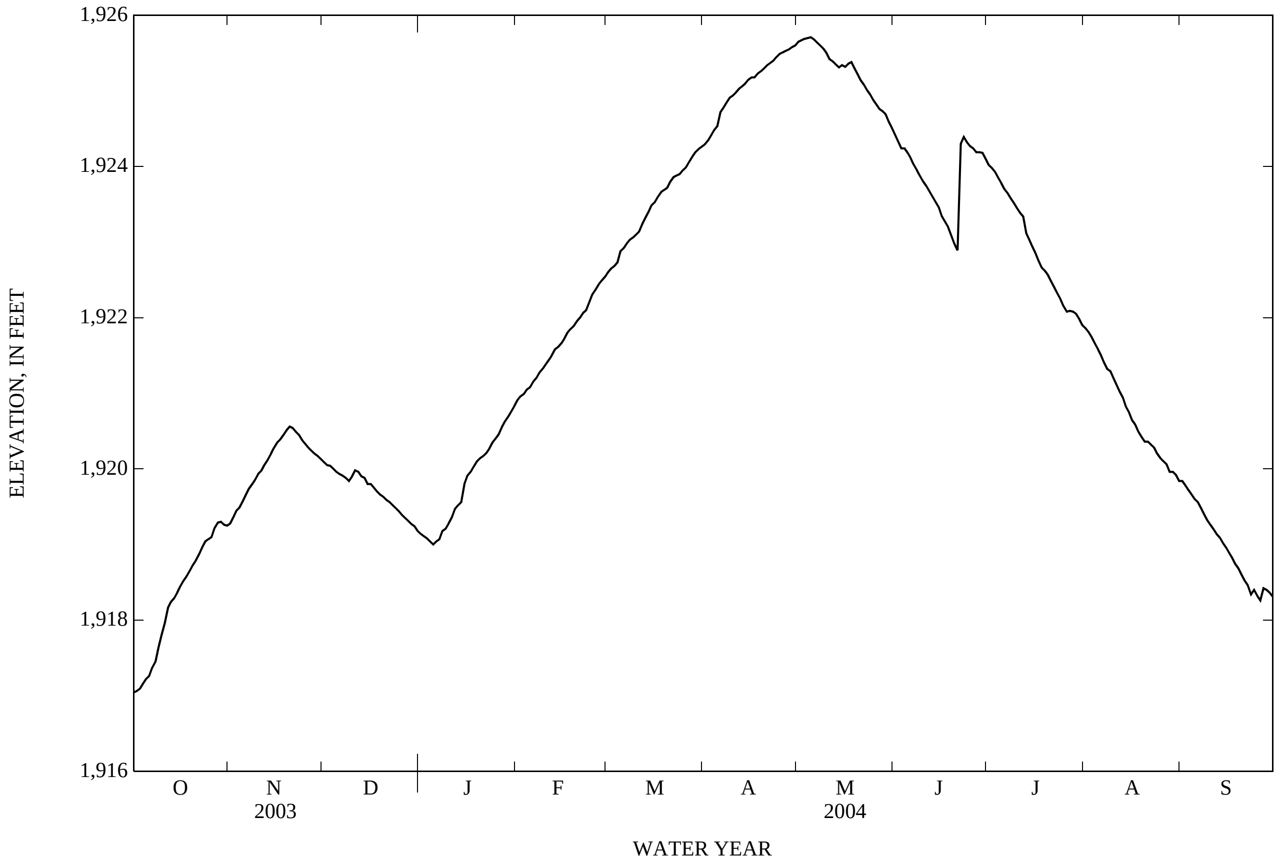
08131200 Twin Buttes Reservoir near San Angelo, TX—Continued

ELEVATION ABOVE NGVD 1929, FEET, SOUTH CONCHO POOL
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,917.04	1,919.28	1,920.09	1,919.14	1,920.91	1,922.60	1,924.29	1,925.65	1,924.42	1,924.02	1,921.86	1,919.84
2	1,917.06	1,919.36	1,920.05	1,919.11	1,920.96	1,922.65	1,924.34	1,925.67	1,924.33	1,923.98	1,921.81	1,919.78
3	1,917.09	1,919.45	1,920.04	1,919.08	1,920.99	1,922.68	1,924.41	1,925.69	1,924.24	1,923.93	1,921.74	1,919.72
4	1,917.16	1,919.49	1,920.00	1,919.04	1,921.05	1,922.73	1,924.48	1,925.70	1,924.24	1,923.85	1,921.66	1,919.66
5	1,917.22	1,919.57	1,919.96	1,919.00	1,921.08	1,922.88	1,924.53	1,925.71	1,924.18	1,923.78	1,921.58	1,919.60
6	1,917.26	1,919.66	1,919.93	1,919.04	1,921.15	1,922.92	1,924.72	1,925.68	1,924.11	1,923.70	1,921.50	1,919.56
7	1,917.37	1,919.74	1,919.91	1,919.07	1,921.20	1,922.98	1,924.78	1,925.64	1,924.02	1,923.65	1,921.40	1,919.48
8	1,917.45	1,919.80	1,919.88	1,919.18	1,921.27	1,923.03	1,924.85	1,925.60	1,923.95	1,923.58	1,921.32	1,919.40
9	1,917.64	1,919.86	1,919.84	1,919.21	1,921.32	1,923.06	1,924.91	1,925.56	1,923.87	1,923.52	1,921.29	1,919.32
10	1,917.81	1,919.94	1,919.90	1,919.28	1,921.38	1,923.10	1,924.94	1,925.50	1,923.80	1,923.45	1,921.20	1,919.26
11	1,917.96	1,919.98	1,919.98	1,919.36	1,921.44	1,923.14	1,924.98	1,925.42	1,923.74	1,923.39	1,921.11	1,919.20
12	1,918.16	1,920.06	1,919.96	1,919.47	1,921.50	1,923.24	1,925.03	1,925.39	1,923.67	1,923.34	1,921.02	1,919.14
13	1,918.24	1,920.12	1,919.90	1,919.52	1,921.58	1,923.32	1,925.06	1,925.35	1,923.60	1,923.12	1,920.94	1,919.09
14	1,918.29	1,920.20	1,919.88	1,919.56	1,921.61	1,923.40	1,925.10	1,925.31	1,923.53	1,923.03	1,920.82	1,919.02
15	1,918.36	1,920.28	1,919.80	1,919.80	1,921.66	1,923.49	1,925.15	1,925.34	1,923.46	1,922.94	1,920.74	1,918.96
16	1,918.45	1,920.35	1,919.80	1,919.91	1,921.72	1,923.53	1,925.18	1,925.32	1,923.34	1,922.85	1,920.64	1,918.89
17	1,918.52	1,920.39	1,919.75	1,919.96	1,921.80	1,923.60	1,925.18	1,925.36	1,923.27	1,922.75	1,920.58	1,918.82
18	1,918.58	1,920.45	1,919.70	1,920.03	1,921.85	1,923.66	1,925.23	1,925.38	1,923.20	1,922.66	1,920.49	1,918.74
19	1,918.65	1,920.51	1,919.66	1,920.10	1,921.89	1,923.69	1,925.26	1,925.30	1,923.09	1,922.62	1,920.42	1,918.68
20	1,918.73	1,920.56	1,919.63	1,920.14	1,921.95	1,923.72	1,925.30	1,925.22	1,922.98	1,922.56	1,920.36	1,918.60
21	1,918.79	1,920.54	1,919.59	1,920.17	1,922.00	1,923.80	1,925.34	1,925.14	1,922.89	1,922.48	1,920.36	1,918.52
22	1,918.87	1,920.49	1,919.56	1,920.21	1,922.06	1,923.86	1,925.37	1,925.08	1,924.30	1,922.40	1,920.32	1,918.46
23	1,918.96	1,920.45	1,919.52	1,920.27	1,922.10	1,923.88	1,925.40	1,925.01	1,924.39	1,922.32	1,920.28	1,918.34
24	1,919.04	1,920.38	1,919.48	1,920.35	1,922.20	1,923.90	1,925.45	1,924.95	1,924.32	1,922.24	1,920.20	1,918.40
25	1,919.07	1,920.33	1,919.44	1,920.40	1,922.31	1,923.95	1,925.49	1,924.88	1,924.27	1,922.15	1,920.14	1,918.32
26	1,919.10	1,920.28	1,919.39	1,920.46	1,922.37	1,923.99	1,925.51	1,924.82	1,924.24	1,922.08	1,920.10	1,918.26
27	1,919.22	1,920.24	1,919.35	1,920.55	1,922.44	1,924.06	1,925.53	1,924.76	1,924.19	1,922.09	1,920.06	1,918.42
28	1,919.29	1,920.20	1,919.31	1,920.63	1,922.49	1,924.13	1,925.55	1,924.73	1,924.19	1,922.08	1,919.96	1,918.40
29	1,919.30	1,920.17	1,919.27	1,920.69	1,922.54	1,924.19	1,925.58	1,924.69	1,924.18	1,922.05	1,919.96	1,918.36
30	1,919.26	1,920.13	1,919.24	1,920.76	---	1,924.23	1,925.60	1,924.59	1,924.10	1,921.98	1,919.92	1,918.31
31	1,919.25	---	1,919.18	1,920.83	---	1,924.26	---	1,924.51	---	1,921.90	1,919.84	---
MEAN	1,918.30	1,920.08	1,919.71	1,919.82	1,921.68	1,923.47	1,925.09	1,925.26	1,923.87	1,922.92	1,920.76	1,918.95
MAX	1,919.30	1,920.56	1,920.09	1,920.83	1,922.54	1,924.26	1,925.60	1,925.71	1,924.42	1,924.02	1,921.86	1,919.84
MIN	1,917.04	1,919.28	1,919.18	1,919.00	1,920.91	1,922.60	1,924.29	1,924.51	1,922.89	1,921.90	1,919.84	1,918.26

WTR YR 2004 MEAN 1,921.65 MAX 1,925.71 MIN 1,917.04

08131200 Twin Buttes Reservoir near San Angelo, TX—Continued



08131400 Pecan Creek near San Angelo, TX

LOCATION.--Lat 31°18'32", long 100°26'44", Tom Green County, Hydrologic Unit 12090102, on left bank 200 ft upstream from U.S. Highway 277, 3.7 mi upstream from mouth, and 10.5 mi south of San Angelo.

DRAINAGE AREA.--81.1 mi^2.

PERIOD OF RECORD.--June 1961 to Sept. 1986, July 2001 to current year.

REVISED RECORDS.--WDR TX-75-3: 1971, 1972(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,930.72 ft above NGVD of 1929. Prior to Apr. 30, 1968, at site 1.2 mi downstream at datum 20.21 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except for discharges below 5.0 ft^3/s, which are fair. No known regulation or diversions. No flow many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1908, 14.36 ft, Sept. 15, 1936, former site and datum, (discharge, 30,500 ft^3/s) by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	6.3	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52	0.00	0.57	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	189	0.00	1.6	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	10.36	0.00	0.00	0.00	0.00	0.00	6.30	0.00	241.02	0.00	2.17	0.00
MEAN	0.33	0.00	0.00	0.00	0.00	0.00	0.21	0.00	8.03	0.00	0.07	0.00
MAX	10	0.00	0.00	0.00	0.00	0.00	6.3	0.00	189	0.00	1.6	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	21	0.00	0.00	0.00	0.00	0.00	12	0.00	478	0.00	4.3	0.00

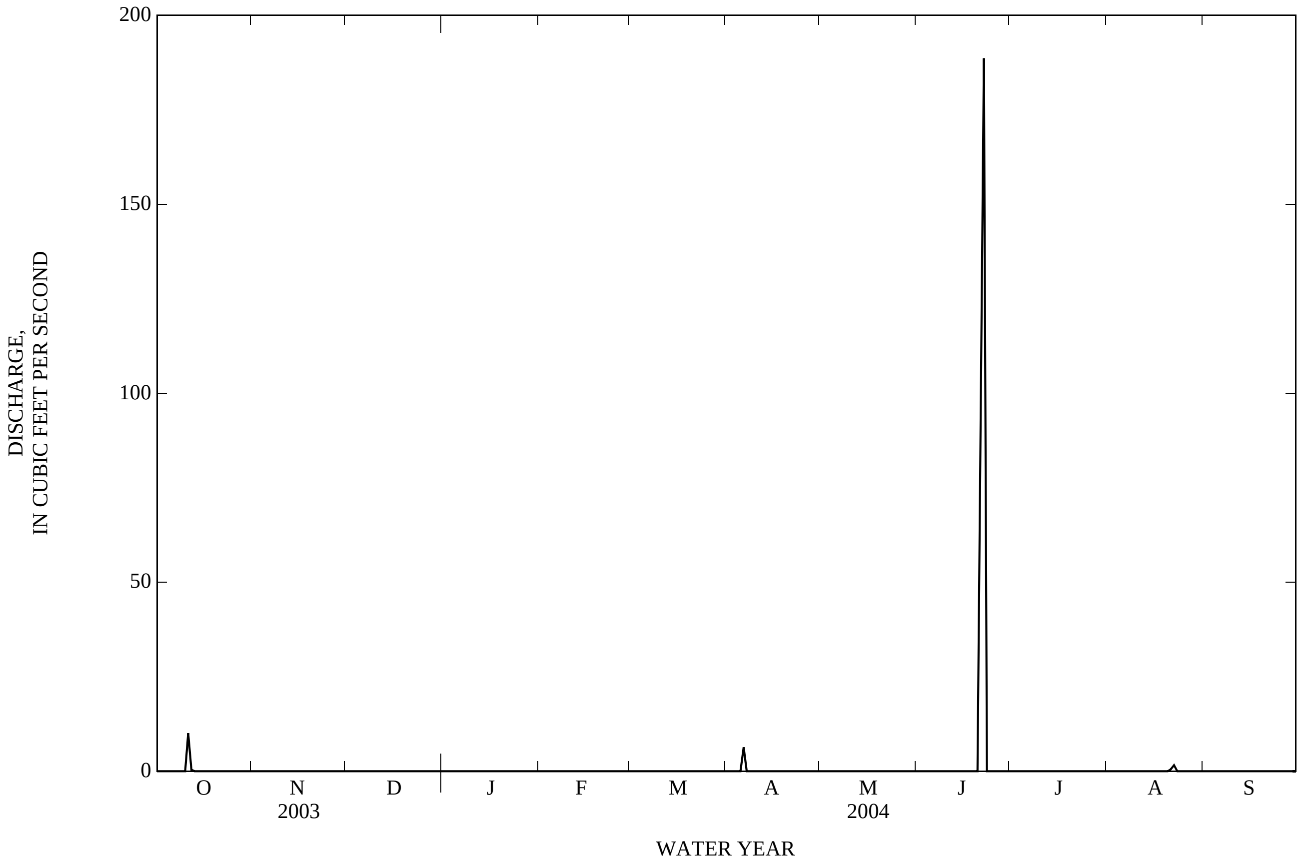
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.34	1.48	1.50	1.08	0.83	0.67	1.68	1.36	1.10	0.44	2.46	8.78
MAX	37.7	24.9	16.0	12.6	9.25	7.84	29.8	12.5	8.03	3.46	47.5	189
(WY)	(1975)	(1975)	(1975)	(1975)	(1975)	(1975)	(1977)	(1975)	(2004)	(1971)	(2001)	(1980)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1963)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1962)	(1961)	(1961)	(1962)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004h	
ANNUAL TOTAL	10.36		259.85			
ANNUAL MEAN	0.03		0.71		1.89	
HIGHEST ANNUAL MEAN					15.7	1980
LOWEST ANNUAL MEAN					0.00	1969
HIGHEST DAILY MEAN	10	Oct 11	189	Jun 22	3,940	Sep 8, 1980
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jul 1, 1961
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jul 1, 1961
MAXIMUM PEAK FLOW			1,700	Jun 22	25,600	Sep 8, 1980
MAXIMUM PEAK STAGE			2.73	Jun 22	10.63	Sep 8, 1980
ANNUAL RUNOFF (AC-FT)	21		515		1,370	
10 PERCENT EXCEEDS	0.00		0.00		2.0	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

h See PERIOD OF RECORD paragraph.

08131400 Pecan Creek near San Angelo, TX—Continued



08133250 North Concho River above Sterling City, TX

LOCATION.--Lat 31°53'50", long 101°06'17", Sterling County, Hydrologic Unit 12090104, on left bank 0.2 mi southwest of U.S. Highway 87, 2.1 mi upstream from Willow Creek, 3.3 mi upstream from Chalk Creek, 5.0 mi above State Highway 158, 5.5 mi downstream from Sand Bluff Draw, and 8.0 mi northwest of Sterling City.

DRAINAGE AREA.--201 mi^2.

PERIOD OF RECORD.--Feb. 2000 to Sept. 2001 (daily mean discharges less than 10 ft^3/s), Oct. 2001 to current year (daily mean discharges less than 500 ft^3/s).

GAGE.--Water-stage recorder and concrete dam. Datum of gage is 2,353.99 ft (Texas Department of Transportation benchmark, vertical control datum unknown). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. No flow many days.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 13.88 ft, Mar. 23, 2000, from floodmark (discharge not determined); minimum, no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 349 ft^3/s, Mar. 5, gage height, 5.31 ft; minimum, no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.2	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	103	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	4.6	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	47	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	107.60	0.00	0.00	72.00	8.64	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	3.47	0.00	0.00	2.40	0.28	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	103	0.00	0.00	47	8.2	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	213	0.00	0.00	143	17	0.00	0.00

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08133500 North Concho River at Sterling City, TX

LOCATION.--Lat 31°49'48", long 100°59'36", Sterling County, Hydrologic Unit 12090104, on right bank 100 ft upstream from bridge on State Highway 163, 0.5 mi south of Sterling City, 4.0 mi upstream from Sterling Creek, 5.1 mi downstream from Lacy Creek, and at mile 57.2.

DRAINAGE AREA.--588 mi^2 of which 20 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1939 to Sept. 1985 (daily mean discharge), Oct. 1985 to Sept. 1995 (daily discharges greater than 100 ft^3/s), Oct. 1995 to current year (peak discharges greater than base discharge).

REVISED RECORDS.--WSP 1512: 1945, 1948. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,242.36 ft above NGVD of 1929. Prior to Dec. 6, 1939, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--Records good. No known regulation. There are several small diversions above station for irrigation.

AVERAGE DISCHARGE.--46 years (water years 1940-85), 7.80 ft^3/s (5,650 acre-ft/year).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,300 ft^3/s, July 6, 1948, gage height, 23.70 ft; no flow at times each year. Maximum stage since at least 1891, that of July 6, 1948.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
No peak above base discharge.				Mar. 6	0415	*79	*5.24

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08133900 Chalk Creek near Water Valley, TX

LOCATION.--Lat 31°38'47", long 100°41'25", Tom Green County, Hydrologic Unit 12090104, on right bank at upstream side of upstream bridge on U.S. Hwy 87, 1.2 mi above mouth, 2.4 mi southeast of Water Valley, and 3.6 mi northwest of Carlsbad.

DRAINAGE AREA.--26.9 mi^2.

PERIOD OF RECORD.--Oct. 2001 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,075.00 ft above NGVD of 1929, from topographic map. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.55	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	7.65	0.00	0.00
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2003)	(2002)	(2002)	(2002)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	0.45		0.00			
ANNUAL MEAN	0.00		0.00		0.22	
HIGHEST ANNUAL MEAN					0.65	2002
LOWEST ANNUAL MEAN					0.00	2004
HIGHEST DAILY MEAN	0.24	May 26	0.00	Oct 1	227	Jul 4, 2002
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 2001
MAXIMUM PEAK FLOW					3,820	Jul 4, 2002
MAXIMUM PEAK STAGE					8.10	Jul 4, 2002
ANNUAL RUNOFF (AC-FT)	0.9		0.00		157	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated

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08134000 North Concho River near Carlsbad, TX
(Hydrologic index station)

LOCATION.--Lat 31°35'33", long 100°38'12", Tom Green County, Hydrologic Unit 12090104, on left bank at downstream side of bridge on county road, 0.6 mi southeast of Carlsbad, 1.5 mi upstream from Mule Creek, 2.5 mi upstream from Grape Creek, 16.2 mi upstream from O.C. Fisher Dam, and 21.3 mi upstream from mouth.

DRAINAGE AREA.--1,266 mi^2 of which 75 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Mar. 1924 to current year. Water-quality records: Chemical data: Apr. 1980 to July 1982. Biochemical data: Apr. 1980 to July 1982.

REVISED RECORDS.--WSP 1512: 1924(M), 1925, 1926(M), 1928, 1930, 1932(M), 1935, 1937-38(M), 1941(M), 1945(M), 1947-49(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,968.02 ft above NGVD of 1929. Prior to Feb. 4, 1925, and Sept. 27, 1936, to Feb. 7, 1937, nonrecording gage; Feb. 4, 1925, to Sept. 26, 1936, and Feb. 8, 1937, to Nov. 6, 1955, water-stage recorder, all at site 2.5 mi upstream at datum 32.76 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. No known regulation. There are several diversions (by pumping) upstream from station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since June 1853, that of Sept. 26, 1936.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.08	0.15	2.7	0.95	0.92	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.08	0.20	2.0	1.1	0.70	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.07	0.17	1.7	1.3	0.61	0.00	0.00	0.00	0.00
4	0.00	0.00	0.01	0.07	0.12	2.1	1.3	0.58	0.00	0.00	0.00	0.00
5	0.00	0.00	0.01	0.07	0.17	2.8	1.9	0.55	0.00	0.00	0.00	0.00
6	0.00	0.00	0.02	0.07	0.13	1.9	4.6	0.54	0.00	0.00	0.00	0.00
7	0.00	0.00	0.03	0.07	0.11	1.4	3.5	0.54	0.00	0.00	0.00	0.00
8	0.00	0.00	0.03	0.08	0.11	1.4	2.7	0.46	0.00	0.00	0.00	0.00
9	0.00	0.00	0.03	0.08	0.13	1.4	2.4	0.35	0.00	0.00	0.00	0.00
10	0.00	0.00	0.04	0.09	0.15	0.81	2.1	0.04	0.00	0.00	0.00	0.00
11	0.00	0.00	0.03	0.09	0.21	0.71	1.9	0.10	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.10	0.41	1.0	1.9	0.23	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.11	0.55	1.7	1.8	0.24	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.12	0.54	1.5	1.7	0.24	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.21	0.55	1.2	1.8	0.29	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.25	0.70	1.00	1.8	0.28	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	2.6	0.66	0.86	1.7	0.25	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.89	0.47	0.91	1.8	0.20	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.68	0.51	0.69	1.9	0.05	0.00	0.00	0.00	0.00
20	0.00	0.00	0.02	0.25	0.40	1.4	2.3	0.09	0.00	0.00	0.00	0.00
21	0.00	0.00	0.05	0.10	0.51	4.8	1.8	0.04	0.00	0.00	0.00	0.00
22	0.00	0.00	0.07	0.07	1.0	2.8	1.3	0.07	0.00	0.00	0.00	0.00
23	0.00	0.00	0.09	0.06	1.1	1.6	0.73	0.01	0.00	0.00	0.00	0.00
24	0.00	0.00	0.08	0.06	2.5	1.1	1.8	0.02	0.00	0.00	0.00	0.00
25	0.00	0.00	0.06	0.06	2.9	1.2	1.6	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.05	0.15	1.9	1.6	1.4	0.01	0.00	0.00	0.00	0.00
27	0.00	0.00	0.04	0.14	1.7	1.8	1.3	0.03	0.00	0.00	0.00	0.00
28	0.00	0.00	0.05	0.10	1.2	1.7	1.2	0.05	0.00	0.00	0.00	0.00
29	0.00	0.00	0.06	0.08	1.5	1.4	1.1	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.07	0.07	---	1.2	0.92	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.07	0.08	---	1.0	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.91	7.03	20.75	49.38	53.60	7.49	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.03	0.23	0.72	1.59	1.79	0.24	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.09	2.6	2.9	4.8	4.6	0.92	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.06	0.11	0.69	0.73	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	1.8	14	41	98	106	15	0.00	0.00	0.00	0.00

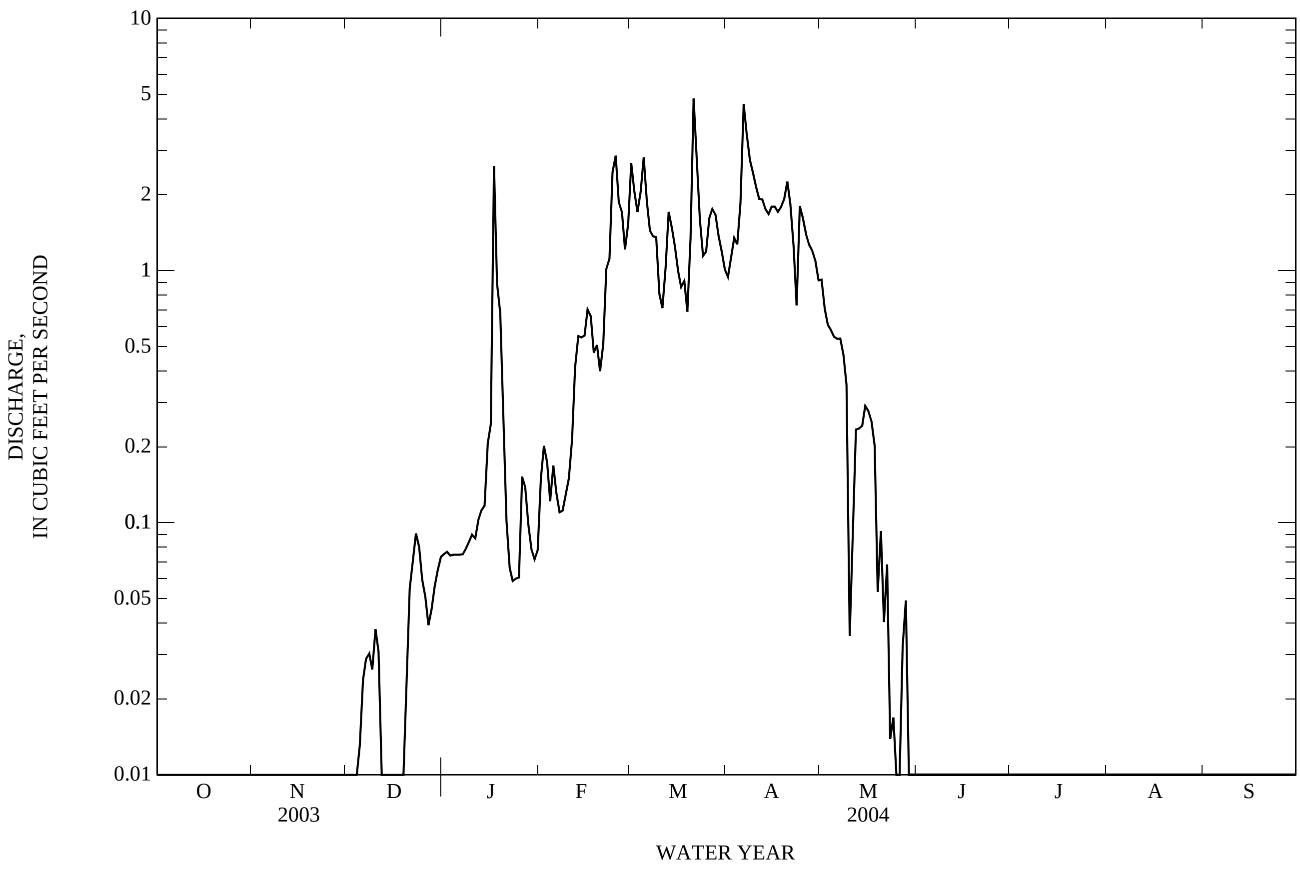
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	35.0	4.05	3.89	3.73	6.35	11.7	33.1	73.8	25.5	37.4	15.4	77.4
MAX	1,463	65.2	20.1	16.0	85.0	307	631	1,355	252	1,195	255	4,019
(WY)	(1958)	(1935)	(1931)	(1937)	(1935)	(1926)	(1925)	(1925)	(1937)	(1948)	(1953)	(1936)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1934)	(1934)	(1953)	(1953)	(1953)	(1953)	(1963)	(1967)	(1934)	(1924)	(1929)	(1930)

08134000 North Concho River near Carlsbad, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1924 - 2004	
ANNUAL TOTAL	873.19		139.16			
ANNUAL MEAN	2.39		0.38		27.5	
HIGHEST ANNUAL MEAN					336	1936
LOWEST ANNUAL MEAN					0.00	1970
HIGHEST DAILY MEAN	205	Jun 6	4.8	Mar 21	62,900	Sep 17, 1936
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Jun 20, 1924
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Jun 20, 1924
MAXIMUM PEAK FLOW			6.8	Jan 17	i94,600	Sep 26, 1936
MAXIMUM PEAK STAGE			3.97	Mar 21	a29.10	Sep 26, 1936
ANNUAL RUNOFF (AC-FT)	1,730		276		19,890	
10 PERCENT EXCEEDS	0.81		1.6		11	
50 PERCENT EXCEEDS	0.00		0.00		1.2	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

i From slope-area measurement of peak flow at former site.
a From floodmark at present site.



08134230 Grape Creek near Grape Creek, TX

LOCATION.--Lat 31°34'30", long 100°35'07", Tom Green County, Hydrologic Unit 12090104, on left bank, at left upstream end of upstream bridge on U.S. Hwy 87, 0.9 mi above mouth, 2.5 mi northwest of intersection of FM 2288 and U.S. Hwy 87 in Grape Creek, 4.4 mi southeast of Carlsbad, and 9.0 mi above O.C. Fisher Dam.

DRAINAGE AREA.--109 mi^2.

PERIOD OF RECORD.--Oct. 2001 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,940.71 ft above the NGVD of 1929. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

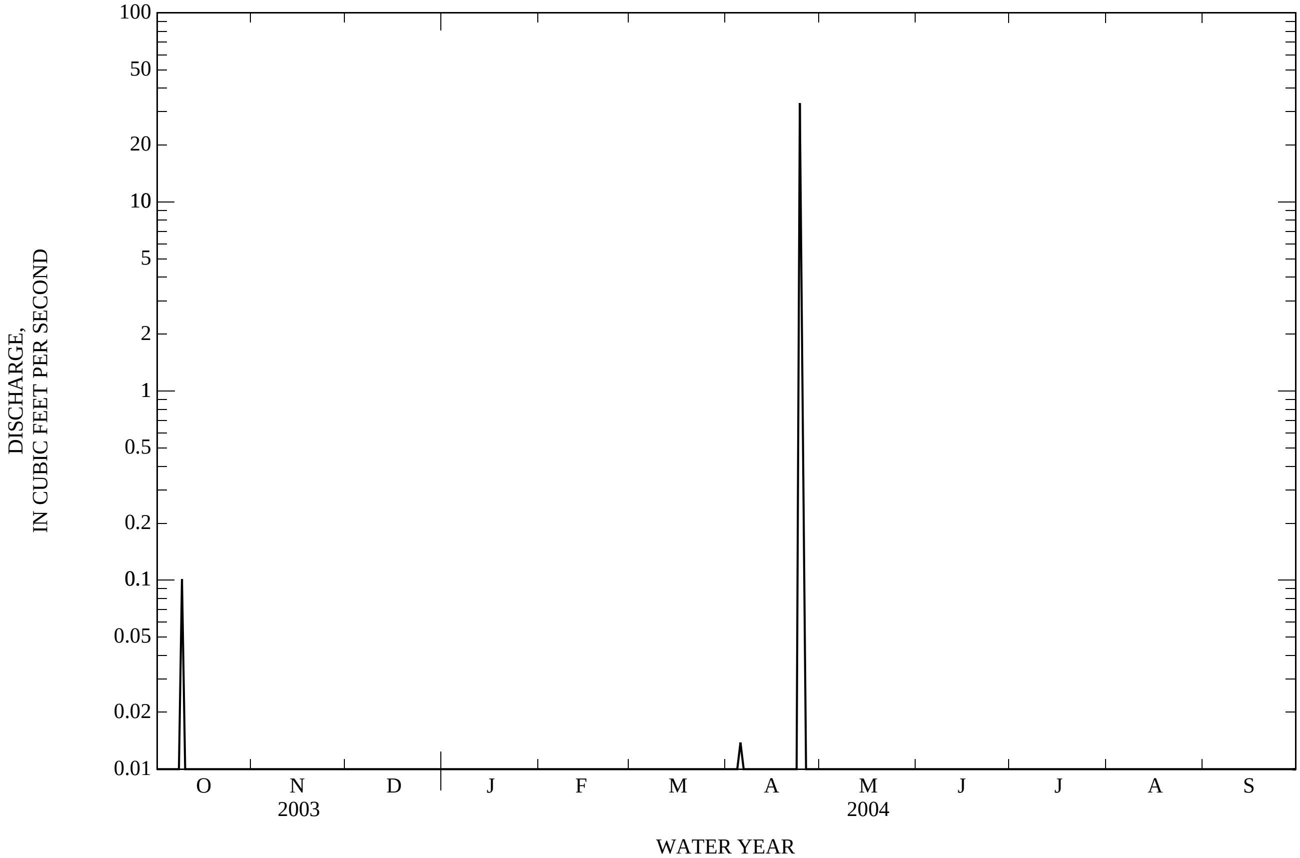
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	33	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.10	0.00	0.00	0.00	0.00	0.00	33.17	0.00	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00
MAX	0.10	0.00	0.00	0.00	0.00	0.00	33	0.00	0.00	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.2	0.00	0.00	0.00	0.00	0.00	66	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	0.01	0.00	0.00	0.00	0.00	0.00	0.37	0.00	2.92	0.54	0.00	1.07
MAX	0.02	0.00	0.00	0.00	0.00	0.00	1.11	0.00	8.75	1.61	0.00	3.20
(WY)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2003)	(2002)	(2002)	(2003)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2004)	(2003)	(2002)	(2004)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2001 - 2004	
ANNUAL TOTAL	358.70		33.27			
ANNUAL MEAN	0.98		0.09		0.40	
HIGHEST ANNUAL MEAN					0.98	2003
LOWEST ANNUAL MEAN					0.09	2004
HIGHEST DAILY MEAN	68	Sep 14	33	Apr 24	68	Sep 14, 2003
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Sep 28, 2001
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 2001
MAXIMUM PEAK FLOW			122	Apr 24	477	Sep 14, 2003
MAXIMUM PEAK STAGE			5.28	Apr 24	7.80	Sep 14, 2003
ANNUAL RUNOFF (AC-FT)	711		66		293	
10 PERCENT EXCEEDS	0.00		0.00		0.00	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

08134230 Grape Creek near Grape Creek, TX—Continued



08134250 North Concho River near Grape Creek, TX

LOCATION.--Lat 31°32'33", long 100°33'17", Tom Green County, Hydrologic Unit 12090104, on left bank at downstream side of bridge on FM 2288, 1.2 mi upstream from Bald Eagle Creek, 1.3 mi south of U.S. Hwy 87 at community of Grape Creek, 2.8 mi downstream from Grape Creek, and 6.0 mi upstream from O.C. Fisher Dam.

DRAINAGE AREA.--1,400 mi^2 of which 75 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Feb. 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,895.83 ft (Texas Department of Transportation benchmark, vertical control datum unknown). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation. There are several diversions (by pumping) upstream from station. No flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
2	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00
3	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
4	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00
5	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
6	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
7	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
8	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
9	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
10	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
11	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
12	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
13	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.01	0.00	0.00	0.00	0.00	0.00	11	0.00	0.00	0.00	0.00	0.00
25	0.01	0.00	0.00	0.00	0.00	0.00	0.88	0.00	0.00	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00
28	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
29	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
30	0.01	0.00	0.00	0.00	---	0.00	0.02	0.00	0.00	0.00	0.00	0.00
31	0.01	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.45	0.12	0.00	0.00	0.00	0.00	12.07	0.42	0.00	0.00	0.00	0.00
MEAN	0.01	0.00	0.00	0.00	0.00	0.00	0.40	0.01	0.00	0.00	0.00	0.00
MAX	0.04	0.01	0.00	0.00	0.00	0.00	11	0.07	0.00	0.00	0.00	0.00
MIN	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.9	0.2	0.00	0.00	0.00	0.00	24	0.8	0.00	0.00	0.00	0.00

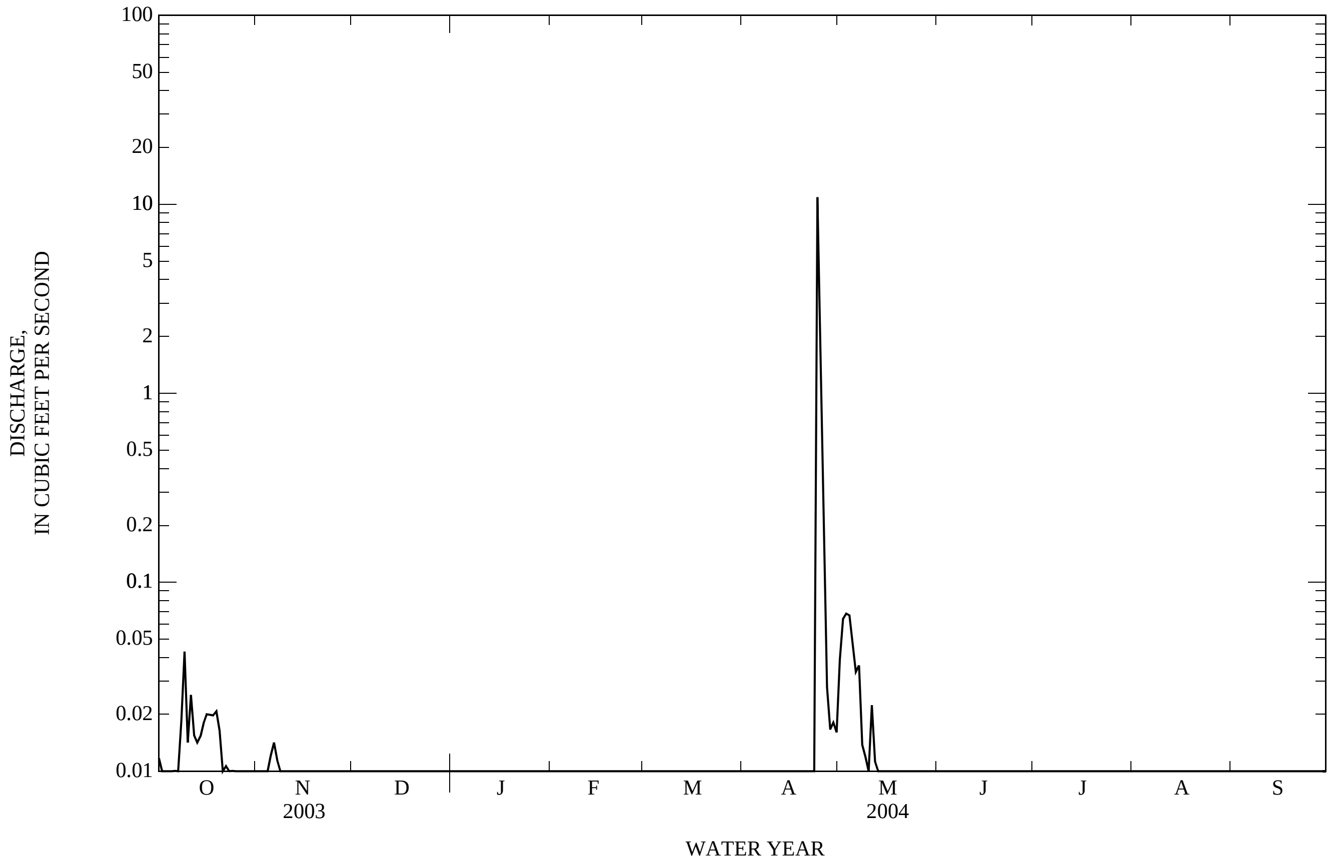
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	22.4	3.89	0.00	0.00	0.00	30.8	0.44	0.00	8.17	3.18	0.00	1.17
MAX	82.7	11.4	0.00	0.00	0.00	154	1.59	0.01	40.8	15.9	0.00	3.15
(WY)	(2001)	(2002)	(2001)	(2001)	(2001)	(2000)	(2000)	(2004)	(2003)	(2002)	(2000)	(2003)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(2002)	(2004)	(2001)	(2001)	(2001)	(2002)	(2002)	(2000)	(2000)	(2000)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	1,320.65		13.06			
ANNUAL MEAN	3.62		0.04		3.53	
HIGHEST ANNUAL MEAN					7.60	2001
LOWEST ANNUAL MEAN					0.04	2004
HIGHEST DAILY MEAN	193	Jun 9	11	Apr 24	3,890	Mar 24, 2000
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Nov 13	0.00	Feb 14, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Nov 13	0.00	Feb 14, 2000
MAXIMUM PEAK FLOW			55	Apr 24	10,400	Mar 24, 2000
MAXIMUM PEAK STAGE			7.14	Apr 24	p24.50	Mar 24, 2000
ANNUAL RUNOFF (AC-FT)	2,620		26		2,560	
10 PERCENT EXCEEDS	0.03		0.01		0.02	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

p Observed.

08134250 North Concho River near Grape Creek, TX—Continued



08134500 O.C. Fisher Lake at San Angelo, TX

LOCATION.--Lat 31°29'04", long 100°28'53", Tom Green County, Hydrologic Unit 12090104, at intake structure of O.C. Fisher Dam on North Concho River, 0.1 mi west of Glenna Drive, 3.1 mi northwest of center of San Angelo, and 6.6 mi upstream from mouth.

DRAINAGE AREA.--1,488 mi^2 of which 105 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Feb. 1952 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to Sept. 2002 (contents), Oct. 2002 to current year. Published as "San Angelo Reservoir" prior to Oct. 1970, and as "San Angelo Lake", Oct. 1970 to Sept. 1974.

REVISED RECORDS.--WSP 1922: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to May 12, 1953, nonrecording gage at same site and datum. Prior to Aug. 16, 2001, water-stage recorder inside intake structure at same datum. Satellite telemeter at station.

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 40,885 ft long, including spillway. Closure was completed Mar. 7, 1951, and the dam was completed May 3, 1951. Deliberate impoundment began Feb. 1, 1952. The dam is owned by the U.S. Army Corps of Engineers. The lake is operated for flood control, recreation, and partial municipal supply for the city of San Angelo. The spillway is an uncontrolled off-channel concrete gravity dam with ogee weir section 1,150 ft wide located to the right and upstream from the right end of dam. The spillway is designed to discharge 356,000 ft^3/s at maximum design flood level. The control outlet works consist of six gate-controlled outlets, 7.5 by 14.5 ft, opening into two 18.0-foot-diameter concrete conduits, and two 2.5-foot gate-controlled outlets for water-supply outlets. Since Feb. 1973, the capacity is based on a survey made in 1962. Prior to 1973, the capacity was based on a survey made in 1944. Conservation pool storage is 115,743 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,964.0
Design flood	1,958.0
Crest of spillway	1,938.5
Top of conservation pool	1,908.0
Lowest gated outlet (invert)	1,840.0

COOPERATION.--Records of diversions may be obtained from the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 174,100 acre-ft, Oct. 14, 1957, elevation, 1,916.47 ft; minimum since first appreciable storage, lake dry July 16, 1970, to Apr. 15, 1971.

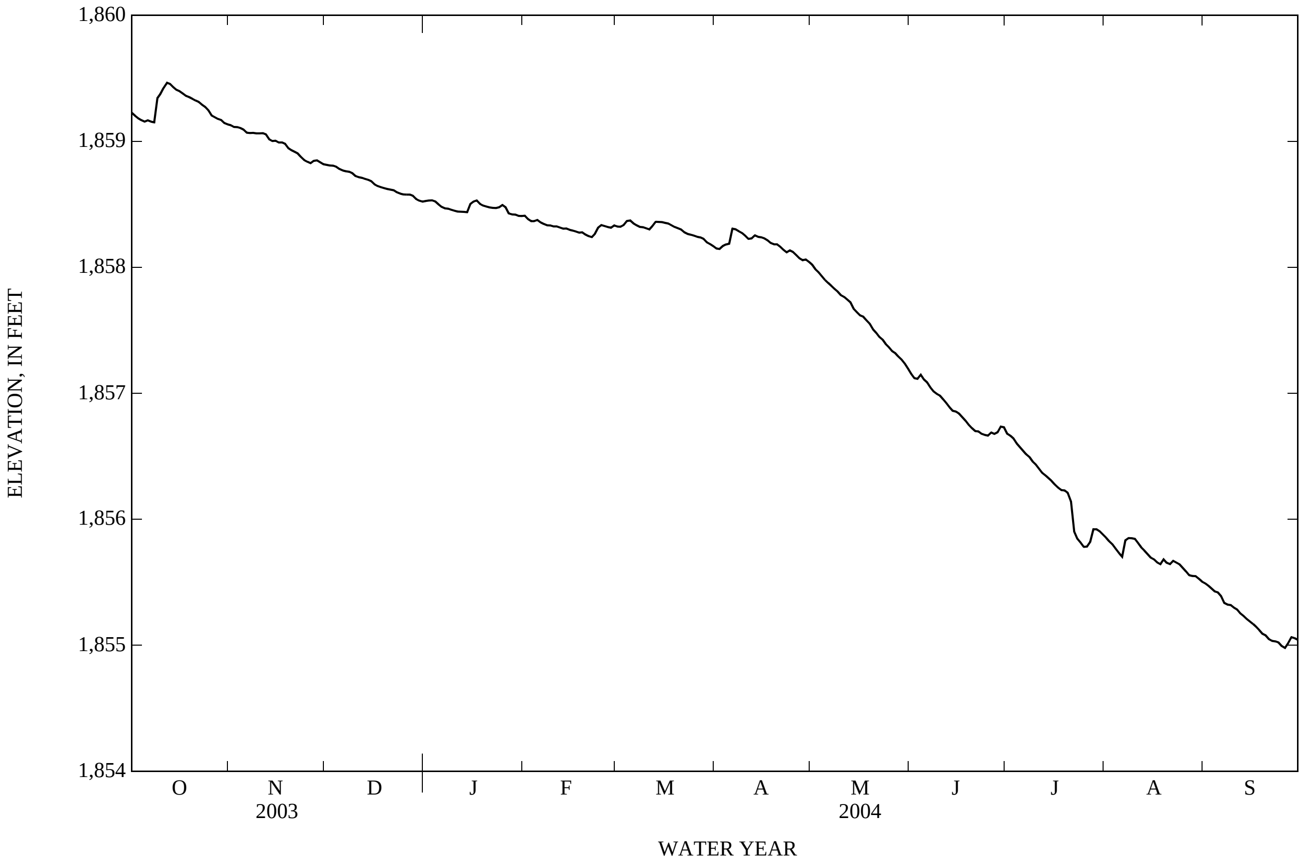
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,859.47 ft, Oct. 11, 12; minimum elevation, 1,854.96 ft, Sept. 26.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,859.23	1,859.13	1,858.81	1,858.53	1,858.41	1,858.32	1,858.15	1,858.02	1,857.15	1,856.68	1,855.85	1,855.49
2	1,859.20	1,859.11	1,858.81	1,858.53	1,858.38	1,858.32	1,858.15	1,857.98	1,857.12	1,856.66	1,855.82	1,855.47
3	1,859.18	1,859.11	1,858.81	1,858.53	1,858.37	1,858.34	1,858.17	1,857.96	1,857.12	1,856.64	1,855.80	1,855.45
4	1,859.17	1,859.11	1,858.80	1,858.52	1,858.37	1,858.37	1,858.18	1,857.93	1,857.15	1,856.60	1,855.77	1,855.43
5	1,859.16	1,859.09	1,858.78	1,858.50	1,858.38	1,858.37	1,858.19	1,857.90	1,857.11	1,856.57	1,855.73	1,855.42
6	1,859.17	1,859.07	1,858.77	1,858.48	1,858.36	1,858.35	1,858.31	1,857.88	1,857.09	1,856.55	1,855.70	1,855.39
7	1,859.16	1,859.07	1,858.76	1,858.47	1,858.34	1,858.33	1,858.30	1,857.85	1,857.05	1,856.52	1,855.83	1,855.34
8	1,859.15	1,859.07	1,858.76	1,858.46	1,858.33	1,858.32	1,858.29	1,857.83	1,857.02	1,856.49	1,855.85	1,855.32
9	1,859.34	1,859.06	1,858.75	1,858.46	1,858.33	1,858.32	1,858.27	1,857.81	1,857.00	1,856.46	1,855.85	1,855.32
10	1,859.38	1,859.06	1,858.72	1,858.45	1,858.32	1,858.31	1,858.25	1,857.78	1,856.98	1,856.43	1,855.84	1,855.30
11	1,859.43	1,859.06	1,858.72	1,858.44	1,858.33	1,858.30	1,858.23	1,857.77	1,856.95	1,856.40	1,855.81	1,855.28
12	1,859.46	1,859.05	1,858.71	1,858.44	1,858.32	1,858.33	1,858.23	1,857.74	1,856.92	1,856.37	1,855.78	1,855.25
13	1,859.45	1,859.02	1,858.70	1,858.44	1,858.31	1,858.36	1,858.25	1,857.72	1,856.89	1,856.35	1,855.75	1,855.23
14	1,859.43	1,859.00	1,858.69	1,858.44	1,858.31	1,858.36	1,858.24	1,857.67	1,856.86	1,856.33	1,855.72	1,855.21
15	1,859.41	1,859.01	1,858.68	1,858.50	1,858.30	1,858.36	1,858.24	1,857.64	1,856.86	1,856.30	1,855.70	1,855.19
16	1,859.40	1,858.99	1,858.66	1,858.52	1,858.29	1,858.35	1,858.23	1,857.62	1,856.84	1,856.27	1,855.68	1,855.17
17	1,859.38	1,858.99	1,858.64	1,858.53	1,858.28	1,858.35	1,858.21	1,857.61	1,856.81	1,856.25	1,855.66	1,855.14
18	1,859.36	1,858.98	1,858.63	1,858.50	1,858.28	1,858.33	1,858.19	1,857.58	1,856.78	1,856.23	1,855.64	1,855.12
19	1,859.35	1,858.94	1,858.63	1,858.49	1,858.28	1,858.32	1,858.18	1,857.55	1,856.75	1,856.23	1,855.68	1,855.09
20	1,859.34	1,858.93	1,858.62	1,858.48	1,858.26	1,858.31	1,858.18	1,857.51	1,856.72	1,856.21	1,855.65	1,855.08
21	1,859.32	1,858.92	1,858.62	1,858.48	1,858.25	1,858.30	1,858.16	1,857.48	1,856.70	1,856.14	1,855.64	1,855.05
22	1,859.31	1,858.90	1,858.61	1,858.47	1,858.24	1,858.28	1,858.14	1,857.45	1,856.70	1,855.90	1,855.67	1,855.03
23	1,859.29	1,858.88	1,858.60	1,858.47	1,858.27	1,858.27	1,858.12	1,857.43	1,856.68	1,855.85	1,855.66	1,855.03
24	1,859.27	1,858.85	1,858.59	1,858.48	1,858.32	1,858.26	1,858.13	1,857.39	1,856.67	1,855.82	1,855.64	1,855.02
25	1,859.24	1,858.84	1,858.58	1,858.49	1,858.34	1,858.25	1,858.12	1,857.37	1,856.66	1,855.78	1,855.62	1,854.99
26	1,859.21	1,858.83	1,858.58	1,858.48	1,858.33	1,858.24	1,858.10	1,857.33	1,856.69	1,855.78	1,855.59	1,854.98
27	1,859.19	1,858.85	1,858.58	1,858.43	1,858.32	1,858.24	1,858.07	1,857.32	1,856.68	1,855.82	1,855.56	1,855.02
28	1,859.18	1,858.85	1,858.57	1,858.42	1,858.32	1,858.23	1,858.06	1,857.29	1,856.69	1,855.92	1,855.55	1,855.06
29	1,859.17	1,858.83	1,858.54	1,858.42	1,858.33	1,858.20	1,858.06	1,857.27	1,856.74	1,855.92	1,855.55	1,855.06
30	1,859.14	1,858.82	1,858.53	1,858.41	---	1,858.18	1,858.04	1,857.23	1,856.73	1,855.90	1,855.53	1,855.04
31	1,859.13	---	1,858.52	1,858.41	---	1,858.17	---	1,857.20	---	1,855.88	1,855.51	---
MEAN	1,859.28	1,858.98	1,858.67	1,858.47	1,858.32	1,858.30	1,858.18	1,857.62	1,856.87	1,856.23	1,855.70	1,855.20
MAX	1,859.46	1,859.13	1,858.81	1,858.53	1,858.41	1,858.37	1,858.31	1,858.02	1,857.15	1,856.68	1,855.85	1,855.49
MIN	1,859.13	1,858.82	1,858.52	1,858.41	1,858.24	1,858.17	1,858.04	1,857.20	1,856.66	1,855.78	1,855.51	1,854.98

WTR YR 2004 MEAN 1,857.65 MAX 1,859.46 MIN 1,854.98

08134500 O.C. Fisher Lake at San Angelo, TX—Continued



08136000 Concho River at San Angelo, TX

LOCATION.--Lat 31°27'16", long 100°24'37", Tom Green County, Hydrologic Unit 12090105, on left bank 0.4 mi downstream from confluence of North and South Concho Rivers, 1.8 mi southeast of Tom Green County Courthouse, in San Angelo at Rio Concho Sports Complex on Rio Concho Dr. below Bell St. bridge, and 61.9 mi upstream from mouth.

DRAINAGE AREA.--5,542 mi^2 of which 1,131 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1915 to current year. Prior to Oct. 1969, published as "near San Angelo".

REVISED RECORDS.--WSP 568: 1915-16, 1919-22. WSP 1148: 1916-22(M), 1924(M), 1925-26, 1929(M), 1930-32, 1935-37. WSP 1512: 1917-18. WSP 1712: 1936. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,776.79 ft above NGVD of 1929. Prior to Aug. 11, 1917, nonrecording gage at same site and datum. Aug. 11, 1917, to May 15, 1963, water-stage recorder on right bank at same datum. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges. Since water year 1931, at least 10% of contributing drainage area has been regulated. There are many diversions upstream from station for irrigation, industrial, and municipal supply. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--15 years (water years 1916-30) prior to completion of Lake Nasworthy, 142 ft^3/s (102,600 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1853, 47.5 ft, Aug. 6, 1906, discharge, about 246,000 ft^3/s, from information by local resident. Other large floods are known to have occurred in June 1853, Aug. 1882, and Apr. 1900.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS, 1916-1930: Maximum discharge, 92,000 ft^3/s, Apr. 26, 1922, gage height, 36.8 ft, from floodmarks, on basis of slope-area measurements of 167,000 and 230,000 ft^3/s in 1936; no flow at times in 1921.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.1	2.4	0.11	2.4	9.9	0.19	9.7	2.1	3.2	1.1	1.6
2	1.5	3.2	2.7	0.08	0.30	4.3	13	5.0	2.1	1.7	0.74	1.2
3	1.6	3.3	2.7	0.21	0.70	3.7	22	3.2	46	1.0	0.57	0.81
4	1.7	2.9	2.6	0.11	1.7	66	7.3	2.3	26	0.77	0.42	0.70
5	2.1	8.7	2.2	0.05	3.2	23	63	2.3	4.0	0.39	0.17	0.75
6	20	4.7	2.1	0.04	1.6	6.8	168	2.2	1.9	0.24	49	0.45
7	5.8	4.9	2.8	0.05	1.1	4.0	15	2.1	0.99	0.22	183	0.26
8	21	5.5	2.6	0.21	1.7	3.2	7.1	2.4	2.5	0.16	13	0.12
9	300	4.4	5.7	0.13	1.5	2.7	6.0	2.8	1.7	0.10	4.3	0.11
10	38	4.3	0.14	0.20	1.5	2.9	4.6	3.5	0.92	0.05	2.4	0.16
11	160	4.5	0.66	0.21	1.9	2.8	4.0	5.2	0.53	0.03	4.4	0.17
12	48	4.2	2.0	0.32	1.7	44	4.2	5.2	0.39	0.03	2.1	0.27
13	11	3.4	2.1	0.36	1.4	49	3.4	5.5	0.32	0.02	1.3	0.35
14	5.8	3.9	2.5	0.44	2.5	12	3.8	3.1	e0.25	0.02	0.91	0.39
15	4.9	4.5	3.8	0.68	1.1	7.0	4.1	3.2	e0.20	0.02	0.72	0.61
16	4.2	4.8	0.73	10	2.0	4.5	3.7	3.6	e0.15	0.01	0.76	0.22
17	3.3	4.9	0.12	4.2	1.1	2.9	3.6	3.8	e0.10	0.01	0.72	0.13
18	3.2	5.5	0.11	0.87	1.8	2.8	3.2	4.0	e0.05	0.02	5.2	0.09
19	3.2	1.8	0.12	0.47	2.5	2.8	3.1	2.0	0.04	0.03	5.2	0.40
20	3.3	4.0	0.20	0.87	1.4	2.9	4.1	2.2	0.04	0.02	2.0	0.68
21	3.1	3.8	0.27	0.96	1.3	2.7	3.3	1.8	0.04	0.02	44	0.39
22	3.0	4.4	0.80	0.94	1.5	3.6	3.0	1.9	0.07	5.9	35	0.26
23	3.4	3.6	1.2	1.6	18	3.3	2.6	1.2	0.04	3.5	4.8	7.1
24	3.2	3.1	0.25	2.2	97	2.1	5.1	0.25	0.07	0.94	2.1	92
25	3.0	3.6	0.16	4.3	25	1.6	4.0	0.26	32	0.27	1.3	6.3
26	2.6	3.6	0.23	2.3	7.1	0.67	3.1	0.40	46	0.19	3.1	2.1
27	3.2	2.7	0.24	0.08	3.9	2.4	2.5	1.4	5.0	148	1.9	9.2
28	3.0	2.2	0.51	0.10	2.9	2.3	5.8	1.8	104	84	28	30
29	3.5	2.6	0.28	0.23	27	1.7	6.1	2.1	48	9.3	22	5.5
30	3.1	2.5	0.06	0.47	---	1.2	3.6	2.7	8.9	3.6	4.0	2.2
31	2.9	---	0.06	1.4	---	0.57	---	2.4	---	1.9	2.0	---
TOTAL	674.1	118.6	42.34	34.19	216.80	279.34	382.49	89.51	334.40	265.66	426.21	164.52
MEAN	21.7	3.95	1.37	1.10	7.48	9.01	12.7	2.89	11.1	8.57	13.7	5.48
MAX	300	8.7	5.7	10	97	66	168	9.7	104	148	183	92
MIN	1.5	1.8	0.06	0.04	0.30	0.57	0.19	0.25	0.04	0.01	0.17	0.09
AC-FT	1,340	235	84	68	430	554	759	178	663	527	845	326

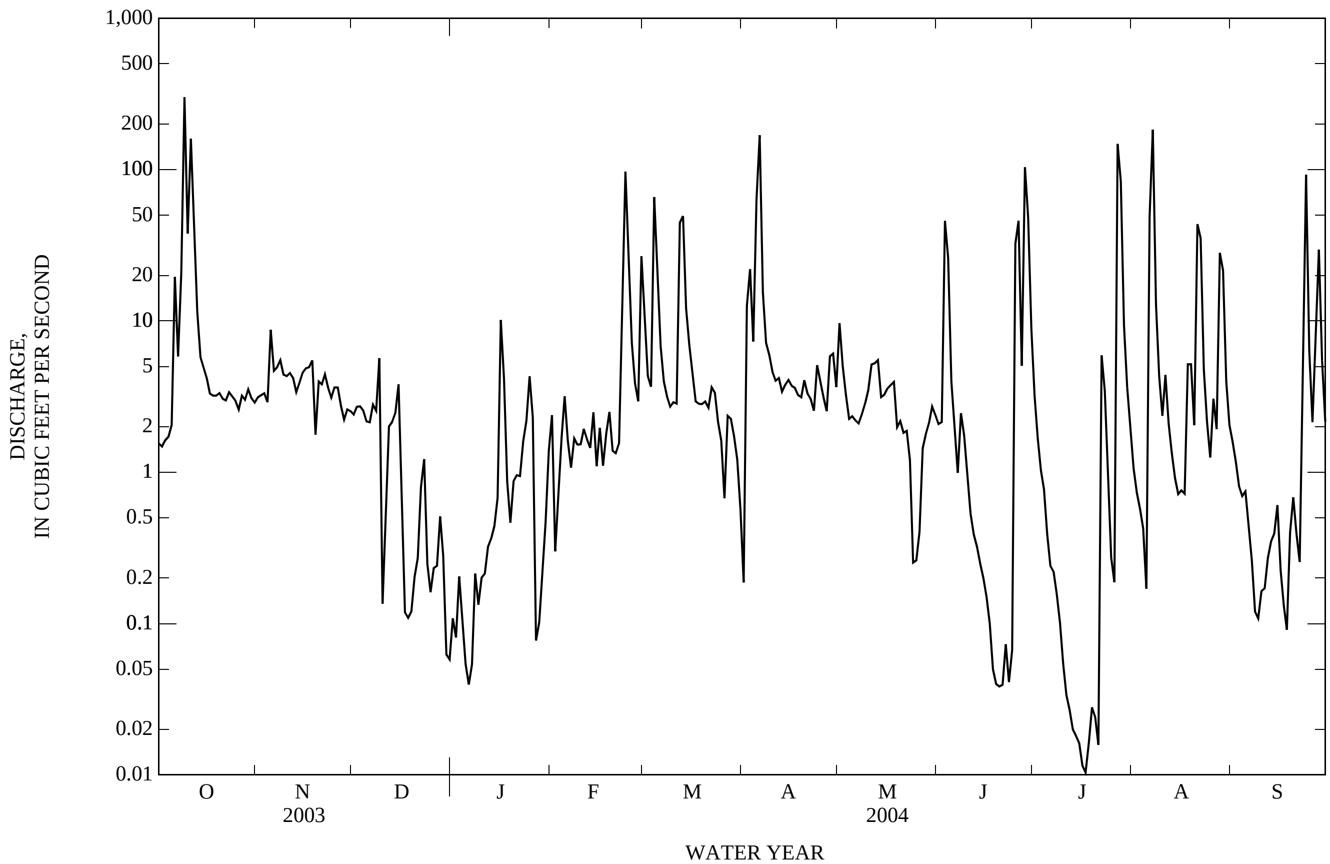
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	31.4	32.0	28.5	33.9	27.5	88.8	178	82.0	98.6	38.2	242
MAX	2,659	434	274	205	213	242	1,604	3,984	1,132	2,137	900	13,190
(WY)	(1960)	(1975)	(1975)	(1938)	(1975)	(1941)	(1949)	(1957)	(1941)	(1938)	(1942)	(1936)
MIN	0.05	0.05	0.10	0.06	0.03	0.05	0.04	0.06	0.09	0.07	0.04	0.03
(WY)	(2000)	(2000)	(1974)	(1974)	(2000)	(1971)	(2000)	(2003)	(1971)	(1969)	(1999)	(1999)

08136000 Concho River at San Angelo, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004z	
ANNUAL TOTAL	4,109.28		3,028.16			
ANNUAL MEAN	11.3		8.27		83.0	
HIGHEST ANNUAL MEAN					1,132	1936
LOWEST ANNUAL MEAN					1.55	2000
HIGHEST DAILY MEAN	631	Jun 4	300	Oct 9	128,000	Sep 17, 1936
LOWEST DAILY MEAN	0.02	May 17	0.01	Jul 16	0.00	Sep 14, 1952
ANNUAL SEVEN-DAY MINIMUM	0.03	Apr 16	0.02	Jul 12	0.00	Sep 16, 1952
MAXIMUM PEAK FLOW			718	Jul 27	i230,000	Sep 17, 1936
MAXIMUM PEAK STAGE			3.85	Jul 27	a46.60	Sep 17, 1936
ANNUAL RUNOFF (AC-FT)	8,150		6,010		60,120	
10 PERCENT EXCEEDS	13		12		66	
50 PERCENT EXCEEDS	0.15		2.4		6.2	
90 PERCENT EXCEEDS	0.05		0.12		0.10	

z Period of regulated streamflow.
a From floodmark.
i From slope-area measurement of peak flow.
e Estimated



08136500 Concho River at Paint Rock, TX

LOCATION.--Lat 31°30'57", long 99°55'09", Concho County, Hydrologic Unit 12090105, near left bank at downstream end of pier of bridge on U.S. Highway 83, 0.5 mi north of Concho County Courthouse in Paint Rock, 2.7 mi downstream from Kickapoo Creek, and 20.0 mi upstream from mouth.

DRAINAGE AREA.--6,574 mi^2 of which 1,131 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Sept. 1915 to current year. Prior to Oct. 1970, published as "near Paint Rock".

REVISED RECORDS.--WSP 458: 1915-16. WSP 568: 1919-20. WSP 1712: 1922(M). WSP 1732: 1918(M), 1923(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,574.36 ft above NGVD of 1929. See WSP 1922 for history of changes prior to Jan. 15, 1940. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since water year 1931, at least 10% of contributing drainage area has been regulated. Flow affected at times by discharge from the flood-detention pools of two floodwater-retarding structures. These structures control runoff from 16.5 mi^2 in the Willow Creek drainage basin. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--15 years (water years 1916-30) prior to construction of Lake Nasworthy, 186 ft^3/s (134,700 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in Aug. 1882 reached a stage of about 39.9 ft, and flood in Aug. 1906 reached a stage of 39.5 ft, from information by local resident. Maximum stage since at least 1853, 43.4 ft Sept. 17, 1936.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1916-1930: Maximum discharge, 76,500 ft^3/s, Apr. 27, 1922, gage height, 27.50 ft; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.3	9.8	3.3	8.0	16	0.84	6.0	0.00	3.8	15	12
2	6.2	5.0	10	4.6	7.4	14	1.0	4.6	0.00	0.91	9.5	15
3	2.1	5.0	12	4.4	5.6	17	22	3.9	0.00	8.4	5.6	9.8
4	0.65	5.6	9.3	2.8	5.5	23	11	3.4	0.00	6.7	2.6	6.9
5	0.26	8.2	6.4	1.5	5.5	20	4.8	2.4	0.00	3.9	1.1	5.4
6	0.16	8.3	5.8	1.1	4.3	27	23	2.7	0.00	1.3	0.80	4.3
7	0.10	9.1	6.6	0.76	3.3	40	158	3.8	0.00	0.51	0.30	2.0
8	0.83	9.9	7.5	0.62	1.9	24	87	1.3	0.00	0.18	19	0.84
9	11	11	7.8	0.51	1.4	17	41	0.55	0.00	0.08	87	0.56
10	313	13	9.0	0.51	0.76	14	26	0.23	0.00	0.02	37	0.33
11	197	13	9.3	0.37	0.75	11	19	0.22	0.00	0.00	20	0.29
12	197	13	8.1	0.34	0.64	13	15	0.13	0.00	0.00	13	0.32
13	180	13	6.5	0.22	0.67	13	12	0.07	0.00	0.00	8.1	0.26
14	71	11	4.9	0.23	0.51	13	11	0.04	0.00	0.00	5.4	0.15
15	37	9.4	2.6	0.83	0.54	32	9.8	0.02	0.00	0.00	2.9	0.08
16	25	10	1.6	0.71	0.59	29	9.0	0.03	0.00	0.00	1.5	0.04
17	20	13	2.2	0.35	0.50	20	7.9	0.03	0.00	0.00	1.1	0.02
18	16	9.7	1.7	0.05	1.0	16	7.0	0.03	0.00	0.00	3.0	0.00
19	12	9.1	1.9	0.10	1.2	13	6.5	0.02	0.00	0.00	12	0.00
20	10	9.7	1.2	0.16	0.91	12	6.0	0.00	0.00	0.00	6.8	0.00
21	11	9.9	1.1	2.8	0.52	9.8	5.5	0.00	0.00	0.00	8.3	0.00
22	10	11	2.0	10	0.35	8.7	4.6	0.00	0.00	0.00	7.0	0.00
23	9.4	11	2.1	8.9	1.0	8.0	4.7	0.00	0.00	0.00	6.0	0.00
24	9.5	10	1.6	8.0	4.4	8.5	10	0.00	0.00	0.00	5.8	0.05
25	9.4	9.8	1.1	7.0	12	7.3	6.7	0.00	0.00	0.00	28	1.3
26	9.5	10	1.2	4.1	63	5.0	6.1	0.00	0.00	0.00	15	4.7
27	11	9.7	1.1	4.9	46	4.8	5.7	0.00	0.00	0.00	9.8	6.3
28	10	9.3	0.79	3.3	27	5.2	5.2	0.00	0.01	0.00	7.7	7.3
29	8.3	9.1	0.78	5.6	21	5.1	5.2	0.00	29	0.00	6.6	12
30	7.8	9.6	0.97	6.8	---	4.1	4.3	0.00	10	38	4.3	9.5
31	7.6	---	1.2	7.7	---	2.6	---	0.00	---	27	5.2	---
TOTAL	1,213.80	291.7	138.14	92.56	226.24	453.1	535.84	29.47	39.01	90.80	355.40	99.44
MEAN	39.2	9.72	4.46	2.99	7.80	14.6	17.9	0.95	1.30	2.93	11.5	3.31
MAX	313	13	12	10	63	40	158	6.0	29	38	87	15
MIN	0.10	5.0	0.78	0.05	0.35	2.6	0.84	0.00	0.00	0.00	0.30	0.00
AC-FT	2,410	579	274	184	449	899	1,060	58	77	180	705	197

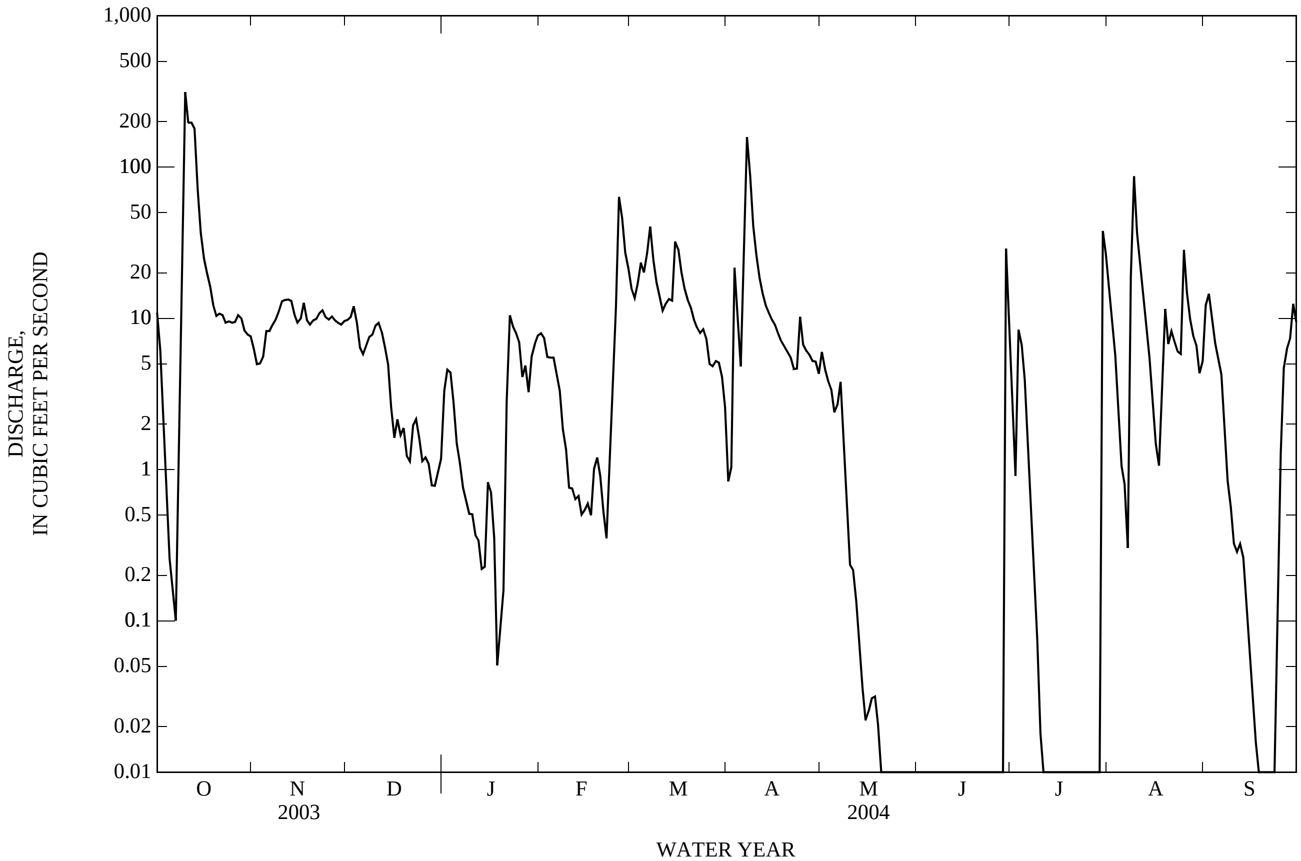
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004z, BY WATER YEAR (WY)

MEAN	188	55.6	54.2	50.3	63.0	50.5	129	281	133	143	55.0	353
MAX	3,805	615	367	274	740	318	2,131	4,756	1,227	3,519	980	17,220
(WY)	(1931)	(1975)	(1975)	(1975)	(1992)	(1992)	(1949)	(1957)	(1941)	(1938)	(1942)	(1936)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1935)	(1952)	(1952)	(1955)	(1955)	(1955)	(1955)	(2000)	(1967)	(1934)	(1952)	(1954)

08136500 Concho River at Paint Rock, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004z	
ANNUAL TOTAL	10,270.72		3,565.50			
ANNUAL MEAN	28.1		9.74		130	
HIGHEST ANNUAL MEAN					1,470	1936
LOWEST ANNUAL MEAN					7.56	2000
HIGHEST DAILY MEAN	2,060	Jun 6	313	Oct 10	134,000	Sep 17, 1936
LOWEST DAILY MEAN	0.00	Apr 7	0.00	May 20	0.00	Sep 28, 1931
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 7	0.00	May 20	0.00	Sep 28, 1931
MAXIMUM PEAK FLOW			591	Oct 10	i301,000	Sep 17, 1936
MAXIMUM PEAK STAGE			a13.71	Oct 10	a43.40	Sep 17, 1936
ANNUAL RUNOFF (AC-FT)	20,370		7,070		93,940	
10 PERCENT EXCEEDS	15		17		122	
50 PERCENT EXCEEDS	0.36		4.6		23	
90 PERCENT EXCEEDS	0.00		0.00		0.10	

z Period of regulated streamflow.
a From floodmark.
i From slope-area measurement of peak flow.



08136500 Concho River at Paint Rock, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Apr. 1946 to Oct. 1949, Mar. 1964 to June 2003.
BIOCHEMICAL DATA: Mar. 1964 to July 2002.
PESTICIDE DATA: Apr. 1968 to Oct. 1981.
SEDIMENT DATA: Feb. 1978 to Sept. 1981.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Apr. 1946 to Oct. 1949, Oct. 1967 to Sept. 1990 (local observer), Feb. 2001 to current year.
WATER TEMPERATURE: Apr. 1946 to Oct. 1949, Oct. 1967 to Sept. 1990 (local observer), Feb. 2001 to current year.
SUSPENDED SEDIMENT DISCHARGE: Feb. 1978 to Sept. 1981 (local observer).

INSTRUMENTATION.--Water-quality monitor since Feb. 6, 2001.

REMARKS.--Records fair. Interruptions in the record were due to malfunction of the instrument and to no flow. No flow May 20 to June 28, July 11-30, and Sept. 18-24. Specific conductance and water temperature are recorded near the left bank in a large pool 1,300 ft upstream from a storage dam. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed for previous years using daily (or continuous) records of specific conductance and regression relations between each chemical constituent and specific conductance. The computation of the selected constituent loads might include estimated discharge or specific conductance data. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,690 microsiemens/cm, June 28, Aug. 12, 1984; minimum, 259 microsiemens/cm, June 6, 2003.
WATER TEMPERATURE: Maximum daily, 35.6, on Aug. 1, 2, 2004; minimum daily, 0.0°C, on many days during winter months.
SEDIMENT CONCENTRATION: Maximum daily mean, 4,190 mg/L, Sept. 9, 1980; minimum daily mean, 3 mg/L, Feb. 2, 1979.
SEDIMENT LOADS: Maximum daily, 269,000 tons Sept. 9, 1980; minimum daily, 0.0 tons on several days during Sept. 1980.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,230 microsiemens/cm, Aug. 9; minimum, 609 microsiemens/cm, Oct. 18.
WATER TEMPERATURE: Maximum, 35.6°C, Aug. 1, 2; minimum, 5.2°C, Feb. 14.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1,300	1,210	1,270	954	928	939	1,580	1,550	1,570	1,920	1,900	1,910
2	1,350	1,170	1,300	959	927	951	1,580	1,510	1,570	1,950	1,870	1,930
3	1,350	1,270	1,320	964	944	955	1,600	1,510	1,580	1,950	1,880	1,920
4	1,360	1,280	1,340	971	944	959	1,600	1,580	1,590	2,000	1,890	1,940
5	1,360	1,310	1,340	993	957	972	1,610	1,560	1,590	2,020	1,990	2,000
6	1,360	1,280	1,340	1,020	974	988	1,610	1,550	1,590	2,060	2,010	2,030
7	1,370	1,260	1,340	1,040	1,000	1,020	1,630	1,530	1,590	2,090	2,040	2,060
8	1,380	1,200	1,350	1,080	1,040	1,060	1,640	1,530	1,600	2,100	2,050	2,080
9	1,360	1,200	1,310	1,130	1,080	1,110	1,650	1,560	1,610	2,100	2,070	2,080
10	1,350	1,040	1,240	1,140	1,120	1,130	1,670	1,640	1,660	2,130	2,100	2,110
11	1,240	971	1,120	1,140	1,130	1,140	1,680	1,610	1,650	2,140	2,110	2,120
12	1,240	751	1,050	1,190	1,140	1,170	1,700	1,600	1,660	2,150	2,060	2,130
13	751	712	730	1,190	1,180	1,190	1,730	1,690	1,710	2,160	2,110	2,140
14	712	681	700	1,200	1,180	1,190	1,750	1,710	1,730	2,190	2,120	2,150
15	730	696	710	1,220	1,200	1,200	1,760	1,660	1,730	2,210	2,140	2,170
16	704	643	682	1,220	1,190	1,210	1,790	1,720	1,760	2,180	2,140	2,160
17	674	631	655	1,230	1,210	1,220	1,800	1,780	1,790	2,190	2,140	2,170
18	664	609	643	1,280	1,220	1,240	1,850	1,780	1,800	2,210	2,170	2,190
19	660	616	639	1,290	1,270	1,280	1,800	1,770	1,780	2,230	2,180	2,210
20	663	642	651	1,300	1,270	1,290	1,790	1,770	1,780	2,240	2,220	2,230
21	702	655	678	1,330	1,290	1,310	1,780	1,760	1,770	2,250	2,220	2,240
22	750	702	723	1,350	1,320	1,330	1,790	1,770	1,780	2,260	2,240	2,250
23	752	738	745	1,390	1,320	1,360	1,820	1,770	1,790	2,260	2,220	2,250
24	771	752	760	1,420	1,390	1,400	1,830	1,800	1,820	2,320	2,260	2,300
25	807	771	785	1,460	1,420	1,430	1,830	1,810	1,820	2,410	2,300	2,360
26	837	807	825	1,480	1,460	1,470	1,830	1,800	1,820	2,440	2,360	2,400
27	872	832	852	1,510	1,470	1,490	1,840	1,820	1,830	2,450	2,380	2,430
28	886	862	877	1,530	1,470	1,490	1,860	1,830	1,850	2,480	2,380	2,430
29	896	873	885	1,540	1,490	1,530	1,880	1,860	1,870	2,520	2,450	2,490
30	949	888	915	1,560	1,530	1,550	1,910	1,820	1,880	2,550	2,430	2,490
31	946	916	926	---	---	---	1,910	1,880	1,900	2,580	2,400	2,500
MONTH	1,380	609	958	1,560	927	1,220	1,910	1,510	1,720	2,580	1,870	2,190

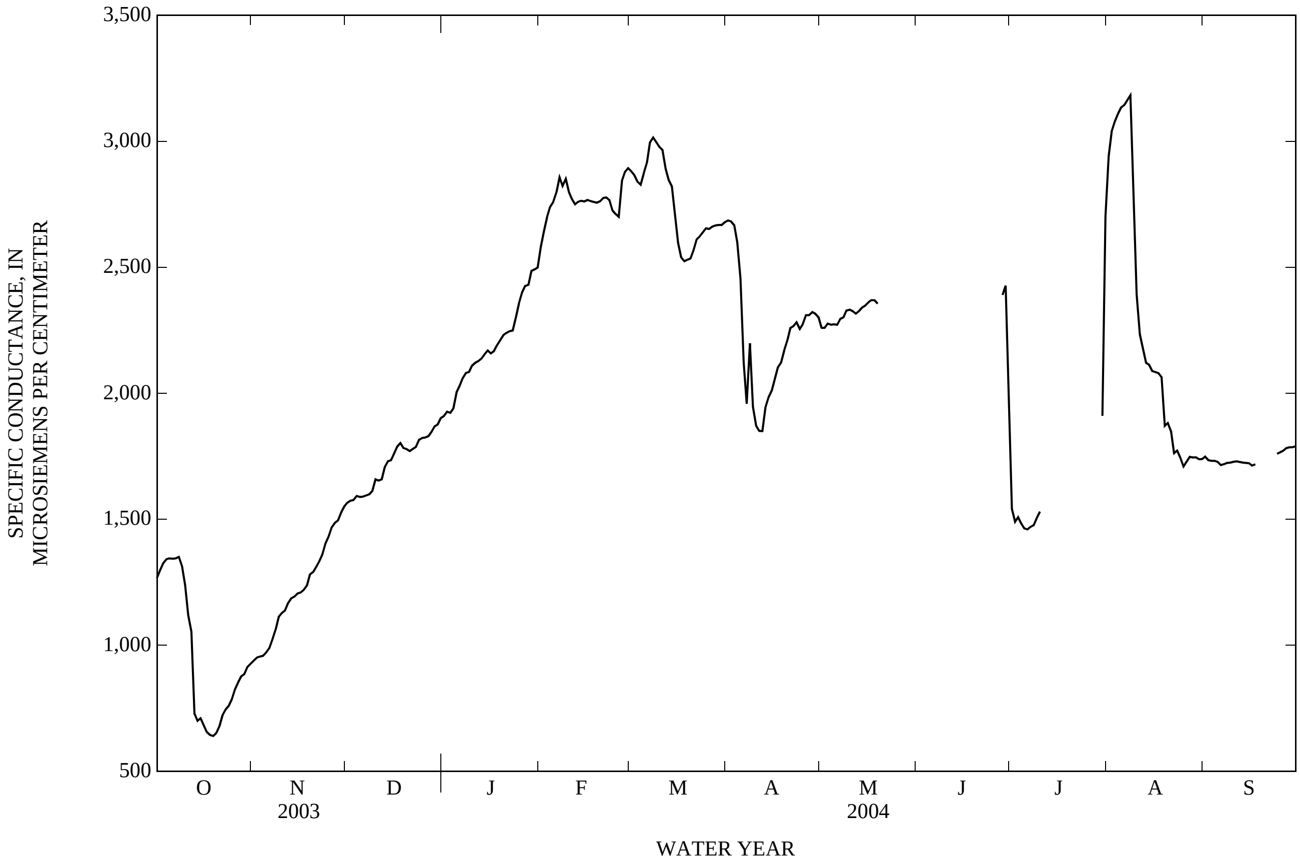
08136500 Concho River at Paint Rock, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2,670	2,500	2,580	2,900	2,860	2,880	2,700	2,670	2,690	2,310	2,210	2,260
2	2,720	2,570	2,640	2,870	2,850	2,870	2,700	2,660	2,680	2,300	2,210	2,260
3	2,780	2,590	2,700	2,860	2,830	2,840	2,680	2,640	2,670	2,300	2,240	2,280
4	2,800	2,660	2,740	2,850	2,800	2,830	2,640	2,510	2,600	2,310	2,240	2,270
5	2,820	2,690	2,760	2,890	2,840	2,870	2,530	2,340	2,460	2,300	2,240	2,270
6	2,850	2,690	2,800	2,970	2,890	2,910	2,430	1,730	2,120	2,300	2,240	2,270
7	2,890	2,820	2,860	3,010	2,960	3,000	2,300	1,600	1,960	2,320	2,260	2,290
8	2,870	2,760	2,820	3,030	2,990	3,020	2,290	2,040	2,200	2,340	2,250	2,300
9	2,890	2,810	2,850	&3,020	&2,880	&3,000	2,040	1,880	1,950	2,340	2,300	2,330
10	2,820	2,780	2,800	&3,010	&2,900	&2,980	1,890	1,860	1,870	2,340	2,320	2,330
11	2,780	2,750	2,770	&3,000	&2,840	&2,970	1,860	1,830	1,850	2,340	2,320	2,330
12	2,770	2,740	2,750	&2,980	&2,810	&2,890	1,910	1,830	1,850	2,340	2,290	2,320
13	2,780	2,740	2,760	&2,900	&2,760	&2,850	1,980	1,910	1,940	2,340	2,310	2,330
14	2,780	2,740	2,760	&2,880	&2,680	&2,820	2,000	1,960	1,980	2,370	2,320	2,340
15	2,780	2,740	2,760	2,800	2,630	2,720	2,040	1,990	2,010	2,360	2,330	2,350
16	2,800	2,750	2,770	2,630	2,560	2,600	2,110	2,020	2,060	2,370	2,340	2,360
17	2,780	2,740	2,760	2,570	2,510	2,540	2,120	2,080	2,100	2,380	2,350	2,370
18	2,780	2,730	2,760	2,540	2,500	2,520	2,150	2,090	2,120	2,380	2,350	2,370
19	2,770	2,740	2,760	2,550	2,500	2,530	2,210	2,140	2,170	2,370	2,340	2,360
20	2,780	2,740	2,760	2,550	2,500	2,530	2,240	2,190	2,210	---	---	---
21	2,780	2,770	2,780	2,590	2,540	2,570	2,290	2,230	2,260	---	---	---
22	2,800	2,760	2,780	2,630	2,590	2,610	2,280	2,250	2,270	---	---	---
23	2,790	2,740	2,770	2,630	2,610	2,620	2,300	2,260	2,280	---	---	---
24	2,770	2,700	2,730	2,660	2,630	2,640	2,290	2,240	2,260	---	---	---
25	2,720	2,700	2,710	2,660	2,640	2,650	2,320	2,240	2,270	---	---	---
26	2,740	2,630	2,700	2,660	2,640	2,650	2,330	2,260	2,310	---	---	---
27	2,870	2,740	2,840	2,670	2,650	2,660	2,330	2,270	2,310	---	---	---
28	2,900	2,860	2,880	2,680	2,650	2,670	2,340	2,280	2,320	---	---	---
29	2,910	2,890	2,890	2,680	2,640	2,670	2,340	2,280	2,320	---	---	---
30	---	---	---	2,680	2,660	2,670	2,340	2,260	2,300	---	---	---
31	---	---	---	2,690	2,660	2,680	---	---	---	---	---	---
MONTH	2,910	2,500	2,770	3,030	2,500	2,750	2,700	1,600	2,210	2,380	2,210	2,320
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	1,760	1,390	1,540	3,010	2,860	2,940	1,760	1,740	1,750
2	---	---	---	1,530	1,450	1,490	3,080	3,010	3,040	1,750	1,720	1,730
3	---	---	---	1,530	1,490	1,510	3,100	3,050	3,080	1,750	1,720	1,730
4	---	---	---	1,500	1,450	1,480	3,120	3,090	3,110	1,740	1,720	1,730
5	---	---	---	1,480	1,450	1,460	3,170	3,100	3,130	1,740	1,710	1,730
6	---	---	---	1,470	1,450	1,460	3,160	3,120	3,140	1,720	1,700	1,710
7	---	---	---	1,490	1,460	1,470	3,180	3,140	3,160	1,730	1,700	1,720
8	---	---	---	1,490	1,460	1,480	3,210	3,160	3,180	1,740	1,710	1,720
9	---	---	---	1,540	1,490	1,500	3,230	2,430	2,700	1,740	1,700	1,720
10	---	---	---	1,560	1,520	1,530	2,430	2,330	2,390	1,740	1,710	1,730
11	---	---	---	---	---	---	2,330	2,140	2,230	1,740	1,710	1,730
12	---	---	---	---	---	---	2,210	2,100	2,180	1,740	1,710	1,730
13	---	---	---	---	---	---	2,150	2,090	2,120	1,740	1,710	1,720
14	---	---	---	---	---	---	2,130	2,080	2,110	1,740	1,710	1,720
15	---	---	---	---	---	---	2,110	2,080	2,090	1,740	1,690	1,720
16	---	---	---	---	---	---	2,110	2,060	2,080	1,720	1,690	1,710
17	---	---	---	---	---	---	2,090	2,060	2,080	1,730	1,710	1,720
18	---	---	---	---	---	---	2,100	2,010	2,060	---	---	---
19	---	---	---	---	---	---	2,030	1,700	1,870	---	---	---
20	---	---	---	---	---	---	1,910	1,850	1,880	---	---	---
21	---	---	---	---	---	---	1,890	1,750	1,850	---	---	---
22	---	---	---	---	---	---	1,800	1,720	1,760	---	---	---
23	---	---	---	---	---	---	1,780	1,760	1,770	---	---	---
24	---	---	---	---	---	---	1,770	1,720	1,750	1,770	1,740	1,760
25	---	---	---	---	---	---	1,750	1,680	1,710	1,770	1,750	1,770
26	---	---	---	---	---	---	1,750	1,710	1,730	1,780	1,740	1,770
27	---	---	---	---	---	---	1,760	1,740	1,750	1,790	1,780	1,780
28	2,420	2,360	2,390	---	---	---	1,760	1,730	1,740	1,800	1,780	1,790
29	2,460	2,320	2,430	---	---	---	1,760	1,730	1,750	1,800	1,760	1,790
30	2,320	1,760	2,000	2,440	1,690	1,910	1,750	1,710	1,740	1,810	1,770	1,790
31	---	---	---	2,860	2,440	2,700	1,750	1,730	1,740	---	---	---
MONTH	2,460	1,760	2,270	2,860	1,390	1,630	3,230	1,680	2,250	1,810	1,690	1,740
YEAR	3,230	609	1,990									

& Value was computed from affected unit values

08136500 Concho River at Paint Rock, TX—Continued



TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

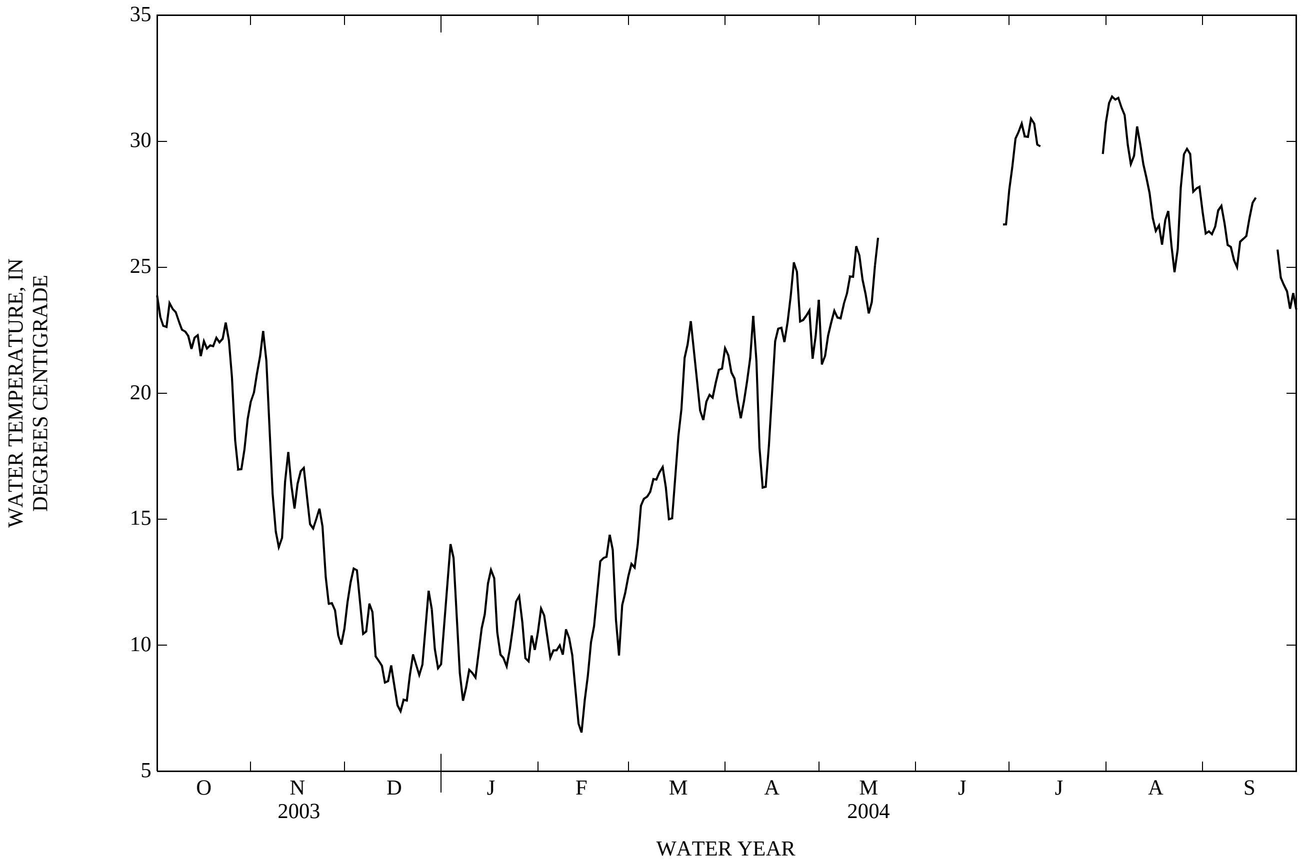
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	26.8	22.3	23.9	21.0	19.1	20.0	15.2	10.1	11.7	12.0	9.7	10.7
2	24.1	22.0	23.0	21.8	19.9	20.8	13.2	12.0	12.5	13.8	10.5	12.2
3	23.9	21.7	22.7	22.5	20.8	21.5	14.3	12.1	13.0	16.1	12.7	14.0
4	23.6	21.8	22.6	24.2	21.3	22.5	14.5	11.9	13.0	14.4	12.2	13.5
5	26.5	22.1	23.6	22.7	20.1	21.3	12.7	10.6	11.6	12.2	10.2	11.1
6	24.8	22.5	23.3	20.1	17.2	18.6	11.8	9.4	10.4	10.2	8.3	8.9
7	24.1	22.6	23.2	17.2	15.2	16.0	12.2	9.3	10.5	8.4	7.4	7.8
8	23.3	22.5	22.8	15.2	14.1	14.5	13.9	10.0	11.6	9.2	7.6	8.3
9	22.8	22.3	22.5	14.2	13.7	13.9	12.3	9.7	11.3	10.8	7.8	9.0
10	22.7	21.9	22.5	15.4	13.5	14.2	11.0	8.6	9.6	11.0	7.6	8.9
11	22.4	22.2	22.3	19.2	14.5	16.5	10.8	8.3	9.4	9.8	7.6	8.7
12	22.2	21.5	21.8	18.9	16.6	17.7	9.9	8.8	9.2	11.6	8.4	9.7
13	24.2	21.0	22.2	17.6	15.6	16.4	9.4	7.7	8.5	13.5	9.1	10.7
14	23.2	21.4	22.3	15.8	15.1	15.4	9.8	7.4	8.6	12.8	9.8	11.2
15	23.1	20.2	21.5	18.0	15.5	16.4	10.2	8.5	9.2	12.7	12.1	12.4
16	24.4	20.2	22.1	19.5	15.9	16.9	9.2	7.6	8.4	13.8	12.5	13.0
17	23.3	20.5	21.8	17.3	16.7	17.0	8.6	6.5	7.6	13.2	11.8	12.7
18	26.1	19.9	21.9	16.7	14.8	15.9	8.1	6.6	7.4	11.8	9.3	10.5
19	26.4	20.0	21.9	16.2	13.5	14.8	10.4	6.3	7.8	11.3	8.5	9.6
20	25.9	20.1	22.2	16.3	13.3	14.6	9.1	6.4	7.8	10.7	8.3	9.5
21	24.1	20.3	22.0	17.8	13.4	15.0	10.3	7.4	8.8	10.0	8.4	9.2
22	24.0	20.6	22.2	17.1	14.1	15.4	10.5	8.9	9.6	11.0	9.1	9.9
23	25.6	20.9	22.8	15.7	13.4	14.7	9.8	8.5	9.2	11.1	10.3	10.7
24	23.9	20.6	22.1	13.8	11.8	12.7	9.6	8.0	8.8	13.0	10.8	11.7
25	21.3	19.8	20.6	12.2	11.0	11.6	10.6	8.2	9.2	12.9	10.9	11.9
26	19.8	16.8	18.1	12.8	10.8	11.7	12.7	9.2	10.7	12.0	9.5	10.9
27	18.4	15.7	17.0	11.9	10.8	11.4	13.5	10.9	12.2	11.0	8.1	9.5
28	18.2	15.8	17.0	11.1	9.6	10.4	12.4	10.4	11.4	10.5	8.2	9.4
29	20.0	16.2	17.8	11.5	8.9	10.0	10.9	9.1	9.8	11.8	9.5	10.4
30	22.0	16.8	19.0	12.5	9.2	10.7	10.1	8.0	9.1	10.6	9.3	9.8
31	20.6	18.7	19.6	---	---	---	10.4	8.2	9.2	12.4	9.2	10.5
MONTH	26.8	15.7	21.6	24.2	8.9	15.6	15.2	6.3	9.9	16.1	7.4	10.5

08136500 Concho River at Paint Rock, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.6	10.6	11.5	14.8	11.7	13.2	23.8	19.7	21.5	23.5	20.2	21.1
2	12.5	10.3	11.2	13.6	12.7	13.1	21.5	19.9	20.8	25.2	19.0	21.5
3	11.3	9.8	10.4	14.8	13.3	14.0	22.0	19.4	20.6	26.4	19.3	22.3
4	9.9	9.1	9.5	16.6	14.6	15.5	20.9	18.8	19.7	25.4	20.5	22.8
5	10.9	8.8	9.8	17.0	14.7	15.8	19.8	18.0	19.0	25.9	21.3	23.3
6	10.6	8.7	9.8	17.2	14.5	15.9	21.5	18.1	19.7	23.4	22.7	23.0
7	12.3	8.1	10.0	17.2	15.2	16.1	22.2	19.2	20.5	23.8	22.4	23.0
8	10.3	8.5	9.6	18.5	14.7	16.6	23.1	19.5	21.4	25.2	22.3	23.5
9	11.3	10.2	10.6	18.1	15.3	16.6	26.1	21.0	23.1	25.2	23.0	23.9
10	10.8	10.0	10.3	18.3	15.4	16.9	23.5	19.4	21.3	26.6	23.3	24.6
11	10.2	9.3	9.6	17.7	16.5	17.1	19.5	16.7	17.8	25.7	23.6	24.6
12	9.3	7.5	8.4	17.3	15.4	16.3	16.9	15.3	16.3	28.7	24.2	25.8
13	7.5	6.3	6.9	15.6	14.7	15.0	18.1	14.7	16.3	26.4	24.7	25.5
14	7.7	5.2	6.5	16.0	14.4	15.0	20.8	15.7	17.9	27.3	22.7	24.5
15	10.6	5.8	7.8	18.6	15.0	16.5	23.2	17.7	20.1	26.7	22.5	23.9
16	10.8	7.0	8.8	19.9	17.0	18.3	24.6	20.6	22.1	24.2	22.6	23.2
17	13.5	8.0	10.1	21.4	17.6	19.4	24.0	21.5	22.6	25.4	22.4	23.6
18	12.9	8.8	10.7	25.1	18.8	21.4	23.5	21.9	22.6	27.4	23.5	25.1
19	13.6	10.7	12.2	23.5	20.7	21.9	22.7	21.7	22.0	28.7	24.6	26.2
20	14.5	12.3	13.3	24.7	21.6	22.9	26.9	21.2	22.8	---	---	---
21	14.1	12.7	13.5	23.0	20.9	21.7	26.0	22.3	23.8	---	---	---
22	14.4	12.4	13.5	21.4	19.9	20.6	28.0	23.6	25.2	---	---	---
23	15.3	13.6	14.4	20.1	18.8	19.3	26.0	23.9	24.8	---	---	---
24	14.5	12.8	13.8	19.7	18.5	18.9	24.5	22.1	22.8	---	---	---
25	12.8	9.7	11.0	21.3	18.6	19.7	26.0	21.4	22.9	---	---	---
26	11.3	8.7	9.6	20.4	19.4	19.9	25.1	21.6	23.1	---	---	---
27	13.7	9.9	11.6	20.6	19.3	19.8	26.4	21.7	23.3	---	---	---
28	12.3	11.9	12.1	21.9	19.6	20.4	22.3	20.6	21.4	---	---	---
29	14.0	11.5	12.8	22.8	19.3	20.9	26.4	20.0	22.3	---	---	---
30	---	---	---	23.1	19.3	21.0	28.0	21.6	23.7	---	---	---
31	---	---	---	24.3	19.9	21.8	---	---	---	---	---	---
MONTH	15.3	5.2	10.7	25.1	11.7	18.1	28.0	14.7	21.4	28.7	19.0	23.8
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	32.1	27.0	29.0	35.6	29.7	31.5	27.0	25.8	26.3
2	---	---	---	33.3	27.9	30.1	35.6	30.0	31.8	29.5	24.9	26.4
3	---	---	---	32.5	28.8	30.4	34.5	29.8	31.7	28.0	24.9	26.3
4	---	---	---	32.8	29.2	30.7	35.0	29.8	31.7	27.9	25.4	26.6
5	---	---	---	31.5	29.0	30.2	33.8	29.7	31.3	28.7	26.2	27.3
6	---	---	---	31.4	28.9	30.2	34.3	29.8	31.1	28.5	26.6	27.4
7	---	---	---	33.7	28.7	30.9	30.9	29.0	29.9	28.2	25.6	26.7
8	---	---	---	32.9	29.1	30.7	29.7	28.4	29.1	28.7	24.5	25.9
9	---	---	---	31.0	28.8	29.9	31.4	27.8	29.4	29.0	23.3	25.8
10	---	---	---	31.4	28.7	29.8	34.2	28.8	30.6	28.4	23.6	25.3
11	---	---	---	---	---	---	31.5	28.7	29.9	27.9	23.6	25.0
12	---	---	---	---	---	---	30.9	27.7	29.1	29.4	24.1	26.0
13	---	---	---	---	---	---	30.7	26.9	28.5	29.2	24.4	26.1
14	---	---	---	---	---	---	29.9	26.6	28.0	28.5	24.8	26.2
15	---	---	---	---	---	---	28.1	26.3	27.0	29.7	25.1	27.0
16	---	---	---	---	---	---	28.4	25.5	26.4	30.4	25.8	27.6
17	---	---	---	---	---	---	29.0	25.2	26.7	29.8	26.2	27.8
18	---	---	---	---	---	---	26.8	25.3	25.9	---	---	---
19	---	---	---	---	---	---	30.4	24.6	26.9	---	---	---
20	---	---	---	---	---	---	29.4	25.7	27.2	---	---	---
21	---	---	---	---	---	---	27.0	24.5	25.9	---	---	---
22	---	---	---	---	---	---	26.1	23.7	24.8	---	---	---
23	---	---	---	---	---	---	28.5	24.2	25.7	---	---	---
24	---	---	---	---	---	---	32.2	25.1	28.2	28.4	24.2	25.7
25	---	---	---	---	---	---	31.7	27.9	29.5	26.1	23.8	24.6
26	---	---	---	---	---	---	31.6	28.1	29.7	25.6	23.7	24.3
27	---	---	---	---	---	---	30.9	28.4	29.5	24.5	23.6	24.1
28	27.3	26.1	26.7	---	---	---	29.2	27.0	28.0	23.8	23.1	23.4
29	28.7	25.9	26.7	---	---	---	32.1	26.1	28.1	26.2	22.2	24.0
30	31.2	25.6	28.1	31.9	27.5	29.5	31.7	26.5	28.2	24.3	22.7	23.3
31	---	---	---	34.2	28.6	30.7	27.8	26.7	27.2	---	---	---
MONTH	31.2	25.6	27.2	34.2	27.0	30.2	35.6	23.7	28.7	30.4	22.2	25.8
YEAR	35.6	5.2	18.8									

08136500 Concho River at Paint Rock, TX—Continued



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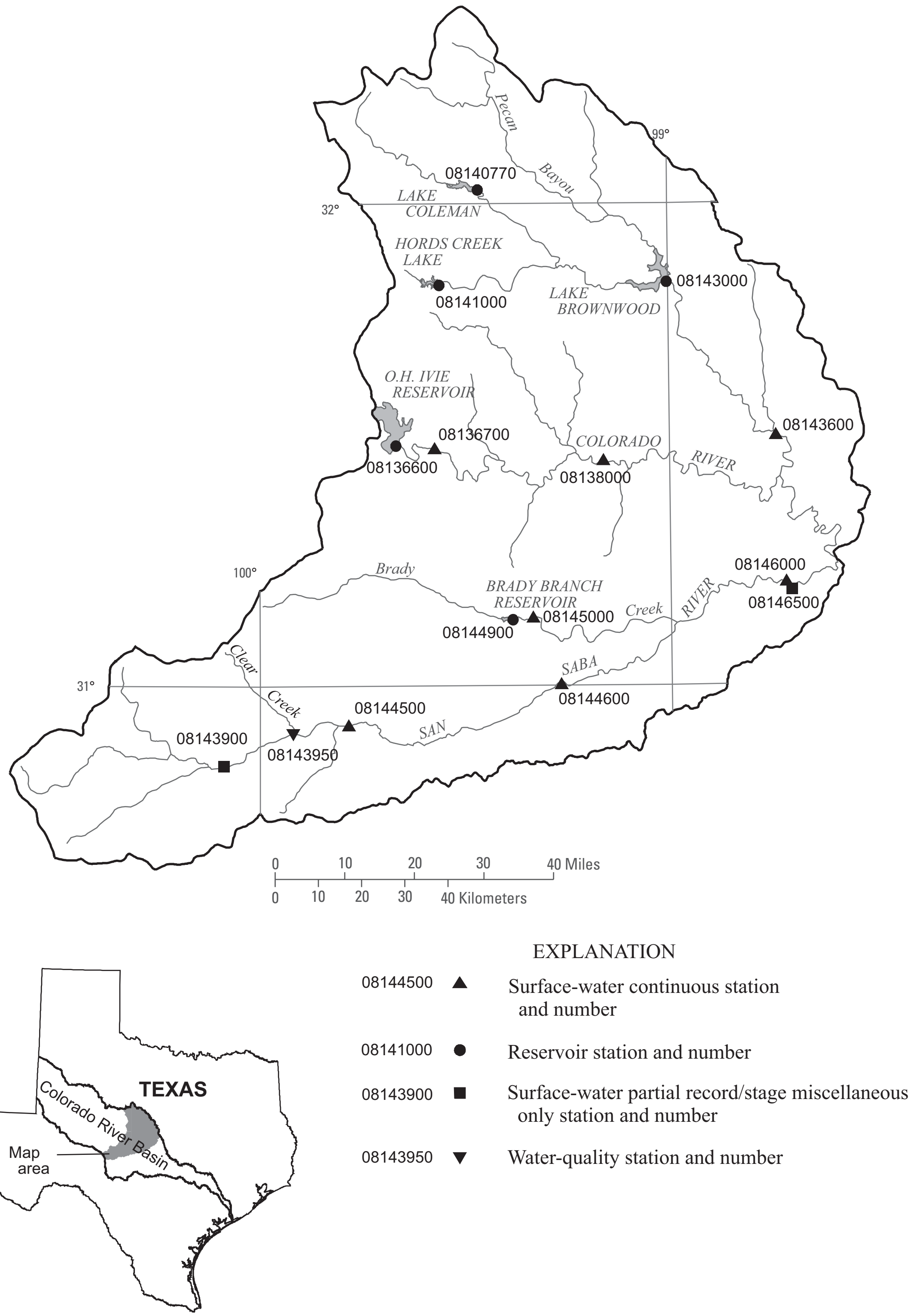


Figure 5.--Map showing location of gaging stations in the third section of the Colorado River Basin

08136600 O.H. Ivie Reservoir near Voss, TX

LOCATION.--Lat 31°30'00", long 99°40'05", Coleman County, Hydrologic Unit 12090106, on left bank, in outlet structure of Freese-Nichols Dam on Colorado River, 8.0 mi northeast of Millersview, 10.0 mi southwest of Voss, and at mile 615.1.

DRAINAGE AREA.--24,038 mi^2 of which 11,391 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1990 to Sept. 2003 (contents), Oct. 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.00 ft from Colorado River Municipal Water District survey point (vertical control datum unknown). Satellite telemeter at station.

REMARKS.--Records good except those for Jan. 7-21, which are poor. The lake is formed by a concrete dam and spillway with six 50- by 40-foot tainter gates, and a 6,000 ft overflow spillway with a 2,000 ft tapered fuse plug release feature. Total length of the dam is 12,000 ft. The dam was completed and storage began Mar. 15, 1990. Recording equipment was installed May 30, 1990, but water did not reach the sensing point until Sept. 21, 1990 (at an elevation of 1,502.05 ft). The dam is owned by the Colorado River Municipal Water District. Water is utilized for municipal use for several West Texas communities, the city of San Angelo being the largest user. The capacity curve is based on a survey made in 1989 by Freese and Nichols, Consulting Engineers, Fort Worth, TX. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,584.0
Crest of overflow spillway	1,563.0
Crest of spillway (tainter gates sill)	1,528.0
Lowest gated outlet (service outlet)	1,440.0

COOPERATION.--Records of diversions may be obtained from the Colorado River Municipal Water District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 574,700 acre-ft, June 26, 1997, elevation, 1,552.55 ft; minimum contents after initial filling, 187,400 acre-ft, June 1, 2003, elevation, 1,524.97 ft; minimum elevation, 1,522.07 ft, Sept. 30, 2004.

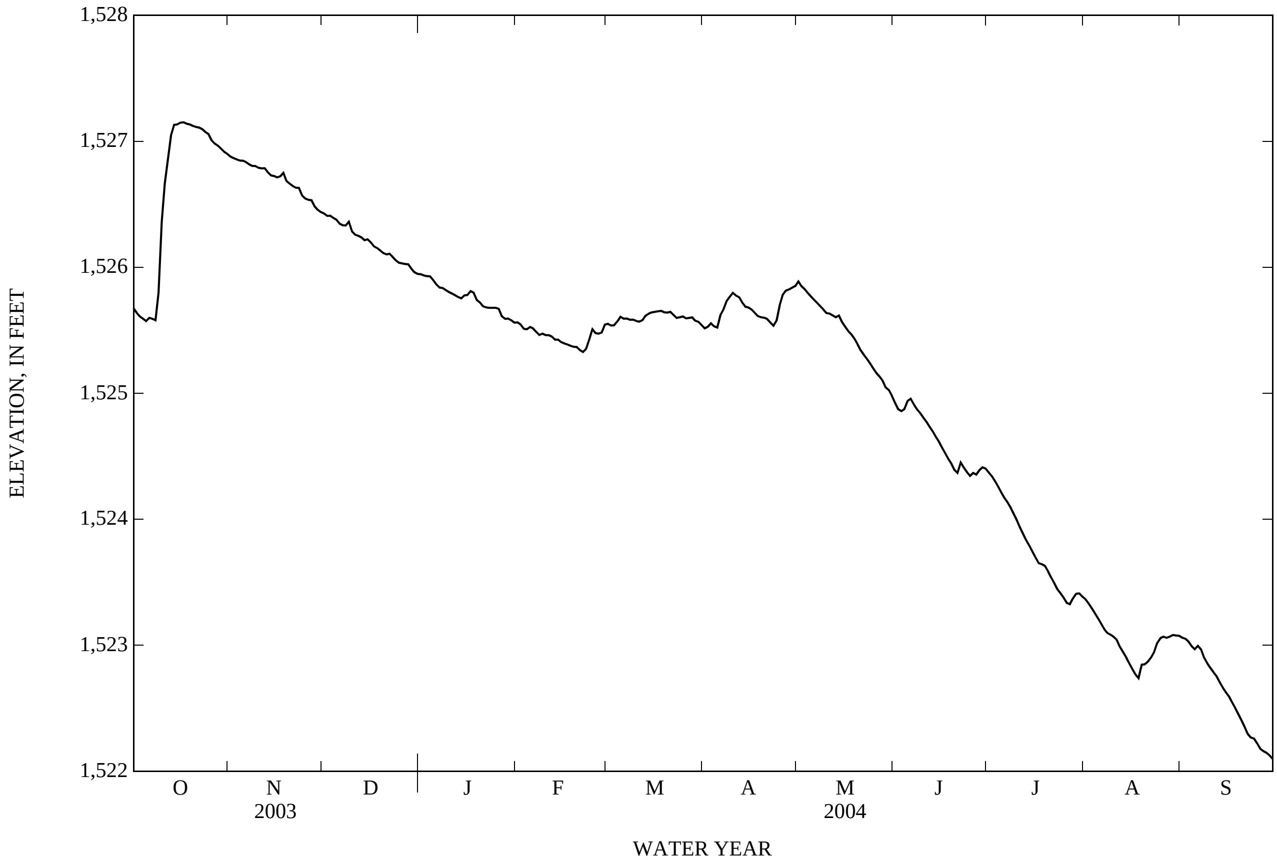
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,527.17 ft, Oct. 17; minimum elevation, 1,522.07 ft, Sept. 30.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,525.67	1,526.88	1,526.43	1,525.94	1,525.56	1,525.55	1,525.52	1,525.89	1,524.92	1,524.37	1,523.36	1,523.06
2	1,525.64	1,526.87	1,526.41	1,525.93	1,525.55	1,525.54	1,525.53	1,525.85	1,524.87	1,524.34	1,523.33	1,523.05
3	1,525.61	1,526.86	1,526.41	1,525.93	1,525.51	1,525.54	1,525.56	1,525.83	1,524.86	1,524.30	1,523.29	1,523.03
4	1,525.59	1,526.85	1,526.39	1,525.93	1,525.51	1,525.57	1,525.53	1,525.80	1,524.88	1,524.26	1,523.25	1,522.99
5	1,525.57	1,526.85	1,526.38	1,525.90	1,525.53	1,525.61	1,525.52	1,525.77	1,524.94	1,524.21	1,523.21	1,522.97
6	1,525.60	1,526.84	1,526.35	1,525.87	1,525.52	1,525.59	1,525.62	1,525.74	1,524.96	1,524.17	1,523.17	1,522.99
7	1,525.59	1,526.82	1,526.33	1,525.84	1,525.49	1,525.59	1,525.67	1,525.72	1,524.91	1,524.13	1,523.13	1,522.97
8	1,525.58	1,526.80	1,526.33	1,525.84	1,525.46	1,525.58	1,525.73	1,525.69	1,524.87	1,524.09	1,523.10	1,522.90
9	1,525.80	1,526.80	1,526.36	1,525.82	1,525.47	1,525.58	1,525.77	1,525.67	1,524.84	1,524.04	1,523.08	1,522.86
10	1,526.36	1,526.79	1,526.28	1,525.80	1,525.46	1,525.57	1,525.80	1,525.64	1,524.81	1,523.99	1,523.07	1,522.82
11	1,526.66	1,526.79	1,526.26	1,525.79	1,525.46	1,525.57	1,525.78	1,525.63	1,524.78	1,523.94	1,523.04	1,522.79
12	1,526.87	1,526.79	1,526.25	1,525.78	1,525.45	1,525.58	1,525.76	1,525.62	1,524.74	1,523.88	1,522.99	1,522.75
13	1,527.05	1,526.76	1,526.24	1,525.76	1,525.43	1,525.62	1,525.72	1,525.60	1,524.70	1,523.83	1,522.95	1,522.70
14	1,527.13	1,526.73	1,526.21	1,525.75	1,525.43	1,525.63	1,525.69	1,525.62	1,524.66	1,523.79	1,522.91	1,522.66
15	1,527.13	1,526.72	1,526.22	1,525.78	1,525.40	1,525.64	1,525.68	1,525.57	1,524.62	1,523.74	1,522.86	1,522.62
16	1,527.15	1,526.71	1,526.20	1,525.78	1,525.39	1,525.65	1,525.66	1,525.53	1,524.57	1,523.69	1,522.81	1,522.59
17	1,527.15	1,526.72	1,526.17	1,525.81	1,525.39	1,525.65	1,525.64	1,525.49	1,524.53	1,523.65	1,522.77	1,522.54
18	1,527.14	1,526.75	1,526.15	1,525.80	1,525.38	1,525.65	1,525.61	1,525.47	1,524.48	1,523.64	1,522.74	1,522.50
19	1,527.13	1,526.68	1,526.13	1,525.74	1,525.37	1,525.64	1,525.60	1,525.43	1,524.44	1,523.63	1,522.85	1,522.45
20	1,527.12	1,526.66	1,526.11	1,525.72	1,525.37	1,525.64	1,525.60	1,525.39	1,524.39	1,523.59	1,522.85	1,522.40
21	1,527.11	1,526.65	1,526.10	1,525.69	1,525.34	1,525.65	1,525.59	1,525.34	1,524.37	1,523.54	1,522.87	1,522.35
22	1,527.11	1,526.63	1,526.11	1,525.68	1,525.33	1,525.62	1,525.56	1,525.30	1,524.45	1,523.49	1,522.90	1,522.30
23	1,527.10	1,526.63	1,526.08	1,525.68	1,525.35	1,525.60	1,525.54	1,525.27	1,524.41	1,523.44	1,522.95	1,522.27
24	1,527.07	1,526.57	1,526.06	1,525.68	1,525.42	1,525.60	1,525.58	1,525.23	1,524.37	1,523.41	1,523.02	1,522.26
25	1,527.06	1,526.55	1,526.04	1,525.68	1,525.51	1,525.61	1,525.70	1,525.20	1,524.35	1,523.38	1,523.06	1,522.22
26	1,527.01	1,526.54	1,526.03	1,525.67	1,525.48	1,525.60	1,525.78	1,525.16	1,524.37	1,523.34	1,523.07	1,522.18
27	1,526.98	1,526.53	1,526.03	1,525.61	1,525.47	1,525.60	1,525.81	1,525.13	1,524.36	1,523.33	1,523.06	1,522.16
28	1,526.96	1,526.48	1,526.02	1,525.59	1,525.48	1,525.60	1,525.82	1,525.10	1,524.39	1,523.37	1,523.07	1,522.15
29	1,526.94	1,526.46	1,525.99	1,525.59	1,525.55	1,525.58	1,525.84	1,525.05	1,524.41	1,523.41	1,523.08	1,522.12
30	1,526.92	1,526.44	1,525.96	1,525.58	---	1,525.57	1,525.85	1,525.03	1,524.40	1,523.41	1,523.08	1,522.10
31	1,526.90	---	1,525.95	1,525.56	---	1,525.54	---	1,524.98	---	1,523.39	1,523.08	---
MEAN	1,526.60	1,526.70	1,526.19	1,525.76	1,525.45	1,525.60	1,525.67	1,525.47	1,524.62	1,523.77	1,523.03	1,522.59
MAX	1,527.15	1,526.88	1,526.43	1,525.94	1,525.56	1,525.65	1,525.85	1,525.89	1,524.96	1,524.37	1,523.36	1,523.06
MIN	1,525.57	1,526.44	1,525.95	1,525.56	1,525.33	1,525.54	1,525.52	1,524.98	1,524.35	1,523.33	1,522.74	1,522.10

CAL YR	2003	MEAN 1,526.82	MAX 1,529.01	MIN 1,525.03
WTR YR	2004	MEAN 1,525.12	MAX 1,527.15	MIN 1,522.10

08136600 O.H. Ivie Reservoir near Voss, TX—Continued



08136700 Colorado River near Stacy, TX

LOCATION.--Lat 31°29'37", long 99°34'25", Coleman County, Hydrologic Unit 12090106, on left bank at downstream side of bridge on Farm Road 503, 1.2 mi upstream from Bois d'Arc Creek, 1.8 mi northeast of Stacy, 10.5 mi downstream from O.H. Ivie Reservoir, 24.0 mi downstream from Concho River, and at mile 604.8.

DRAINAGE AREA.--24,193 mi^2 of which 11,391 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Mar. 1968 to current year. Prior to Oct. 1970, published as "at Stacy". Water-quality records: Chemical data: Dec. 1961 to July 1994. Biochemical data: Oct. 1974 to Aug. 1977. Pesticide data: Apr. 1975 to Aug. 1977. Sediment data: Oct. 1974 to Oct. 1977. Specific conductance: Apr. 1968 to Sept. 1994. Water temperature: Apr. 1968 to Sept. 1994.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,394.66 ft above NGVD of 1929 (Texas Department of Transportation bridge plans). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Mar. 1968, at least 10% of contributing drainage area has been regulated by upstream reservoirs, and since Mar. 15, 1990, flow completely regulated by O.H. Ivie Reservoir (station 08136600), 10.5 mi upstream. There are many diversions above station for irrigation, municipal, and oil field operations. Wastewater effluent is returned to the river from numerous wastewater plants above station. At times flow may be slightly affected by discharge from the flood-detention pools of 42 floodwater-retarding structures with a combined detention capacity of 56,730 acre-ft. These structures control runoff from 277 mi^2 above this station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1882, 356,000 ft^3/s, Sept. 18, 1936, gage height, 64.59 ft, by slope-area measurement of peak flow. The flood of Sept. 18, 1936, was 4 ft higher than the 1906 flood and 7 to 8 ft higher than the 1882 flood, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	7.0	4.7	5.5	5.2	6.9	4.5	14	12	16	14	15
2	14	7.0	5.7	6.0	5.2	6.3	6.5	14	12	14	14	15
3	13	6.8	6.1	5.9	5.5	6.2	9.3	12	14	13	14	14
4	7.5	6.8	5.6	5.1	5.9	7.0	7.6	12	21	13	14	14
5	4.2	7.1	5.7	4.4	5.9	7.1	9.8	12	45	13	13	14
6	16	7.1	5.5	4.7	5.8	6.4	25	12	24	13	14	31
7	15	6.8	5.7	5.4	5.3	5.6	24	13	15	13	14	36
8	8.7	7.1	5.9	5.8	5.5	4.9	14	13	14	13	16	19
9	46	7.6	5.5	5.9	5.6	5.0	13	13	14	13	17	15
10	51	7.6	4.6	6.1	5.8	4.9	12	13	14	13	15	14
11	19	7.4	5.4	5.5	6.5	5.0	13	13	13	12	14	14
12	21	6.8	5.1	5.4	6.3	6.2	12	13	13	12	13	14
13	19	6.0	5.6	6.3	5.9	7.8	12	13	13	12	14	14
14	11	5.8	5.7	6.7	5.8	7.3	12	14	13	12	14	14
15	8.0	6.0	5.5	8.5	5.7	6.4	12	14	13	12	14	14
16	7.3	6.5	4.5	9.5	5.8	6.1	12	14	13	12	14	14
17	6.8	7.2	4.7	8.7	5.7	5.9	12	14	13	13	14	14
18	6.3	6.9	4.8	7.2	5.8	5.2	12	14	13	17	15	14
19	6.3	6.0	5.1	6.7	5.9	5.0	12	13	12	17	34	14
20	6.3	5.7	5.5	6.4	5.5	5.1	13	13	12	14	22	14
21	6.4	5.5	5.6	6.3	5.0	4.8	12	13	17	13	40	14
22	6.3	5.7	5.6	6.4	5.2	4.8	12	13	34	13	66	14
23	6.3	5.5	4.9	6.7	6.0	4.9	11	13	18	13	29	14
24	6.1	4.9	5.1	6.9	8.4	5.5	30	13	14	14	19	15
25	5.8	5.4	5.3	6.6	12	6.1	15	13	13	13	16	15
26	5.2	5.6	5.6	5.7	8.8	6.1	12	13	13	14	15	15
27	5.8	5.6	5.7	5.2	6.6	6.1	12	13	14	16	14	15
28	6.1	5.3	4.7	5.6	6.1	6.0	12	13	19	48	17	17
29	6.3	5.5	4.3	4.3	6.5	5.4	13	13	30	58	20	15
30	6.4	5.3	4.8	4.5	---	4.9	13	12	25	26	16	8.2
31	6.6	---	5.0	5.1	---	4.4	---	12	---	16	15	---
TOTAL	367.7	189.5	163.5	189.0	179.2	179.3	389.7	404	510	511	580	469.2
MEAN	11.9	6.32	5.27	6.10	6.18	5.78	13.0	13.0	17.0	16.5	18.7	15.6
MAX	51	7.6	6.1	9.5	12	7.8	30	14	45	58	66	36
MIN	4.2	4.9	4.3	4.3	5.0	4.4	4.5	12	12	12	13	8.2
AC-FT	729	376	324	375	355	356	773	801	1,010	1,010	1,150	931

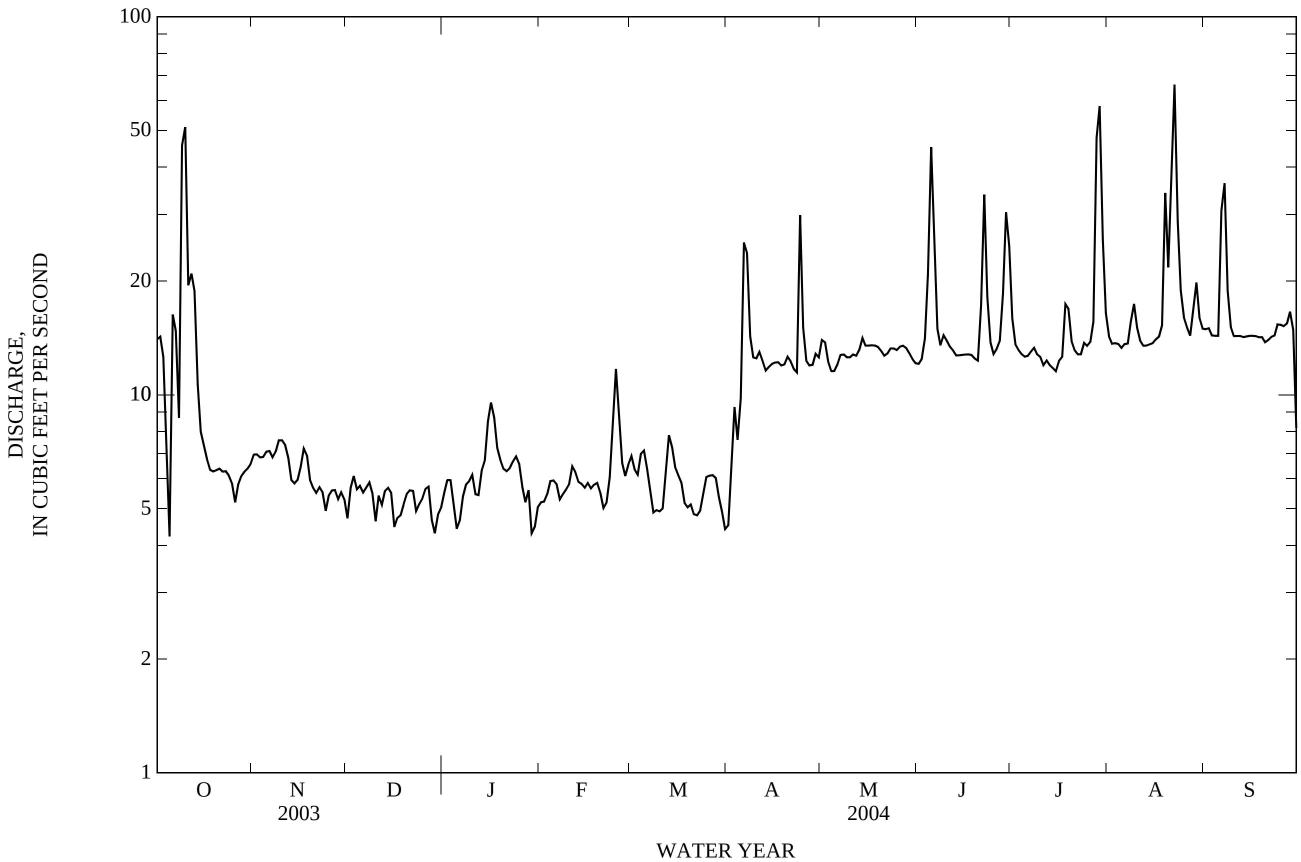
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	204	105	89.3	90.2	92.1	127	125	290	330	104	151	238
MAX	1,475	1,344	562	470	666	732	873	1,440	1,783	623	1,516	2,953
(WY)	(1987)	(1975)	(1975)	(1975)	(1975)	(1987)	(1977)	(1987)	(1996)	(1987)	(1978)	(1980)
MIN	4.42	4.57	2.07	2.09	2.19	2.78	0.41	0.00	0.00	0.00	2.24	0.00
(WY)	(1999)	(1999)	(1999)	(1999)	(1999)	(2000)	(1986)	(1984)	(1984)	(1974)	(1983)	(1983)

08136700 Colorado River near Stacy, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	4,180.8		4,132.1			
ANNUAL MEAN	11.5		11.3		160	
HIGHEST ANNUAL MEAN					719	1987
LOWEST ANNUAL MEAN					11.3	2003
HIGHEST DAILY MEAN	158	Jun 6	66	Aug 22	31,300	Sep 10, 1980
LOWEST DAILY MEAN	3.4	Mar 20	4.2	Oct 5	0.00	Jun 22, 1974
ANNUAL SEVEN-DAY MINIMUM	4.1	Mar 26	5.0	Jan 27	0.00	Jun 22, 1974
MAXIMUM PEAK FLOW			185	Jul 28	45,000	Sep 10, 1980
MAXIMUM PEAK STAGE			a5.21	Jul 28	28.00	Sep 10, 1980
ANNUAL RUNOFF (AC-FT)	8,290		8,200		116,100	
10 PERCENT EXCEEDS	16		16		311	
50 PERCENT EXCEEDS	7.7		12		34	
90 PERCENT EXCEEDS	4.8		5.2		5.6	

a From floodmark.



08138000 Colorado River at Winchell, TX

LOCATION.--Lat 31°28'04", long 99°09'43", Brown County, Hydrologic Unit 12090106, near left bank at downstream end of pier of old abandoned bridge, 300 ft upstream from bridge on U.S. Highway 377, 0.3 mi south of Winchell, 5.9 mi downstream from Home Creek, and at mile 560.7.

DRAINAGE AREA.--25,179 mi^2 of which 11,391 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Nov. 1923 to Sept. 1934 published as "near Milburn", June 1939 to Sept. 1993, and Oct. 1997 to current year. Water-quality records: Chemical data: Nov. 1967 to Sept. 1985, Dec. 1990 to Sept. 1993. Biochemical data: Dec. 1990 to Aug. 1993. Specific conductance: Feb. 1991 to Sept. 1993. Water temperature: Feb. 1991 to Sept. 1993.

REVISED RECORDS.--WDR TX-81-3: Drainage area. WDR TX-88-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is 1,264.86 ft above NGVD of 1929. Nov. 1923 to Sept. 1934, nonrecording gage at site 4.2 mi downstream at datum 10.14 ft lower. Jan. 13, 1939, to Mar. 24, 1940, nonrecording gage at present site and datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since water year 1931, at least 10% of contributing drainage area has been regulated. At times, flow may also be affected by discharge from the flood-detention pools of 89 floodwater-retarding structures. These flood-detention structures control runoff from 512 mi^2 above this station. There are many diversions above station for irrigation, municipal supply, and oil field operation. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, and computes and publishes streamflow record.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--6 years (water years 1925-30) prior to construction of Lake Nasworthy, 798 ft^3/s (578,400 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Highest stages since 1882 were 62.2 ft Sept. 19, 1936, and 56.2 ft Aug. 8, 1906, at railway bridge 1,000 ft upstream and converted to present site and datum, from information by Gulf, Colorado, and Santa Fe Railway Co.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1925-1930: Maximum discharge, 42,300 ft^3/s, June 15, 1930, gage height, 38.3 ft, at site 4.2 mi downstream at datum 10.14 ft lower; no flow, Aug. 8-10, Sept. 1-5, 1929.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	12	5.8	5.0	5.7	35	17	37	8.2	143	54	51
2	28	11	5.8	5.0	5.6	32	316	36	7.7	81	33	47
3	25	11	6.3	5.2	5.4	30	648	48	6.6	51	22	42
4	23	11	6.7	5.3	5.2	32	343	41	7.1	35	16	39
5	23	11	7.5	4.7	5.2	38	208	31	11	25	13	37
6	33	10	7.6	4.6	5.2	37	1,190	25	13	19	12	36
7	36	9.7	7.6	4.6	5.3	35	703	22	17	16	11	36
8	55	9.9	7.6	4.7	5.7	32	305	19	29	14	11	35
9	1,460	10	6.7	4.7	5.7	30	178	17	34	12	18	35
10	2,700	10	5.8	4.6	5.8	27	119	16	23	11	34	43
11	1,030	10	5.8	4.7	6.0	25	98	15	17	10	27	38
12	964	10	6.1	4.8	6.7	25	81	14	14	9.6	21	34
13	479	9.7	5.7	4.8	6.4	32	66	15	11	8.9	15	30
14	233	8.8	5.3	4.7	6.9	32	56	32	9.7	8.1	13	29
15	132	8.3	5.5	7.0	6.8	32	49	74	8.8	6.9	11	27
16	85	8.4	5.5	8.4	6.7	36	43	72	7.9	6.5	11	26
17	59	8.3	4.8	10	6.8	32	39	62	7.2	6.4	9.9	26
18	46	8.2	4.8	11	6.4	30	34	42	6.6	7.4	10	25
19	38	7.1	4.6	12	6.5	27	30	31	5.9	8.9	411	24
20	32	7.0	4.6	13	6.2	25	27	24	5.3	10	2,010	24
21	28	7.0	4.6	13	5.7	31	24	18	e31	9.9	5,540	24
22	24	6.9	4.8	11	5.6	31	22	15	e1,000	9.9	6,380	23
23	22	6.9	5.2	9.1	6.2	25	21	12	730	11	1,370	23
24	20	6.5	5.0	8.2	72	23	149	11	289	11	598	36
25	18	6.3	5.0	6.8	93	23	421	9.7	154	10	305	40
26	16	6.3	5.0	6.0	61	23	288	8.9	84	10	178	29
27	15	6.0	4.9	5.8	46	23	136	8.7	53	11	115	29
28	14	5.7	5.0	5.8	39	22	81	8.3	116	15	92	30
29	13	5.8	4.8	5.8	38	21	55	8.3	159	29	92	30
30	12	5.8	5.0	5.7	---	19	40	8.1	212	118	64	30
31	12	---	5.0	5.7	---	18	---	7.8	---	100	54	---
TOTAL	7,709	254.6	174.4	211.7	486.7	883	5,787	788.8	3,078.0	824.5	17,550.9	978
MEAN	249	8.49	5.63	6.83	16.8	28.5	193	25.4	103	26.6	566	32.6
MAX	2,700	12	7.6	13	93	38	1,190	74	1,000	143	6,380	51
MIN	12	5.7	4.6	4.6	5.2	18	17	7.8	5.3	6.4	9.9	23
AC-FT	15,290	505	346	420	965	1,750	11,480	1,560	6,110	1,640	34,810	1,940

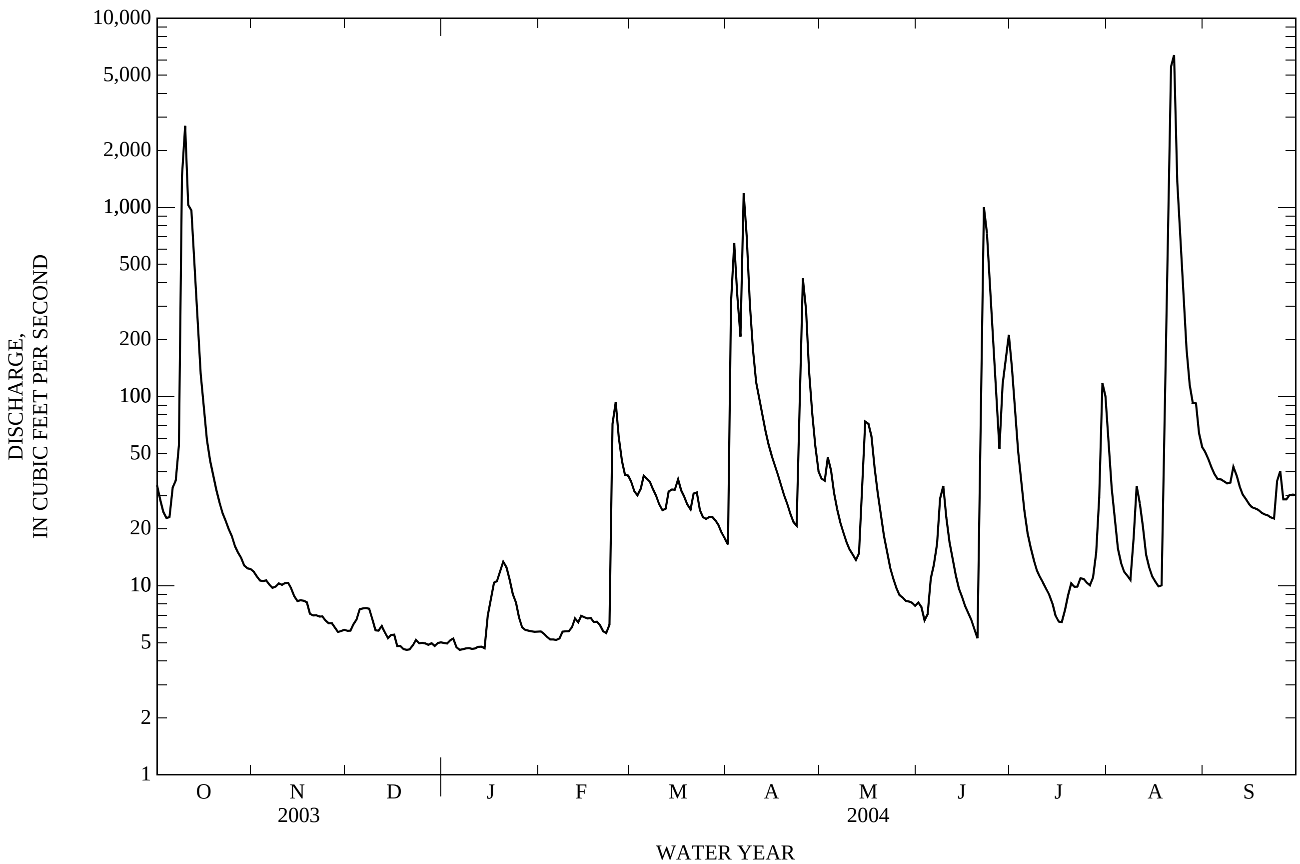
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004hz, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	672	151	149	140	165	185	457	1,214	721	403	259	521
MAX	9,878	1,515	1,907	1,718	2,453	1,069	4,576	13,910	5,313	4,746	2,227	6,020
(WY)	(1931)	(1975)	(1992)	(1968)	(1992)	(1987)	(1949)	(1957)	(1941)	(1945)	(1942)	(1932)
MIN	0.07	1.09	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.00
(WY)	(1964)	(1952)	(1952)	(1952)	(1952)	(1952)	(1959)	(1984)	(1984)	(1974)	(1952)	(1954)

08138000 Colorado River at Winchell, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004hz	
ANNUAL TOTAL	24,095.06		38,726.6			
ANNUAL MEAN	66.0		106		417	
HIGHEST ANNUAL MEAN					2,070	1957
LOWEST ANNUAL MEAN					19.6	1999
HIGHEST DAILY MEAN	2,770	Jun 6	6,380	Aug 22	67,000	Oct 14, 1930
LOWEST DAILY MEAN	0.33	Aug 14	4.6	Dec 19	0.00	Aug 15, 1934
ANNUAL SEVEN-DAY MINIMUM	0.84	Apr 8	4.7	Jan 5	0.00	Aug 15, 1934
MAXIMUM PEAK FLOW			13,100	Aug 21	76,100	Oct 15, 1930
MAXIMUM PEAK STAGE			19.93	Aug 21	aa51.80	Oct 15, 1930
ANNUAL RUNOFF (AC-FT)	47,790		76,810		302,400	
10 PERCENT EXCEEDS	53		117		620	
50 PERCENT EXCEEDS	8.3		16		53	
90 PERCENT EXCEEDS	3.9		5.5		2.7	

h See PERIOD OF RECORD paragraph.
z Period of regulated streamflow.
aa From floodmark at present site and datum.
e Estimated



08140770 Lake Coleman near Novice, TX

LOCATION.--Lat 32°01'48", long 99°27'54", Coleman County, Hydrologic Unit 12090108, 800 ft left of service outlet structure on upstream edge of Coleman Dam on Jim Ned Creek, 2.0 mi upstream from Salt Branch, 2.5 mi west of U.S. Hwy 283, 3.0 mi south of Coleman and Callahan County line, 10.0 mi northeast of Novice, and 14.0 mi north of Coleman.

DRAINAGE AREA.--292 mi^2.

PERIOD OF RECORD.--Feb. 1999 to Sept. 2002 (contents), Oct. 2002 to current year.

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

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 3,200 ft long. Impoundment began Apr. 1966 and dam was completed in May 1966. The top of the dam was raised 2.0 ft in 1975. The dam and reservoir are owned and operated by the city of Coleman. The uncontrolled emergency spillway is 1,500 ft long across natural earth. The uncontrolled morning glory service spillway is 28 ft wide at the crest. A service outlet is provided for small releases through a 24-inch conduit. Water may be pumped from reservoir for municipal and industrial use. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,742.0
Crest of emergency spillway	1,726.0
Crest of service spillway	1,717.5
Lowest gated outlet (invert)	1,662.5

COOPERATION.--Records of diversions may be obtained from the city of Coleman.

EXTREMES FOR PERIOD OF RECORD.--Feb. 1999 to Sept. 2002: Maximum contents, 53,740 acre-ft, July 7, 2002; minimum contents, 12,750 acre-ft, May 2, 3, 2002; Feb. 1999 to current year: Maximum elevation, 1,724.10 ft, July 7, 2002; minimum elevation, 1,698.57 ft, May 2, 3, 2002.

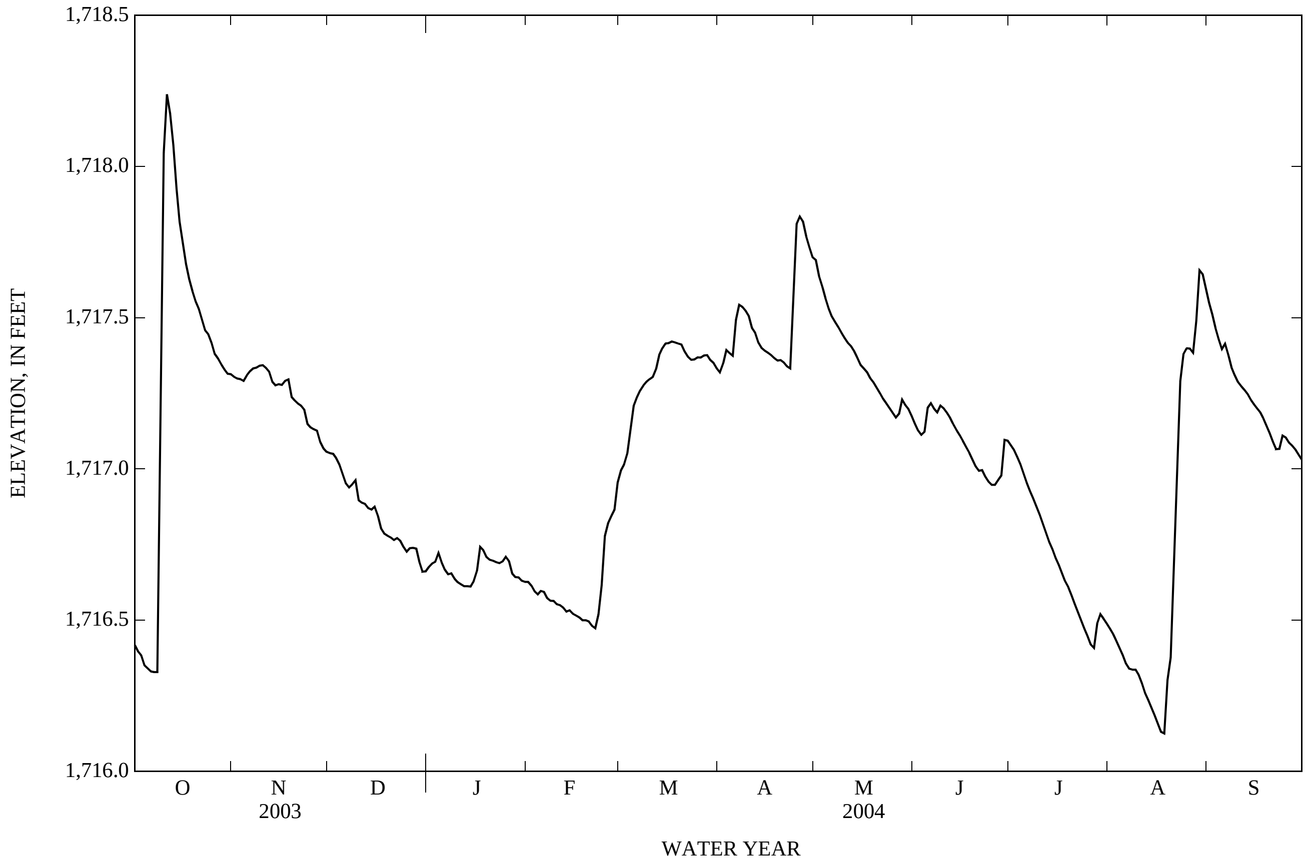
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,718.27 ft, Oct. 11; minimum elevation, 1,716.10 ft, Aug. 18.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,716.42	1,717.31	1,717.05	1,716.68	1,716.63	1,716.99	1,717.32	1,717.69	1,717.15	1,717.08	1,716.47	1,717.55
2	1,716.40	1,717.30	1,717.05	1,716.69	1,716.61	1,717.01	1,717.35	1,717.64	1,717.13	1,717.06	1,716.45	1,717.51
3	1,716.38	1,717.30	1,717.04	1,716.69	1,716.60	1,717.05	1,717.39	1,717.60	1,717.11	1,717.04	1,716.43	1,717.47
4	1,716.35	1,717.29	1,717.01	1,716.72	1,716.59	1,717.12	1,717.38	1,717.57	1,717.12	1,717.02	1,716.41	1,717.43
5	1,716.34	1,717.31	1,716.98	1,716.69	1,716.60	1,717.21	1,717.37	1,717.53	1,717.20	1,716.98	1,716.38	1,717.40
6	1,716.33	1,717.32	1,716.95	1,716.67	1,716.59	1,717.24	1,717.49	1,717.50	1,717.22	1,716.95	1,716.36	1,717.41
7	1,716.33	1,717.33	1,716.94	1,716.65	1,716.57	1,717.26	1,717.54	1,717.49	1,717.20	1,716.93	1,716.34	1,717.38
8	1,716.33	1,717.34	1,716.95	1,716.65	1,716.56	1,717.28	1,717.54	1,717.47	1,717.19	1,716.90	1,716.34	1,717.34
9	1,717.20	1,717.34	1,716.96	1,716.64	1,716.56	1,717.29	1,717.52	1,717.45	1,717.21	1,716.88	1,716.34	1,717.31
10	1,718.05	1,717.34	1,716.90	1,716.62	1,716.55	1,717.30	1,717.51	1,717.43	1,717.20	1,716.85	1,716.32	1,717.29
11	1,718.24	1,717.33	1,716.89	1,716.62	1,716.55	1,717.30	1,717.47	1,717.42	1,717.19	1,716.82	1,716.29	1,717.27
12	1,718.17	1,717.32	1,716.88	1,716.61	1,716.54	1,717.33	1,717.45	1,717.41	1,717.17	1,716.79	1,716.26	1,717.26
13	1,718.07	1,717.29	1,716.87	1,716.61	1,716.53	1,717.38	1,717.42	1,717.39	1,717.15	1,716.76	1,716.24	1,717.25
14	1,717.93	1,717.28	1,716.86	1,716.61	1,716.53	1,717.40	1,717.40	1,717.37	1,717.13	1,716.73	1,716.21	1,717.23
15	1,717.82	1,717.28	1,716.88	1,716.63	1,716.52	1,717.41	1,717.39	1,717.34	1,717.11	1,716.71	1,716.18	1,717.21
16	1,717.75	1,717.28	1,716.85	1,716.66	1,716.52	1,717.42	1,717.38	1,717.33	1,717.09	1,716.68	1,716.16	1,717.20
17	1,717.68	1,717.29	1,716.80	1,716.74	1,716.51	1,717.42	1,717.38	1,717.32	1,717.07	1,716.65	1,716.13	1,717.19
18	1,717.63	1,717.30	1,716.79	1,716.73	1,716.50	1,717.42	1,717.37	1,717.30	1,717.05	1,716.63	1,716.12	1,717.17
19	1,717.59	1,717.24	1,716.78	1,716.71	1,716.50	1,717.41	1,717.36	1,717.29	1,717.03	1,716.61	1,716.30	1,717.14
20	1,717.56	1,717.23	1,716.77	1,716.70	1,716.49	1,717.41	1,717.36	1,717.27	1,717.01	1,716.58	1,716.38	1,717.12
21	1,717.53	1,717.22	1,716.77	1,716.70	1,716.48	1,717.39	1,717.35	1,717.25	1,716.99	1,716.55	1,716.79	1,717.09
22	1,717.49	1,717.21	1,716.77	1,716.69	1,716.47	1,717.37	1,717.34	1,717.23	1,717.00	1,716.53	1,717.08	1,717.07
23	1,717.46	1,717.20	1,716.76	1,716.69	1,716.52	1,717.36	1,717.33	1,717.22	1,716.97	1,716.50	1,717.29	1,717.07
24	1,717.44	1,717.15	1,716.74	1,716.69	1,716.61	1,717.36	1,717.58	1,717.20	1,716.96	1,716.47	1,717.38	1,717.11
25	1,717.42	1,717.14	1,716.73	1,716.71	1,716.78	1,717.37	1,717.81	1,717.18	1,716.95	1,716.45	1,717.40	1,717.10
26	1,717.38	1,717.13	1,716.74	1,716.69	1,716.82	1,717.37	1,717.83	1,717.17	1,716.95	1,716.42	1,717.40	1,717.09
27	1,717.37	1,717.13	1,716.74	1,716.65	1,716.84	1,717.38	1,717.82	1,717.18	1,716.96	1,716.41	1,717.38	1,717.08
28	1,717.35	1,717.09	1,716.73	1,716.64	1,716.86	1,717.38	1,717.77	1,717.23	1,716.98	1,716.49	1,717.49	1,717.06
29	1,717.33	1,717.07	1,716.69	1,716.64	1,716.95	1,717.36	1,717.73	1,717.21	1,717.10	1,716.52	1,717.66	1,717.05
30	1,717.32	1,717.06	1,716.66	1,716.63	---	1,717.35	1,717.70	1,717.20	1,717.09	1,716.50	1,717.64	1,717.03
31	1,717.31	---	1,716.66	1,716.63	---	1,717.33	---	1,717.17	---	1,716.49	1,717.60	---
MEAN	1,717.29	1,717.25	1,716.85	1,716.67	1,716.60	1,717.31	1,717.49	1,717.36	1,717.09	1,716.71	1,716.68	1,717.23
MAX	1,718.24	1,717.34	1,717.05	1,716.74	1,716.95	1,717.42	1,717.83	1,717.69	1,717.22	1,717.08	1,717.66	1,717.55
MIN	1,716.33	1,717.06	1,716.66	1,716.61	1,716.47	1,716.99	1,717.32	1,717.17	1,716.95	1,716.41	1,716.12	1,717.03

CAL YR 2003 MEAN 1,716.83 MAX 1,718.24 MIN 1,716.08
WTR YR 2004 MEAN 1,717.04 MAX 1,718.24 MIN 1,716.12

08140770 Lake Coleman near Novice, TX—Continued



08141000 Hords Creek Lake near Valera, TX

LOCATION.--Lat 31°49'58", long 99°33'38", Coleman County, Hydrologic Unit 12090108, at outlet-works structure near right end of dam on Hords Creek, 5.6 mi north of Valera, and 8.8 mi west of Coleman.

DRAINAGE AREA.--48.0 mi^2.

PERIOD OF RECORD.--Apr. 1948 to Sept. 2000 (U.S. Army Corps of Engineers furnished contents), Oct. 2000 to Sept. 2002 (contents), Oct. 2002 to current year. Prior to Oct. 1970, published as "Hords Creek Reservoir". Water-quality records: Chemical data: Oct. 1969 to Aug. 1982.

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

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 6,800 ft long, including spillway. Deliberate impoundment of water began Apr. 7, 1948, and the dam was completed in June 1948. The spillway is an excavated channel through natural ground, 500 ft wide, located about 600 ft from the right end of dam. The spillway consists of three concrete conduits; two controlled by 5.0- by 6.0-foot slide gates, and a third uncontrolled ogee spillway 4.0 ft wide and 19.5 ft high. The dam is owned by the U.S. Army Corps of Engineers. The lake is operated for flood control and municipal water supply for the city of Coleman. The capacity table of Aug. 1974 based on a sedimentation survey was made in 1948. Flow is affected at times by discharge from the flood-detention pool of one floodwater-retarding structure with a detention capacity of 1,370 acre-ft. This structure controls runoff from 6.82 mi^2 in the Jim Ned Creek drainage basin. Conservation pool storage is 8,112 acre-ft. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,939.0
Design flood	1,933.6
Crest of spillway	1,920.0
Crest of spillway (top of conservation pool)	1,900.0
Lowest gated outlet (invert)	1,856.0

COOPERATION.--Records of diversions may be obtained from the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Apr. 1948 to Sept. 2002: Maximum contents, 12,790 acre-ft, May 1, 1956; minimum contents since first appreciable storage in June 1951, 1,550 acre-ft, Sept. 2, 1984; Apr. 1948 to current year: Maximum elevation, 1907.31 ft, Mar. 4, 1992; minimum elevation, 1,878.01 ft, Sept. 2, 1984.

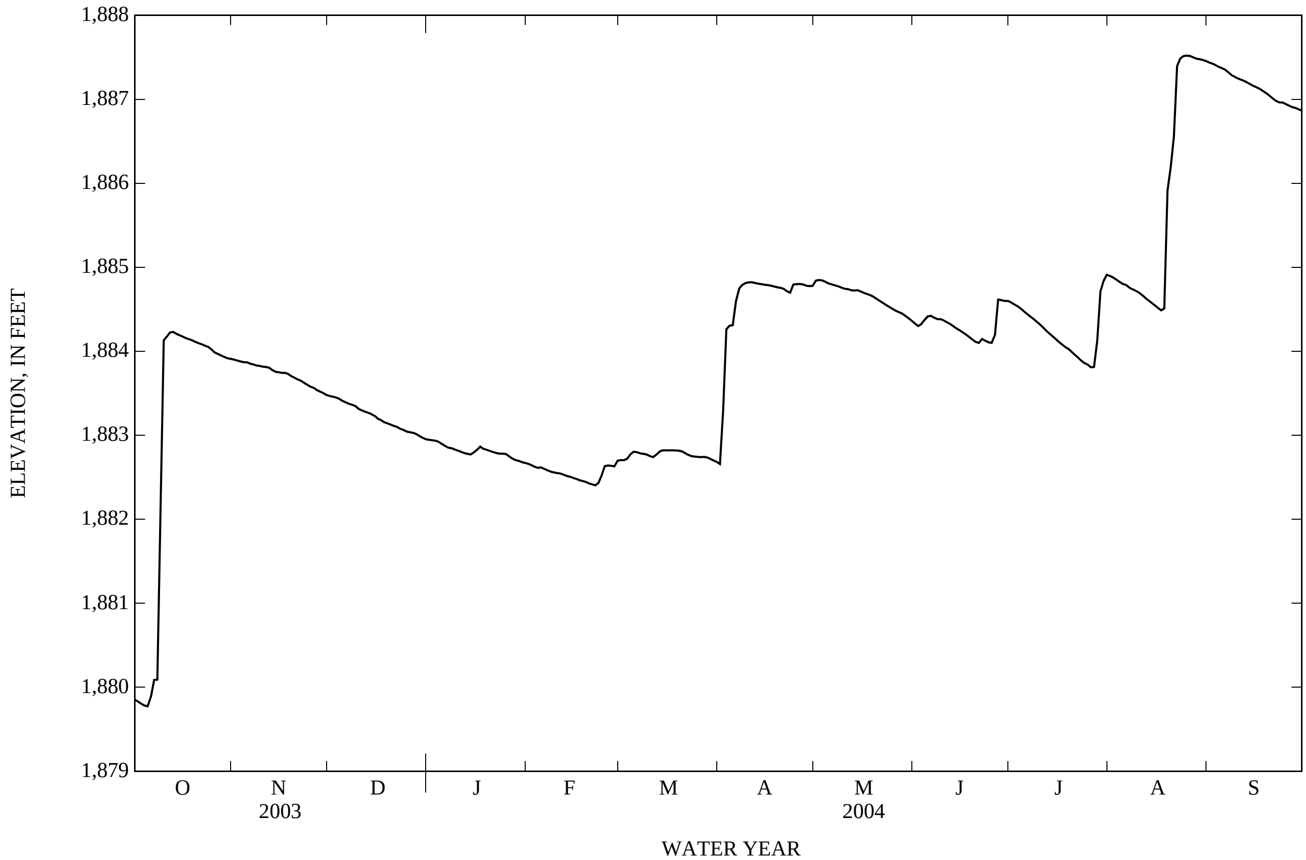
EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,887.53 ft, Aug. 25; minimum elevation, 1,879.76 ft, Oct. 5, 6.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,879.85	1,883.90	1,883.47	1,882.95	1,882.66	1,882.71	1,882.66	1,884.84	1,884.33	1,884.58	1,884.90	1,887.44
2	1,879.83	1,883.89	1,883.46	1,882.94	1,882.64	1,882.70	1,883.30	1,884.85	1,884.30	1,884.56	1,884.88	1,887.43
3	1,879.80	1,883.88	1,883.45	1,882.93	1,882.62	1,882.72	1,884.26	1,884.84	1,884.32	1,884.54	1,884.85	1,887.41
4	1,879.78	1,883.87	1,883.43	1,882.92	1,882.61	1,882.77	1,884.30	1,884.83	1,884.37	1,884.51	1,884.83	1,887.39
5	1,879.77	1,883.87	1,883.41	1,882.90	1,882.62	1,882.80	1,884.31	1,884.81	1,884.41	1,884.48	1,884.80	1,887.37
6	1,879.89	1,883.85	1,883.39	1,882.87	1,882.60	1,882.80	1,884.60	1,884.80	1,884.42	1,884.45	1,884.79	1,887.35
7	1,880.09	1,883.84	1,883.37	1,882.85	1,882.58	1,882.79	1,884.74	1,884.78	1,884.40	1,884.42	1,884.76	1,887.32
8	1,880.09	1,883.83	1,883.36	1,882.85	1,882.57	1,882.78	1,884.79	1,884.77	1,884.38	1,884.39	1,884.74	1,887.29
9	1,882.62	1,883.83	1,883.35	1,882.83	1,882.56	1,882.77	1,884.81	1,884.76	1,884.38	1,884.36	1,884.72	1,887.27
10	1,884.13	1,883.82	1,883.31	1,882.82	1,882.55	1,882.75	1,884.82	1,884.74	1,884.37	1,884.32	1,884.70	1,887.25
11	1,884.17	1,883.81	1,883.30	1,882.80	1,882.55	1,882.74	1,884.82	1,884.74	1,884.35	1,884.29	1,884.67	1,887.23
12	1,884.22	1,883.80	1,883.28	1,882.79	1,882.53	1,882.77	1,884.81	1,884.73	1,884.33	1,884.25	1,884.64	1,887.22
13	1,884.23	1,883.78	1,883.27	1,882.78	1,882.52	1,882.80	1,884.81	1,884.72	1,884.30	1,884.21	1,884.61	1,887.20
14	1,884.21	1,883.76	1,883.25	1,882.77	1,882.51	1,882.82	1,884.80	1,884.73	1,884.27	1,884.18	1,884.58	1,887.18
15	1,884.19	1,883.75	1,883.23	1,882.79	1,882.49	1,882.82	1,884.79	1,884.71	1,884.25	1,884.15	1,884.55	1,887.16
16	1,884.17	1,883.74	1,883.20	1,882.83	1,882.48	1,882.82	1,884.79	1,884.69	1,884.22	1,884.11	1,884.52	1,887.14
17	1,884.16	1,883.74	1,883.18	1,882.87	1,882.47	1,882.82	1,884.78	1,884.68	1,884.20	1,884.08	1,884.49	1,887.12
18	1,884.14	1,883.73	1,883.15	1,882.84	1,882.45	1,882.82	1,884.77	1,884.67	1,884.17	1,884.05	1,884.51	1,887.10
19	1,884.13	1,883.70	1,883.14	1,882.83	1,882.44	1,882.82	1,884.76	1,884.65	1,884.14	1,884.03	1,885.91	1,887.07
20	1,884.11	1,883.68	1,883.13	1,882.81	1,882.43	1,882.81	1,884.76	1,884.62	1,884.11	1,883.99	1,886.19	1,887.04
21	1,884.10	1,883.66	1,883.11	1,882.80	1,882.41	1,882.79	1,884.74	1,884.60	1,884.10	1,883.96	1,886.56	1,887.01
22	1,884.08	1,883.65	1,883.10	1,882.79	1,882.40	1,882.77	1,884.71	1,884.57	1,884.15	1,883.92	1,887.39	1,886.98
23	1,884.07	1,883.62	1,883.08	1,882.78	1,882.43	1,882.75	1,884.70	1,884.55	1,884.12	1,883.89	1,887.48	1,886.96
24	1,884.05	1,883.60	1,883.06	1,882.78	1,882.52	1,882.75	1,884.80	1,884.53	1,884.11	1,883.86	1,887.51	1,886.96
25	1,884.02	1,883.58	1,883.05	1,882.78	1,882.63	1,882.74	1,884.80	1,884.50	1,884.10	1,883.84	1,887.52	1,886.94
26	1,883.98	1,883.56	1,883.04	1,882.75	1,882.64	1,882.74	1,884.80	1,884.48	1,884.19	1,883.81	1,887.52	1,886.92
27	1,883.97	1,883.54	1,883.03	1,882.72	1,882.64	1,882.74	1,884.80	1,884.46	1,884.62	1,883.81	1,887.50	1,886.91
28	1,883.95	1,883.52	1,883.01	1,882.71	1,882.63	1,882.74	1,884.78	1,884.45	1,884.61	1,884.12	1,887.48	1,886.90
29	1,883.93	1,883.50	1,882.99	1,882.69	1,882.70	1,882.72	1,884.78	1,884.42	1,884.60	1,884.71	1,887.48	1,886.88
30	1,883.92	1,883.48	1,882.97	1,882.68	---	1,882.70	1,884.78	1,884.39	1,884.60	1,884.84	1,887.47	1,886.87
31	1,883.91	---	1,882.95	1,882.67	---	1,882.68	---	1,884.36	---	1,884.91	1,887.46	---
MEAN	1,882.95	1,883.73	1,883.21	1,882.81	1,882.55	1,882.77	1,884.61	1,884.65	1,884.31	1,884.25	1,885.74	1,887.14
MAX	1,884.23	1,883.90	1,883.47	1,882.95	1,882.70	1,882.82	1,884.82	1,884.85	1,884.62	1,884.91	1,887.52	1,887.44
MIN	1,879.77	1,883.48	1,882.95	1,882.67	1,882.40	1,882.68	1,882.66	1,884.36	1,884.10	1,883.81	1,884.49	1,886.87

CAL YR 2003 MEAN 1,882.26 MAX 1,884.23 MIN 1,879.77
WTR YR 2004 MEAN 1,884.06 MAX 1,887.52 MIN 1,879.77

08141000 Hords Creek Lake near Valera, TX—Continued



08143000 Lake Brownwood near Brownwood, TX

LOCATION.--Lat 31°50'13", long 99°00'13", Brown County, Hydrologic Unit 12090107, on abandoned service outlet structure near center of dam on Pecan Bayou, 0.2 mi downstream from Jim Ned Creek, 8.0 mi north of Brownwood, and 57.1 mi upstream from mouth.

DRAINAGE AREA.--1,565 mi^2.

PERIOD OF RECORD.--July 1933 to May 1941, Nov. 1944 to Sept. 1986, and Feb. 1999 to Sept. 2002 (contents), Oct. 2002 to current year. Fragmentary records July 1934 to Apr. 1935 and Oct. 1940 to May 1941. Prior to Oct. 1970, published as "Brownwood Reservoir". Water-quality records: Chemical data: Oct. 1970 to Apr. 1984.

REVISED RECORDS.--WSP 1212: 1948-50. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. From July 1933 to May 1941, July 23, 1946 to May 12, 1948, nonrecording gage at irrigation outlet structure near right end of dam, Nov. 21, 1944 to July 22, 1946, water-stage recorder on irrigation outlet structure near right end of dam, May 13, 1948 to June 30, 1949, water-stage recorder in right downstream corner of outlet control tower, July 1, 1949 to Sept. 30, 1986, nonrecording gage at irrigation outlet structure near right end of dam all at datum 0.50 ft higher. Satellite telemeter at station.

REMARKS.--Records good. Interruptions in the record were due to malfunction of the instrument. The lake is formed by a rolled earthfill dam, 1,580 ft long. The dam was completed in 1933 and deliberate impoundment began in July 1933. In Aug. 1983, work was completed to reinforce backside of dam and dam was raised 20 ft. The uncontrolled emergency spillway is a broad-crested weir 479 ft long located 800 ft to left of dam. The controlled service spillway consists of two 48-inch horseshoe-shaped concrete conduits. Water is used for irrigation, municipal, and industrial supply. Flow is affected at times by discharge from the flood-detention pools of 59 floodwater-retarding structures with a combined capacity of 73,310 acre-ft. These structures control runoff from 353 mi^2 in the Jim Ned Creek and Pecan Bayou drainage basins. The dam is owned by Brown County WID No. 1. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,470.0
Crest of spillway	1,424.6
Lowest gated outlet (invert)	1,329.5

COOPERATION.--Records of diversions may be obtained from the Brown County Water Improvement District No. 1.

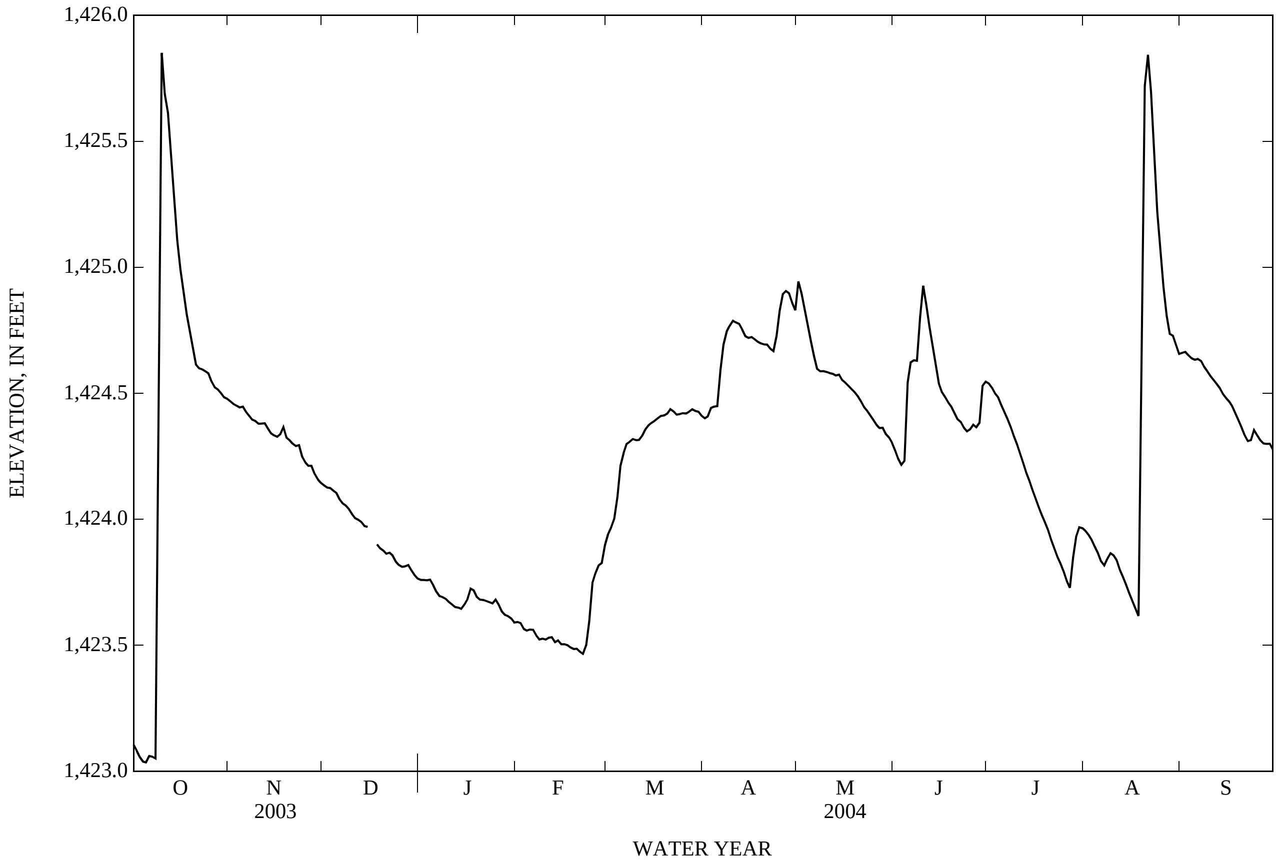
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 198,000 acre-ft, July 7, 2002, elevation, 1,432.12 ft; minimum contents observed, 11,900 acre-ft, July 15, 1934, elevation, 1,389.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,425.90 ft, Oct. 10; minimum elevation, 1,423.02 ft, Oct. 5, 6.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,423.11	1,424.47	1,424.13	1,423.76	1,423.59	1,423.94	1,424.40	1,424.94	1,424.27	1,424.54	1,423.95	1,424.66
2	1,423.08	1,424.46	1,424.13	1,423.76	1,423.59	1,423.97	1,424.41	1,424.90	1,424.24	1,424.52	1,423.94	1,424.66
3	1,423.06	1,424.45	1,424.12	1,423.76	1,423.56	1,424.00	1,424.44	1,424.83	1,424.22	1,424.50	1,423.92	1,424.65
4	1,423.04	1,424.44	1,424.11	1,423.76	1,423.56	1,424.09	1,424.45	1,424.77	1,424.23	1,424.48	1,423.89	1,424.64
5	1,423.04	1,424.45	1,424.10	1,423.74	1,423.56	1,424.21	1,424.45	1,424.71	1,424.54	1,424.45	1,423.87	1,424.63
6	1,423.06	1,424.43	1,424.08	1,423.71	1,423.56	1,424.26	1,424.59	1,424.65	1,424.62	1,424.43	1,423.83	1,424.64
7	1,423.06	1,424.41	1,424.06	1,423.69	1,423.54	1,424.30	1,424.69	1,424.60	1,424.63	1,424.40	1,423.82	1,424.63
8	1,423.05	1,424.39	1,424.05	1,423.69	1,423.52	1,424.31	1,424.74	1,424.59	1,424.63	1,424.37	1,423.84	1,424.61
9	1,424.38	1,424.39	1,424.04	1,423.68	1,423.53	1,424.32	1,424.77	1,424.59	1,424.80	1,424.33	1,423.87	1,424.59
10	1,425.85	1,424.38	1,424.02	1,423.67	1,423.52	1,424.31	1,424.79	1,424.59	1,424.93	1,424.30	1,423.86	1,424.57
11	1,425.69	1,424.38	1,424.00	1,423.66	1,423.53	1,424.32	1,424.78	1,424.58	1,424.85	1,424.26	1,423.84	1,424.55
12	1,425.61	1,424.38	1,424.00	1,423.65	1,423.53	1,424.33	1,424.78	1,424.58	1,424.77	1,424.22	1,423.80	1,424.54
13	1,425.44	1,424.36	1,423.99	1,423.65	1,423.51	1,424.36	1,424.75	1,424.57	1,424.69	1,424.19	1,423.77	1,424.52
14	1,425.27	1,424.34	1,423.97	1,423.64	1,423.52	1,424.37	1,424.73	1,424.57	1,424.61	1,424.15	1,423.74	1,424.50
15	1,425.11	1,424.33	1,423.97	1,423.66	1,423.50	1,424.38	1,424.72	1,424.55	1,424.54	1,424.12	1,423.71	1,424.48
16	1,424.99	1,424.33	---	1,423.68	1,423.50	1,424.39	1,424.72	1,424.54	1,424.51	1,424.08	1,423.68	1,424.47
17	1,424.90	1,424.34	---	1,423.72	1,423.50	1,424.40	1,424.71	1,424.53	1,424.48	1,424.05	1,423.65	1,424.45
18	1,424.81	1,424.37	1,423.90	1,423.72	1,423.49	1,424.41	1,424.70	1,424.52	1,424.46	1,424.02	1,423.62	1,424.42
19	1,424.74	1,424.32	1,423.88	1,423.69	1,423.48	1,424.41	1,424.70	1,424.51	1,424.45	1,423.99	1,424.54	1,424.39
20	1,424.67	1,424.31	1,423.88	1,423.68	1,423.49	1,424.42	1,424.69	1,424.49	1,424.42	1,423.96	1,425.72	1,424.37
21	1,424.61	1,424.30	1,423.86	1,423.68	1,423.47	1,424.44	1,424.69	1,424.47	1,424.40	1,423.92	1,425.84	1,424.33
22	1,424.60	1,424.29	1,423.87	1,423.67	1,423.47	1,424.43	1,424.68	1,424.45	1,424.39	1,423.88	1,425.70	1,424.31
23	1,424.60	1,424.29	1,423.86	1,423.67	1,423.50	1,424.41	1,424.67	1,424.43	1,424.36	1,423.85	1,425.44	1,424.31
24	1,424.59	1,424.25	1,423.83	1,423.67	1,423.60	1,424.42	1,424.73	1,424.41	1,424.35	1,423.82	1,425.22	1,424.35
25	1,424.58	1,424.23	1,423.82	1,423.68	1,423.75	1,424.42	1,424.83	1,424.39	1,424.36	1,423.79	1,425.06	1,424.33
26	1,424.55	1,424.21	1,423.81	1,423.66	1,423.79	1,424.42	1,424.89	1,424.38	1,424.38	1,423.76	1,424.92	1,424.31
27	1,424.52	1,424.21	1,423.81	1,423.63	1,423.82	1,424.43	1,424.91	1,424.36	1,424.37	1,423.73	1,424.81	1,424.30
28	1,424.52	1,424.18	1,423.82	1,423.62	1,423.83	1,424.44	1,424.90	1,424.36	1,424.38	1,423.85	1,424.74	1,424.30
29	1,424.50	1,424.16	1,423.80	1,423.62	1,423.90	1,424.43	1,424.86	1,424.34	1,424.53	1,423.93	1,424.73	1,424.30
30	1,424.48	1,424.14	1,423.78	1,423.61	---	1,424.43	1,424.83	1,424.33	1,424.55	1,423.97	1,424.69	1,424.28
31	1,424.48	---	1,423.77	1,423.59	---	1,424.41	---	1,424.30	---	1,423.96	1,424.66	---
MEAN	1,424.39	1,424.33	---	1,423.68	1,423.58	1,424.33	1,424.70	1,424.54	1,424.50	1,424.12	1,424.34	1,424.47
MAX	1,425.85	1,424.47	---	1,423.76	1,423.90	1,424.44	1,424.91	1,424.94	1,424.93	1,424.54	1,425.84	1,424.66
MIN	1,423.04	1,424.14	---	1,423.59	1,423.47	1,423.94	1,424.40	1,424.30	1,424.22	1,423.73	1,423.62	1,424.28

08143000 Lake Brownwood near Brownwood, TX—Continued



08143600 Pecan Bayou near Mullin, TX

LOCATION.--Lat 31°31'02", long 98°44'25", Mills County, Hydrologic Unit 12090107, on right bank 44 ft downstream from bridge on Farm Road 573, 0.6 mi downstream from Blanket Creek, 5.5 mi southwest of Mullin, and 13.6 mi upstream from mouth.

DRAINAGE AREA.--2,073 mi^2.

PERIOD OF RECORD.--Oct. 1967 to current year. Water-quality records: Chemical data: Oct. 1967 to Aug. 1996. Biochemical data: Nov. 1991 to Aug. 1996. Specific conductance: Oct. 1967 to Sept. 1991. Water temperature: Oct. 1967 to Sept. 1991.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,202.93 ft above NGVD of 1929. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Since installation of gage in water year 1968, at least 10% of contributing drainage area has been regulated. In addition, flow from 152 mi^2 (from an intervening drainage area of 641 mi^2) above this station and below Lake Brownwood is partly controlled by 41 floodwater-retarding structures. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	24	16	14	12	50	20	684	10	134	31	198
2	15	23	16	14	12	53	21	753	9.5	87	17	74
3	14	22	16	14	12	40	29	514	8.3	64	11	51
4	13	22	17	14	12	53	45	401	8.9	47	8.5	38
5	13	20	15	14	12	136	35	334	219	e37	7.9	34
6	14	19	13	14	12	113	220	296	187	e29	5.8	36
7	25	18	14	13	12	64	219	281	84	23	5.1	43
8	27	18	15	13	13	45	112	221	52	18	5.8	42
9	2,660	20	15	13	13	36	81	99	3,990	15	6.8	33
10	6,040	21	14	13	14	30	76	67	2,050	13	5.7	26
11	2,650	21	14	13	14	28	90	54	1,000	13	5.7	22
12	2,000	21	14	13	14	28	105	48	717	12	5.6	20
13	1,500	21	14	13	13	32	89	45	490	10	5.3	17
14	1,030	20	14	13	13	44	84	43	378	9.2	5.3	17
15	784	18	14	16	13	50	67	40	328	8.7	5.3	16
16	631	18	14	17	13	52	54	37	270	8.4	5.5	14
17	507	20	15	24	13	42	47	35	127	7.7	5.8	13
18	419	22	15	28	13	36	42	33	78	6.4	5.7	12
19	349	24	14	24	13	34	39	31	61	6.0	73	11
20	309	22	14	17	11	29	36	26	49	6.2	4,750	11
21	293	20	14	15	10	237	35	25	40	5.6	3,320	11
22	186	20	14	13	10	64	32	24	40	5.1	3,410	10
23	67	20	14	12	14	43	31	21	36	4.9	1,730	10
24	42	20	14	13	138	38	1,180	18	39	5.2	1,060	13
25	35	19	14	14	359	35	847	16	48	4.8	768	15
26	31	17	14	13	165	32	600	16	37	4.4	582	13
27	26	17	15	13	74	31	471	15	31	4.5	445	11
28	25	17	16	12	44	29	478	16	52	4.7	415	11
29	26	16	15	12	40	26	443	15	103	43	444	11
30	24	16	14	12	---	24	408	14	213	159	347	11
31	23	---	14	13	---	22	---	12	---	48	314	---
TOTAL	19,795	596	451	456	1,108	1,576	6,036	4,234	10,755.7	843.8	17,806.8	844
MEAN	639	19.9	14.5	14.7	38.2	50.8	201	137	359	27.2	574	28.1
MAX	6,040	24	17	28	359	237	1,180	753	3,990	159	4,750	198
MIN	13	16	13	12	10	22	20	12	8.3	4.4	5.1	10
AC-FT	39,260	1,180	895	904	2,200	3,130	11,970	8,400	21,330	1,670	35,320	1,670

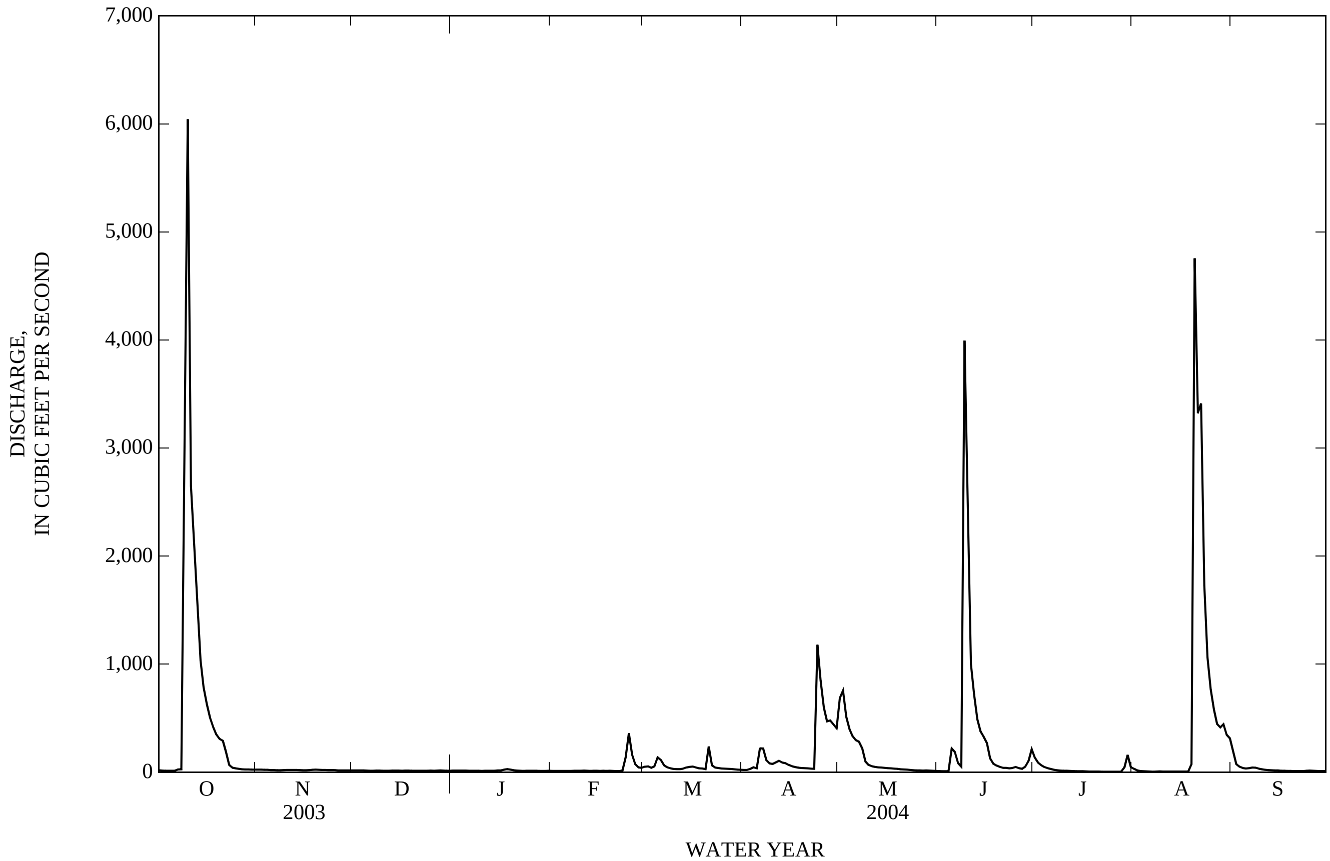
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	156	81.6	170	128	214	222	209	261	346	139	39.7	76.5
MAX	987	1,227	4,741	1,965	4,416	2,361	3,510	1,975	2,898	3,272	574	980
(WY)	(1975)	(1975)	(1992)	(1968)	(1992)	(1992)	(1990)	(1994)	(1997)	(2002)	(2004)	(1991)
MIN	0.59	4.79	3.90	4.57	6.52	5.45	3.63	0.12	0.00	0.00	0.00	0.00
(WY)	(1989)	(1989)	(1984)	(1986)	(2000)	(1996)	(1984)	(1984)	(1984)	(1974)	(1980)	(2000)

08143600 Pecan Bayou near Mullin, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004	
ANNUAL TOTAL	56,169.6		64,502.3			
ANNUAL MEAN	154		176		170	
HIGHEST ANNUAL MEAN					1,245	1992
LOWEST ANNUAL MEAN					9.01	1984
HIGHEST DAILY MEAN	6,040	Oct 10	6,040	Oct 10	37,000	Apr 27, 1990
LOWEST DAILY MEAN	1.3	Aug 10	4.4	Jul 26	0.00	Jun 29, 1974
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 5	4.8	Jul 22	0.00	Jun 29, 1974
MAXIMUM PEAK FLOW			8,100	Oct 10	38,300	Apr 27, 1990
MAXIMUM PEAK STAGE			18.77	Oct 10	42.15	Apr 27, 1990
ANNUAL RUNOFF (AC-FT)	111,400		127,900		123,000	
10 PERCENT EXCEEDS	357		385		254	
50 PERCENT EXCEEDS	15		22		14	
90 PERCENT EXCEEDS	5.7		10		2.9	

e Estimated



08144500 San Saba River at Menard, TX

LOCATION.--Lat 30°55'08", long 99°47'07", Menard County, Hydrologic Unit 12090109, at downstream side of bridge on U.S. Highway 83 in Menard, 1.1 mi downstream from Las Moras Creek, 1.9 mi upstream from Volkmann Draw, and 116.3 mi upstream from mouth.

DRAINAGE AREA.--1,135 mi^2 of which 7 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1915 to Sept. 1993, Oct. 1997 to current year. Water-quality records: Chemical data: Nov. 1964 to July 1967.

REVISED RECORDS.--WDR TX-81-3: Drainage area. WSP 1512: 1918-20, 1922-25, 1926(M), 1927-32, 1934(M), 1936, 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 1,863.05 ft above NGVD of 1929. Sept. 14, 1915, to Mar. 12, 1924, nonrecording gage at site 635 ft downstream at datum 2.20 ft lower. Mar. 13, 1924, to Feb. 21, 1939, nonrecording gage at site 1,000 ft upstream at datum 2.00 ft higher. Feb. 22, 1939, to Jan. 25, 1940, nonrecording gage at present site and datum. Jan. 26, 1940, to Sept. 19, 1957, water-stage recorder at site 240 ft to right at present datum. Feb. 8, 1962, to Jan. 22, 1963, nonrecording gage at site 600 ft downstream at present datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records good except those for May 18 to June 15, which are fair, and estimated daily discharges, which are poor. Since about 1890, low flow regulated during irrigation season by diversions to Noyes Canal at Menard (discontinued station 08144000) 4.6 mi upstream and diversions by pumping at several locations upstream. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages and computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1880, 23.3 ft, June 6, 1899, present site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	17	17	18	18	21	17	38	16	16	9.4	19
2	14	17	17	19	18	18	19	34	15	14	9.7	22
3	13	17	17	20	18	23	20	30	14	13	8.9	22
4	14	16	16	20	18	22	21	27	13	12	7.6	21
5	14	17	15	19	19	18	22	25	13	11	7.0	20
6	16	17	15	18	19	15	26	25	13	11	6.9	21
7	16	17	15	17	18	17	27	25	13	11	7.6	21
8	17	17	17	18	18	16	25	26	12	10	12	19
9	21	17	17	17	18	15	22	26	11	9.8	12	19
10	22	18	16	17	19	12	23	26	11	9.1	10	18
11	22	17	16	18	19	12	27	26	11	8.5	9.2	17
12	30	17	17	18	19	19	26	26	e9.7	7.8	7.3	17
13	29	16	17	18	18	27	23	26	e9.7	7.6	7.4	17
14	23	15	17	19	19	26	21	25	9.8	7.8	7.0	16
15	20	16	17	24	19	22	20	25	9.4	7.4	7.3	16
16	18	17	16	25	19	21	20	25	9.0	7.1	7.0	15
17	17	16	15	26	17	20	19	25	8.3	7.0	7.0	15
18	17	16	15	21	17	20	19	25	7.6	7.2	7.0	13
19	17	16	16	19	17	19	19	24	6.9	7.5	600	11
20	17	15	16	18	18	18	20	24	6.9	7.3	77	11
21	17	15	16	16	17	23	20	22	7.4	7.0	115	11
22	17	16	17	16	18	21	20	22	277	6.6	65	11
23	17	16	18	18	29	20	21	22	41	7.4	35	11
24	16	16	18	18	29	19	21	22	14	8.4	28	11
25	16	16	17	19	26	19	22	21	12	8.2	23	12
26	18	16	18	19	21	18	23	20	13	8.4	20	12
27	20	15	19	17	17	18	22	20	12	9.3	19	13
28	20	16	17	18	18	18	23	20	12	10	21	13
29	16	18	17	18	19	18	26	20	16	15	21	13
30	16	16	17	18	---	17	28	18	16	11	22	14
31	17	---	17	18	---	17	---	17	---	9.9	21	---
TOTAL	562	491	515	584	559	589	662	757	639.7	293.3	1,217.3	471
MEAN	18.1	16.4	16.6	18.8	19.3	19.0	22.1	24.4	21.3	9.46	39.3	15.7
MAX	30	18	19	26	29	27	28	38	277	16	600	22
MIN	13	15	15	16	17	12	17	17	6.9	6.6	6.9	11
AC-FT	1,110	974	1,020	1,160	1,110	1,170	1,310	1,500	1,270	582	2,410	934

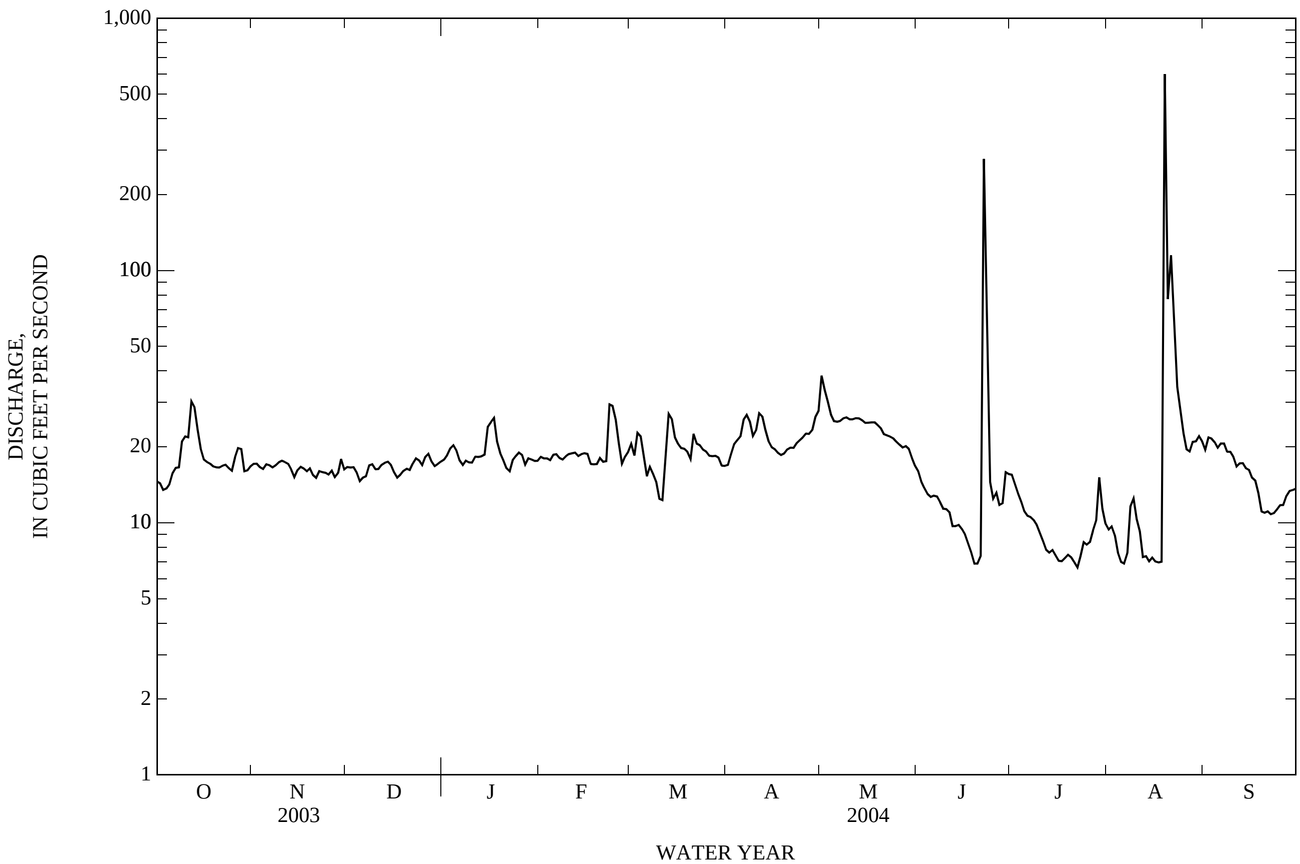
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	88.0	44.9	31.7	31.8	37.8	32.7	66.1	74.6	55.4	98.3	41.4	130
MAX	914	778	152	80.4	261	251	1,206	1,631	667	5,140	869	2,870
(WY)	(1942)	(2001)	(1985)	(1985)	(1958)	(1922)	(1922)	(1957)	(1958)	(1938)	(1974)	(1936)
MIN	0.00	0.00	0.00	0.04	0.82	0.99	0.89	1.22	0.00	0.00	0.00	0.00
(WY)	(1957)	(1957)	(1955)	(1957)	(1955)	(1956)	(1955)	(1964)	(1953)	(1952)	(1952)	(1954)

08144500 San Saba River at Menard, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004h	
ANNUAL TOTAL	9,011.8		7,340.3			
ANNUAL MEAN	24.7		20.1		61.1	
HIGHEST ANNUAL MEAN					485	1938
LOWEST ANNUAL MEAN					6.12	1952
HIGHEST DAILY MEAN	529	May 28	600	Aug 19	53,300	Jul 23, 1938
LOWEST DAILY MEAN	9.3	Aug 10	6.6	Jul 22	0.00	Jul 12, 1918
ANNUAL SEVEN-DAY MINIMUM	9.7	Aug 7	7.1	Jul 16	0.00	Jul 19, 1918
MAXIMUM PEAK FLOW			3,580	Aug 19	i130,000	Jul 23, 1938
MAXIMUM PEAK STAGE			8.51	Aug 19	a22.20	Jul 23, 1938
ANNUAL RUNOFF (AC-FT)	17,870		14,560		44,240	
10 PERCENT EXCEEDS	42		25		58	
50 PERCENT EXCEEDS	18		17		22	
90 PERCENT EXCEEDS	12		9.3		2.3	

h See PERIOD OF RECORD paragraph.
i From slope-area measurement of peak flow.
a From floodmark.
e Estimated



LOCATION.--Lat 31°00'14", long 99°16'07", Mcculloch County, Hydrologic Unit 12090109, on right bank at downstream side of bridge on U.S. Highways 87 and 377, 0.4 mi upstream from Hudson Branch, and 8.4 mi southeast of Brady, and 72.9 mi upstream from mouth.

DRAINAGE AREA.--1,633 mi^2 of which 7 mi^2 probably is noncontributing.

PERIOD OF RECORD.--July 1979 to Sept. 1993, Oct. 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,530.98 ft above NGVD of 1929. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation. Since about 1890, water diverted to Noyes Canal at Menard (discontinued station 08144000) during irrigation season.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, and computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Highest stage since June 1899, 33.8 ft, July 23, 1938, from floodmark on left bank 150 ft upstream from present site.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	33	32	35	32	34	29	56	13	23	1.9	29
2	26	34	38	36	31	35	31	68	12	20	5.9	30
3	24	33	39	36	31	36	60	56	10	19	8.3	29
4	23	34	39	36	27	39	38	51	9.2	16	7.3	27
5	23	34	39	34	25	39	35	43	8.3	13	6.5	27
6	30	33	39	34	26	40	71	38	6.7	11	5.5	51
7	28	34	39	32	30	36	73	37	5.1	9.6	5.6	45
8	26	35	38	32	32	31	53	35	5.0	8.5	11	32
9	37	37	38	32	32	26	51	32	8.6	7.6	22	29
10	40	37	37	32	32	23	58	31	9.3	6.5	14	27
11	46	38	40	30	33	22	74	30	10	5.6	16	26
12	76	38	38	31	33	28	63	31	8.7	4.8	14	24
13	68	37	38	31	33	51	54	55	8.4	4.9	13	21
14	55	37	39	32	33	51	52	1,220	7.8	4.9	12	20
15	52	36	38	43	33	52	47	86	6.7	4.3	13	18
16	46	36	39	44	33	50	42	45	6.8	3.6	12	18
17	41	38	38	50	32	45	37	34	5.8	3.1	12	17
18	36	39	37	46	31	41	33	27	5.3	3.1	11	17
19	34	39	36	41	31	39	33	23	4.7	3.1	12	16
20	34	35	35	40	31	37	33	22	4.1	2.9	e554	14
21	33	35	35	36	28	35	31	22	4.3	2.7	370	13
22	31	36	36	34	29	36	31	21	10	2.2	163	12
23	30	35	38	34	30	38	31	21	120	1.8	112	11
24	28	34	37	35	41	40	31	19	66	1.5	e67	12
25	28	34	38	33	46	38	73	19	48	1.2	e55	12
26	27	32	39	33	49	37	55	19	36	1.1	e45	12
27	28	33	34	32	46	34	39	18	24	1.0	e40	13
28	28	34	36	31	40	34	36	18	20	1.1	e35	14
29	29	34	37	31	38	32	36	17	24	1.4	e34	14
30	31	31	36	31	---	31	31	15	28	1.6	30	14
31	33	---	34	32	---	30	---	14	---	2.2	30	---
TOTAL	1,099	1,055	1,156	1,089	968	1,140	1,361	2,223	535.8	192.3	1,738.0	644
MEAN	35.5	35.2	37.3	35.1	33.4	36.8	45.4	71.7	17.9	6.20	56.1	21.5
MAX	76	39	40	50	49	52	74	1,220	120	23	554	51
MIN	23	31	32	30	25	22	29	14	4.1	1.0	1.9	11
AC-FT	2,180	2,090	2,290	2,160	1,920	2,260	2,700	4,410	1,060	381	3,450	1,280

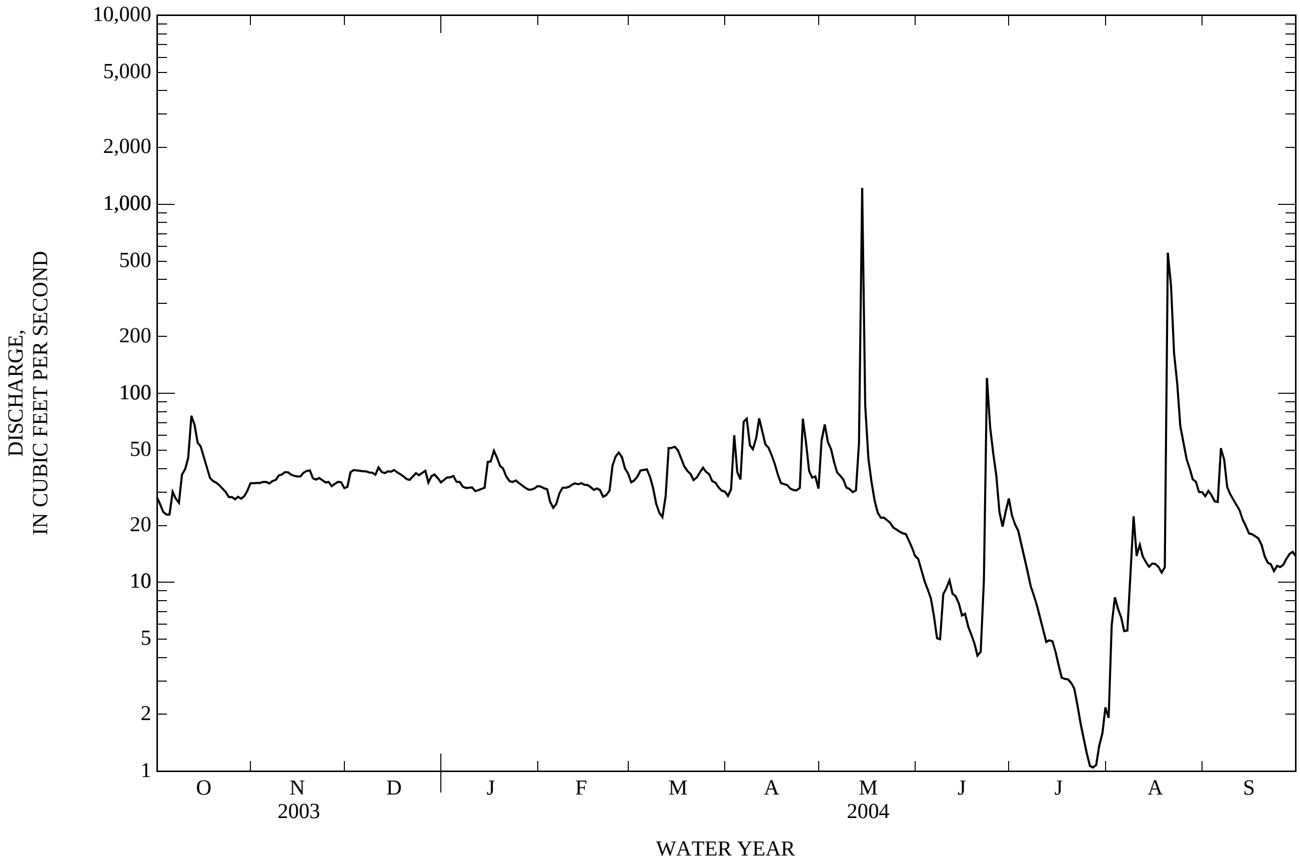
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	59.0	108	77.1	61.2	67.4	58.4	47.9	58.1	81.0	64.7	45.9	160
MAX	204	1,397	516	282	400	160	144	167	511	901	543	1,631
(WY)	(2003)	(2001)	(1985)	(1985)	(1992)	(1992)	(1992)	(1987)	(1987)	(1990)	(1990)	(1980)
MIN	3.35	16.5	22.6	24.0	23.3	18.3	16.3	6.35	0.75	0.49	0.13	0.07
(WY)	(2000)	(2000)	(1986)	(2000)	(2000)	(2000)	(1986)	(1984)	(1984)	(1998)	(2000)	(1984)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004h	
ANNUAL TOTAL	12,578.56		13,201.1			
ANNUAL MEAN	34.5		36.1		74.2	
HIGHEST ANNUAL MEAN					256	1990
LOWEST ANNUAL MEAN					15.4	2000
HIGHEST DAILY MEAN	269	May 29	1,220	May 14	23,900	Sep 8, 1980
LOWEST DAILY MEAN	0.05	Aug 8	1.0	Jul 27	0.00	Sep 26, 1999
ANNUAL SEVEN-DAY MINIMUM	0.06	Aug 6	1.3	Jul 24	0.00	Sep 26, 1999
MAXIMUM PEAK FLOW			2,940	May 14	66,000	Sep 8, 1980
MAXIMUM PEAK STAGE			6.64	May 14	25.50	Sep 8, 1980
ANNUAL RUNOFF (AC-FT)	24,950		26,180		53,730	
10 PERCENT EXCEEDS	56		50		87	
50 PERCENT EXCEEDS	34		32		36	
90 PERCENT EXCEEDS	1.8		6.8		3.9	

h See PERIOD OF RECORD paragraph.
e Estimated

08144600 San Saba River near Brady, TX—Continued



08144900 Brady Creek Reservoir near Brady, TX

LOCATION.--Lat 31°08'17", long 99°23'07", Mcculloch County, Hydrologic Unit 12090110, at mouth of Bear Creek on Brady Creek, on upstream side and near center of Brady Creek Dam, 10 ft upstream from Farm Road 3022 over Brady Creek Dam, 3.0 mi west of Brady, and 34.1 mi upstream from mouth.

DRAINAGE AREA.--523 mi^2.

PERIOD OF RECORD.--May 1963 to Sept. 1983, Jan. 1999 to Sept. 2002 (contents), Oct. 2002 to current year. Water-quality records: Chemical data: Sept. 1964 to Apr. 1983.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to May 5, 2004 water-stage recorder at site 250 ft upstream at same datum. Satellite telemeter at station.

REMARKS.--Records fair. Interruptions in the record were due to malfunction of the instrument. The reservoir is formed by a compacted earthfill dam 8,400 ft long. The dam was completed and storage began in May 1963. The dam was built by the city of Brady in cooperation with the Natural Resources Conservation Service and the Farmers Home Administration for flood control, municipal, and industrial water supply. The spillway is a cut channel through natural ground 1,000 ft wide located at right end of dam. The service spillway is an uncontrolled concrete drop-inlet structure that discharges through a 7.0 by 7.0-foot concrete box conduit and is designed to discharge 4,000 ft^3/s at a 19.4-ft head. The gated outlet is a 36-inch pipe that extends through the embankment and is equipped with three sluice gates for controlled releases downstream. Flow into reservoir is affected at times by discharge from the flood-detention pools of 35 floodwater-retarding structures with a combined detention capacity of 77,950 acre-ft. These structures were built during the period Feb. 1955 to July 1962 and control runoff from 263 mi^2 in the Brady Creek watershed above this station. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	1,783.0
Crest of emergency spillway	1,762.4
Crest of service spillway	1,743.0
Lowest gated outlet (invert)	1,712.0

COOPERATION.--Records of diversions may be obtained from the city of Brady.

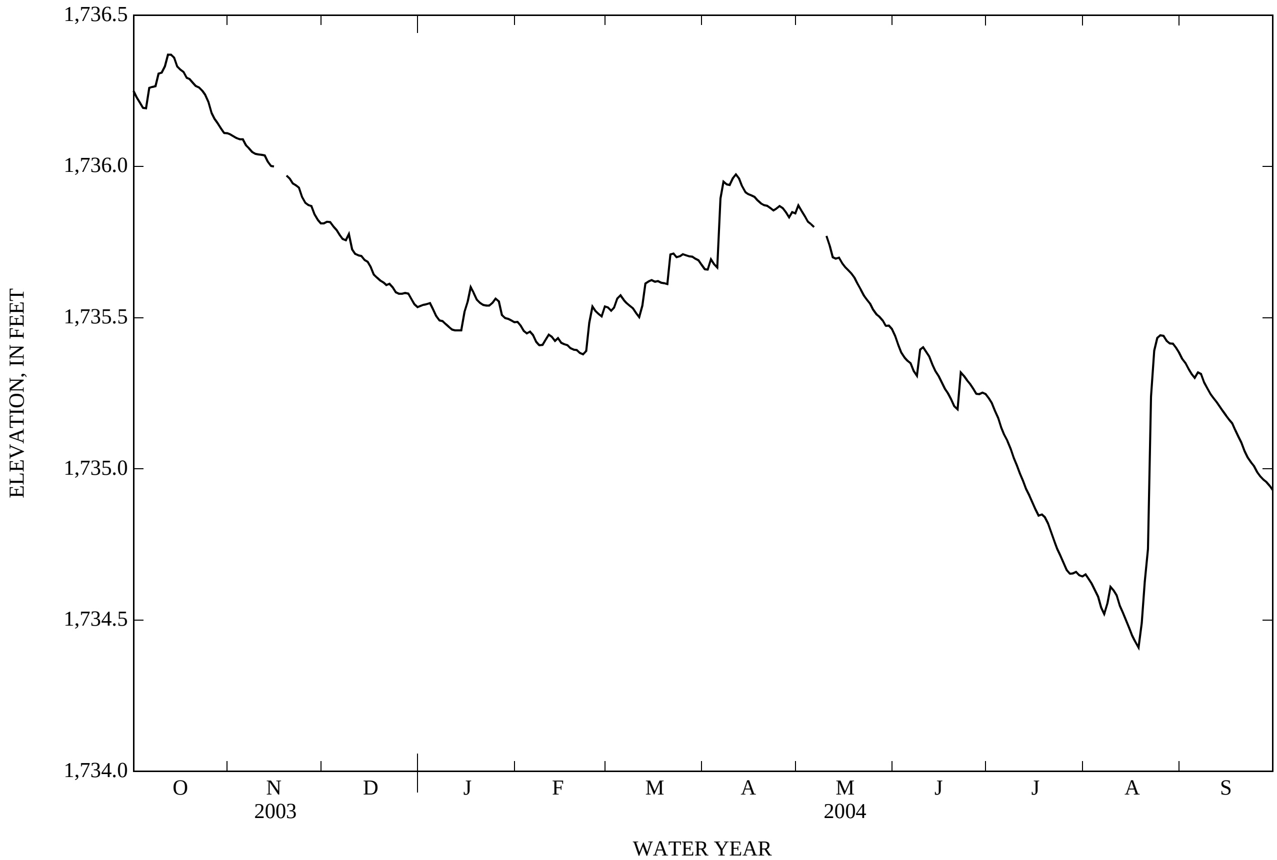
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 40,880 acre-ft, Sept. 24, 1971, elevation, 1,747.70 ft; minimum contents, 1,030 acre-ft, Sept. 18, 1964, elevation, 1,710.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1,736.38 ft, Oct. 14; minimum elevation, 1,734.39 ft, Aug. 18.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,736.25	1,736.11	1,735.81	1,735.54	1,735.49	1,735.53	1,735.66	1,735.87	1,735.44	1,735.23	1,734.65	1,735.36
2	1,736.23	1,736.10	1,735.82	1,735.54	1,735.47	1,735.52	1,735.66	1,735.85	1,735.41	1,735.22	1,734.64	1,735.35
3	1,736.21	1,736.09	1,735.82	1,735.55	1,735.46	1,735.53	1,735.69	1,735.84	1,735.38	1,735.19	1,734.62	1,735.33
4	1,736.19	1,736.09	1,735.80	1,735.55	1,735.45	1,735.56	1,735.68	1,735.82	1,735.37	1,735.17	1,734.60	1,735.31
5	1,736.19	1,736.09	1,735.79	1,735.53	1,735.45	1,735.57	1,735.67	1,735.81	1,735.36	1,735.14	1,734.58	1,735.30
6	1,736.26	1,736.07	1,735.77	1,735.51	1,735.44	1,735.56	1,735.89	1,735.80	1,735.35	1,735.11	1,734.54	1,735.32
7	1,736.26	1,736.06	1,735.76	1,735.49	1,735.42	1,735.55	1,735.95	---	1,735.32	1,735.09	1,734.52	1,735.31
8	1,736.27	1,736.05	1,735.76	1,735.49	1,735.41	1,735.54	1,735.94	---	1,735.31	1,735.07	1,734.55	1,735.29
9	1,736.31	1,736.04	1,735.78	1,735.48	1,735.41	1,735.53	1,735.94	---	1,735.39	1,735.04	1,734.61	1,735.27
10	1,736.31	1,736.04	1,735.72	1,735.47	1,735.43	1,735.52	1,735.96	1,735.77	1,735.40	1,735.01	1,734.60	1,735.25
11	1,736.33	1,736.04	1,735.71	1,735.46	1,735.44	1,735.50	1,735.97	1,735.74	1,735.39	1,734.98	1,734.58	1,735.23
12	1,736.37	1,736.04	1,735.71	1,735.46	1,735.44	1,735.54	1,735.96	1,735.70	1,735.37	1,734.96	1,734.55	1,735.22
13	1,736.37	1,736.02	1,735.70	1,735.46	1,735.42	1,735.61	1,735.93	1,735.69	1,735.34	1,734.93	1,734.53	1,735.21
14	1,736.36	1,736.00	1,735.69	1,735.46	1,735.43	1,735.62	1,735.91	1,735.70	1,735.32	1,734.91	1,734.50	1,735.19
15	1,736.33	1,736.00	1,735.68	1,735.52	1,735.42	1,735.62	1,735.91	1,735.68	1,735.31	1,734.89	1,734.47	1,735.18
16	1,736.32	---	1,735.67	1,735.55	1,735.41	1,735.62	1,735.90	1,735.67	1,735.29	1,734.87	1,734.45	1,735.16
17	1,736.31	---	1,735.64	1,735.60	1,735.41	1,735.62	1,735.90	1,735.66	1,735.27	1,734.85	1,734.43	1,735.15
18	1,736.29	---	1,735.63	1,735.58	1,735.40	1,735.62	1,735.89	1,735.65	1,735.25	1,734.85	1,734.41	1,735.13
19	1,736.29	1,735.97	1,735.62	1,735.56	1,735.39	1,735.61	1,735.88	1,735.63	1,735.23	1,734.84	1,734.49	1,735.11
20	1,736.28	1,735.96	1,735.62	1,735.55	1,735.39	1,735.61	1,735.87	1,735.61	1,735.21	1,734.82	1,734.63	1,735.09
21	1,736.27	1,735.94	1,735.61	1,735.54	1,735.38	1,735.71	1,735.87	1,735.59	1,735.20	1,734.79	1,734.73	1,735.06
22	1,736.26	1,735.94	1,735.61	1,735.54	1,735.38	1,735.71	1,735.86	1,735.57	1,735.32	1,734.76	1,735.24	1,735.04
23	1,736.25	1,735.93	1,735.60	1,735.54	1,735.39	1,735.70	1,735.86	1,735.56	1,735.31	1,734.73	1,735.39	1,735.02
24	1,736.24	1,735.90	1,735.58	1,735.55	1,735.48	1,735.70	1,735.86	1,735.55	1,735.29	1,734.71	1,735.43	1,735.01
25	1,736.21	1,735.88	1,735.58	1,735.56	1,735.54	1,735.71	1,735.87	1,735.53	1,735.28	1,734.69	1,735.44	1,734.99
26	1,736.18	1,735.87	1,735.58	1,735.55	1,735.52	1,735.71	1,735.86	1,735.51	1,735.27	1,734.66	1,735.44	1,734.97
27	1,736.16	1,735.87	1,735.58	1,735.51	1,735.51	1,735.70	1,735.85	1,735.50	1,735.25	1,734.65	1,735.42	1,734.96
28	1,736.14	1,735.84	1,735.58	1,735.50	1,735.50	1,735.70	1,735.83	1,735.49	1,735.25	1,734.65	1,735.41	1,734.96
29	1,736.13	1,735.82	1,735.56	1,735.50	1,735.54	1,735.69	1,735.85	1,735.47	1,735.25	1,734.66	1,735.41	1,734.94
30	1,736.11	1,735.81	1,735.54	1,735.49	---	1,735.69	1,735.85	1,735.47	1,735.25	1,734.65	1,735.40	1,734.93
31	1,736.11	---	1,735.54	1,735.48	---	1,735.67	---	1,735.46	---	1,734.64	1,735.38	---
MEAN	1,736.25	---	1,735.67	1,735.52	1,735.44	1,735.62	1,735.86	---	1,735.31	1,734.90	1,734.83	1,735.15
MAX	1,736.37	---	1,735.82	1,735.60	1,735.54	1,735.71	1,735.97	---	1,735.44	1,735.23	1,735.44	1,735.36
MIN	1,736.11	---	1,735.54	1,735.46	1,735.38	1,735.50	1,735.66	---	1,735.20	1,734.64	1,734.41	1,734.93

08144900 Brady Creek Reservoir near Brady, TX—Continued



08145000 Brady Creek at Brady, TX

LOCATION.--Lat 31°08'17", long 99°20'05", Mcculloch County, Hydrologic Unit 12090110, on left bank 60 ft upstream from bridge on U.S. Highway 377 on North Bridge Street in Brady, 0.4 mi downstream from Live Oak Creek, and 30.4 mi upstream from mouth.

DRAINAGE AREA.--588 mi^2.

PERIOD OF RECORD.--May 1939 to Sept. 1986, Apr. 2001 to current year.

REVISED RECORDS.--WSP 1512: 1941(M), 1951(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,646.50 ft above NGVD of 1929. Prior to July 9, 1940, nonrecording gage at site 3,600 ft upstream at datum 8.24 ft higher. Satellite telemeter at station.

REMARKS.--Records poor. Since water year 1962, at least 10% of contributing drainage area has been regulated. The city of Brady returns sewage effluent downstream from the gage. Flow is also affected at times by discharge from the flood-detention pools of flood-retarding structures above this station. No flow at times most years.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--23 years (water years 1940-62) prior to completion of Brady Creek Reservoir, 25.2 ft^3/s (18,260,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1882, 29.1 ft, July 23, 1938, present site and datum, discharge at site 5.0 mi downstream, 86,000 ft^3/s, by slope-area measurement. Flood of Oct. 6, 1930, second highest since 1882, reached a stage of 25.9 ft, discharge, 50,300 ft^3/s, present site and datum, from information by local residents.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1939-1962: Maximum discharge, 39,100 ft^3/s, Sept. 10, 1952, gage height, 24.80 ft; no flow at times most years.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.03	0.01	0.01	0.17	0.45	2.3	0.05	0.05	0.00	0.02
2	0.00	0.00	0.03	0.01	0.01	0.13	5.1	0.57	0.05	0.04	0.00	0.02
3	0.00	0.00	0.02	0.02	0.00	0.14	7.2	0.31	0.04	0.03	0.00	0.01
4	0.00	0.00	0.02	0.02	0.00	0.31	1.4	0.20	0.05	0.01	0.00	0.00
5	0.00	0.00	0.01	0.01	0.00	0.40	1.1	0.15	0.05	0.00	0.00	0.00
6	4.9	0.00	0.00	0.01	0.00	0.31	74	0.13	0.06	0.00	0.00	0.65
7	1.4	0.00	0.00	0.04	0.01	0.27	28	0.12	0.05	0.00	0.00	0.14
8	2.8	0.00	0.00	0.04	0.02	0.25	6.1	0.12	0.06	0.00	0.15	0.07
9	13	0.00	0.00	0.02	0.02	0.25	1.1	0.11	0.16	0.00	0.16	0.01
10	2.1	0.00	0.01	0.02	0.07	0.23	11	0.11	0.08	0.00	0.10	0.00
11	5.7	0.00	0.02	0.03	0.25	0.23	14	0.12	0.06	0.00	0.07	0.00
12	11	0.00	0.02	0.03	0.13	2.5	2.3	0.12	0.05	0.00	0.06	0.00
13	1.6	0.00	0.02	0.04	0.07	3.6	0.77	0.13	0.04	0.00	0.05	0.01
14	0.59	0.00	0.02	0.04	0.04	1.0	0.64	e0.19	0.04	0.00	0.04	0.00
15	0.25	0.00	0.02	0.22	0.06	0.63	0.53	0.13	0.03	0.00	0.03	0.00
16	0.18	0.00	0.02	0.25	0.06	0.41	0.53	0.10	0.02	0.00	0.01	0.00
17	0.13	0.02	0.03	0.62	0.06	0.39	0.50	0.08	0.01	0.00	0.00	0.00
18	0.03	0.06	0.02	0.18	0.06	0.47	0.49	0.08	0.00	0.00	0.00	0.00
19	0.00	0.05	0.02	0.08	0.06	0.36	0.48	0.07	0.00	0.00	1.1	0.00
20	0.00	0.05	0.02	0.02	0.06	0.22	0.43	0.06	0.00	0.00	0.16	0.00
21	0.00	0.05	0.03	0.00	0.06	9.9	0.37	0.06	0.05	0.00	0.23	0.00
22	0.00	0.04	0.02	0.00	0.07	0.92	0.38	0.05	1.2	0.00	0.16	0.00
23	0.00	0.04	0.02	0.00	0.21	0.71	0.41	0.04	0.14	0.00	0.06	0.00
24	0.00	0.04	0.02	0.00	7.2	0.93	0.51	0.04	0.06	0.00	0.05	0.00
25	0.00	0.04	0.02	0.00	0.68	1.0	0.69	0.04	0.04	0.00	0.04	0.00
26	0.00	0.04	0.02	0.00	0.24	0.93	0.51	0.04	0.05	0.00	0.03	0.00
27	0.00	0.04	0.01	0.01	0.16	0.90	0.07	0.04	0.05	0.00	0.02	0.00
28	0.00	0.04	0.00	0.02	0.13	1.8	0.02	0.04	0.04	0.00	0.02	0.00
29	0.00	0.04	0.00	0.02	0.20	2.0	0.06	0.04	0.05	0.00	0.03	0.00
30	0.00	0.03	0.00	0.01	---	1.1	0.01	0.08	0.05	0.00	0.03	0.00
31	0.00	---	0.00	0.02	---	0.65	---	0.07	---	0.00	0.02	---
TOTAL	43.68	0.58	0.47	1.79	9.94	33.11	159.15	5.74	2.63	0.13	2.62	0.93
MEAN	1.41	0.02	0.02	0.06	0.34	1.07	5.30	0.19	0.09	0.00	0.08	0.03
MAX	13	0.06	0.03	0.62	7.2	9.9	74	2.3	1.2	0.05	1.1	0.65
MIN	0.00	0.00	0.00	0.00	0.00	0.13	0.01	0.04	0.00	0.00	0.00	0.00
AC-FT	87	1.2	0.9	3.6	20	66	316	11	5.2	0.3	5.2	1.8

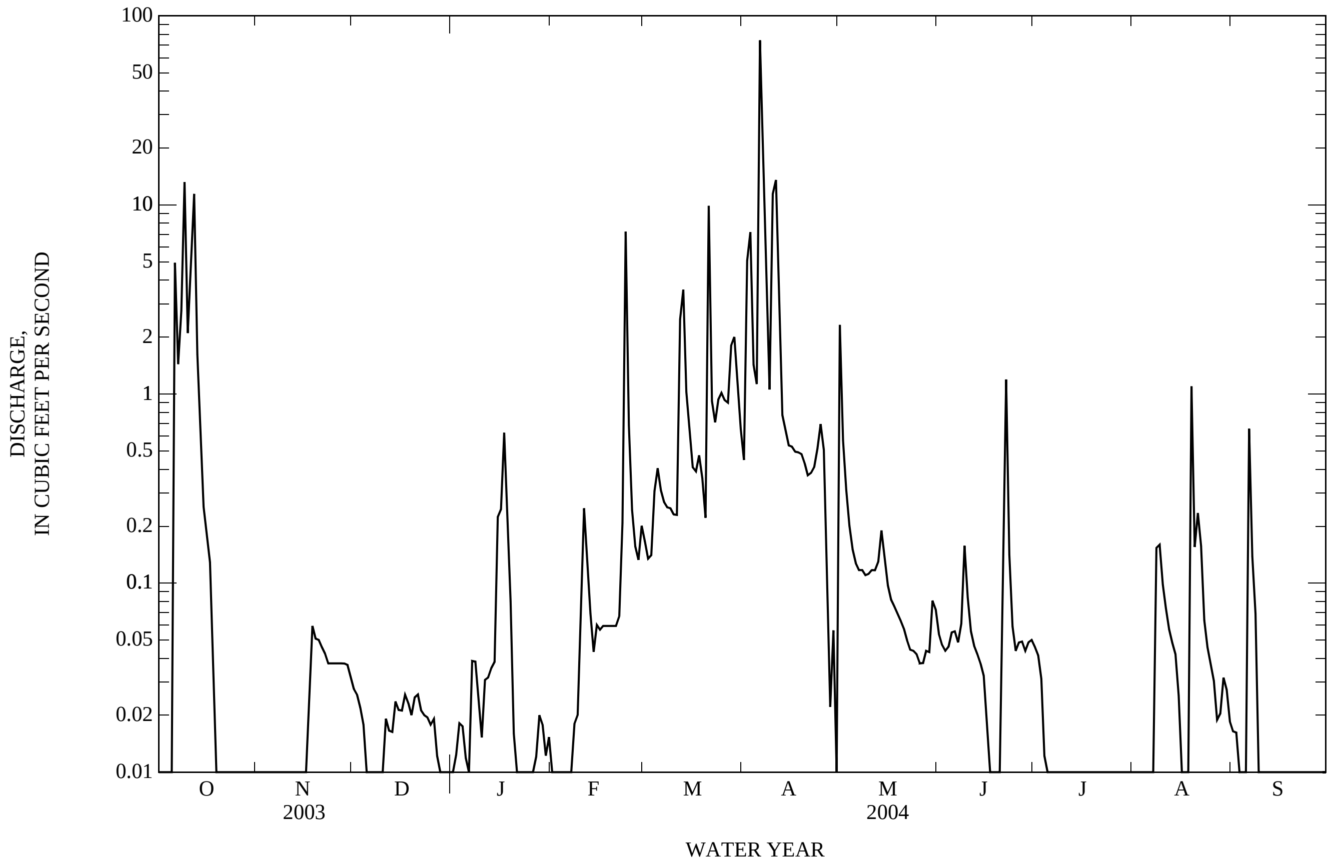
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004hz, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.4	3.70	3.16	3.78	2.82	3.50	5.38	7.34	5.72	15.0	12.2	17.9
MAX	134	60.8	32.8	50.4	43.0	26.1	82.3	95.7	90.6	388	300	364
(WY)	(1974)	(1975)	(1985)	(1968)	(1975)	(1977)	(1975)	(1975)	(1986)	(1971)	(1971)	(1971)
MIN	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1969)	(1971)	(1971)	(1963)	(1963)	(1963)	(1984)	(2003)	(1984)	(1963)	(1963)	(1963)

08145000 Brady Creek at Brady, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004hz	
ANNUAL TOTAL	367.82		260.77			
ANNUAL MEAN	1.01		0.71		7.94	
HIGHEST ANNUAL MEAN					88.4	1971
LOWEST ANNUAL MEAN					0.03	1963
HIGHEST DAILY MEAN	136	Sep 19	74	Apr 6	4,580	Jul 26, 1971
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 1, 1962
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 6	0.00	Oct 19	0.00	Oct 1, 1962
MAXIMUM PEAK FLOW			172	Apr 6	24,700	Jul 26, 1971
MAXIMUM PEAK STAGE			7.51	Apr 6	19.80	Jul 26, 1971
ANNUAL RUNOFF (AC-FT)	730		517		5,750	
10 PERCENT EXCEEDS	0.77		0.73		4.7	
50 PERCENT EXCEEDS	0.00		0.04		0.08	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

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



08146000 San Saba River at San Saba, TX

LOCATION.--Lat 31°12'47", long 98°43'09", San Saba County, Hydrologic Unit 12090109, on left bank near left downstream end of bridge on State Highway 16, 1.2 mi north of San Saba, 2.7 mi upstream from Mill Creek, 4.8 mi downstream from China Creek, and 16.8 mi upstream from mouth.

DRAINAGE AREA.--3,046 mi^2 of which 7 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Dec. 1904 to Dec. 1906 (gage heights only), Sept. 1915 to Sept. 1993, and Oct. 1997 to current year. Published as "near San Saba" Dec. 1904 to Dec. 1906 and Sept. 1915 to Aug. 1930. Water-quality records: Chemical data: Sept. 1947 to Feb. 1949, Nov. 1958 to Sept. 1969. Water temperature: Sept. 1962 to Sept. 1969.

REVISED RECORDS.--WSP 458: 1915-16. WSP 1282: WDR TX-81-3: Drainage area. WSP 1512: 1918-19(M), 1922, 1931(M), 1935. WSP 1922: 1917. WDR TX-00-4: 1992.

GAGE.--Water-stage recorder. Datum of gage is 1,162.16 ft above NGVD of 1929. See WSP 1922 for brief history of changes prior to July 8, 1953. From Oct. 1956 to Sept. 1993, at site 250 ft to right and supplementary water-stage recorder 2,780 ft to right of main channel gage used for floodflows at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Since water year 1963, at least 10% of contributing drainage area has been regulated. Many diversions above station for irrigation and municipal use affect low flows. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, and computes and publishes streamflow record.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--47 years (water years 1916-1962) prior to completion of Brady Creek Reservoir, 248 ft^3/s (179,900 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 6, 1899, reached a stage of 36.7 ft, present site and datum, from information by local residents.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1916-1962: Maximum discharge, 203,000 ft^3/s, July 23, 1938, gage height, 39.30 ft, from floodmarks, at site then in use, adjusted to present datum, from rating curve extended above 40,600 ft^3/s on basis of slope-area measurement of 203,000 ft^3/s; no flow at times in 1918, 1930, 1954-56.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	104	73	74	71	65	115	66	127	71	168	55	102
2	85	74	72	73	65	103	72	128	75	156	56	99
3	78	76	70	69	63	96	108	164	65	126	53	100
4	73	75	71	68	62	96	136	157	55	110	47	98
5	68	74	73	68	62	103	125	138	56	102	45	96
6	88	72	73	66	62	116	471	126	57	97	44	102
7	101	72	77	65	61	106	433	117	54	89	37	383
8	85	74	79	66	58	99	383	112	54	85	49	418
9	104	79	79	65	59	95	239	107	6,540	80	64	244
10	111	83	78	64	61	88	205	103	5,090	78	55	163
11	119	85	74	65	66	82	402	100	976	74	45	126
12	148	85	71	67	68	80	361	102	659	71	47	109
13	177	82	75	68	69	93	256	106	511	68	42	102
14	210	80	79	67	69	119	212	730	309	66	44	98
15	175	80	79	74	69	159	186	894	169	63	44	94
16	140	82	78	90	71	185	165	356	134	62	44	87
17	124	84	74	116	70	134	152	198	118	60	44	93
18	111	81	74	117	69	118	141	140	113	58	44	91
19	102	79	73	103	69	107	133	114	106	59	52	89
20	95	79	73	99	68	98	127	99	101	60	85	86
21	90	78	70	94	67	91	123	89	98	56	2,990	84
22	85	79	75	89	68	84	120	82	114	54	2,460	81
23	82	78	74	84	72	107	116	78	202	50	820	80
24	80	74	69	81	84	95	114	75	141	50	498	82
25	77	75	70	79	117	99	132	74	176	52	356	85
26	72	76	73	76	129	97	146	73	212	50	243	80
27	70	76	77	72	113	89	167	70	212	50	184	79
28	73	74	77	70	123	84	146	69	211	53	152	79
29	72	72	75	69	118	80	127	66	195	54	136	79
30	73	70	71	66	---	75	120	67	198	53	118	81
31	73	---	69	64	---	69	---	69	---	55	107	---
TOTAL	3,145	2,321	2,296	2,385	2,197	3,162	5,684	4,930	17,072	2,309	9,060	3,590
MEAN	101	77.4	74.1	76.9	75.8	102	189	159	569	74.5	292	120
MAX	210	85	79	117	129	185	471	894	6,540	168	2,990	418
MIN	68	70	69	64	58	69	66	66	54	50	37	79
AC-FT	6,240	4,600	4,550	4,730	4,360	6,270	11,270	9,780	33,860	4,580	17,970	7,120

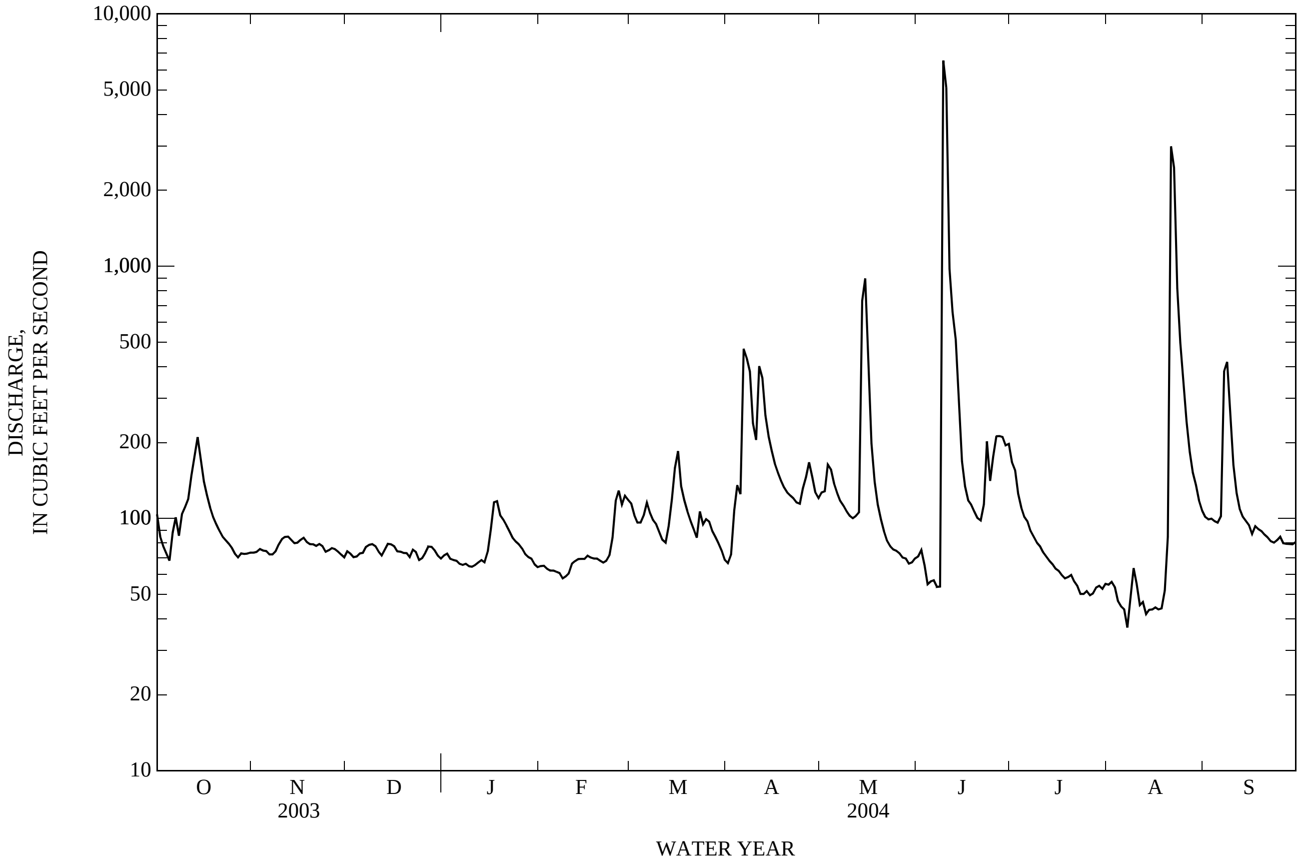
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004hz, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	209	180	150	154	173	161	154	193	172	142	162	291
MAX	1,716	2,290	935	896	1,542	635	777	1,195	695	1,201	1,768	2,144
(WY)	(1974)	(2001)	(1992)	(1968)	(1992)	(1992)	(1977)	(1965)	(1992)	(1971)	(1971)	(1974)
MIN	17.6	32.7	47.8	46.1	44.9	34.7	23.4	10.3	5.31	0.32	9.43	11.1
(WY)	(1964)	(2000)	(1964)	(1964)	(1984)	(1986)	(1986)	(1984)	(1984)	(1964)	(1980)	(1984)

08146000 San Saba River at San Saba, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004hz	
ANNUAL TOTAL	37,712		58,151			
ANNUAL MEAN	103		159		178	
HIGHEST ANNUAL MEAN					493	1974
LOWEST ANNUAL MEAN					29.2	1984
HIGHEST DAILY MEAN	2,100	Sep 15	6,540	Jun 9	32,700	Nov 4, 2000
LOWEST DAILY MEAN	21	Jul 24	37	Aug 7	0.00	Jul 17, 1963
ANNUAL SEVEN-DAY MINIMUM	25	Jul 23	44	Aug 12	0.00	Jul 25, 1963
MAXIMUM PEAK FLOW			14,900	Jun 9	46,200	Nov 4, 2000
MAXIMUM PEAK STAGE			26.83	Jun 9	29.94	Sep 18, 1990
ANNUAL RUNOFF (AC-FT)	74,800		115,300		129,100	
10 PERCENT EXCEEDS	151		185		265	
50 PERCENT EXCEEDS	77		81		88	
90 PERCENT EXCEEDS	36		59		27	

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



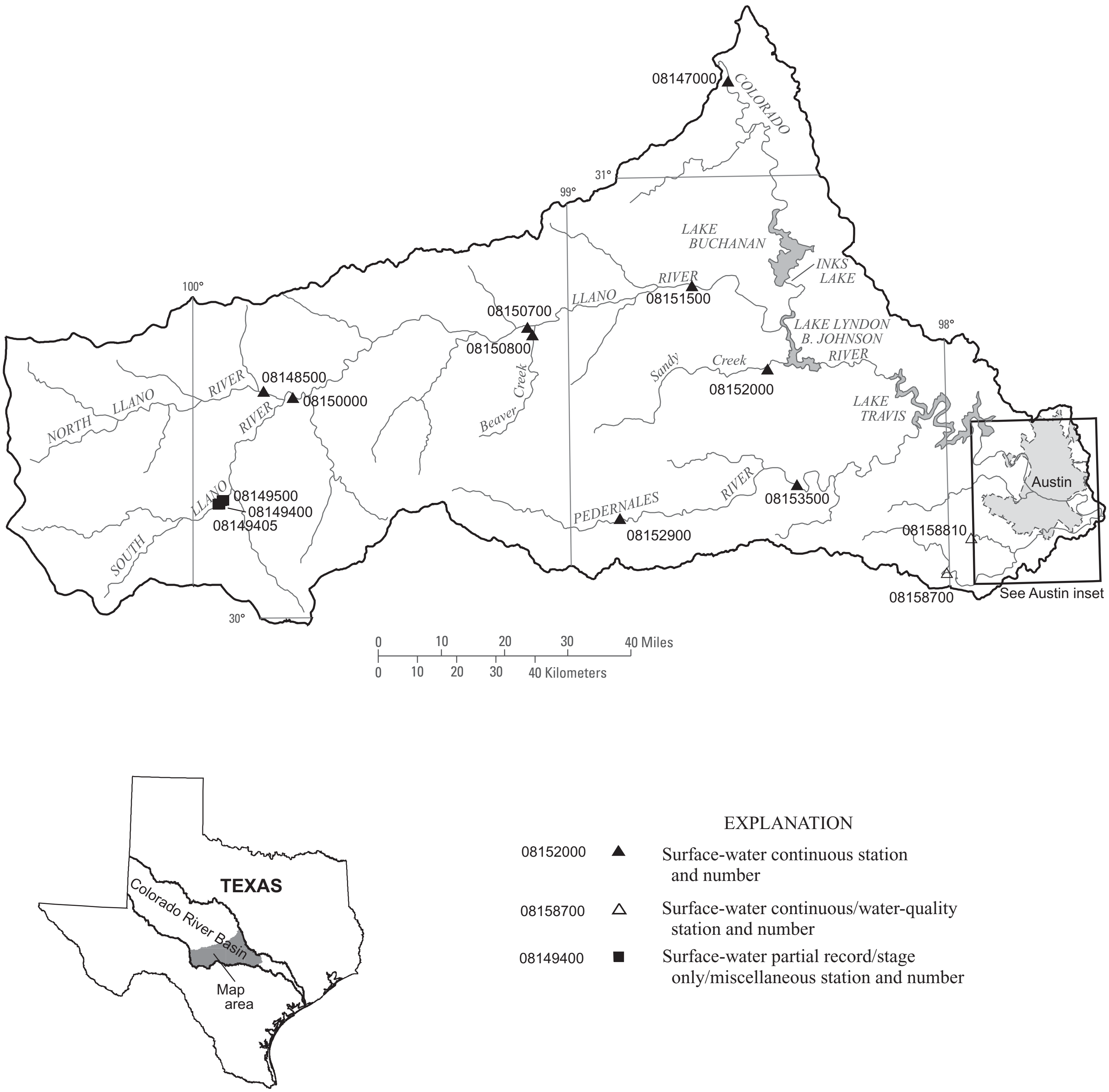
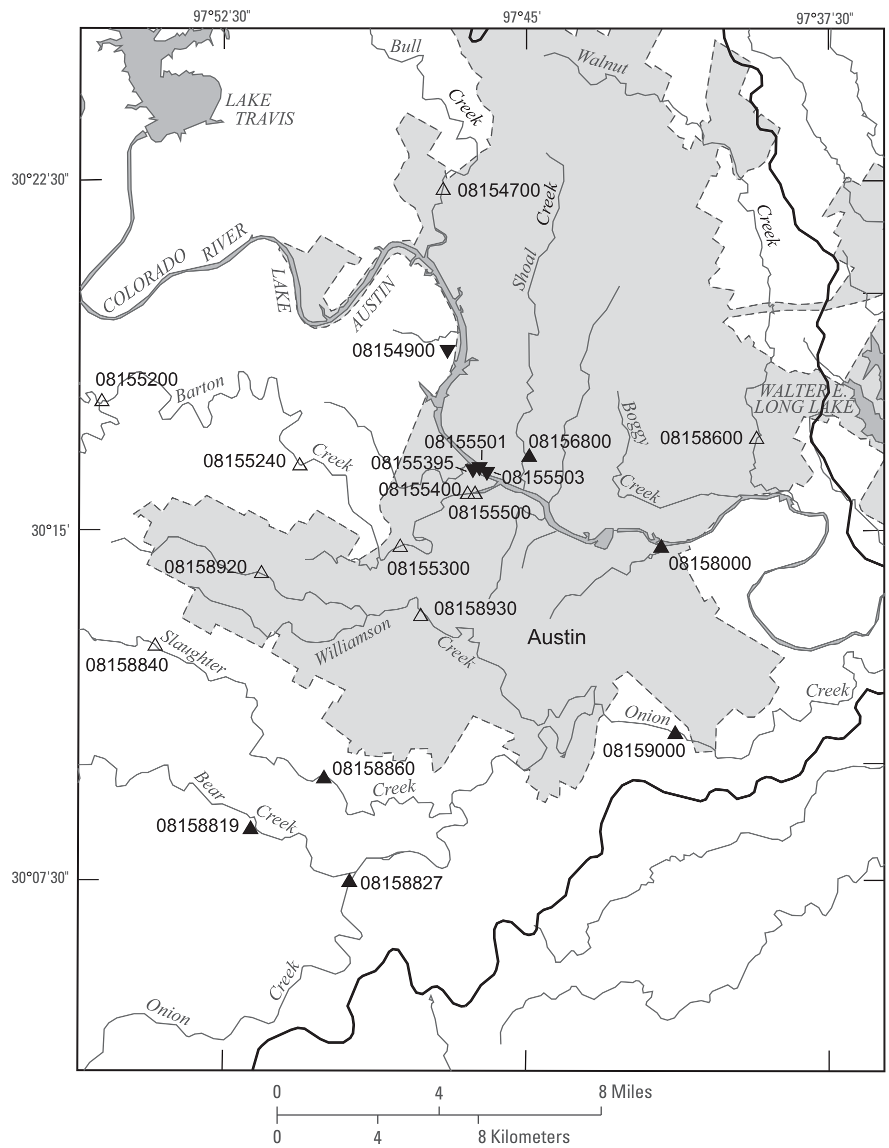


Figure 6.--Map showing location of gaging stations in the fourth section of the Colorado River Basin



EXPLANATION

08158000 ▲ Surface-water continuous station and number

08155500 △ Surface-water continuous/water-quality station and number

08157900 ▼ Water-quality station and number

Figure 7.--Map showing location of gaging stations in the Austin inset of the Colorado River Basin

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08147000 Colorado River near San Saba, TX

LOCATION.--Lat 31°13'04", long 98°33'51", Lampasas County, Hydrologic Unit 12090201, on left bank at downstream side of bridge on U.S. Highway 190, 5.2 mi downstream from San Saba River, 9.2 mi east of San Saba, and at mile 474.3.

DRAINAGE AREA.--31,217 mi^2 of which 11,398 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Oct. 1915 to Oct. 1922, published as "near Chadwick", Oct. 1923 to Aug. 1930, published as "near Tow", Sept. 1930 to current year. Monthly discharge only for some periods, published in WSP 1312. Water-quality records: Chemical data: Aug. 1941, Sept. 1947 to Sept. 1967, Jan. 1968 to Aug. 1993. Biochemical data: Jan. 1968 to Aug. 1993. Pesticide data: Jan. 1968 to Apr. 1982. Sediment data: May 1951 to Oct. 1962 and Oct. 1977 to Aug. 1993. Suspended sediment discharge: Dec. 1950 to Sept. 1962. Specific conductance: Sept. 1947 to Sept. 1992. Water temperature: Sept. 1947 to Sept. 1992.

REVISED RECORDS.--WSP 458: 1916. WSP 858: 1900(M), 1936(M). WDR TX-81-3: Drainage area. WSP 1512: 1916-18(M), 1936. WSP 1732: 1925-26(M).

GAGE.--Water-stage recorder. Datum of gage is 1,096.22 ft above NGVD of 1929. See WSP 1922 for brief history of changes prior to May 23, 1940. From May 1940 to Nov. 1996, at site 150 ft right at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Since water year 1931, at least 10% of contributing drainage area has been regulated. Flow is also affected at times by discharge from the flood-detention pools of 187 floodwater-retarding structures. These flood-detention structures control runoff from an 944 mi^2 area above this station. There are many diversions above station for irrigation, municipal use, and for oil field operations. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation of low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, and computes and publishes streamflow record.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--12 years (water years 1917-19, 1921-22, 1924-30) prior to completion of Lake Nasworthy, 1,440 ft^3/s (1,040,000 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage during period 1878 to July 22, 1938, 58.4 ft, Sept. 25, 1900, discharge, 184,000 ft^3/s, present site, from floodmarks at former site.

EXTREMES FOR PERIOD PRIOR TO REGULATION.-- WATER YEARS 1917-1919, 1921-1922, 1924-1930: Maximum discharge, 130,000 ft^3/s, Apr. 26, 1922, gage height about 54.0 ft, present site, from information by local residents; minimum observed discharge, 1.5 ft^3/s, Aug. 22, 23, 1918.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	216	120	112	105	89	279	154	604	131	1,040	150	605
2	161	114	114	106	90	266	149	994	124	691	181	434
3	137	113	111	107	91	252	468	877	113	477	170	299
4	122	111	110	103	92	256	1,150	685	106	355	129	248
5	112	110	108	101	91	236	714	552	105	282	105	223
6	108	107	110	100	87	355	1,240	484	130	228	90	208
7	120	106	111	100	87	358	3,100	439	265	194	80	685
8	138	106	111	98	84	311	1,700	414	230	175	72	964
9	205	111	113	94	83	258	939	375	21,200	157	95	536
10	6,940	116	110	91	84	229	611	288	31,400	142	104	378
11	8,600	120	110	91	92	203	619	242	3,870	132	90	286
12	4,260	122	109	91	95	196	557	222	2,150	123	82	229
13	3,600	123	111	92	95	205	489	213	1,540	116	77	201
14	2,420	125	111	94	99	210	409	593	1,090	110	68	186
15	1,740	126	112	97	97	229	358	817	780	105	68	169
16	1,260	131	110	99	97	301	323	560	623	98	76	155
17	970	142	110	118	97	330	293	340	536	93	77	145
18	787	141	109	123	98	312	273	292	414	90	73	137
19	638	131	108	124	97	273	254	265	346	89	96	127
20	543	129	109	124	94	247	241	239	311	87	3,400	120
21	481	130	109	123	93	223	229	207	292	85	e21,000	117
22	452	131	109	116	93	583	219	185	920	80	17,500	116
23	372	127	109	110	95	418	207	169	1,380	76	13,000	116
24	239	123	108	108	103	347	227	160	1,280	74	5,030	119
25	192	120	105	105	229	289	2,360	152	829	72	2,680	116
26	169	118	106	102	760	253	1,780	143	718	71	1,860	116
27	151	120	108	100	446	226	1,250	136	503	70	1,380	117
28	139	118	107	99	360	206	930	130	449	71	1,060	116
29	133	117	106	94	326	193	784	124	809	76	961	121
30	125	114	106	91	---	179	655	118	1,370	76	920	121
31	121	---	105	90	---	165	---	121	---	85	731	---
TOTAL	35,651	3,622	3,387	3,196	4,344	8,388	22,682	11,140	74,014	5,620	71,405	7,510
MEAN	1,150	121	109	103	150	271	756	359	2,467	181	2,303	250
MAX	8,600	142	114	124	760	583	3,100	994	31,400	1,040	21,000	964
MIN	108	106	105	90	83	165	149	118	105	70	68	116
AC-FT	70,710	7,180	6,720	6,340	8,620	16,640	44,990	22,100	146,800	11,150	141,600	14,900

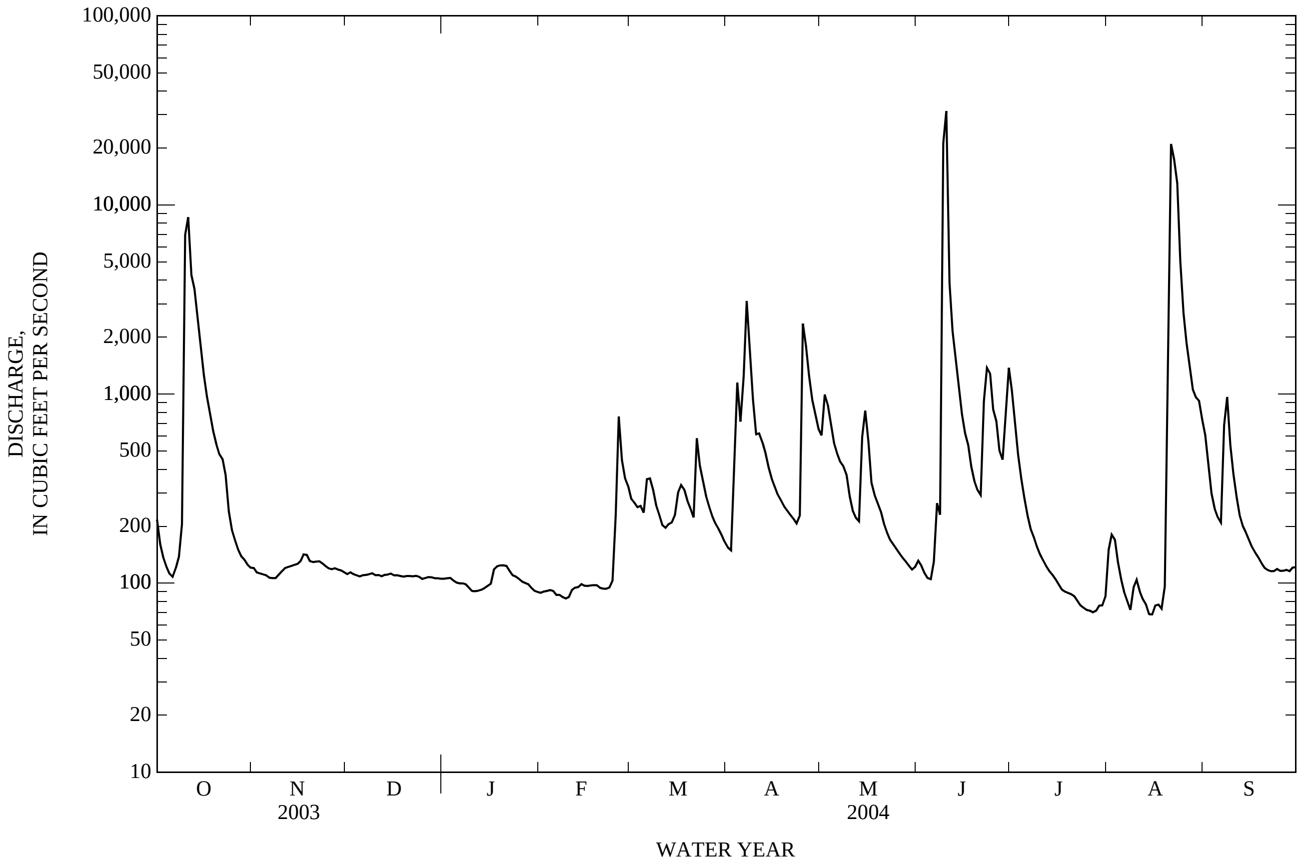
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2004z, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1,305	453	452	493	630	601	952	2,249	1,684	1,269	484	1,455
MAX	15,300	4,362	9,242	5,105	10,760	5,002	6,907	23,620	10,940	32,210	3,915	29,380
(WY)	(1931)	(2001)	(1992)	(1968)	(1992)	(1992)	(1957)	(1957)	(1935)	(1938)	(1971)	(1936)
MIN	29.5	39.3	31.8	41.5	40.5	24.4	33.6	11.2	4.16	2.06	2.68	11.9
(WY)	(1952)	(1952)	(1955)	(1955)	(1952)	(1952)	(1986)	(1984)	(1984)	(1964)	(1952)	(1954)

08147000 Colorado River near San Saba, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1931 - 2004z	
ANNUAL TOTAL	133,051		250,959			
ANNUAL MEAN	365		686		1,004	
HIGHEST ANNUAL MEAN					3,880	1938
LOWEST ANNUAL MEAN					84.1	1984
HIGHEST DAILY MEAN	9,620	Sep 15	31,400	Jun 10	191,000	Jul 23, 1938
LOWEST DAILY MEAN	30	Aug 8	68	Aug 14	0.00	Aug 27, 1954
ANNUAL SEVEN-DAY MINIMUM	34	Aug 5	73	Jul 23	0.00	Aug 3, 1963
MAXIMUM PEAK FLOW			52,100	Jun 9	224,000	Jul 23, 1938
MAXIMUM PEAK STAGE			33.13	Jun 9	aa62.24	Jul 23, 1938
ANNUAL RUNOFF (AC-FT)	263,900		497,800		727,100	
10 PERCENT EXCEEDS	589		962		1,550	
50 PERCENT EXCEEDS	121		138		215	
90 PERCENT EXCEEDS	43		91		52	

z Period of regulated streamflow.
aa From floodmarks at site then in use adjusted to present datum.
e Estimated



08148500 North Llano River near Junction, TX

LOCATION.--Lat 30°31'02", long 99°48'21", Kimble County, Hydrologic Unit 12090202, on left bank 50 ft south of Ranch Road 1674, 600 ft west of county road KC 171, 1.7 mi northwest of Junction, and 3.7 mi upstream from confluence with South Llano River.

DRAINAGE AREA.--914 mi^2.

PERIOD OF RECORD.--Sept. 1915 to Sept. 1977, June 2001 to current year.

REVISED RECORDS.--WSP 568: 1920, 1922. WSP 1512: 1915, 1918-19, 1923(M), 1924-26, 1928, 1930(M), 1931-33, 1934(M), 1935. WDR TX-76-3: 1942(M), 1948(M), 1957(M), 1958(P), 1959(M), 1961(M), 1964(M), 1970-71(M), 1974(P).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,709.92 ft above NGVD of 1929. Prior to Aug. 1925, nonrecording gage at site 1,450 ft upstream at datum 10 ft lower. Aug. 1925 to Sept. 1936, water-stage recorder 1,450 ft upstream at datum 10 ft lower. Sept. 1936 to June 1940, nonrecording gages at various sites at datum 10 ft lower. June 1940 to Sept. 1977, water-stage recorder at site 2,000 ft upstream at datum 10 ft lower. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for June 4-15, which are fair. No known regulation. Low flow affected by diversions from irrigation. No flow at times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, that of Sept. 16, 1936; maximum stage during period 1875 to Sept. 15, 1936, 27 ft in 1889, at former site, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	35	23	20	21	20	22	25	9.7	5.9	2.4	43
2	7.7	34	23	20	21	20	21	22	9.4	6.9	2.1	42
3	7.8	34	23	20	20	22	23	25	9.5	7.9	1.7	41
4	8.2	35	22	20	21	23	23	25	8.5	8.0	1.4	38
5	8.5	35	22	19	21	23	23	22	7.7	7.8	0.95	36
6	9.4	33	21	19	21	22	36	21	7.4	7.5	1.2	34
7	9.6	32	21	18	20	22	34	19	7.3	7.2	4.1	32
8	12	32	21	19	20	20	30	17	7.5	7.1	3.5	32
9	16	32	21	18	20	19	28	16	7.3	6.7	3.6	29
10	13	32	21	18	21	19	27	15	7.0	6.8	3.5	27
11	145	30	20	18	23	19	28	17	6.7	6.4	3.5	27
12	771	30	20	18	23	25	25	16	6.8	6.1	3.6	27
13	356	28	20	18	22	29	24	16	6.6	5.5	4.0	25
14	186	28	21	18	22	31	21	15	6.4	5.3	4.1	26
15	131	28	21	22	22	30	21	15	6.3	5.2	3.9	25
16	103	28	20	24	21	28	20	15	5.5	4.8	3.9	24
17	87	28	20	26	22	27	19	15	5.2	4.4	3.9	24
18	75	29	20	25	21	27	18	14	5.1	4.0	4.1	23
19	66	28	20	23	21	26	19	14	4.9	3.9	6.3	22
20	60	27	21	21	20	27	18	13	4.8	3.7	6.6	22
21	55	26	21	20	20	26	17	13	4.6	3.5	758	20
22	52	25	21	21	19	26	17	13	7.8	3.4	896	20
23	49	25	19	21	20	26	16	13	5.6	3.2	228	20
24	47	24	19	22	21	26	14	13	5.4	3.3	126	23
25	46	24	20	22	23	27	15	12	5.4	3.0	80	21
26	44	24	20	21	23	26	15	11	5.9	3.3	67	20
27	44	23	20	21	22	26	16	11	5.8	3.2	57	20
28	43	23	21	21	21	26	17	12	5.8	2.9	52	21
29	40	23	20	21	21	25	20	11	7.0	3.5	49	20
30	37	23	19	21	---	24	18	11	6.4	3.3	46	20
31	36	---	19	21	---	24	---	10	---	3.0	43	---
TOTAL	2,573.3	858	640	636	613	761	645	487	199.3	156.7	2,470.35	804
MEAN	83.0	28.6	20.6	20.5	21.1	24.5	21.5	15.7	6.64	5.05	79.7	26.8
MAX	771	35	23	26	23	31	36	25	9.7	8.0	896	43
MIN	7.7	23	19	18	19	19	14	10	4.6	2.9	0.95	20
AC-FT	5,100	1,700	1,270	1,260	1,220	1,510	1,280	966	395	311	4,900	1,590

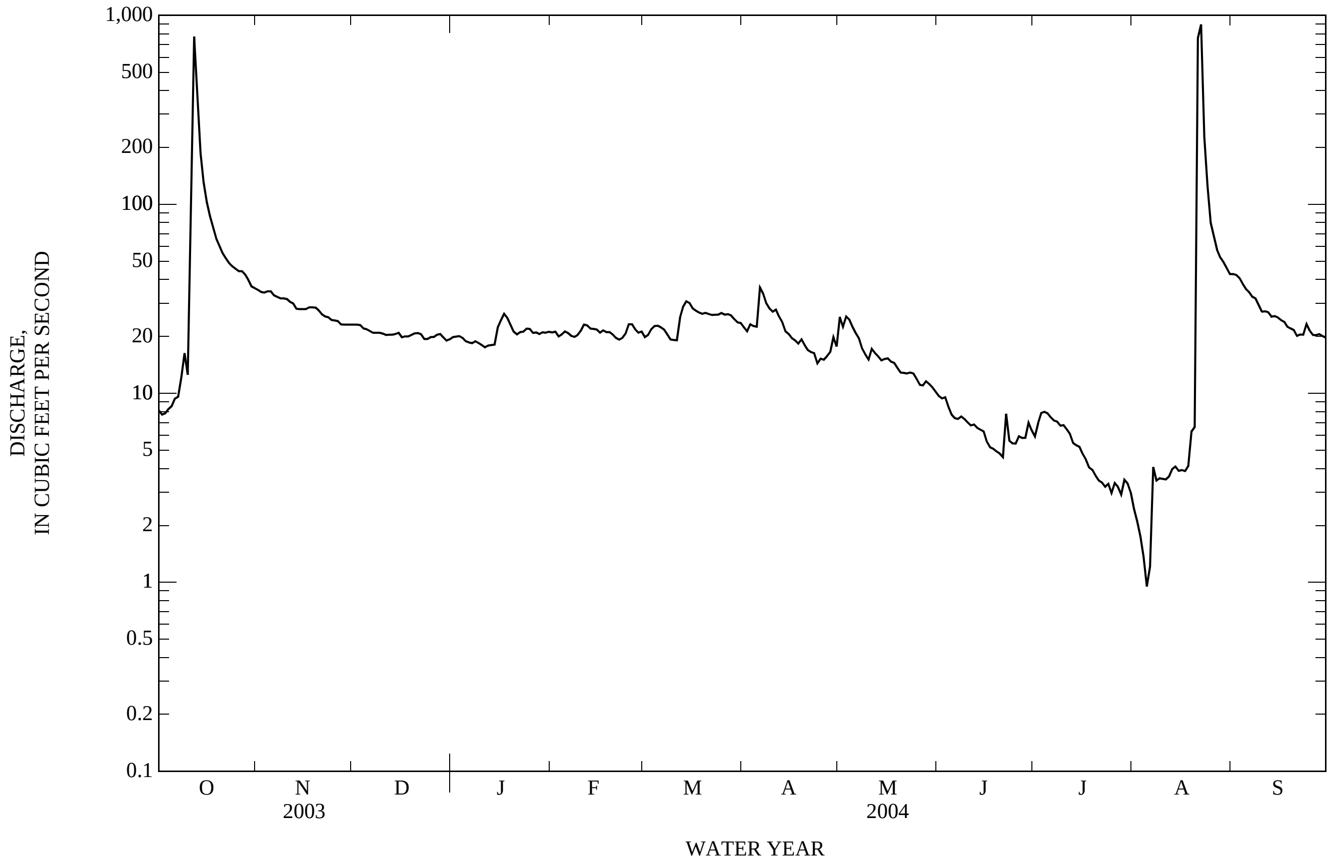
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	83.3	43.3	30.7	29.2	34.0	30.0	60.4	108	107	79.5	59.6	155
MAX	944	662	203	124	450	134	886	1,524	1,938	2,924	1,456	2,730
(WY)	(1931)	(1924)	(1924)	(1924)	(1958)	(1941)	(1918)	(1925)	(1935)	(1938)	(1974)	(1932)
MIN	0.00	0.00	0.00	0.00	0.00	0.18	0.35	4.67	0.46	0.00	0.00	0.00
(WY)	(1935)	(1918)	(1955)	(1955)	(1955)	(1957)	(1955)	(1927)	(1953)	(1953)	(1917)	(1934)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004h	
ANNUAL TOTAL	7,069.92		10,843.65			
ANNUAL MEAN	19.4		29.6		68.6	
HIGHEST ANNUAL MEAN					298	1938
LOWEST ANNUAL MEAN					0.80	1954
HIGHEST DAILY MEAN	771	Oct 12	896	Aug 22	42,400	May 29, 1925
LOWEST DAILY MEAN	0.00	Aug 3	0.95	Aug 5	0.00	Jul 16, 1917
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 3	1.8	Jul 31	0.00	Jul 16, 1917
MAXIMUM PEAK FLOW			4,770	Aug 21	i94,800	Sep 16, 1936
MAXIMUM PEAK STAGE			13.86	Aug 21	g29.20	Sep 16, 1936
ANNUAL RUNOFF (AC-FT)	14,020		21,510		49,700	
10 PERCENT EXCEEDS	29		36		71	
50 PERCENT EXCEEDS	16		21		20	
90 PERCENT EXCEEDS	0.00		4.9		0.89	

h See Period of Record paragraph.
i From slope-area measurement of peak flow.
g At former site and datum based on gage-height relation curve.

08148500 North Llano River near Junction, TX—Continued



08150000 Llano River near Junction, TX

LOCATION.--Lat 30°30'15", long 99°44'03", Kimble County, Hydrologic Unit 12090204, on right bank 960 ft upstream from abandoned low-water crossing, 1.0 mi east of Junction, 2.6 mi downstream from bridge on Interstate Highway 10, 2.8 mi downstream from confluence of North and South Llano Rivers, 5.3 mi upstream from Johnson Fork, and 114.8 mi upstream from mouth.

DRAINAGE AREA.--1,854 mi^2 of which 5 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1915 to May 1993, Oct. 1997 to current year.

REVISED RECORDS.--WSP 568: 1915-16, 1918-20, 1922. WDR TX-81-3: Drainage area. WSP 1922: 1920, 1923.

GAGE.--Water-stage recorder. Datum of gage is 1,634.32 ft above NGVD of 1929. Prior to Aug. 14, 1925, nonrecording gage, and Aug. 14, 1925, to May 17, 1940, and Aug. 18, 1944, to Oct. 12, 1981, water-stage recorder at site 5,330 ft downstream at datum 6.0 ft lower, designated as regular gage (destroyed by flood of Oct. 13, 1981). Prior to June 13, 1990, at datum 2.0 ft higher. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No known regulation. There are diversions above station for irrigation.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, and computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, that of June 14, 1935. A major flood in 1889 was the highest known prior to June 14, 1935.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	142	119	107	106	109	107	128	91	90	84	123
2	73	142	119	106	105	107	108	119	90	85	78	125
3	71	141	117	107	106	e110	111	114	90	81	77	119
4	70	139	116	106	107	113	112	113	91	78	71	118
5	71	137	117	103	108	114	114	111	89	76	68	112
6	72	137	117	103	107	109	1,390	110	88	73	70	111
7	73	137	117	104	104	107	860	110	87	73	94	111
8	76	137	116	104	104	105	272	111	99	72	94	105
9	86	137	117	104	104	104	189	108	108	69	101	102
10	81	136	115	103	108	103	175	106	99	70	97	100
11	128	133	115	103	112	102	172	120	94	70	92	102
12	4,240	131	115	102	109	132	154	121	91	68	87	102
13	1,010	130	115	102	107	151	145	154	93	68	84	99
14	542	130	114	103	109	149	137	143	93	64	83	96
15	351	131	113	115	109	141	132	130	90	63	81	94
16	282	131	111	118	107	132	127	125	87	62	80	92
17	243	135	110	122	106	126	127	122	84	59	79	91
18	218	140	110	115	104	121	125	119	81	59	79	90
19	203	130	111	109	104	118	122	115	80	57	94	89
20	190	125	111	109	103	117	122	111	77	59	91	87
21	186	123	110	109	102	116	119	108	78	59	414	85
22	177	122	110	110	102	114	117	108	112	56	1,760	85
23	172	120	108	110	102	115	115	107	95	55	300	92
24	166	119	107	112	112	114	113	108	89	55	198	114
25	160	120	109	110	118	115	115	105	89	65	161	97
26	156	122	108	108	112	115	117	101	92	69	144	94
27	152	121	108	105	108	115	110	99	93	78	128	95
28	145	118	107	105	108	114	108	103	88	79	121	100
29	142	119	105	106	107	113	120	100	98	78	122	100
30	142	119	105	106	---	113	115	97	99	80	116	96
31	142	---	106	107	---	110	---	94	---	82	114	---
TOTAL	9,893	3,904	3,478	3,333	3,100	3,624	5,950	3,520	2,735	2,152	5,262	3,026
MEAN	319	130	112	108	107	117	198	114	91.2	69.4	170	101
MAX	4,240	142	119	122	118	151	1,390	154	112	90	1,760	125
MIN	70	118	105	102	102	102	107	94	77	55	68	85
AC-FT	19,620	7,740	6,900	6,610	6,150	7,190	11,800	6,980	5,420	4,270	10,440	6,000
CFSM	0.17	0.07	0.06	0.06	0.06	0.06	0.11	0.06	0.05	0.04	0.09	0.05
IN.	0.20	0.08	0.07	0.07	0.06	0.07	0.12	0.07	0.06	0.04	0.11	0.06

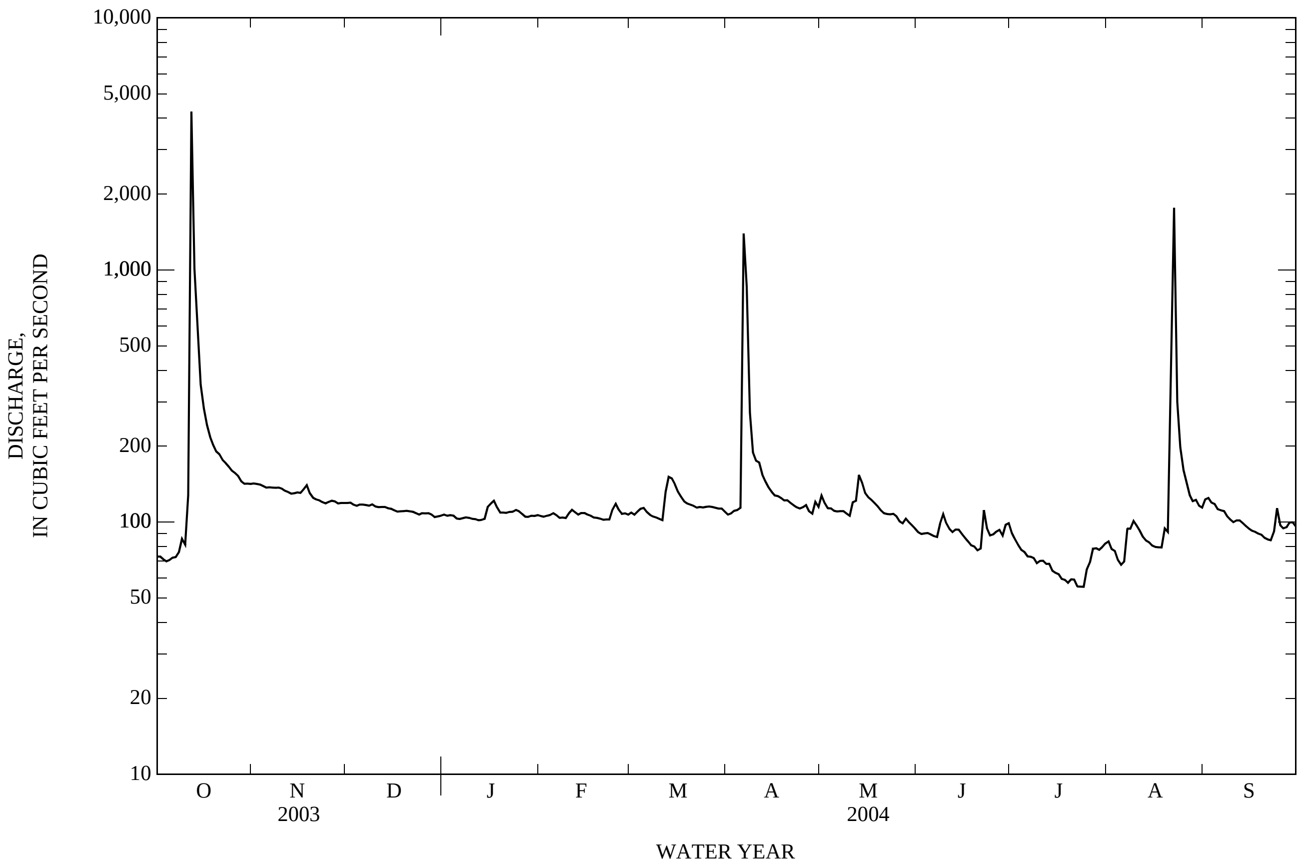
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	272	190	141	125	132	118	170	234	281	200	180	324
MAX	2,708	3,723	1,229	641	816	428	1,222	2,395	5,797	4,236	2,299	4,298
(WY)	(1924)	(2001)	(1985)	(1968)	(1958)	(1992)	(1977)	(1925)	(1935)	(1938)	(1974)	(1932)
MIN	15.8	21.5	25.3	26.2	27.9	27.0	21.3	30.3	12.4	10.5	11.4	13.1
(WY)	(1957)	(1957)	(1957)	(1957)	(1954)	(1954)	(1955)	(1954)	(1953)	(1956)	(1956)	(1956)

08150000 Llano River near Junction, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004h	
ANNUAL TOTAL	43,371		49,977			
ANNUAL MEAN	119		137		197	
HIGHEST ANNUAL MEAN					708	1935
LOWEST ANNUAL MEAN					29.8	1953
HIGHEST DAILY MEAN	4,240	Oct 12	4,240	Oct 12	124,000	Jun 14, 1935
LOWEST DAILY MEAN	63	Aug 7	55	Jul 23	3.7	Aug 17, 1956
ANNUAL SEVEN-DAY MINIMUM	65	Aug 2	57	Jul 18	4.2	Aug 11, 1956
MAXIMUM PEAK FLOW			11,200	Oct 12	i319,000	Jun 14, 1935
MAXIMUM PEAK STAGE			9.97	Oct 12	a43.30	Jun 14, 1935
ANNUAL RUNOFF (AC-FT)	86,030		99,130		142,900	
ANNUAL RUNOFF (CFSM)	0.064		0.074		0.107	
ANNUAL RUNOFF (INCHES)	0.87		1.01		1.45	
10 PERCENT EXCEEDS	131		142		220	
50 PERCENT EXCEEDS	105		108		100	
90 PERCENT EXCEEDS	71		78		44	

h See PERIOD OF RECORD paragraph.
i From slope-area measurement of peak flow.
a From floodmark.
e Estimated



08150700 Llano River near Mason, TX

LOCATION.--Lat 30°39'38", long 99°06'32", Mason County, Hydrologic Unit 12090204, on right bank 98 ft downstream from downstream bridge on U.S. Highway 87, 1.0 mi upstream from Beaver Creek, 9.1 mi southeast of Mason, 10.2 mi downstream from James River, and 61.1 mi upstream from mouth.

DRAINAGE AREA.--3,247 mi^2 of which 5 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Mar. 1968 to May 1993, Oct. 1997 to current year.

REVISED RECORDS.--WDR TX-75-3: 1968(P). WDR TX-81-3: Drainage area. WDR TX-01-4: 1980.

GAGE.--Water-stage recorder. Datum of gage is 1,230.36 ft above NGVD of 1929. Prior to Jan. 19, 1971, at site 190 ft upstream at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversion.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages and computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1875, about 46 ft, June 14, 1935, discharge, about 380,000 ft^3/s, from information by Texas Department of Transportation; at site 17.0 mi downstream discharge was 388,000 ft^3/s by slope-area measurement. Discharges for other floods are 258,000 ft^3/s, 1952; 218,000 ft^3/s, 1889.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	161	186	171	161	143	167	203	233	120	325	121	128
2	158	181	171	163	139	165	209	244	120	216	121	129
3	156	180	174	163	135	169	354	224	118	169	121	136
4	156	176	174	162	133	177	213	206	120	144	120	136
5	156	174	172	159	134	182	193	194	118	127	118	146
6	164	175	168	159	132	178	491	191	118	124	118	186
7	169	174	168	159	131	177	1,300	192	118	123	122	310
8	164	175	168	159	130	177	1,060	192	118	121	338	158
9	171	181	167	159	131	178	493	191	3,520	121	191	134
10	176	181	161	159	132	177	382	189	957	121	128	127
11	177	181	164	159	136	179	597	199	267	121	124	125
12	2,560	178	165	159	136	200	373	236	161	121	123	126
13	2,520	176	169	159	135	262	307	216	126	121	121	129
14	1,270	174	167	159	135	272	276	1,370	122	121	121	127
15	758	176	166	194	130	274	257	281	121	120	121	125
16	512	178	165	215	128	256	246	186	121	118	121	124
17	392	184	160	239	127	246	237	151	120	118	119	124
18	332	187	161	211	127	234	230	133	118	118	118	124
19	302	179	161	192	128	227	227	125	118	118	120	124
20	281	180	162	182	131	223	224	124	118	118	121	124
21	264	177	162	175	133	219	220	123	118	118	122	124
22	251	175	165	172	136	215	214	121	1,420	118	631	124
23	240	177	164	171	139	213	210	121	489	118	1,480	124
24	229	172	160	173	145	214	211	121	238	118	578	124
25	221	173	161	172	159	214	211	121	196	118	323	125
26	208	172	162	168	155	214	211	121	206	118	242	133
27	204	173	164	162	160	214	204	121	167	118	194	128
28	200	171	167	158	158	214	199	121	152	118	169	127
29	194	171	168	154	165	211	215	121	246	181	154	128
30	192	171	161	150	---	208	213	121	682	154	143	127
31	189	---	159	146	---	204	---	120	---	122	136	---
TOTAL	13,127	5,308	5,127	5,273	4,003	6,460	9,980	6,409	10,733	4,186	6,879	4,106
MEAN	423	177	165	170	138	208	333	207	358	135	222	137
MAX	2,560	187	174	239	165	274	1,300	1,370	3,520	325	1,480	310
MIN	156	171	159	146	127	165	193	120	118	118	118	124
AC-FT	26,040	10,530	10,170	10,460	7,940	12,810	19,800	12,710	21,290	8,300	13,640	8,140

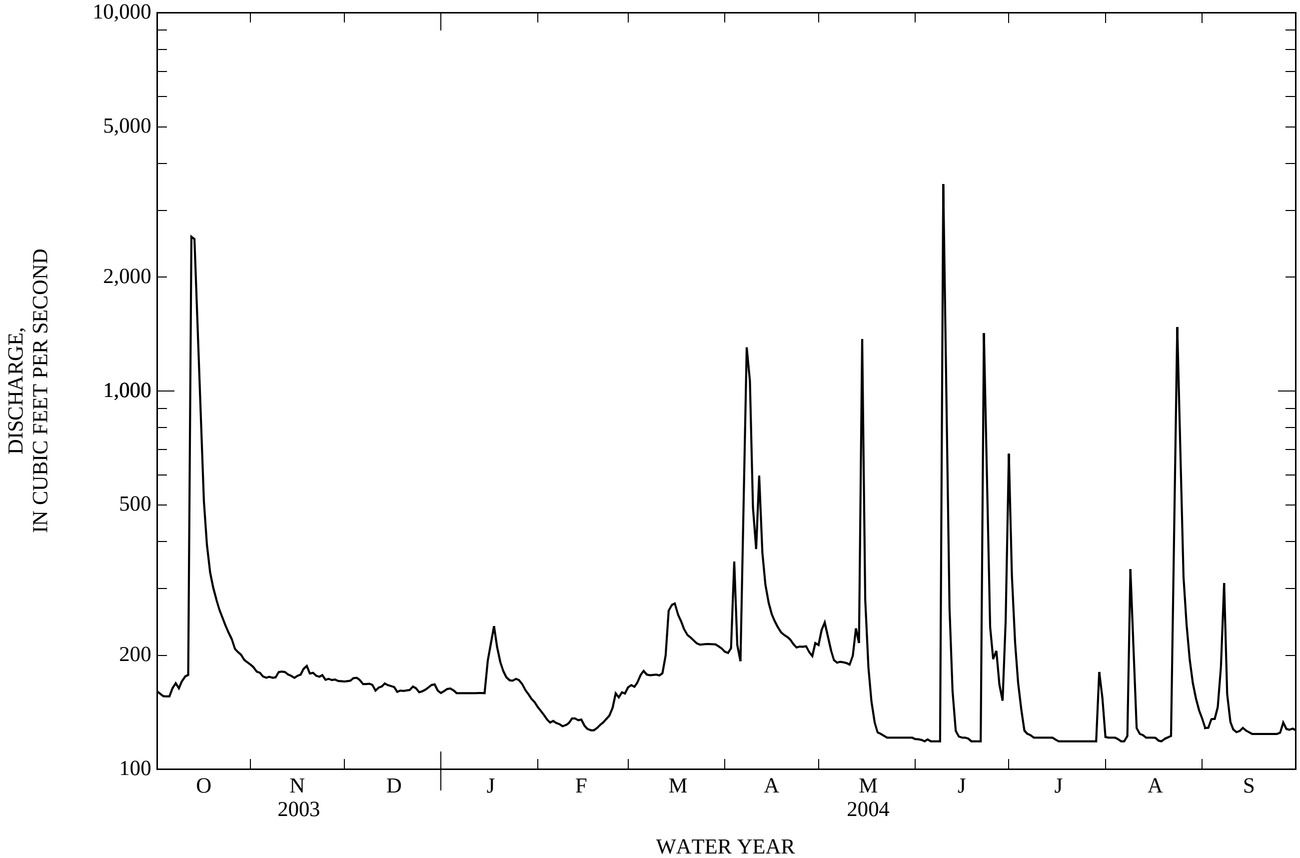
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2004h, BY WATER YEAR (WY)

MEAN	521	445	291	234	251	231	283	340	326	233	368	369
MAX	3,222	5,707	1,929	1,053	1,530	875	2,097	1,559	1,791	1,439	3,331	3,280
(WY)	(1974)	(2001)	(1985)	(1985)	(1992)	(1992)	(1977)	(1990)	(1987)	(1988)	(1974)	(1980)
MIN	72.9	105	108	118	98.5	89.0	71.5	66.0	49.1	38.4	31.2	38.1
(WY)	(1984)	(1969)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1980)	(1980)	(1984)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1968 - 2004h	
ANNUAL TOTAL	58,030		81,591			
ANNUAL MEAN	159		223		326	
HIGHEST ANNUAL MEAN					870	2001
LOWEST ANNUAL MEAN					77.7	1984
HIGHEST DAILY MEAN	2,560	Oct 12	3,520	Jun 9	80,800	Nov 4, 2000
LOWEST DAILY MEAN	55	Aug 22	118	Jun 3	10	Jul 17, 1984
ANNUAL SEVEN-DAY MINIMUM	59	Aug 5	118	Jul 16	18	Jul 12, 1984
MAXIMUM PEAK FLOW			10,900	Jun 9	215,000	Sep 8, 1980
MAXIMUM PEAK STAGE			8.21	Jun 9	a37.00	Sep 8, 1980
ANNUAL RUNOFF (AC-FT)	115,100		161,800		236,300	
10 PERCENT EXCEEDS	185		265		409	
50 PERCENT EXCEEDS	132		165		169	
90 PERCENT EXCEEDS	72		121		90	

h See Period of Record paragraph.
a From floodmark.

08150700 Llano River near Mason, TX—Continued



08150800 Beaver Creek near Mason, TX

LOCATION.--Lat 30°38'36", long 99°05'44", Mason County, Hydrologic Unit 12090204, on left bank at downstream side of downstream bridge on U.S. Highway 87, 1.8 mi upstream from Llano River, 6.4 mi downstream from Spring Creek, and 11.1 mi southeast of Mason.

DRAINAGE AREA.--215 mi^2.

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WSP 2122: 1964-65. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,253.24 ft above NGVD of 1929. Prior to Aug. 3, 1978, at site 300 ft upstream at same datum. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.1	3.4	3.2	5.0	8.0	4.3	15	3.4	34	9.5	2.8
2	1.1	2.9	3.6	3.5	4.9	7.0	6.0	12	7.8	29	8.4	2.9
3	1.1	2.7	3.9	3.5	4.7	6.3	8.7	9.0	3.7	26	7.4	3.0
4	1.1	2.9	3.6	2.9	4.8	11	8.4	6.2	2.1	23	6.6	2.8
5	1.1	3.0	3.4	2.6	6.1	21	7.7	5.1	1.3	21	5.7	2.7
6	6.4	3.4	3.4	2.3	8.1	14	59	4.7	1.1	20	5.4	17
7	17	3.4	3.4	2.2	6.1	9.7	62	5.4	0.82	18	6.3	24
8	9.9	4.4	3.6	2.4	5.2	7.9	29	6.0	0.89	17	7.7	12
9	13	5.3	3.7	2.8	5.1	6.9	21	5.3	5,930	17	8.2	7.7
10	14	5.7	3.3	2.6	5.9	6.5	64	4.6	588	16	6.9	5.9
11	15	5.3	3.1	2.4	7.3	6.3	71	12	193	15	5.8	5.4
12	107	4.6	3.4	2.5	8.7	11	38	10	107	15	4.4	5.1
13	34	4.1	4.0	2.6	7.8	35	28	14	73	14	3.8	4.7
14	21	3.5	4.0	2.8	7.0	30	23	68	52	13	3.5	4.1
15	14	3.3	3.7	8.1	6.4	21	19	24	38	12	3.4	3.7
16	11	3.9	3.4	14	6.1	17	17	13	26	11	3.2	3.6
17	9.1	5.2	3.1	24	5.7	13	16	9.3	22	10	3.2	3.6
18	7.9	11	3.0	16	5.2	11	14	7.1	22	9.9	3.3	3.2
19	6.8	7.5	3.2	8.0	4.9	9.8	13	5.9	22	10	5.0	2.8
20	6.1	4.5	3.4	6.6	4.5	9.3	13	5.0	22	9.3	9.8	2.6
21	5.3	3.7	3.5	6.0	4.5	9.0	12	4.0	23	8.7	7.9	2.3
22	4.9	3.3	3.5	5.2	4.6	8.0	11	3.7	500	8.0	14	2.0
23	4.5	3.0	3.3	5.5	5.1	7.0	10	3.6	50	7.4	10	2.1
24	4.1	2.9	3.1	5.6	6.8	6.7	12	3.9	35	7.0	8.1	10
25	3.5	3.0	3.1	6.2	11	8.1	17	4.0	29	6.8	5.7	12
26	3.6	3.4	3.5	5.8	8.8	7.9	13	3.7	25	9.4	4.4	7.1
27	3.7	3.6	3.7	4.7	6.6	6.7	11	3.2	23	10	3.6	5.5
28	3.7	3.5	3.5	4.2	6.0	6.1	9.1	3.9	55	8.8	3.3	5.2
29	3.5	3.2	3.4	4.3	6.8	12	10	3.1	53	12	4.0	4.9
30	3.1	3.2	3.5	4.6	---	7.5	11	2.4	60	20	4.7	4.3
31	3.0	---	3.1	4.9	---	5.1	---	1.9	---	12	3.2	---
TOTAL	340.7	122.5	106.8	172.0	179.7	345.8	638.2	279.0	7,969.11	450.3	186.4	175.0
MEAN	11.0	4.08	3.45	5.55	6.20	11.2	21.3	9.00	266	14.5	6.01	5.83
MAX	107	11	4.0	24	11	35	71	68	5,930	34	14	24
MIN	1.1	2.7	3.0	2.2	4.5	5.1	4.3	1.9	0.82	6.8	3.2	2.0
AC-FT	676	243	212	341	356	686	1,270	553	15,810	893	370	347
CFSM	0.05	0.02	0.02	0.03	0.03	0.05	0.10	0.04	1.24	0.07	0.03	0.03
IN.	0.06	0.02	0.02	0.03	0.03	0.06	0.11	0.05	1.38	0.08	0.03	0.03

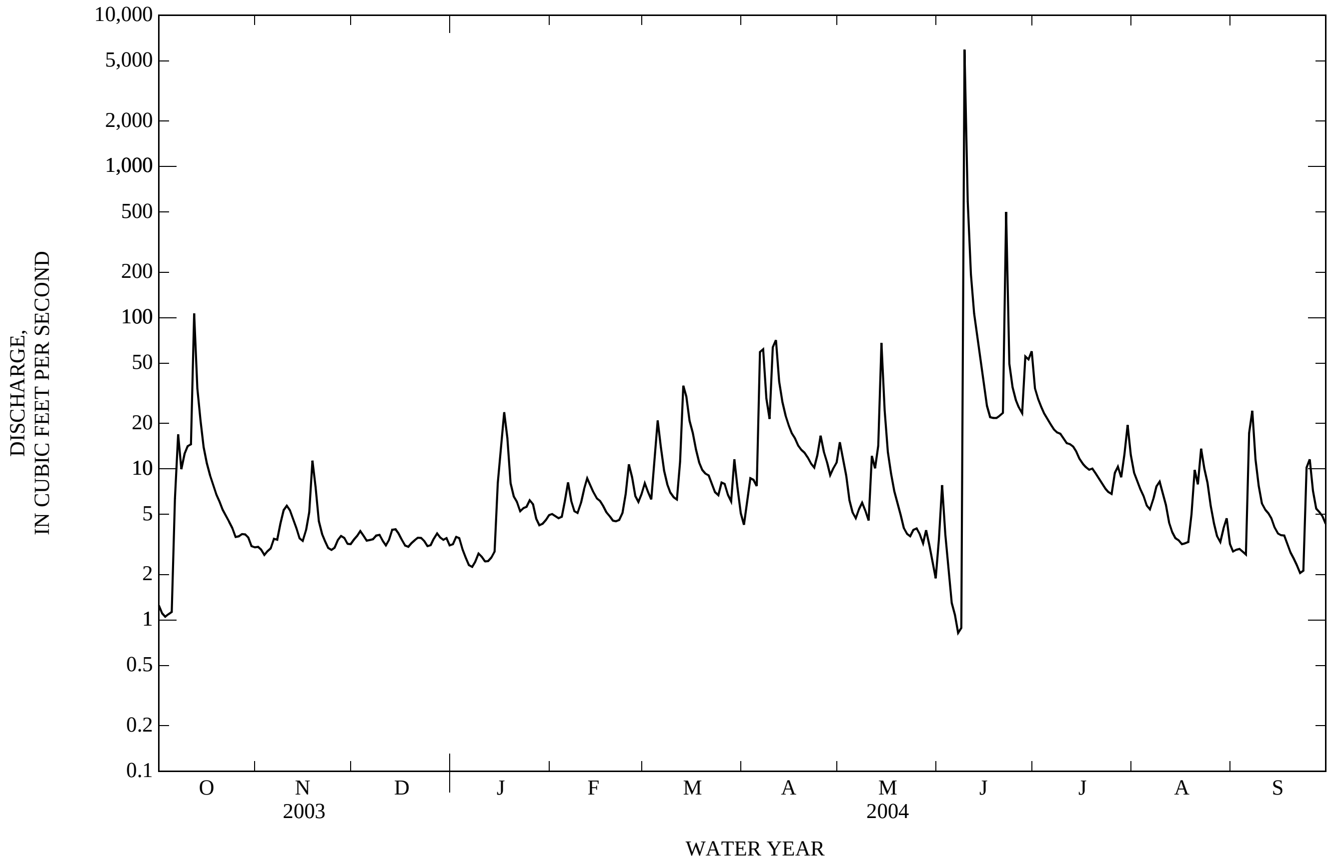
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	28.0	14.8	13.8	12.8	22.0	21.7	18.6	26.8	33.2	5.57	17.9	10.2
MAX	329	215	220	183	285	164	132	197	327	70.6	443	167
(WY)	(1997)	(2001)	(1992)	(1968)	(1992)	(1997)	(1977)	(1975)	(1987)	(2002)	(1978)	(1964)
MIN	0.37	0.91	1.44	1.84	1.41	1.29	0.49	0.72	0.21	0.00	0.00	0.02
(WY)	(1983)	(1980)	(1983)	(1971)	(1984)	(1967)	(1984)	(1996)	(1971)	(1964)	(1985)	(1977)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004	
ANNUAL TOTAL	3,896.17		10,965.51			
ANNUAL MEAN	10.7		30.0		18.8	
HIGHEST ANNUAL MEAN					91.5	1997
LOWEST ANNUAL MEAN					1.97	1967
HIGHEST DAILY MEAN	1,630	Jun 15	5,930	Jun 9	12,800	Aug 3, 1978
LOWEST DAILY MEAN	0.02	Aug 5	0.82	Jun 7	0.00	Aug 3, 1963
ANNUAL SEVEN-DAY MINIMUM	0.03	Aug 4	2.5	Jan 6	0.00	Aug 3, 1963
MAXIMUM PEAK FLOW			22,600	Jun 9	i66,900	Aug 3, 1978
MAXIMUM PEAK STAGE			a13.12	Jun 9	a24.00	Aug 3, 1978
ANNUAL RUNOFF (AC-FT)	7,730		21,750		13,620	
ANNUAL RUNOFF (CFSM)	0.050		0.139		0.087	
ANNUAL RUNOFF (INCHES)	0.67		1.90		1.19	
10 PERCENT EXCEEDS	12		23		23	
50 PERCENT EXCEEDS	4.0		6.0		3.4	
90 PERCENT EXCEEDS	1.2		3.0		0.21	

i From slope-area measurement of peak flow.
a From floodmark.

08150800 Beaver Creek near Mason, TX—Continued



08151500 Llano River at Llano, TX

LOCATION.--Lat 30°45'04", long 98°40'10", Llano County, Hydrologic Unit 12090204, on right bank in Llano, 0.4 mi downstream from bridge on State Highway 16, 7.0 mi upstream from Little Llano River, and 29.3 mi upstream from mouth.

DRAINAGE AREA.--4,197 mi^2 of which 5 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Sept. 1939 to current year. Water-quality records: Chemical data: Apr. 1948 to Oct. 1967, Apr. 1979 to Sept. 1986. Biochemical data: Apr. 1979 to Sept. 1986. Sediment data: Sept. 1964, Apr. 1979 to Sept. 1986. Specific conductance: Apr. 1979 to Sept. 1980. Water temperature: Apr. 1979 to Sept. 1980.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 970.01 ft above NGVD of 1929. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation or diversions. Part of low flow of the Llano River disappears into various formations, many of which are faulted, between this station and Llano River near Junction (station 08150000). No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1879, 41.5 ft, June 14, 1935, discharge, 380,000 ft^3/s, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	203	164	148	143	161	139	259	111	957	140	148
2	131	200	166	148	140	159	146	305	106	555	112	145
3	118	197	167	152	136	156	635	301	127	413	105	143
4	111	196	167	153	142	176	516	244	104	336	94	145
5	112	195	165	147	164	212	282	201	103	285	85	149
6	261	191	162	143	149	199	2,740	175	94	249	77	182
7	270	193	161	142	141	175	1,680	168	81	223	72	245
8	225	194	161	142	140	158	1,880	165	101	205	69	317
9	519	197	161	141	138	146	982	161	16,900	187	221	201
10	415	202	157	140	140	138	1,630	157	5,190	173	210	163
11	363	202	156	138	148	130	2,190	152	1,370	165	142	148
12	936	200	159	139	150	144	1,140	184	698	155	112	144
13	3,260	193	160	141	150	344	722	238	447	145	106	138
14	1,510	187	160	143	154	475	551	1,110	327	136	96	140
15	944	185	164	173	149	426	456	828	259	128	86	139
16	651	188	158	224	144	635	395	391	219	122	80	132
17	496	218	156	391	139	432	351	270	192	116	76	125
18	407	270	154	304	136	316	316	220	171	114	75	118
19	355	210	154	237	135	257	294	194	154	112	76	113
20	318	196	154	202	133	228	283	176	134	104	79	108
21	292	189	154	186	129	209	272	163	116	98	165	102
22	274	183	155	177	129	194	252	152	3,410	94	164	100
23	258	178	155	171	133	182	235	147	2,130	91	789	106
24	246	172	153	171	174	178	277	142	773	87	783	107
25	236	170	151	169	179	178	329	138	526	86	436	107
26	227	169	152	161	169	177	278	135	1,320	84	301	116
27	218	169	152	153	161	173	249	130	580	83	238	136
28	213	165	155	149	156	171	225	127	707	85	205	142
29	209	164	151	145	163	167	221	122	959	92	183	131
30	206	164	155	143	---	158	223	118	1,460	133	168	131
31	205	---	152	142	---	149	---	116	---	201	156	---
TOTAL	14,139	5,740	4,891	5,315	4,264	7,003	19,889	7,389	38,869	6,014	5,701	4,321
MEAN	456	191	158	171	147	226	663	238	1,296	194	184	144
MAX	3,260	270	167	391	179	635	2,740	1,110	16,900	957	789	317
MIN	111	164	151	138	129	130	139	116	81	83	69	100
AC-FT	28,040	11,390	9,700	10,540	8,460	13,890	39,450	14,660	77,100	11,930	11,310	8,570

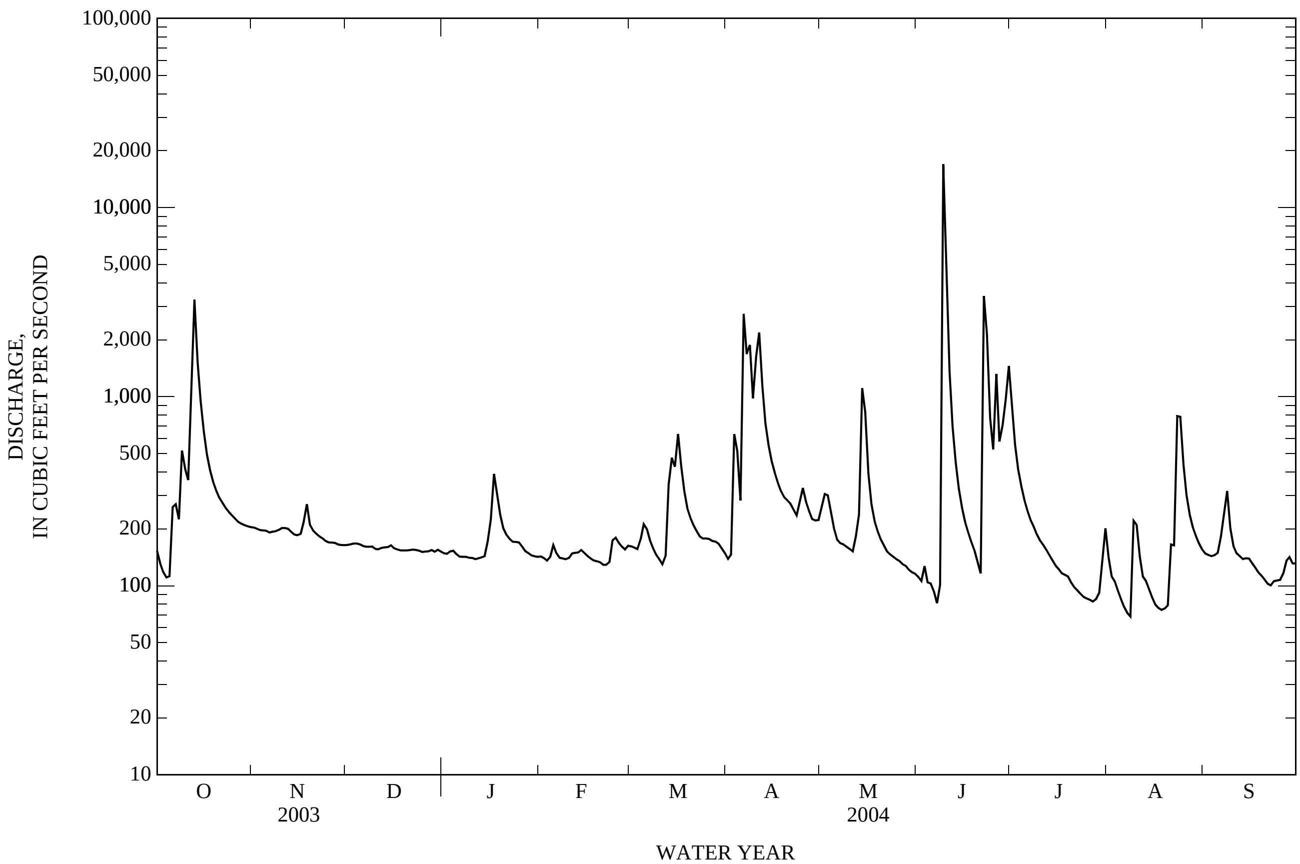
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	529	364	293	281	378	327	373	495	561	235	304	431
MAX	3,700	7,149	3,179	2,483	3,754	2,798	3,115	3,350	4,620	1,796	3,605	3,891
(WY)	(1974)	(2001)	(1992)	(1968)	(1992)	(1997)	(1977)	(1957)	(1997)	(1988)	(1974)	(1952)
MIN	18.0	20.7	27.5	31.7	37.7	23.7	20.9	41.0	7.93	0.00	0.09	0.56
(WY)	(1952)	(1957)	(1955)	(1957)	(1954)	(1954)	(1955)	(1984)	(1953)	(1956)	(1952)	(1954)

08151500 Llano River at Llano, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	71,351		123,535			
ANNUAL MEAN	195		338		370	
HIGHEST ANNUAL MEAN					1,308	1997
LOWEST ANNUAL MEAN					50.0	1954
HIGHEST DAILY MEAN	3,260	Oct 13	16,900	Jun 9	88,500	Nov 4, 2000
LOWEST DAILY MEAN	29	Apr 11	69	Aug 8	0.00	Aug 5, 1952
ANNUAL SEVEN-DAY MINIMUM	51	Aug 4	81	Aug 14	0.00	Aug 27, 1952
MAXIMUM PEAK FLOW			85,200	Jun 9	i260,000	Jun 23, 1997
MAXIMUM PEAK STAGE			22.15	Jun 9	a38.86	Jun 23, 1997
ANNUAL RUNOFF (AC-FT)	141,500		245,000		267,700	
10 PERCENT EXCEEDS	291		517		524	
50 PERCENT EXCEEDS	162		165		156	
90 PERCENT EXCEEDS	69		110		42	

a From floodmark.
i From indirect measurement of peak flow.



08152000 Sandy Creek near Kingsland, TX

LOCATION.--Lat 30°33'27", long 98°28'19", Llano County, Hydrologic Unit 12090201, at right downstream end of bridge on State Highway 71, 6.6 mi upstream from mouth.

DRAINAGE AREA.--346 mi^2.

PERIOD OF RECORD.--Oct. 1966 to Mar. 1993, Oct. 1997 to current year. Water-quality records: Sediment data: Jan. 1968 to Sept. 1975.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 862.31 ft above NGVD of 1929. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for daily discharges below 1 ft^3/s, which are poor. No known regulation. There are several small diversions above station for irrigation. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Sept. 11, 1952, the highest since at least 1881, reached a stage of 34.2 ft; discharge, 163,000 ft^3/s, from slope-area measurement at gage site. The flood of May 29, 1995, reached a stage of 31.22 ft; discharge 107,000 ft^3/s, from slope-area measurement at gage site.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	7.7	6.9	7.9	6.1	25	18	115	6.7	134	14	8.9
2	5.0	5.4	8.4	7.5	5.8	27	16	113	6.1	95	10	8.0
3	4.6	5.0	10	7.1	4.3	28	48	85	7.2	79	6.1	6.1
4	4.9	4.8	11	7.6	7.4	32	59	81	6.2	59	4.0	5.1
5	5.2	5.0	10	6.8	24	63	40	70	4.3	49	2.3	3.1
6	7.5	5.1	11	5.9	13	49	3,560	59	3.7	39	1.9	9.6
7	9.7	6.1	13	5.9	11	40	679	55	3.4	35	1.5	125
8	14	6.5	12	5.9	8.8	34	260	49	17	31	9.0	54
9	32	6.7	11	5.5	7.6	26	149	46	3,080	29	7.1	32
10	29	7.6	9.5	5.4	11	22	136	41	593	26	3.9	20
11	33	9.8	8.9	5.8	25	19	459	38	139	25	2.5	13
12	156	9.2	11	5.9	37	28	280	32	74	20	2.4	9.8
13	102	8.8	11	6.0	32	49	163	30	55	18	1.8	6.8
14	62	8.9	9.4	6.2	27	76	125	73	54	16	1.3	5.7
15	29	12	9.4	13	21	64	96	80	46	14	1.2	3.6
16	16	11	8.7	22	16	84	83	61	41	13	1.1	2.0
17	11	23	7.8	94	13	71	79	43	37	12	0.95	1.8
18	7.8	22	7.8	66	11	53	70	27	33	15	0.89	1.2
19	8.0	14	7.4	48	9.8	45	59	21	29	13	0.87	0.93
20	7.7	13	7.2	34	9.1	40	50	18	26	11	0.69	0.59
21	7.2	12	7.4	24	8.3	48	49	17	23	7.7	0.51	0.49
22	6.4	14	7.6	19	11	55	50	15	104	6.3	0.62	0.41
23	6.7	9.9	7.5	16	13	38	58	15	153	5.6	1.1	0.34
24	6.3	8.3	7.3	17	39	38	260	14	69	5.8	1.9	0.29
25	5.9	8.1	8.1	15	52	49	220	14	49	6.2	12	0.22
26	5.6	7.6	8.7	11	33	46	137	13	568	41	9.0	0.20
27	5.0	7.6	8.5	8.9	31	40	101	13	147	19	5.5	0.22
28	5.5	7.2	8.3	7.8	26	34	75	12	966	11	3.5	0.25
29	6.6	7.2	7.6	6.4	30	30	156	9.9	231	14	26	0.23
30	8.2	7.3	7.2	6.3	---	28	127	9.1	203	24	21	0.17
31	9.4	---	7.4	6.0	---	21	---	8.0	---	21	12	---
TOTAL	622.7	280.8	277.0	503.8	543.2	1,302	7,662	1,277.0	6,774.6	894.6	166.63	320.04
MEAN	20.1	9.36	8.94	16.3	18.7	42.0	255	41.2	226	28.9	5.38	10.7
MAX	156	23	13	94	52	84	3,560	115	3,080	134	26	125
MIN	4.6	4.8	6.9	5.4	4.3	19	16	8.0	3.4	5.6	0.51	0.17
AC-FT	1,240	557	549	999	1,080	2,580	15,200	2,530	13,440	1,770	331	635
CFSM	0.06	0.03	0.03	0.05	0.05	0.12	0.74	0.12	0.65	0.08	0.02	0.03
IN.	0.07	0.03	0.03	0.05	0.06	0.14	0.82	0.14	0.73	0.10	0.02	0.03

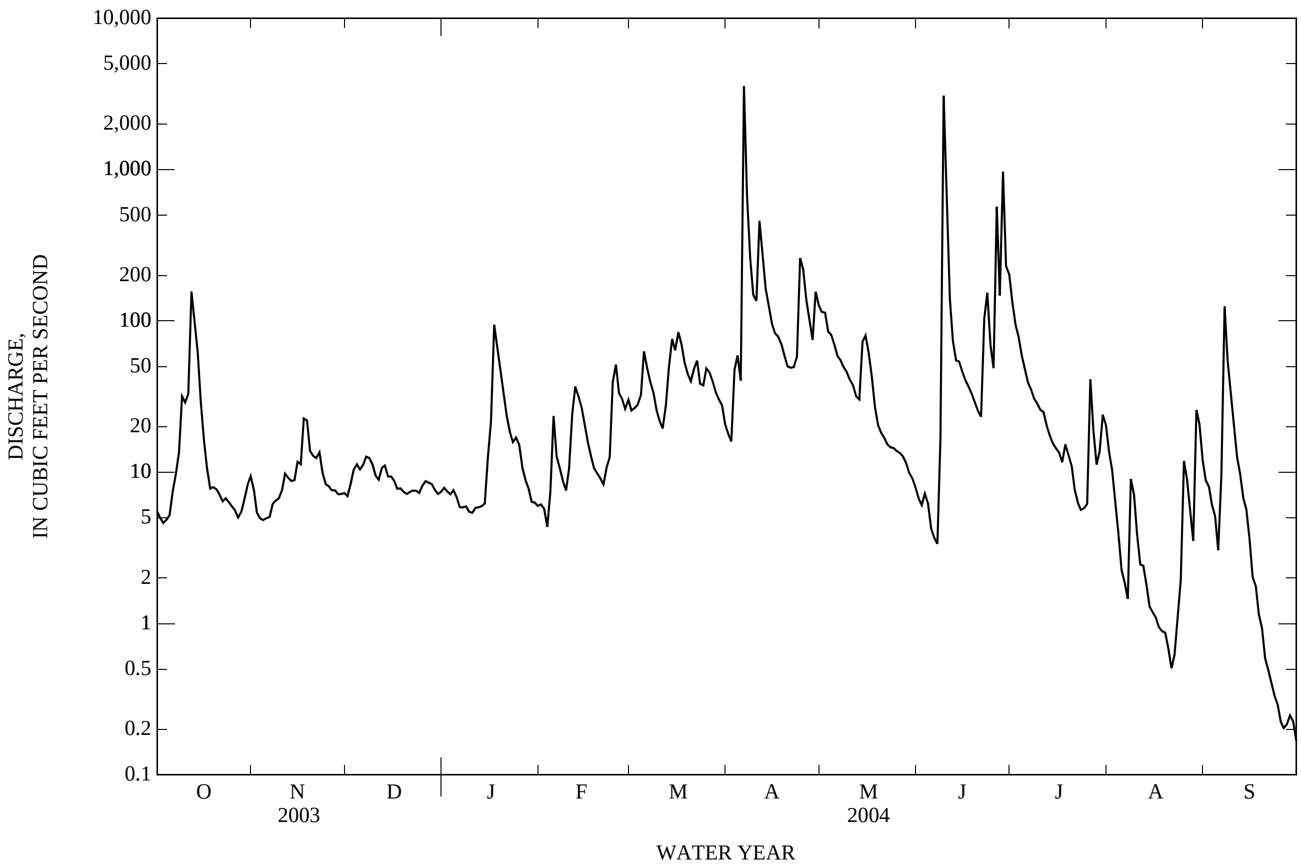
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	60.1	44.6	72.7	56.2	85.5	81.1	62.9	112	112	46.4	21.2	27.5
MAX	306	277	1,074	511	936	425	528	510	862	819	358	188
(WY)	(1972)	(2001)	(1992)	(1968)	(1992)	(1992)	(1977)	(1975)	(1987)	(2002)	(1974)	(1976)
MIN	0.04	0.05	1.10	1.06	4.19	1.86	1.41	0.71	0.05	0.10	0.00	0.00
(WY)	(1990)	(1989)	(1990)	(1990)	(1967)	(1967)	(1984)	(1984)	(1971)	(1980)	(1989)	(1989)

08152000 Sandy Creek near Kingsland, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004h	
ANNUAL TOTAL	11,708.20		20,624.37			
ANNUAL MEAN	32.1		56.4		65.6	
HIGHEST ANNUAL MEAN					279	1992
LOWEST ANNUAL MEAN					3.62	1984
HIGHEST DAILY MEAN	996	Feb 21	3,560	Apr 6	14,200	Dec 21, 1991
LOWEST DAILY MEAN	0.04	Aug 11	0.17	Sep 30	0.00	Jul 16, 1967
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 6	0.23	Sep 24	0.00	Jul 16, 1967
MAXIMUM PEAK FLOW			15,700	Jun 9	39,500	Dec 20, 1991
MAXIMUM PEAK STAGE			a12.69	Jun 9	17.63	Jun 16, 1987
ANNUAL RUNOFF (AC-FT)	23,220		40,910		47,540	
ANNUAL RUNOFF (CFSM)	0.093		0.163		0.190	
ANNUAL RUNOFF (INCHES)	1.26		2.22		2.58	
10 PERCENT EXCEEDS	58		83		95	
50 PERCENT EXCEEDS	15		13		12	
90 PERCENT EXCEEDS	0.67		3.7		0.12	

a From Floodmark.
h See PERIOD OF RECORD paragraph.



LOCATION.--Lat 30°13'13", long 98°52'10", Gillespie County, Hydrologic Unit 12090206, on left bank at downstream side of bridge on U.S. Highway 87, 2.0 mi upstream from Mueseback Creek, 3.8 mi south of the Post Office in Fredericksburg, and 88.7 mi upstream from mouth.

DRAINAGE AREA.--369 mi^2.

PERIOD OF RECORD.--July 1979 to May 1993, Mar. 1998 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,564.96 ft above NGVD of 1929. Radio telemeter at station. Satellite telemeter at station.

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

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of Aug. 2, 1978, which is the highest since 1907, reached a stage of 41.6 ft (discharge not determined). The highest known discharge was 64,000 ft^3/s, June 1, 1979, gage height, 34.4 ft, from floodmark, from rating curve extended above a discharge measurement of 42,300 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	25	25	23	27	33	42	107	38	251	74	36
2	19	25	26	24	26	31	47	109	36	196	60	35
3	18	26	27	24	25	31	122	93	35	172	58	35
4	18	26	26	23	25	35	68	87	36	154	53	35
5	19	26	26	22	27	47	65	82	34	138	49	38
6	21	27	25	21	30	42	7,370	80	33	126	48	189
7	25	28	25	20	29	36	656	81	32	116	185	115
8	25	29	25	21	26	33	270	82	35	111	273	64
9	35	30	25	21	26	32	192	79	5,920	108	124	50
10	41	30	24	21	27	31	157	76	833	101	80	44
11	172	30	24	21	32	31	202	72	290	97	73	41
12	851	30	24	21	36	37	156	71	200	92	65	41
13	114	29	25	21	34	74	129	72	165	88	59	38
14	70	28	25	21	32	74	118	198	137	84	56	37
15	53	28	25	27	31	70	111	101	116	80	55	40
16	44	30	25	36	29	65	108	82	105	77	50	37
17	39	52	25	98	28	58	105	74	98	74	47	34
18	36	56	25	58	28	56	101	70	90	71	46	34
19	33	37	25	42	27	54	99	67	84	71	50	33
20	30	32	25	36	27	53	98	63	80	66	56	30
21	29	30	25	34	26	54	97	59	75	63	47	28
22	28	29	25	32	25	50	96	57	1,650	61	48	28
23	28	28	24	31	26	49	92	56	323	61	76	29
24	26	26	24	32	31	50	158	56	290	63	68	31
25	26	25	25	33	39	52	135	55	176	64	53	34
26	26	25	26	32	35	50	109	52	210	110	47	32
27	26	26	26	29	31	49	94	50	144	77	43	30
28	25	26	25	27	30	49	88	48	451	65	41	31
29	25	25	24	27	31	48	136	46	286	61	39	32
30	25	25	23	28	---	46	112	44	745	79	37	30
31	25	---	23	27	---	43	---	42	---	81	35	---
TOTAL	1,971	889	772	933	846	1,463	11,333	2,311	12,747	3,058	2,095	1,311
MEAN	63.6	29.6	24.9	30.1	29.2	47.2	378	74.5	425	98.6	67.6	43.7
MAX	851	56	27	98	39	74	7,370	198	5,920	251	273	189
MIN	18	25	23	20	25	31	42	42	32	61	35	28
AC-FT	3,910	1,760	1,530	1,850	1,680	2,900	22,480	4,580	25,280	6,070	4,160	2,600

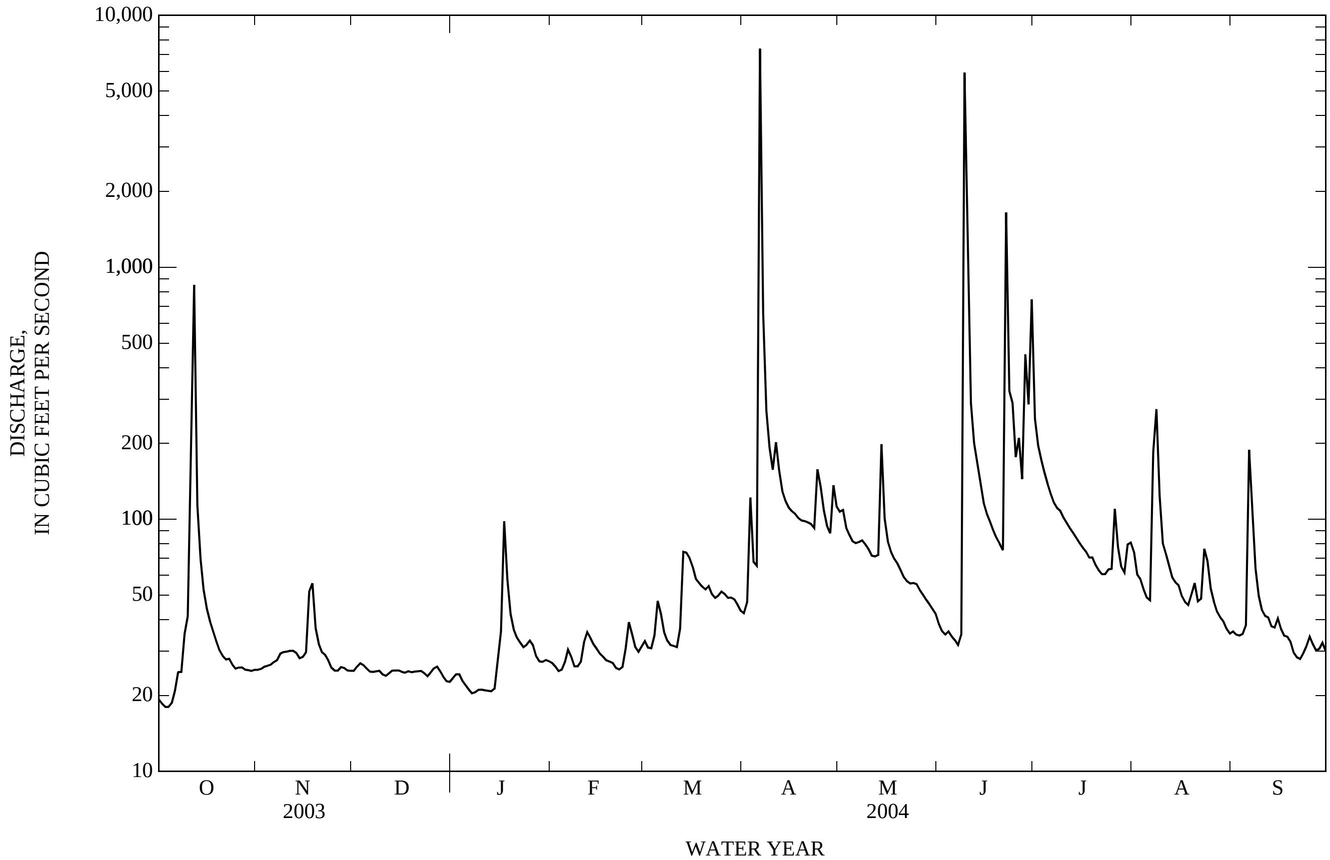
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	64.2	60.4	89.6	41.8	69.5	63.2	63.8	78.5	113	96.9	18.4	19.4
MAX	408	333	993	173	631	370	378	261	635	1,214	67.6	48.8
(WY)	(1986)	(2002)	(1992)	(1992)	(1992)	(1992)	(2004)	(1990)	(1987)	(2002)	(2004)	(1981)
MIN	3.25	5.70	7.18	8.78	8.32	9.77	5.96	2.95	2.33	0.78	0.23	0.31
(WY)	(2000)	(2000)	(1990)	(1990)	(1984)	(1984)	(1984)	(1984)	(1984)	(2000)	(1985)	(1984)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004h	
ANNUAL TOTAL	15,772.1		39,729			
ANNUAL MEAN	43.2		109		66.7	
HIGHEST ANNUAL MEAN					244	1992
LOWEST ANNUAL MEAN					5.31	1984
HIGHEST DAILY MEAN	851	Oct 12	7,370	Apr 6	14,800	Dec 20, 1991
LOWEST DAILY MEAN	9.2	Aug 21	18	Oct 3	0.00	Jul 13, 1984
ANNUAL SEVEN-DAY MINIMUM	9.8	Aug 16	20	Oct 1	0.00	Sep 2, 2000
MAXIMUM PEAK FLOW			33,100	Apr 6	55,700	Jul 5, 2002
MAXIMUM PEAK STAGE			p23.49	Apr 6	a32.09	Dec 20, 1991
ANNUAL RUNOFF (AC-FT)	31,280		78,800		48,360	
10 PERCENT EXCEEDS	63		131		96	
50 PERCENT EXCEEDS	30		40		24	
90 PERCENT EXCEEDS	14		25		3.6	

p Observed.
h See Period of Record paragraph.
a From floodmark.

08152900 Pedernales River near Fredericksburg, TX—Continued



08153500 Pedernales River near Johnson City, TX

LOCATION.--Lat 30°17'30", long 98°23'57", Blanco County, Hydrologic Unit 12090206, near left downstream end of bridge on U.S. Highway 281, 0.2 mi downstream from Towhead Creek, 1.1 mi northeast of Johnson City, 3.4 mi downstream from Buffalo Creek, and 48.0 mi upstream from mouth.

DRAINAGE AREA.--901 mi^2.

PERIOD OF RECORD.--May 1939 to current year. Water-quality records: Chemical data: Apr. 1948 to Sept. 1950, Oct. 1971 to Sept. 1985.

REVISED RECORDS.--WSP 1632: 1953(M), 1957, 1958(M). WDR TX-81-3: Drainage area. WRD TX-03-4.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,096.70 ft above NGVD of 1929. May 4 to Sept. 13, 1939, nonrecording gage, and Sept. 14, 1939, to Sept. 10, 1952, water-stage recorder at upstream side of bridge at same datum. Sept. 11, 1952, to June 29, 1953, nonrecording gage, and June 30, 1953, to Oct. 7, 1954, water-stage recorder at site 360 ft downstream at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records good except for those estimated daily discharges, which are fair. There are diversions above station for irrigation. During the year, the city of Fredericksburg discharged varying amounts of wastewater effluent into the river upstream from station. The city of Johnson City diverts varying amounts of water from the pool at gage and discharges wastewater effluent into river below the gage. No flow at times.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 1869, reached a stage of 33 ft from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	53	45	43	48	93	69	606	93	925	233	79
2	42	53	46	43	46	93	69	515	86	583	182	78
3	41	54	45	43	47	92	108	425	78	468	169	81
4	41	54	44	40	50	101	166	368	78	415	153	75
5	42	52	39	37	111	e122	131	336	77	374	140	79
6	43	50	43	37	64	e108	10,800	316	70	339	131	76
7	49	52	44	40	56	e96	2,060	312	66	310	126	195
8	60	55	44	41	55	e84	827	316	102	292	308	183
9	83	60	e40	40	56	e74	555	301	7,790	274	508	115
10	82	61	35	40	68	65	456	298	4,480	246	280	89
11	85	61	41	37	174	65	545	278	1,000	237	194	77
12	1,040	58	44	36	151	68	553	274	635	224	172	73
13	384	54	44	37	111	105	424	280	496	207	144	70
14	191	52	46	37	97	134	363	833	418	188	130	71
15	133	55	44	49	91	136	331	547	360	169	121	72
16	112	56	e42	76	83	164	305	364	317	150	115	68
17	95	64	41	159	74	142	287	291	276	128	106	66
18	88	e61	41	183	69	119	266	251	243	121	105	62
19	82	95	41	114	67	112	253	229	219	116	104	58
20	77	80	42	83	61	107	243	216	196	102	101	57
21	72	65	43	66	64	101	235	197	183	92	102	55
22	66	59	43	58	68	102	227	186	1,290	76	107	54
23	64	e50	33	54	71	97	216	180	1,200	77	794	54
24	63	52	40	56	93	99	2,970	172	523	89	326	52
25	58	54	42	57	127	100	940	163	492	217	184	54
26	54	51	43	e51	116	100	546	151	819	347	130	52
27	58	e45	45	49	103	93	435	144	454	208	109	52
28	57	46	41	47	92	91	375	128	1,500	161	99	50
29	57	49	41	45	91	85	846	124	741	389	93	49
30	55	50	43	43	---	77	570	122	1,470	283	92	48
31	55	---	43	43	---	72	---	112	---	157	85	---
TOTAL	3,472	1,701	1,308	1,784	2,404	3,097	26,171	9,035	25,752	7,964	5,643	2,244
MEAN	112	56.7	42.2	57.5	82.9	99.9	872	291	858	257	182	74.8
MAX	1,040	95	46	183	174	164	10,800	833	7,790	925	794	195
MIN	41	45	33	36	46	65	69	112	66	76	85	48
AC-FT	6,890	3,370	2,590	3,540	4,770	6,140	51,910	17,920	51,080	15,800	11,190	4,450

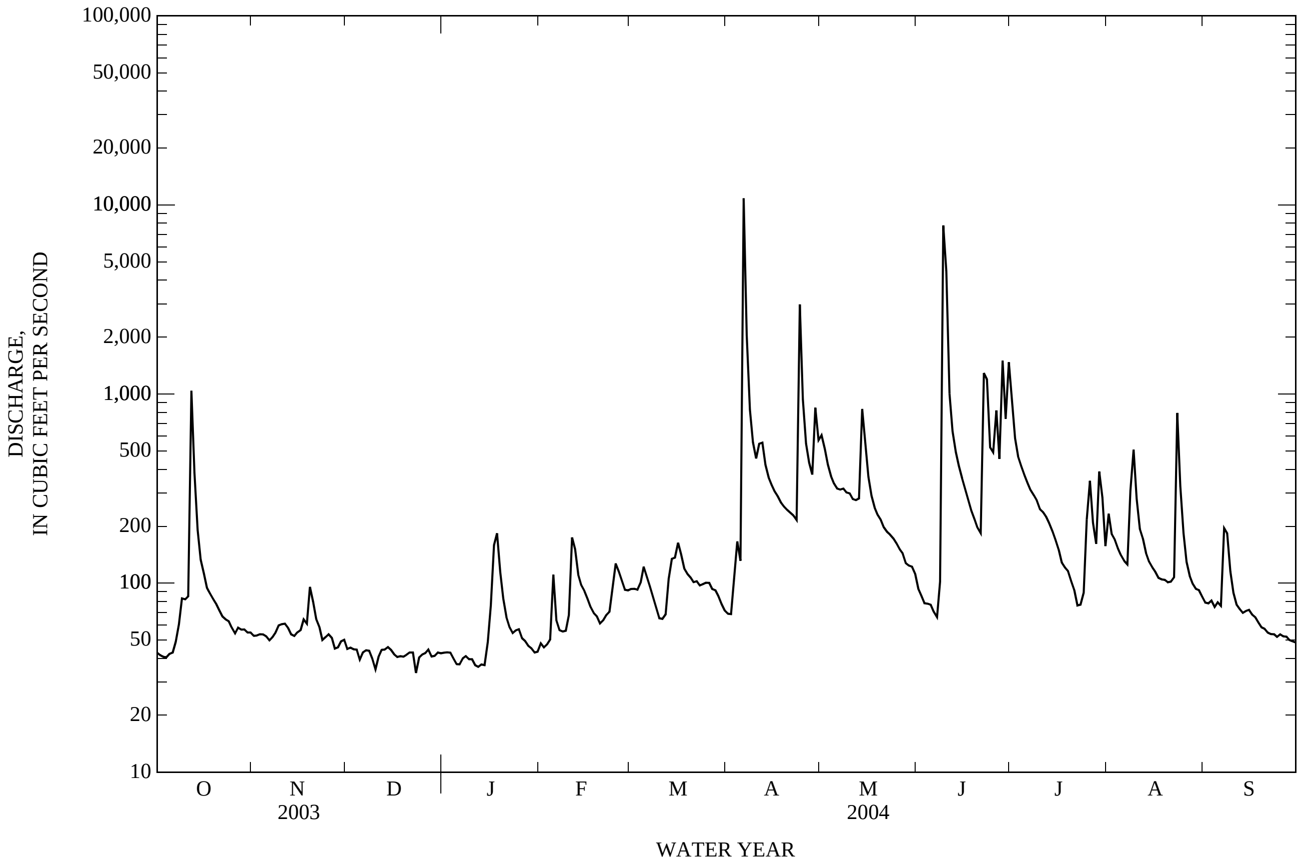
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	226	119	176	128	211	178	243	320	330	167	113	191
MAX	2,041	1,005	3,161	1,177	2,794	1,289	2,368	1,673	2,905	4,554	1,953	6,332
(WY)	(1960)	(2002)	(1992)	(1968)	(1992)	(1992)	(1977)	(1975)	(1987)	(2002)	(1978)	(1952)
MIN	0.44	2.51	2.44	1.68	4.83	2.07	0.06	2.05	0.52	0.00	0.00	0.00
(WY)	(1952)	(1952)	(1955)	(1957)	(1957)	(1956)	(1956)	(1956)	(1971)	(1971)	(1954)	(1984)

08153500 Pedernales River near Johnson City, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	59,217		90,575			
ANNUAL MEAN	162		247		201	
HIGHEST ANNUAL MEAN					840	1992
LOWEST ANNUAL MEAN					4.12	1956
HIGHEST DAILY MEAN	4,550	Feb 21	10,800	Apr 6	129,000	Sep 11, 1952
LOWEST DAILY MEAN	19	Aug 23	33	Dec 23	0.00	Aug 8, 1951
ANNUAL SEVEN-DAY MINIMUM	21	Aug 20	38	Jan 8	0.00	Aug 8, 1951
MAXIMUM PEAK FLOW			25,900	Apr 6	i441,000	Sep 11, 1952
MAXIMUM PEAK STAGE			16.99	Apr 6	a42.50	Sep 11, 1952
ANNUAL RUNOFF (AC-FT)	117,500		179,700		145,400	
10 PERCENT EXCEEDS	302		441		289	
50 PERCENT EXCEEDS	89		92		54	
90 PERCENT EXCEEDS	40		43		4.8	

a From floodmark.
i From indirect measurement of peak flow.
e Estimated



08154700 Bull Creek at Loop 360 near Austin, TX

LOCATION.--Lat 30°22'19", long 97°47'04", Travis County, Hydrologic Unit 12090205, on right bank at downstream side of bridge at Loop 360, 1.0 mi upstream from West Fork Bull Creek and Farm Road 2222, and 7.1 mi northwest of the State Capitol Building in Austin.

DRAINAGE AREA.--22.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1976 to July 1978 (peak discharge greater than base discharge), July 1978 to current year.

GAGE.--Water-stage recorder, concrete control, and crest-stage gage. Datum of gage is 534.08 ft above NGVD of 1929 (levels from city of Austin benchmark). Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.6	2.4	1.8	7.2	20	e19	18	3.0	117	6.7	2.8
2	1.7	1.8	2.3	1.7	6.7	23	e19	15	2.6	85	6.6	2.8
3	1.6	1.7	2.2	1.9	6.3	21	e18	13	12	71	5.0	2.9
4	1.9	1.6	2.1	1.9	17	52	e17	10	4.2	56	4.5	2.7
5	4.6	1.5	2.0	1.7	73	45	e17	9.9	4.1	44	3.9	2.6
6	8.5	1.5	2.0	1.6	25	29	e245	9.3	3.5	36	3.6	2.5
7	4.8	1.3	1.9	1.7	18	24	e68	8.6	3.1	30	3.5	2.8
8	4.5	1.3	1.9	1.8	14	21	40	8.2	42	26	3.3	2.5
9	11	1.4	2.0	1.7	13	19	31	7.9	654	22	3.0	1.9
10	8.2	1.4	1.6	1.6	26	18	51	7.7	260	19	3.0	1.9
11	6.9	1.4	2.0	1.5	72	16	65	9.0	113	19	3.9	1.9
12	9.4	1.4	3.0	1.6	46	15	46	9.3	83	17	3.7	1.8
13	6.5	1.3	4.8	1.6	30	19	34	13	65	15	2.8	1.8
14	5.2	1.2	2.9	1.9	28	19	29	37	53	13	2.8	92
15	4.2	1.3	2.8	6.2	24	17	26	14	45	12	2.3	36
16	3.6	1.6	2.5	201	20	40	24	12	38	10	2.1	11
17	3.4	7.9	2.3	126	18	24	23	14	33	9.6	2.0	7.0
18	3.1	12	2.4	28	16	20	21	9.6	29	8.6	2.0	5.6
19	2.8	5.0	2.1	18	15	18	20	6.9	25	8.1	1.9	4.7
20	2.5	3.8	2.1	14	15	17	19	6.0	22	7.1	126	4.2
21	2.5	3.4	2.1	11	14	18	18	5.5	19	6.7	39	4.1
22	2.3	3.3	2.1	9.7	13	16	17	5.2	21	6.3	12	3.9
23	2.3	3.2	1.8	8.8	12	e15	15	5.0	19	6.0	8.4	3.6
24	2.0	3.0	2.1	13	25	e35	24	4.8	17	5.6	6.8	3.3
25	1.7	2.9	1.9	15	17	e30	19	4.3	26	5.3	5.5	3.4
26	1.7	2.9	1.9	10	14	e26	17	4.0	68	9.8	4.8	3.6
27	1.9	2.9	1.9	8.7	13	e24	15	3.7	86	6.4	4.0	3.3
28	1.7	2.5	2.0	8.0	12	e24	14	4.1	63	5.4	3.9	3.0
29	1.7	2.3	1.7	7.9	22	e23	17	3.5	74	8.4	3.7	3.0
30	1.8	2.5	1.6	7.6	---	e21	15	3.6	179	9.2	3.6	2.9
31	1.7	---	1.7	7.2	---	e20	---	3.4	---	12	3.1	---
TOTAL	117.5	80.9	68.1	524.1	632.2	729	1,003	285.5	2,066.5	706.5	287.4	225.5
MEAN	3.79	2.70	2.20	16.9	21.8	23.5	33.4	9.21	68.9	22.8	9.27	7.52
MAX	11	12	4.8	201	73	52	245	37	654	117	126	92
MIN	1.6	1.2	1.6	1.5	6.3	15	14	3.4	2.6	5.3	1.9	1.8
AC-FT	233	160	135	1,040	1,250	1,450	1,990	566	4,100	1,400	570	447

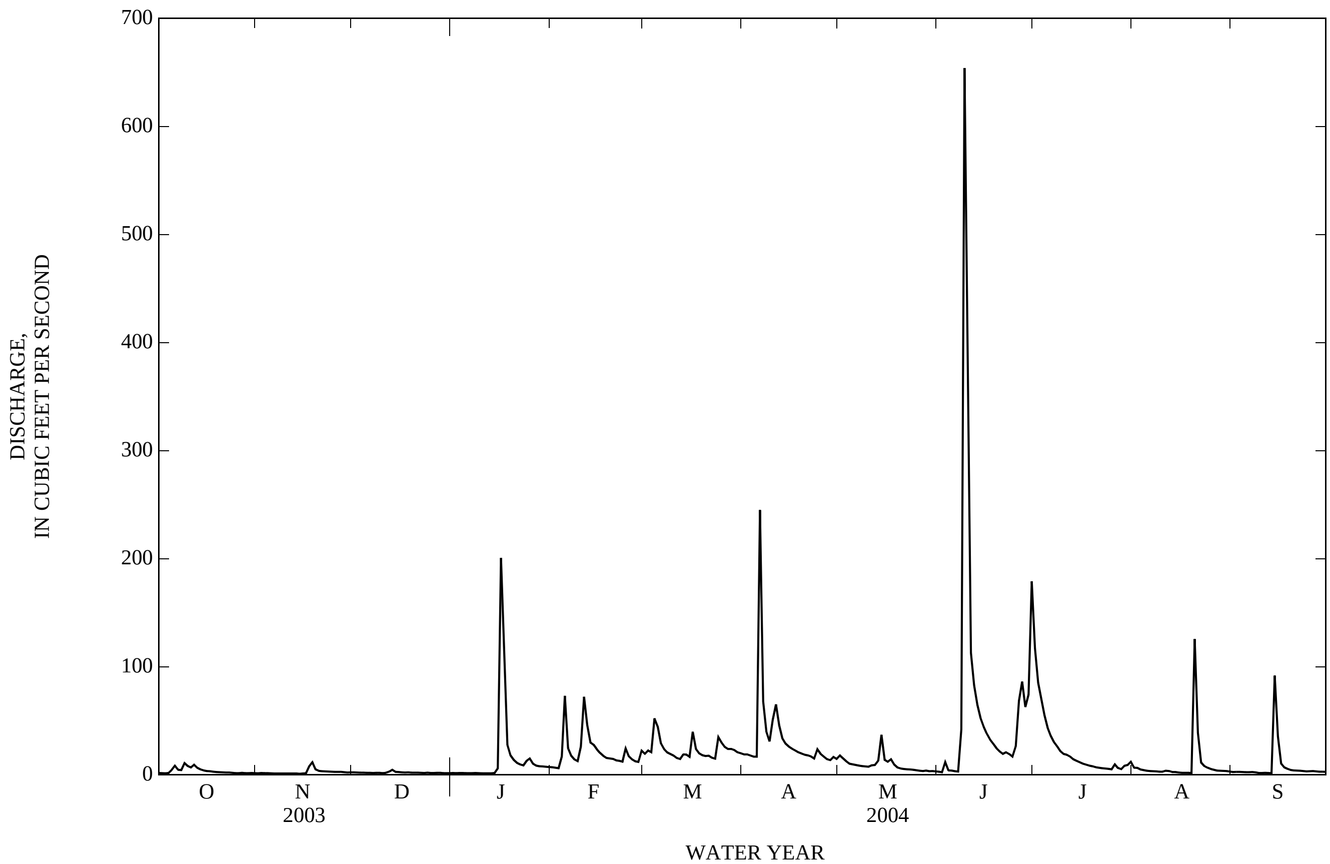
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	16.3	15.2	17.9	14.5	18.7	17.7	12.8	22.1	25.9	6.24	4.01	4.70
MAX	120	73.0	130	55.9	114	64.7	69.4	58.9	141	46.6	26.3	15.8
(WY)	(1999)	(2001)	(1992)	(1992)	(1992)	(1992)	(1997)	(1992)	(1987)	(2002)	(1991)	(2002)
MIN	0.17	0.06	0.64	1.08	1.92	2.06	1.28	0.33	0.57	0.04	0.01	0.01
(WY)	(2000)	(2000)	(1990)	(1990)	(1996)	(1996)	(1984)	(1984)	(1998)	(1994)	(2000)	(1999)

08154700 Bull Creek at Loop 360 near Austin, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	4,569.47		6,726.2			
ANNUAL MEAN	12.5		18.4		14.7	
HIGHEST ANNUAL MEAN					40.6	1992
LOWEST ANNUAL MEAN					1.86	1984
HIGHEST DAILY MEAN	459	Feb 20	654	Jun 9	1,180	Oct 17, 1998
LOWEST DAILY MEAN	0.04	Aug 6	1.2	Nov 14	0.00	Jul 4, 1984
ANNUAL SEVEN-DAY MINIMUM	0.05	Aug 4	1.3	Nov 8	0.00	Jul 4, 1984
MAXIMUM PEAK FLOW			3,430	Jun 9	13,700	May 13, 1982
MAXIMUM PEAK STAGE			a8.77	Jun 9	12.31	Oct 7, 1994
ANNUAL RUNOFF (AC-FT)	9,060		13,340		10,630	
10 PERCENT EXCEEDS	28		37		28	
50 PERCENT EXCEEDS	3.3		7.1		4.4	
90 PERCENT EXCEEDS	0.57		1.8		0.29	

a From floodmark.
e Estimated



08154700 Bull Creek at Loop 360 near Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Apr. 1978 to current year.
BIOCHEMICAL DATA: Apr. 1978 to current year.
RADIOCHEMICAL DATA: Jan. 1980 to June 1981.
PESTICIDE DATA: June 1978 to Oct. 1984, Jan. 1993 to June 1995, Oct. 2002 to current year.
SEDIMENT DATA: May 2000 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis- charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
NOV													
17-18	2030	24	<1	3.6	7.8	601	218	<10	.18	<.04	--	<.06	<.008
APR													
06-07	0710	325	75d	110	7.9	403	140	230d	2.1	<.04	.72	.73	.010

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)
NOV													
17-18	<.02	<.04	<.04	.21	--	5.5	10	E.03n	1.8	.20	2	<.009	<.02
APR													
06-07	E.01n	.03	.31	2.46	2.8	20.2	60	E.07nd	4.5d	3.93d	20d	.033	.61

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	Aceto- chlor, water, fltrd, ug/L (49260)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Ala- chlor, water, fltrd, ug/L (46342)	Aldi- carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd 0.7u GF ug/L (49312)
NOV													
17-18	<.02mc	<.006	<.006	<.04mc	E.019mc	<.006	<2mc	<.006	<.007	<.005	<.02mc	<.008mc	<.04mc
APR													
06-07	<.02mc	<.006	E.098	<.01mc	E.151mc	<.006	<.014mc	<.006	<.007	.013	<.02mc	<.008mc	<.04mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	alpha- HCH, water, fltrd, ug/L (34253)	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Bendio- carb, water, fltrd, ug/L (50299)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Broma- cil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl- ate, water, fltrd, ug/L (04028)	Caf- feine, water, fltrd, ug/L (50305)	Car- baryl, water, fltrd 0.7u GF ug/L (49310)
NOV													
17-18	<.005	.008	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	<.0101c	<.03
APR													
06-07	<.005	4.69	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.3041	.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Clopyr- alid, water, fltrd 0.7u GF ug/L (49305)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)
NOV													
17-18	<.041	<.006	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01
APR													
06-07	E.166	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01

08154700 Bull Creek at Loop 360 near Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dieldrin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)
NOV													
17-18	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005
APR													
06-07	<.003	<.012	.092	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)
NOV													
17-18	<.03	E.005t	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01
APR													
06-07	<.03	<.029	<.013	<.024	E.015n	<.01mc	<.03	<.003	Mmc	<.02mc	<.007	<.004	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl) -N'-methylurea, ug/L (61692)
NOV													
17-18	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003	<.02
APR													
06-07	<.035	.036	.06	<.01mc	<.02	<.008mc	<.004mc	<.015	.015	<.006	<.03mc	<.003	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)
NOV													
17-18	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01
APR													
06-07	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	E.009t	<.011	<.02	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometruron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)
NOV													
17-18	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.005	<.009	<.02	<.034	<.010mc
APR													
06-07	<.004	<.025	<.011	<.04	<.010	<.02	<.008	<.02	.149	<.009	<.02	<.034	<.010mc

08154700 Bull Creek at Loop 360 near Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribenuron water, fltrd, ug/L (61159)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV								
17-18	<.02	<.010	<.002	--u	<.02	<.009	6	.39
APR								
06-07	<.02	<.010	<.002	--u	<.02	E.004t	241	211

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

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08154900 Lake Austin at Austin, TX

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1978 to current year.
BIOCHEMICAL DATA: Oct. 1978 to current year.
RADIOCHEMICAL DATA: July 1980 to Feb. 1982.
PESTICIDE DATA: Oct. 1978 to Aug. 1990.
SEDIMENT DATA: June 2001 to July 2003.
SEDIMENT CHEMISTRY: Oct. 1978, Mar. 1987 to Aug. 1990, and June 2001 to July 2003.

REMARKS.--Water quality samples collected periodically after storm events.

301739097471201 -- LK AUSTIN SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue on evap. at 180degC wat flt mg/L (70300)
JUN													
10...	1228	.80	--	--	--	--	--	--	--	--	--	--	--
10...	1230	1.00	.49	12	753	7.0	77	7.7	439	28.0	19.9	151	245
10...	1232	10.0	--	--	753	6.9	75	7.7	444	--	18.8	--	--
10...	1234	20.0	--	--	753	6.8	73	7.7	444	--	18.4	--	--
10...	1236	30.0	--	--	753	6.8	73	7.7	444	--	18.5	--	--
10...	1238	40.0	--	--	753	6.7	72	7.7	445	--	18.0	--	--
10...	1240	49.0	--	12	753	6.8	73	7.7	443	--	18.4	152	242
AUG													
20...	0950	1.00	1.83	2.1	752	7.3	92	8.0	449	27.0	26.0	159	226
20...	0951	3.00	--	--	--	--	--	--	--	--	--	--	--
20...	0952	10.0	--	--	752	7.2	90	8.0	447	--	25.7	--	--
20...	0954	20.0	--	--	752	5.8	71	7.7	447	--	24.6	--	--
20...	0956	30.0	--	--	752	5.6	68	7.7	448	--	24.3	--	--
20...	0958	40.0	--	--	752	5.3	64	7.7	446	--	24.2	--	--
20...	1000	49.0	--	9.1	752	4.9	59	7.6	447	--	24.1	158	230

301739097471201 -- LK AUSTIN SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Cadmium water, unfltrd ug/L (01027)
JUN													
10...	--	--	--	--	--	--	--	--	--	--	.6d	<.1d	--
10...	12	.32	<.04	.22	<.008	<.02	<.04	<.04	.54	4.1	--	--	<.04
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<10	.29	<.04	.21	<.008	<.02	<.04	<.04	.50	3.7	--	--	<.04
AUG													
20...	<10	.27	<.04	<.06	<.008	<.02	<.04	<.04	--	5.8	--	--	<.04
20...	--	--	--	--	--	--	--	--	--	--	2.1d	E.1d	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	14	.35	E.02n	E.05n	<.008	<.02	<.04	E.02n	--	5.6	--	--	<.04

08154900 Lake Austin at Austin, TX—Continued

301739097471201 -- LK AUSTIN SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)
JUN				
10...	--	--	--	--
10...	1.4	1.5	.38	3
10...	--	--	--	--
10...	--	--	--	--
10...	--	--	--	--
10...	--	--	--	--
10...	1.4	2.7	.35	3
AUG				
20...	2.7	3.6v	.24	5
20...	--	--	--	--
20...	--	--	--	--
20...	--	--	--	--
20...	--	--	--	--
20...	--	--	--	--
20...	3.3	4.1v	.59	12

301739097471601 -- LK AUSTIN SITE AR
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sam-pling depth, feet (00003)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)
JUN									
10...	1218	1.00	753	7.0	78	7.7	438	28.0	20.0
10...	1220	10.0	753	6.9	75	7.7	441	--	18.9
10...	1222	20.0	753	6.9	75	7.7	442	--	18.8
AUG									
20...	0936	1.00	752	7.4	92	7.9	448	26.0	25.9
20...	0938	10.0	752	7.2	90	7.9	448	--	25.7
20...	0940	24.0	752	5.8	70	7.6	445	--	24.5

301739097470901 -- LK AUSTIN SITE AL
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sam-pling depth, feet (00003)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, air, deg C (00020)	Temper-ature, water, deg C (00010)
JUN									
10...	1206	1.00	753	7.0	79	7.7	426	28.0	20.6
10...	1208	10.0	753	6.8	74	7.7	442	--	18.7
10...	1210	15.0	753	7.1	76	7.7	445	--	18.3
AUG									
20...	1022	1.00	752	7.2	91	8.0	446	28.3	26.0
20...	1024	10.0	752	7.0	87	8.0	447	--	25.7
20...	1026	21.0	752	6.0	74	7.8	446	--	24.9

08154900 Lake Austin at Austin, TX—Continued

302043097472401 -- LK AUSTIN SITE BC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue on evap. at 180degC wat flt mg/L (70300)
JUN													
10...	1124	.90	--	--	--	--	--	--	--	--	--	--	--
10...	1126	1.00	.55	12	754	6.8	74	7.7	450	M	18.6	160	249
10...	1133	10.0	--	--	754	6.5	68	7.6	443	--	16.9	--	--
10...	1136	20.0	--	--	754	6.5	68	7.6	445	--	16.9	--	--
10...	1139	29.0	--	24	754	6.5	67	7.6	445	--	16.8	155	238
AUG													
20...	1046	1.00	1.83	<2.0	752	7.4	94	8.1	445	29.3	26.4	156	242
20...	1047	3.00	--	--	--	--	--	--	--	--	--	--	--
20...	1048	10.0	--	--	752	7.0	87	8.0	432	--	25.6	--	--
20...	1050	20.0	--	--	752	6.1	75	7.8	441	--	24.7	--	--
20...	1052	29.0	--	6.4	752	6.1	75	7.8	442	--	24.6	150	235

302043097472401 -- LK AUSTIN SITE BC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Cadmium water, unfltrd ug/L (01027)
JUN													
10...	--	--	--	--	--	--	--	--	--	--	E.1	<.1	--
10...	12	.32	<.04	.41	<.008	<.02	<.04	E.04n	.73	4.3	--	--	<.04
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	23	.31	<.04	.22	<.008	<.02	<.04	E.02n	.53	3.5	--	--	<.04
AUG													
20...	<10	.26	<.04	<.06	<.008	<.02	<.04	<.04	--	5.1	--	--	<.04
20...	--	--	--	--	--	--	--	--	--	--	3.0d	E.1d	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<10	.22	<.04	E.05n	<.008	<.02	<.04	<.04	--	4.3	--	--	<.04

302043097472401 -- LK AUSTIN SITE BC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)
JUN				
10...	--	--	--	--
10...	1.7	1.9	.34	4
10...	--	--	--	--
10...	--	--	--	--
10...	1.6	2.0	.29	4
AUG				
20...	2.7	2.8v	.19	4
20...	--	--	--	--
20...	--	--	--	--
20...	--	--	--	--
20...	2.5	3.1v	.43	6

08154900 Lake Austin at Austin, TX—Continued

302044097472301 -- LK AUSTIN SITE BL
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
JUN									
10...	1146	1.00	753	6.9	75	7.7	446	27.1	18.6
10...	1148	10.0	753	6.6	70	7.6	444	--	17.4
10...	1150	17.0	753	6.6	70	7.6	443	--	17.1
AUG									
20...	1036	1.00	752	7.4	93	8.1	443	29.1	26.3
20...	1038	10.0	752	6.8	84	7.9	435	--	25.5
20...	1040	19.0	752	5.8	71	7.8	442	--	24.8

301926097502201 -- LK AUSTIN SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue on evap. at 180degC wat flt mg/L (70300)
JUN													
10...	1042	1.00	.91	3.5	754	6.0	62	7.6	453	27.0	16.2	156	252
10...	1043	1.50	--	--	--	--	--	--	--	--	--	--	--
10...	1044	10.0	--	--	754	5.8	60	7.6	455	--	15.9	--	--
10...	1046	24.0	--	3.7	754	5.8	60	7.6	453	--	16.0	157	251
AUG													
20...	1120	1.00	1.89	<2.0	752	5.8	70	7.8	442	29.7	24.2	156	232
20...	1121	3.10	--	--	--	--	--	--	--	--	--	--	--
20...	1122	10.0	--	--	752	5.3	64	7.7	441	--	23.9	--	--
20...	1124	23.0	--	<2.0	752	5.2	63	7.7	442	--	23.8	158	247

301926097502201 -- LK AUSTIN SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Cadmium water, unfltrd ug/L (01027)
JUN													
10...	<10	.24	<.04	.22	<.008	<.02	<.04	<.04	.46	4.6	--	--	<.04
10...	--	--	--	--	--	--	--	--	--	--	.8d	<.1d	--
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
10...	<10	.21	<.04	.22	<.008	<.02	<.04	<.04	.43	6.8	--	--	<.04
AUG													
20...	<10	.23	<.04	.06	<.008	<.02	<.04	<.04	.30	3.9	--	--	<.04
20...	--	--	--	--	--	--	--	--	--	--	.7d	<.1d	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
20...	<10	.23	<.04	.06	<.008	<.02	<.04	<.04	.29	3.3	--	--	<.04

301926097502201 -- LK AUSTIN SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Lead, water, unfltrd recoverable, ug/L (01051)	Zinc, water, unfltrd recoverable, ug/L (01092)
JUN				
10...	1.7	1.8	.17	4
10...	--	--	--	--
10...	--	--	--	--
10...	1.8	1.9	.18	5
AUG				
20...	2.6	2.8v	.21	4
20...	--	--	--	--
20...	--	--	--	--
20...	2.4	3.1v	.22	5

08154900 Lake Austin at Austin, TX—Continued

302021097540001 -- LK AUSTIN SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)
JUN									
10...	1022	1.00	754	5.7	58	7.5	458	26.5	15.2
10...	1024	10.0	754	5.7	57	7.5	458	--	15.1
10...	1026	17.0	754	5.8	58	7.5	458	--	15.2
AUG									
20...	1150	1.00	753	5.2	62	7.7	444	30.7	24.0
20...	1152	10.0	753	4.9	58	7.7	443	--	23.4
20...	1154	16.0	753	4.9	58	7.6	444	--	23.3

302314097544901 -- LK AUSTIN SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue on evap. at 180degC wat flt mg/L (70300)
JUN													
10...	0948	1.00	1.83	<2.0	754	5.4	54	7.3	464	M	14.5	159	256
10...	0950	3.00	--	--	--	--	--	--	--	--	--	--	--
AUG													
20...	1212	1.00	>2.44e	<2.0	751	6.2	74	7.7	438	30.8	23.5	154	246
20...	1213	4.00	--	--	--	--	--	--	--	--	--	--	--
20...	1214	8.00	--	--	751	5.8	68	7.7	438	--	23.1	--	--

302314097544901 -- LK AUSTIN SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Cadmium water, unfltrd ug/L (01027)
JUN													
10...	<10	.19	<.04	.23	<.008	<.02	<.04	<.04	.43	5.4	--	--	<.04
10...	--	--	--	--	--	--	--	--	--	--	E.2d	<.1d	--
AUG													
20...	<10	.21	<.04	.08	<.008	<.02	<.04	<.04	.29	2.9	--	--	<.04
20...	--	--	--	--	--	--	--	--	--	--	6.5d	E.2d	--
20...	--	--	--	--	--	--	--	--	--	--	--	--	--

08154900 Lake Austin at Austin, TX—Continued

302314097544901 -- LK AUSTIN SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)
JUN				
10...	2.3	2.3	.13	7
10...	--	--	--	--
AUG				
20...	2.5	2.6v	.14	5
20...	--	--	--	--
20...	--	--	--	--

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
e -- See field comment
n -- Below the LRL and above the LT-MDL
v -- Analyte detected in laboratory blank

08155200 Barton Creek at State Highway 71 near Oak Hill, TX

LOCATION.--Lat 30°17'46", long 97°55'31", Travis County, Hydrologic Unit 12090205, on right bank at upstream side of bridge on State Highway 71, 0.1 mi downstream from Little Barton Creek, and 5.8 mi northwest of Oak Hill.

DRAINAGE AREA.--89.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Aug. 1975 to Feb. 1978 (peak discharge greater than base discharge), Feb. 1978 to Sept. 1982, Jan. 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 737.04 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for daily discharges below 5 ft^3/s, which are poor. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.63	2.4	0.95	1.1	2.8	21	13	40	13	532	12	1.9
2	0.60	0.79	0.90	0.55	2.6	17	13	38	11	344	11	1.9
3	2.5	1.1	0.69	0.44	2.4	18	13	32	10	267	8.0	2.0
4	1.0	0.79	0.57	0.39	3.6	23	13	28	11	222	6.9	2.3
5	0.69	0.67	0.60	2.1	7.1	25	14	26	11	188	7.9	2.1
6	0.76	0.78	0.60	1.3	4.1	22	78	24	9.0	164	6.6	1.0
7	0.78	1.3	0.88	0.82	3.5	20	68	24	7.8	143	6.6	0.81
8	0.93	2.9	0.62	1.00	3.4	18	37	23	24	127	6.3	0.93
9	1.2	1.1	0.48	0.98	3.5	17	32	22	244	113	5.6	1.2
10	1.0	0.75	0.38	0.82	4.6	16	39	21	479	98	5.6	0.81
11	1.2	0.56	1.5	0.64	12	16	118	21	143	87	4.7	0.62
12	1.5	0.58	1.6	0.67	10	15	135	20	103	77	4.1	0.53
13	0.97	0.44	1.4	0.60	13	19	85	19	79	68	3.4	0.45
14	0.61	0.42	0.97	2.4	13	20	73	82	65	58	3.2	0.86
15	0.55	0.50	0.97	2.1	11	18	65	49	56	50	3.3	1.7
16	0.66	0.47	0.62	27	10	20	59	31	93	43	2.6	1.9
17	0.91	1.2	0.68	15	9.0	18	54	26	58	38	1.7	1.8
18	0.59	1.3	0.92	3.7	7.6	16	50	23	48	35	1.6	1.7
19	0.79	0.86	0.96	3.1	8.3	16	45	22	41	32	1.6	1.6
20	0.67	0.84	0.95	2.7	7.9	15	42	20	35	26	1.3	0.35
21	2.4	4.1	1.0	2.5	6.8	19	41	19	30	24	1.7	0.26
22	0.66	1.6	0.85	2.6	6.5	25	39	22	30	21	1.7	0.66
23	0.63	1.2	0.49	2.6	7.5	18	36	20	30	22	1.9	2.3
24	0.63	1.1	0.49	3.2	13	19	46	19	25	25	1.9	2.0
25	0.58	1.1	0.57	3.9	14	21	56	18	23	27	1.7	1.3
26	0.56	1.1	0.57	3.1	12	18	41	17	43	50	1.4	1.3
27	0.56	0.95	0.53	2.8	10	17	34	15	164	24	1.4	1.2
28	0.60	2.0	0.48	3.4	9.8	16	31	15	157	18	1.4	1.2
29	0.75	1.2	0.45	3.3	23	15	51	16	98	15	3.8	1.1
30	0.84	0.98	0.62	3.3	---	14	50	15	1,310	14	2.4	1.0
31	0.99	---	2.4	2.8	---	13	---	15	---	12	2.0	---
TOTAL	27.74	35.08	25.69	100.91	242.0	565	1,471	782	3,450.8	2,964	125.3	38.78
MEAN	0.89	1.17	0.83	3.26	8.34	18.2	49.0	25.2	115	95.6	4.04	1.29
MAX	2.5	4.1	2.4	27	23	25	135	82	1,310	532	12	2.3
MIN	0.55	0.42	0.38	0.39	2.4	13	13	15	7.8	12	1.3	0.26
AC-FT	55	70	51	200	480	1,120	2,920	1,550	6,840	5,880	249	77

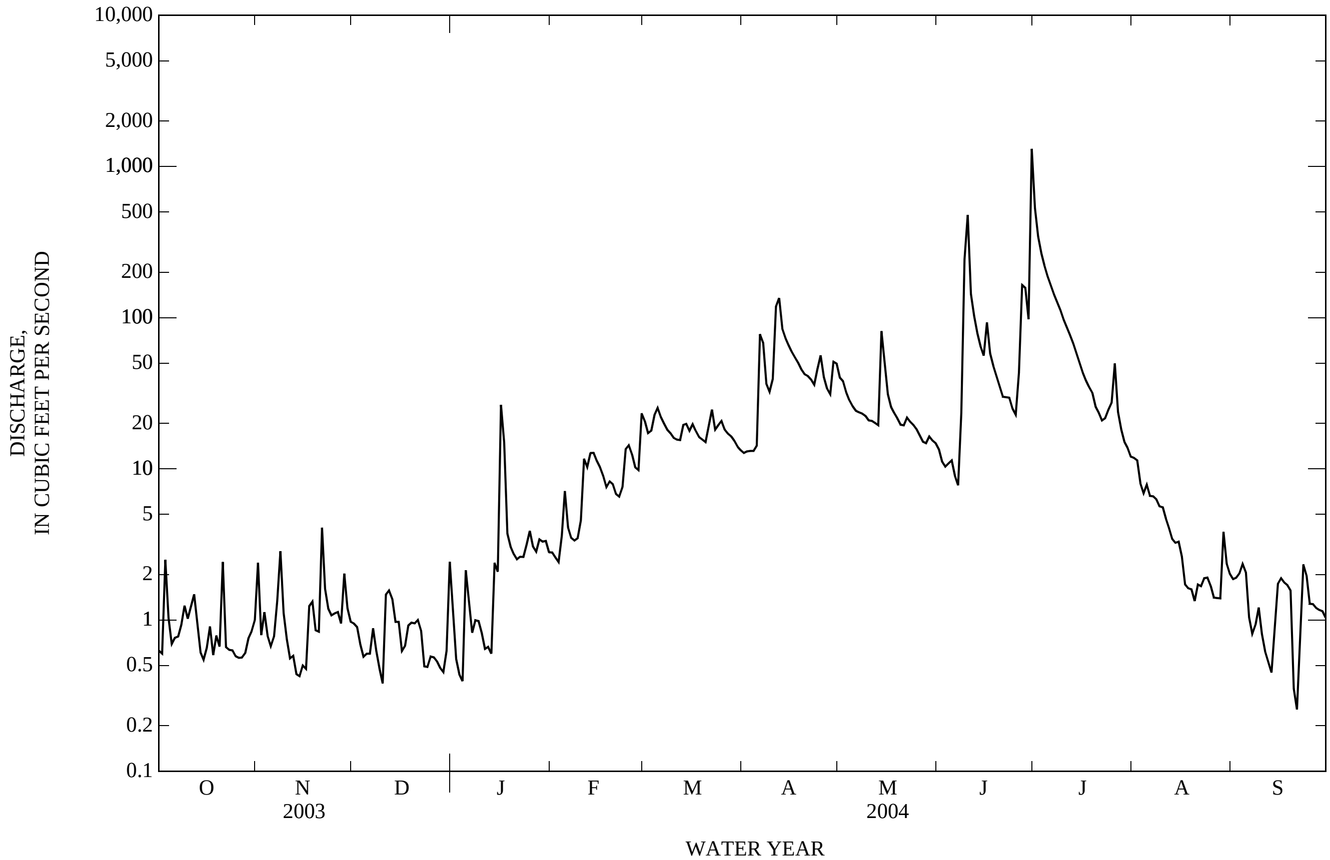
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	20.8	31.8	56.8	50.6	62.5	61.2	45.0	58.8	89.0	39.9	3.43	2.48
MAX	192	181	520	293	465	338	196	226	613	529	20.0	24.2
(WY)	(1999)	(2002)	(1992)	(1992)	(1992)	(1992)	(1979)	(1992)	(1981)	(2002)	(2002)	(1991)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
(WY)	(1991)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1996)	(1996)	(1978)	(1996)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004h	
ANNUAL TOTAL	12,604.35		9,828.30			
ANNUAL MEAN	34.5		26.9		45.7	
HIGHEST ANNUAL MEAN					182	1992
LOWEST ANNUAL MEAN					0.17	1996
HIGHEST DAILY MEAN	669	Feb 20	1,310	Jun 30	5,220	Jul 2, 2002
LOWEST DAILY MEAN	0.00	Aug 8	0.26	Sep 21	0.00	Feb 7, 1978
ANNUAL SEVEN-DAY MINIMUM	0.05	Aug 3	0.51	Dec 23	0.00	Feb 7, 1978
MAXIMUM PEAK FLOW			3,960	Jun 30	25,300	Jul 2, 2002
MAXIMUM PEAK STAGE			11.37	Jun 30	a22.82	Jul 2, 2002
ANNUAL RUNOFF (AC-FT)	25,000		19,490		33,110	
10 PERCENT EXCEEDS	102		56		103	
50 PERCENT EXCEEDS	3.9		5.9		6.2	
90 PERCENT EXCEEDS	0.50		0.62		0.01	

a From floodmark.
h See PERIOD OF RECORD paragraph.

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued



08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Apr. 1978 to July 1982, Feb. 1989 to current year.
BIOCHEMICAL DATA: Apr. 1978 to July 1982, Feb. 1989 to current year.
RADIOCHEMICAL DATA: Jan. 1980 to June 1981.
PESTICIDE DATA: June 1978 to July 1982, Jan. 1993 to June 1995, June 2002 to current year.
SUSPENDED SEDIMENT CHEMISTRY: May 2000 to current year.
SEDIMENT DATA: Nov. 1998 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
FEB													
29-29	1105	50	100d	110	7.6	543	189	101d	.51	<.04	.51	.52	.008
APR													
06-07	1525	112	50d	19	8.1	556	171	21	.31	<.04	--	.10	E.004n

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)
FEB													
29-29	<.02	<.04	.06	1.10	1.0	7.8	10	E.03n	3.0	1.80	8	<.009	E.02
APR													
06-07	<.02	<.01	.03	.39	.41	3.8	<10	<.04	1.6	.50	4	<.009	.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)
FEB													
29-29	<.02mc	<.006	E.005n	E.05mc	<.008mc	<.006	<2mc	<.006	<.007	<.005	<.02mc	<.008mc	<.04mc
APR													
06-07	<.02mc	<.006	E.008	<.01mc	<.008mc	<.006	<.014mc	<.006	<.007	<.008	<.02mc	<.008mc	<.04mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)
FEB													
29-29	<.005	.016	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.0213	.08
APR													
06-07	<.005	.050	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	E.0093	.09

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)	Dacthal monoacid, water, fltrd 0.7u GF ug/L (49304)
FEB													
29-29	E.092	<.006	<.020	<.02mc	<.010	E.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01
APR													
06-07	E.192	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dieldrin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)
FEB													
29-29	<.003	<.012	<.010	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005
APR													
06-07	<.003	<.012	.006	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)
FEB													
29-29	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01
APR													
06-07	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl) -N-' methylurea, ug/L (61692)
FEB													
29-29	<.035	<.027	<.02	<.01mc	M	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003	<.02
APR													
06-07	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	E.010n	<.006	<.03mc	<.003	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)
FEB													
29-29	<.007	<.01	<.01	<.02mc	E.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01
APR													
06-07	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	E.013n	<.011	<.02	<.01

08155200 Barton Creek at State Highway 71 near Oak Hill, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)
FEB													
29-29	.080	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.110	<.009	<.02	<.034	<.010mc
APR													
06-07	.021	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.018	<.009	<.02	<.034	<.010mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
FEB								
29-29	<.02	<.010	<.002	--u	.03	<.009	--	--
APR								
06-07	<.02	<.010	<.002	--u	<.02	<.009	37	11

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

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08155240 Barton Creek at Lost Creek Boulevard, Austin, TX

LOCATION.--Lat 30°16'26", long 97°50'40", Travis County, Hydrologic Unit 12090205, 1.4 mi southwest of intersection of Lost Creek Boulevard and Loop 360, and 6.2 mi west of State Capitol Building in Austin.

DRAINAGE AREA.--107 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1979 to Sept. 1980 (periodic gage heights and discharge measurements only), Dec. 1988 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 600 ft above NGVD of 1929, from topographic map. Satellite telemeter at station.

REMARKS.--Records good except those for daily discharges below 5 ft^3/s, which are poor. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 28, 1929, was probably the highest since that date (discharge 39,400 ft^3/s), based on slope-area measurement of peak flow at a site about 2.1 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	0.80	0.99	1.2	5.3	42	24	62	16	653	18	1.7
2	1.4	0.77	1.1	1.3	4.8	37	24	57	13	431	16	1.6
3	e1.4	0.76	1.0	1.4	4.5	36	24	51	17	356	16	1.4
4	1.4	0.74	0.98	1.4	6.9	53	24	46	11	295	12	1.3
5	1.2	0.71	0.91	1.6	22	62	26	43	11	227	10	1.3
6	1.3	0.67	0.89	1.5	18	51	86	39	12	189	9.0	1.3
7	1.2	0.82	0.90	1.4	12	45	121	38	9.9	154	7.9	1.2
8	1.1	0.90	0.97	1.5	9.7	41	65	36	49	124	7.3	1.1
9	1.3	0.86	0.90	1.5	9.3	39	51	37	238	101	6.7	1.1
10	1.4	0.87	0.89	1.7	14	37	54	36	622	91	6.0	1.1
11	1.5	0.97	0.92	1.7	37	35	129	35	275	83	5.9	1.1
12	1.6	0.96	1.1	1.7	42	34	168	35	176	75	4.9	1.3
13	1.6	0.97	1.1	1.7	34	37	123	34	130	66	4.5	1.3
14	1.6	1.0	1.1	1.7	35	39	105	78	112	59	4.0	1.8
15	1.5	1.1	1.2	2.7	32	37	96	86	100	55	3.8	1.7
16	1.5	1.2	1.0	43	28	45	89	54	121	49	3.6	1.8
17	1.4	1.3	0.99	96	25	39	83	46	97	45	3.0	1.8
18	1.3	1.1	1.1	24	22	36	77	44	85	39	2.8	1.7
19	1.2	0.94	1.2	13	20	34	73	40	77	36	2.7	1.8
20	1.2	0.85	1.2	9.8	20	33	70	37	69	34	2.6	1.7
21	1.1	0.78	1.2	8.2	19	31	67	35	63	30	2.9	1.5
22	1.1	0.85	1.2	6.9	18	41	66	32	62	27	3.0	1.5
23	1.0	1.0	1.0	6.5	19	37	62	30	61	28	3.3	1.4
24	0.98	0.98	0.98	7.3	30	34	63	30	56	32	3.2	1.2
25	0.91	1.2	1.0	8.0	30	37	83	e25	55	27	3.0	1.1
26	0.82	1.3	1.1	7.3	29	34	66	22	81	46	2.7	1.0
27	0.87	1.1	1.3	6.1	26	31	57	21	167	34	2.5	0.95
28	0.90	1.0	1.2	5.6	24	30	51	19	250	26	2.2	0.97
29	0.84	0.94	1.1	5.6	29	28	55	18	141	24	2.1	0.98
30	0.81	1.00	1.1	5.7	---	27	77	17	1,190	22	2.0	0.99
31	0.83	---	1.1	5.5	---	26	---	17	---	20	1.9	---
TOTAL	37.96	28.44	32.72	282.5	625.5	1,168	2,159	1,200	4,366.9	3,478	175.5	40.69
MEAN	1.22	0.95	1.06	9.11	21.6	37.7	72.0	38.7	146	112	5.66	1.36
MAX	1.7	1.3	1.3	96	42	62	168	86	1,190	653	18	1.8
MIN	0.81	0.67	0.89	1.2	4.5	26	24	17	9.9	20	1.9	0.95
AC-FT	75	56	65	560	1,240	2,320	4,280	2,380	8,660	6,900	348	81

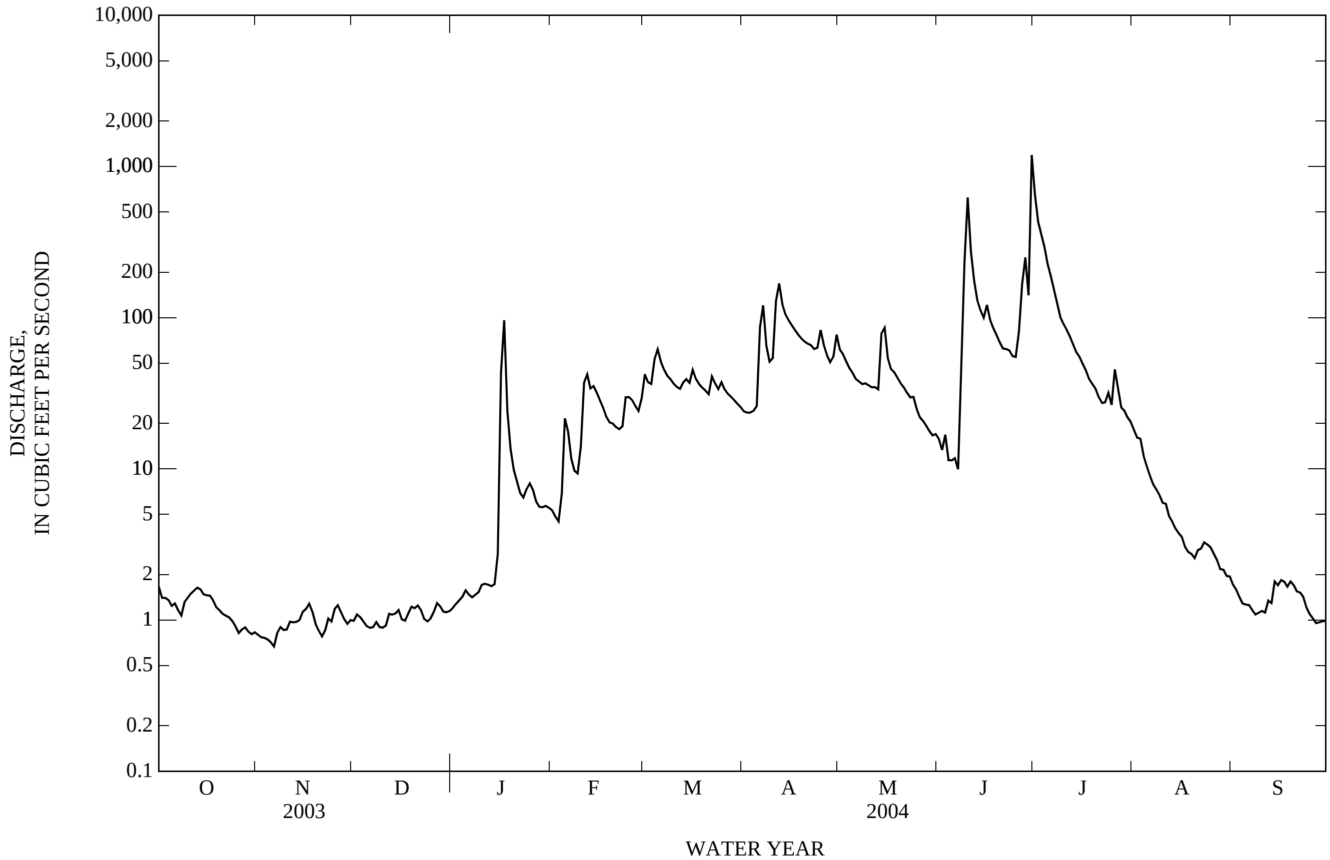
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	26.9	46.0	82.4	68.9	88.7	76.9	57.6	74.0	96.1	54.1	5.14	3.46
MAX	269	188	627	307	581	381	247	264	701	592	33.8	25.6
(WY)	(1999)	(1999)	(1992)	(1992)	(1992)	(1992)	(1997)	(1992)	(1997)	(2002)	(2002)	(1991)
MIN	0.03	0.23	0.22	0.40	0.96	0.81	0.84	0.42	0.93	0.17	0.00	0.00
(WY)	(2000)	(2000)	(1990)	(1990)	(1996)	(1996)	(1996)	(1996)	(1998)	(1996)	(1998)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	14,350.46		13,595.21			
ANNUAL MEAN	39.3		37.1		57.8	
HIGHEST ANNUAL MEAN					212	1992
LOWEST ANNUAL MEAN					1.14	1996
HIGHEST DAILY MEAN	566	Feb 21	1,190	Jun 30	7,000	Dec 21, 1991
LOWEST DAILY MEAN	0.12	Sep 9	0.67	Nov 6	0.00	Aug 24, 1993
ANNUAL SEVEN-DAY MINIMUM	0.14	Sep 4	0.75	Nov 1	0.00	Aug 24, 1993
MAXIMUM PEAK FLOW			3,570	Jun 30	26,600	Jul 2, 2002
MAXIMUM PEAK STAGE			7.34	Jun 30	a15.90	Jul 2, 2002
ANNUAL RUNOFF (AC-FT)	28,460		26,970		41,900	
10 PERCENT EXCEEDS	118		83		134	
50 PERCENT EXCEEDS	4.6		10		7.4	
90 PERCENT EXCEEDS	0.58		0.98		0.23	

a From floodmark.
e Estimated

08155240 Barton Creek at Lost Creek Boulevard, Austin, TX—Continued



08155240 Barton Creek at Lost Creek Boulevard, Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Dec. 1988 to current year.
BIOCHEMICAL DATA: Dec. 1988 to current year.
PESTICIDE DATA: Jan. 1993 to May 1995.
SEDIMENT CHEMISTRY: Nov. 1993.
SEDIMENT DATA: May 1999 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
APR													
06-08	0925	112	20	7.6	8.1	560	178	14	.26	<.04	.26	<.008	<.02
JUN													
09-10	1015	576	18	5.8	7.7	524	168	10	.27	<.04	.25	E.004n	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
APR												
06-08	<.01	.02	.48	.52	8.4	<10	<.12d	E1.1nd	.25d	E3nd	21	6.4
JUN												
09-10	<.04	<.04	--	.52	4.8	<10	<.04	.9	.21	5	9	14

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
n -- Below the LRL and above the LT-MDL

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08155300 Barton Creek at Loop 360, Austin, TX

LOCATION.--Lat 30°14'40", long 97°48'07", Travis County, Hydrologic Unit 12090205, on Loop 360, 0.9 mi west of the intersection of Ben White and Lamar Boulevards, and 4.3 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--116 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to Jan. 1977 (peak discharge greater than base discharge), Feb. 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is 510.32 ft above NGVD of 1929 (Texas Department of Transportation bench mark). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good except those for daily discharges below 10 ft^3/s, which are poor. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--The flood of May 28, 1929, was probably the highest since that date (discharge 39,400 ft^3/s), based on a slope-area measurement of peak flow at a site about 2 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

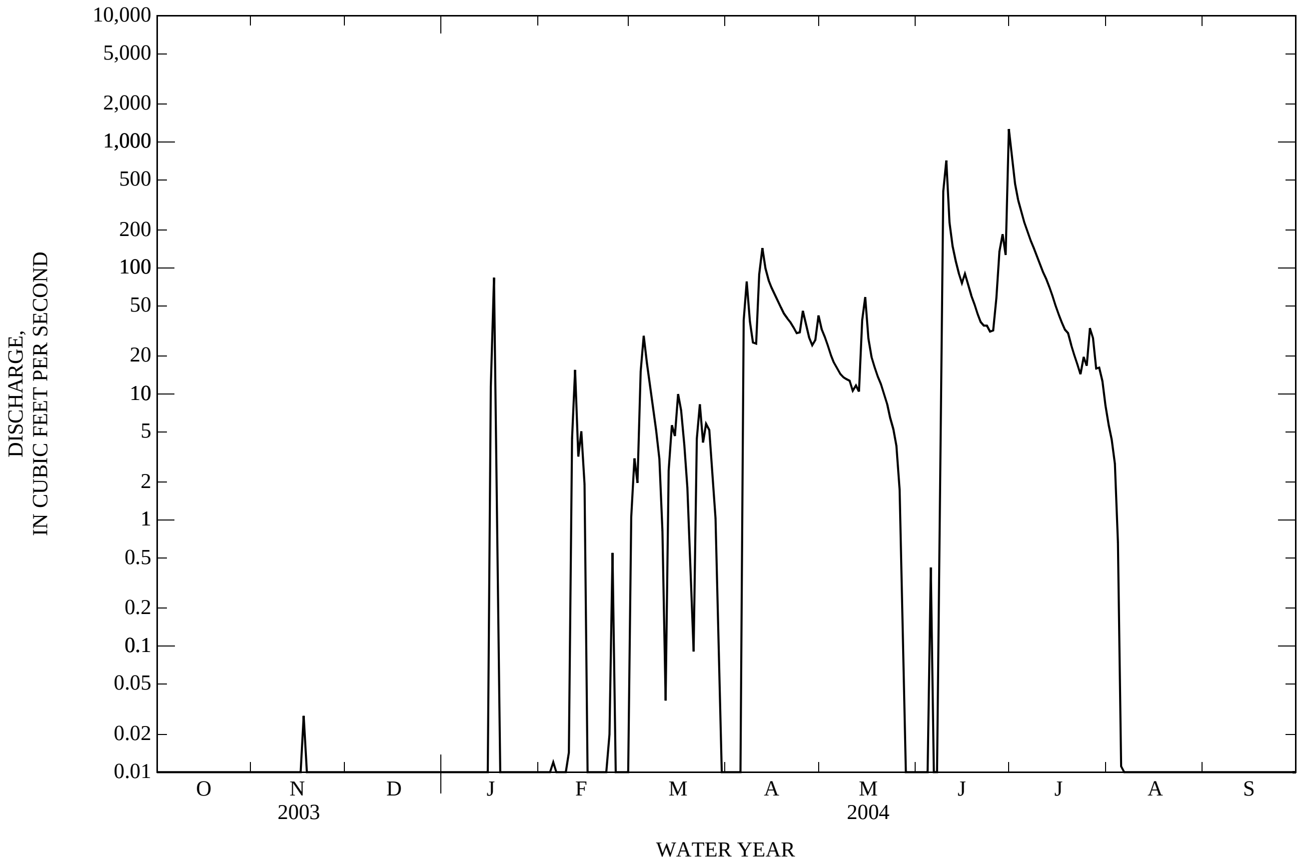
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	1.1	0.00	33	0.00	785	5.7	0.00
2	0.00	0.00	0.00	0.00	0.00	3.1	0.00	28	0.00	464	4.4	0.00
3	0.00	0.00	0.00	0.00	0.00	2.0	0.00	24	0.00	346	2.8	0.00
4	0.00	0.00	0.00	0.00	0.01	15	0.00	20	0.00	279	0.67	0.00
5	0.00	0.00	0.00	0.00	0.01	29	0.00	18	0.42	230	0.01	0.00
6	0.00	0.00	0.00	0.00	0.00	18	38	16	0.00	195	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	12	78	14	0.00	166	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	7.8	38	14	27	145	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	5.1	26	13	407	125	0.00	0.00
10	0.00	0.00	0.00	0.00	0.01	3.1	25	13	712	107	0.00	0.00
11	0.00	0.00	0.00	0.00	4.4	0.82	89	11	228	93	0.00	0.00
12	0.00	0.00	0.00	0.00	16	0.04	144	12	150	82	0.00	0.00
13	0.00	0.00	0.00	0.00	3.2	2.5	100	10	113	71	0.00	0.00
14	0.00	0.00	0.00	0.00	5.1	5.6	80	39	91	60	0.00	0.00
15	0.00	0.00	0.00	0.00	1.9	4.7	70	59	76	50	0.00	0.00
16	0.00	0.00	0.00	11	0.00	10	62	27	90	43	0.00	0.00
17	0.00	0.03	0.00	84	0.00	7.4	55	20	74	37	0.00	0.00
18	0.00	0.00	0.00	2.5	0.00	3.9	48	16	61	32	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	1.8	43	14	52	30	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.46	40	12	44	25	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.09	37	10	37	20	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	4.4	34	8.3	35	17	0.00	0.00
23	0.00	0.00	0.00	0.00	0.02	8.3	30	6.5	35	14	0.00	0.00
24	0.00	0.00	0.00	0.00	0.55	4.1	31	5.2	31	20	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	5.8	46	3.9	32	17	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	5.2	36	1.7	58	33	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	2.5	28	0.14	135	28	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	1.0	24	0.00	185	16	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.11	27	0.00	127	16	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	42	0.00	1,260	13	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	8.1	0.00	---
TOTAL	0.00	0.03	0.00	97.50	31.20	164.92	1,271.00	448.74	4,060.42	3,567.1	13.58	0.00
MEAN	0.00	0.00	0.00	3.15	1.08	5.32	42.4	14.5	135	115	0.44	0.00
MAX	0.00	0.03	0.00	84	16	29	144	59	1,260	785	5.7	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.1	0.00	0.00
AC-FT	0.00	0.06	0.00	193	62	327	2,520	890	8,050	7,080	27	0.00
CFSM	0.00	0.00	0.00	0.03	0.01	0.05	0.37	0.12	1.17	0.99	0.00	0.00
IN.	0.00	0.00	0.00	0.03	0.01	0.05	0.41	0.14	1.30	1.14	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	24.6	27.1	72.6	43.7	61.4	54.1	45.4	67.5	135	28.6	1.18	0.43
MAX	282	204	865	281	609	342	319	321	1,142	494	13.9	7.57
(WY)	(1999)	(1999)	(1992)	(1992)	(1992)	(1992)	(1977)	(1992)	(1987)	(2002)	(1991)	(1983)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1978)	(1977)	(1977)	(1977)

08155300 Barton Creek at Loop 360, Austin, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	12,217.05		9,654.49			
ANNUAL MEAN	33.5		26.4		46.3	
HIGHEST ANNUAL MEAN					229	1992
LOWEST ANNUAL MEAN					0.00	1978
HIGHEST DAILY MEAN	704	Feb 21	1,260	Jun 30	10,800	Dec 21, 1991
LOWEST DAILY MEAN	0.00	May 6	0.00	Oct 1	0.00	Apr 11, 1977
ANNUAL SEVEN-DAY MINIMUM	0.00	May 6	0.00	Oct 1	0.00	Jun 10, 1977
MAXIMUM PEAK FLOW			3,470	Jun 30	18,100	May 25, 1981
MAXIMUM PEAK STAGE			8.78	Jun 30	17.88	Jul 2, 2002
ANNUAL RUNOFF (AC-FT)	24,230		19,150		33,540	
ANNUAL RUNOFF (CFSM)	0.289		0.227		0.399	
ANNUAL RUNOFF (INCHES)	3.92		3.10		5.42	
10 PERCENT EXCEEDS	106		59		101	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



08155300 Barton Creek at Loop 360, Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Jan. 1979 to June 1995, and April 1997 to current year.
BIOCHEMICAL DATA: Jan. 1979 to June 1995, and April 1997 to current year.
RADIOCHEMICAL DATA: Apr. 1980 to June 1981.
PESTICIDE DATA: Jan. 1979 to June 1985.
SEDIMENT DATA: May 1999 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
JAN													
16-16	1910	15	50d	53	7.8	103	40	56	.71	<.04	.34	.35	.009
MAR													
04-05	1745	48	18	53	8.1	511	164	15	.30	<.04	--	.41	<.008

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)
JAN													
16-16	.104	.03	E.04n	.14	1.00	1.1	7.2	20	.05	4.3	4.91	25	44
MAR													
04-05	--	<.02	<.04	E.03n	.65	.71	3.5	<10	<.04	1.4	.75	5	26

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus-pended sedi-ment dis-charge, tons/d (80155)
JAN	
16-16	1.8
MAR	
04-05	3.4

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
n -- Below the LRL and above the LT-MDL

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08155395 Upper Barton Springs at Austin, TX

DRAINAGE AREA.--Not applicable.
PERIOD OF RECORD.--
CHEMICAL DATA: Mar. 2002 to current year.
BIOCHEMICAL DATA: Oct. 2002 to current year.
PESTICIDE DATA: May 2001, Oct. 2002 to current year.
SEDIMENT CHEMISTRY DATA: Mar. 2002, Oct. 2002 to current year.

REMARKS.--Only springflow from the Edwards and associated limestones in the Balcones Fault Zone is published for this station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Sampling depth, feet (00003)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
JUN													
21...	1500	--	80020	460	--	70	754	6.4	7.0	6.9	592	625	31.0
JUL													
07...	1230	--	80020	460	--	70	--	6.4	7.0	7.1	590	637	--
21...	0930	--	80020	460	--	70	--	6.1	6.9	7.0	614	646	--
AUG													
04...	0900	--	80020	460	--	70	755	6.9	7.0	7.3	596	648	30.0
25...	0830	1028	80020	460	.00	70	752	5.7	6.8	7.3	588	605	--
SEP													
15...	0800	1028	80020	460	.00	70	--	6.3	6.6	--	--	625	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
JUN													
21...	21.3	95.9	21.5	1.31	10.4	280	--	--	18.6	12.8	25.2	--	--
JUL													
07...	21.4	92.7	20.2	1.28	11.0	263	--	--	19.9	12.4	25.9	--	--
21...	21.4	96.6	22.7	1.27	10.4	253	--	--	20.3	12.5	27.4	--	--
AUG													
04...	21.4	92.9	23.1	1.35	10.9	239	--	--	19.8	12.2	27.9	--	--
25...	21.5	94.4	24.0	1.27	11.0	288	350	.0	18.4	12.3	27.3	<.10	<.010
SEP													
15...	21.5	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Strontium, water, fltrd, ug/L (01080)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)
JUN													
21...	1.97d	--	--	--	--	324	<.006	E.033	<.006	<.005	<.005	104	.077
JUL													
07...	1.65d	--	--	--	--	249	<.006	E.029	<.006	<.005	<.005	86.6	.042
21...	1.95d	--	--	--	--	349	<.006	E.020	<.006	<.005	<.005	92.6	.028
AUG													
04...	1.94d	--	--	--	--	392	<.006	E.022	<.006	<.005	<.005	79.6	.030
25...	2.09d	<.008	<.02	E.02n	<.04	449	<.006	E.024	<.006	<.005	<.005	98.9	.025
SEP													
15...	2.32d	--	--	--	--	--	<.006	E.014	<.006	<.005	<.005	83.7	.020

08155395 Upper Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dieldrin, water, fltrd, ug/L (39381)
JUN													
21...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	124	<.009
JUL													
07...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	102	<.009
21...	<.050	<.010	<.004	<.050	<.020	<.005	<.006	<.018	<.003	<.012	<.005	96.5	<.009
AUG													
04...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	92.7	<.009
25...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	107	<.009
SEP													
15...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	85.5	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)
JUN													
21...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
JUL													
07...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
21...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
AUG													
04...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
25...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
SEP													
15...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)
JUN													
21...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011
JUL													
07...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011
21...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011
AUG													
04...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011
25...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011
SEP													
15...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	.01	<.004	<.025	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetrachloroethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Trichloroethane, water, unfltrd ug/L (34511)
JUN													
21...	<.02	.007	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
JUL													
07...	<.02	.009	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
21...	<.02	<.010	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
AUG													
04...	<.02	.010	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
25...	<.02	<.010	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
SEP													
15...	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b

08155395 Upper Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,1-Dichloropropene water unfltrd ug/L (77168)	1,2,3,4 Tetramethylbenzene water unfltrd ug/L (49999)	1,2,3,5 Tetramethylbenzene water unfltrd ug/L (50000)	1,2,3-Trichlorobenzene water unfltrd ug/L (77613)	1,2,3-Trichloropropane water unfltrd ug/L (77443)	1,2,3-Trimethylbenzene water unfltrd ug/L (77221)	1,2,4-Trichlorobenzene water unfltrd ug/L (34551)	1,2,4-Trimethylbenzene water unfltrd ug/L (77222)	Dibromochloropropane water unfltrd ug/L (82625)	1,2-Dibromoethane, water, unfltrd ug/L (77651)	1,2-Dichlorobenzene water unfltrd ug/L (34536)
JUN													
21...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
JUL													
07...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
21...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
AUG													
04...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
25...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
SEP													
15...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Dichloroethane, water, unfltrd ug/L (32103)	1,2-Dichloroethane-d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Dichloropropane water unfltrd ug/L (34541)	1,3,5-Trimethylbenzene water unfltrd ug/L (77226)	1,3-Dichlorobenzene water unfltrd ug/L (34566)	1,3-Dichloropropane water unfltrd ug/L (77173)	1,4-Dichlorobenzene water unfltrd ug/L (34571)	14Bromofluorobenzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Dichloropropane water unfltrd ug/L (77170)	2-Chlorotoluene water unfltrd ug/L (77275)	2-Ethyltoluene water unfltrd ug/L (77220)	3-Chloropropene water unfltrd ug/L (78109)	4-Chlorotoluene water unfltrd ug/L (77277)
JUN													
21...	<.1	88.3	<.03b	<.04b	<.03b	<.1b	<.03b	103	<.05b	<.04b	<.06b	<.50mc	<.05b
JUL													
07...	<.1	106	<.03b	<.04b	<.03b	<.1b	<.03b	98.8	<.05b	<.04b	<.06b	<.50mc	<.05b
21...	<.1	108	<.03b	<.04b	<.03b	<.1b	<.03b	94.3	<.05b	<.04b	<.06b	<.50mc	<.05b
AUG													
04...	<.1	121	<.03b	<.04b	<.03b	<.1b	<.03b	104	<.05b	<.04b	<.06b	<.50mc	<.05b
25...	<.1	111	<.03b	<.04b	<.03b	<.1b	<.03b	98.4	<.05b	<.04b	<.06b	<.50mc	<.05b
SEP													
15...	<.1	118	<.03b	<.04b	<.03b	<.1b	<.03b	96.8	<.05b	<.04b	<.06b	<.50mc	<.05b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4-Isopropyltoluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylonitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromobenzene water unfltrd ug/L (81555)	Bromochloromethane water unfltrd ug/L (77297)	Bromodichloromethane water unfltrd ug/L (32101)	Bromoethene, water, unfltrd ug/L (50002)	Bromomethane water unfltrd ug/L (34413)	Carbon disulfide water unfltrd ug/L (77041)	Chlorobenzene water unfltrd ug/L (34301)	Chloroethane, water, unfltrd ug/L (34311)	Chloromethane water unfltrd ug/L (34418)
JUN													
21...	<.08b	<6	<1	<.02b	<.03b	<.12	E.02n	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
JUL													
07...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
21...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
AUG													
04...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
25...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
SEP													
15...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	cis-1,2-Dichloroethene, water, unfltrd ug/L (77093)	cis-1,3-Dichloropropene water unfltrd ug/L (34704)	Dibromochloromethane water unfltrd ug/L (32105)	Dibromomethane water unfltrd ug/L (30217)	Dichlorodifluoromethane wat unf ug/L (34668)	Dichloromethane water unfltrd ug/L (34423)	Diethyl ether, water, unfltrd ug/L (81576)	Diisopropyl ether, water, unfltrd ug/L (81577)	Ethyl methacrylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethylbenzene water unfltrd ug/L (34371)	Hexachlorobutadiene, water, unfltrd ug/L (39702)	Hexachloroethane, water, unfltrd ug/L (34396)
JUN													
21...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
JUL													
07...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
21...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
AUG													
04...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
25...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
SEP													
15...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1

08155395 Upper Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)
JUN													
21...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3b	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
JUL													
07...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3b	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
21...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
AUG													
04...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
25...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
SEP													
15...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)
JUN													
21...	<.06b	<.04b	<.05b	<.2	<.06b	E.03n	<.06b	<2	<.05b	103	<.03b	<.09b	<.7b
JUL													
07...	<.06b	<.04b	<.05b	<.2	<.06b	E.02t	<.06b	<2	<.05b	101	<.03b	<.09b	<.7b
21...	<.06b	<.04b	<.05b	<.2	<.06b	E.03t	<.06b	<2	<.05b	99.4	<.03b	<.09b	<.7b
AUG													
04...	<.06b	<.04b	<.05b	<.2	<.06b	E.04n	<.06b	<2	<.05b	98.8	<.03b	<.09b	<.7b
25...	<.06b	<.04b	<.05b	<.2	<.06b	E.05n	<.06b	<2	<.05b	97.5	<.03b	<.09b	<.7b
SEP													
15...	<.06b	<.04b	<.05b	<.2	<.06b	E.05n	<.06b	<2	<.05b	101	<.03b	<.09b	<.7b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Number of TICS from VOC by GCMS number (99871)	Purpose site visit, code (50280)	Sample purpose code (71999)	Sample volume, Sched-ule 2001, mL (99856)	Sampler type, code (84164)	Sam-pling condi-tion, code (72006)	Type of sample related QA data, code (99111)
JUN												
21...	<.10	<.04b	<.16	E.09b	<.1b	.0	1,001	10.00	884	3070	--	1
JUL												
07...	<.10	<.04b	<.16	E.07b	<.1b	.0	1,001	10.00	895	3070	--	--
21...	<.10	<.04b	<.16	E.08b	<.1b	.0	1,001	10.00	887	3070	--	--
AUG												
04...	<.10	<.04b	<.16	.10	<.1b	.0	1,001	10.00	858	3070	--	30
25...	<.10b	<.04b	<.16	E.09b	<.1b	.0	2,001	10.00	889	3070	4.00	--
SEP												
15...	<.10b	<.04b	<.16	E.10b	<.1b	.0	2,001	10.00	896	8000	4.00	--

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

Value qualifier codes used in this table:
- b -- Value extrapolated at low end
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

08155400 Barton Creek above Barton Springs, Austin, TX

LOCATION.--Lat 30°15'48", long 97°46'19", Travis County, Hydrologic Unit 12090205, on left bank of Barton Creek approximately 200 ft above Barton Springs Pool.

DRAINAGE AREA.--125 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Sept. 1981 to Oct. 1984 (daily mean discharge less than base discharge), Oct. 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 430.5 ft above NGVD of 1929. Satellite telemeter at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1998, 14.71 ft, Oct 17, 1998, from floodmark, discharge 7,300 ft^3/s, as determined by indirect methods by U.S. Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.60	0.03	0.00	0.00	0.00	0.02	0.03	21	1.8	717	3.1	1.6
2	0.53	0.04	0.00	0.00	0.00	0.01	0.06	14	1.6	613	3.0	1.6
3	0.51	0.03	0.00	0.00	0.00	0.00	0.08	11	1.6	430	2.9	1.6
4	0.50	0.03	0.00	0.00	0.00	0.01	0.14	8.3	1.5	333	2.7	1.6
5	0.50	0.03	0.00	0.00	0.00	0.02	0.19	6.5	2.1	265	2.5	1.6
6	0.50	0.03	0.00	0.00	0.00	0.02	1.3	5.5	1.7	208	2.4	2.0
7	0.48	0.03	0.00	0.00	0.00	0.00	62	5.0	1.5	172	2.4	1.8
8	0.49	0.03	0.00	0.00	0.00	0.00	28	5.0	11	142	2.3	1.6
9	0.53	0.03	0.00	0.00	0.00	0.00	8.8	4.9	327	118	2.2	1.5
10	0.55	0.01	0.00	0.00	0.00	0.00	4.1	4.5	754	98	2.2	1.4
11	0.47	0.01	0.00	0.00	0.03	0.00	68	4.3	364	83	2.1	1.4
12	0.47	0.00	0.00	0.00	0.04	0.00	138	4.1	242	71	2.0	1.4
13	0.42	0.00	e0.00	0.00	0.06	0.02	75	4.1	153	60	2.0	1.2
14	0.33	0.00	e0.00	0.00	0.07	0.12	50	9.5	106	50	2.0	1.4
15	0.30	0.00	0.00	0.00	0.07	0.31	40	64	77	41	2.0	1.3
16	0.26	0.00	0.00	0.05	0.06	0.30	34	28	94	33	2.0	1.3
17	0.20	0.02	0.00	48	0.03	0.44	29	10	78	26	2.0	1.2
18	0.12	0.06	0.00	1.9	0.03	0.31	25	4.9	56	21	1.9	1.1
19	0.07	0.05	0.00	0.48	0.02	0.27	21	3.3	46	16	1.8	1.1
20	0.06	0.04	0.00	0.22	0.01	0.21	18	2.9	39	13	1.7	1.1
21	0.05	0.03	0.00	0.17	0.00	0.12	16	2.8	33	8.9	1.7	1.1
22	0.05	0.02	0.00	0.10	0.00	0.07	14	2.8	29	6.4	1.8	1.1
23	0.06	0.00	0.00	0.05	0.00	0.07	12	2.7	28	4.7	1.7	0.98
24	0.05	0.00	0.00	0.05	0.05	0.12	12	2.6	23	4.5	1.6	0.96
25	0.04	0.00	0.00	0.02	0.08	0.14	21	2.3	18	5.4	1.6	0.93
26	0.04	0.00	0.00	0.00	0.08	0.11	19	2.1	64	8.6	1.7	0.91
27	0.04	0.00	0.00	0.00	0.04	0.09	12	1.9	177	15	1.6	0.91
28	0.02	0.00	0.00	0.00	0.04	0.11	8.8	1.9	255	6.3	1.7	0.87
29	0.02	0.00	0.00	0.00	0.03	0.09	10	1.7	185	4.5	1.7	0.85
30	0.03	0.00	0.00	0.00	---	0.05	23	1.6	847	5.5	1.7	0.82
31	0.02	---	0.00	0.00	---	0.04	---	1.6	---	3.6	1.6	---
TOTAL	8.31	0.52	0.00	51.04	0.74	3.07	750.50	244.8	4,017.8	3,583.4	63.6	38.23
MEAN	0.27	0.02	0.00	1.65	0.03	0.10	25.0	7.90	134	116	2.05	1.27
MAX	0.60	0.06	0.00	48	0.08	0.44	138	64	847	717	3.1	2.0
MIN	0.02	0.00	0.00	0.00	0.00	0.00	0.03	1.6	1.5	3.6	1.6	0.82
AC-FT	16	1.0	0.00	101	1.5	6.1	1,490	486	7,970	7,110	126	76

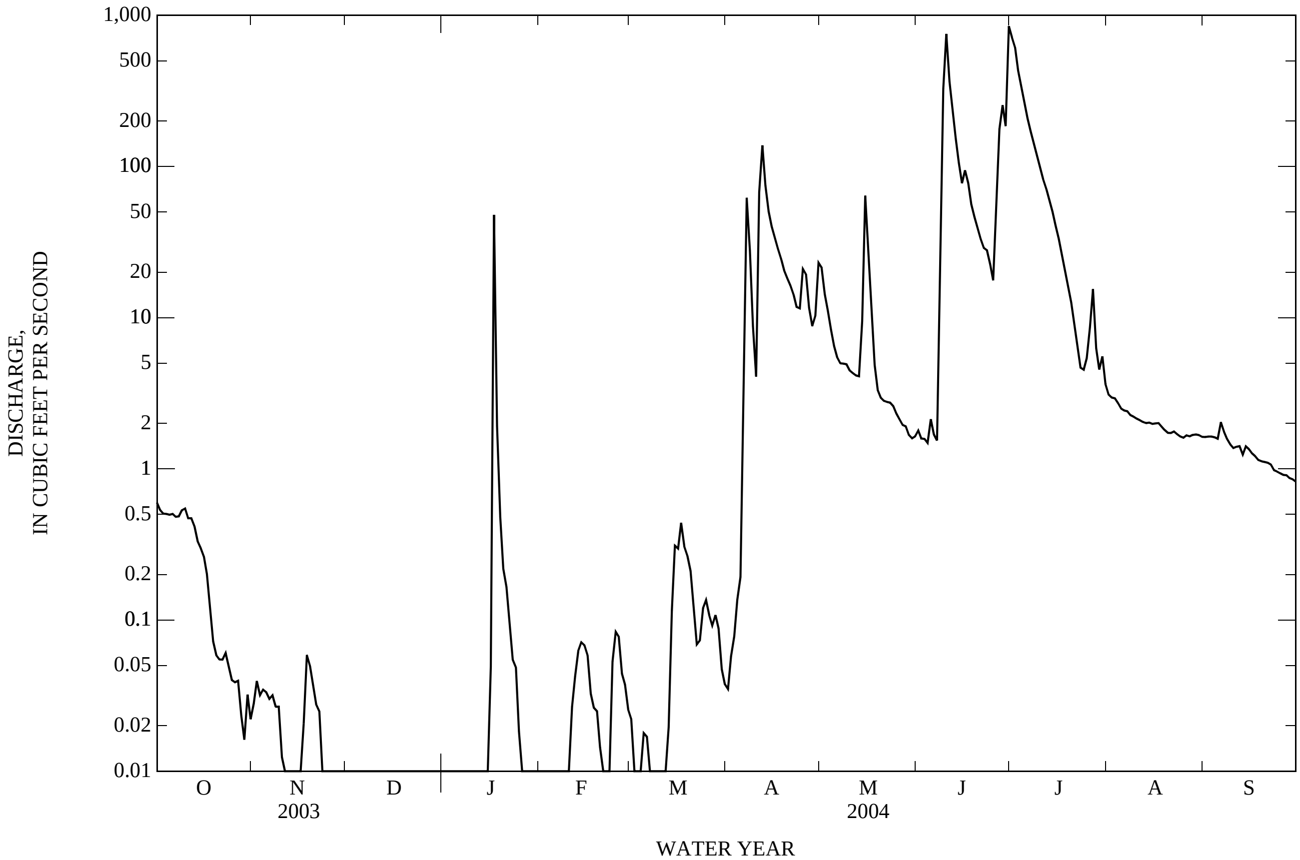
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.52	71.0	76.8	77.0	75.2	63.5	22.2	10.1	38.3	156	4.17	1.37
MAX	31.3	202	176	171	302	175	65.7	35.1	134	662	9.05	2.49
(WY)	(2003)	(2002)	(2002)	(2003)	(2003)	(2003)	(2001)	(2001)	(2004)	(2002)	(2001)	(2002)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	3.07	0.00	0.00	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2001)	(2000)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	20,110.48		8,762.01			
ANNUAL MEAN	55.1		23.9		50.2	
HIGHEST ANNUAL MEAN					96.7	2002
LOWEST ANNUAL MEAN					2.69	2000
HIGHEST DAILY MEAN	1,280	Feb 21	847	Jun 30	4,440	Jul 2, 2002
LOWEST DAILY MEAN	0.00	Nov 12	0.00	Nov 12	0.00	Oct 1, 1999
ANNUAL SEVEN-DAY MINIMUM	0.00	Nov 23	0.00	Nov 23	0.00	Oct 1, 1999
MAXIMUM PEAK FLOW			1,940	Jun 30	i17,200	Jul 2, 2002
MAXIMUM PEAK STAGE			11.49	Jun 30	a18.21	Jul 2, 2002
ANNUAL RUNOFF (AC-FT)	39,890		17,380		36,380	
10 PERCENT EXCEEDS	150		47		133	
50 PERCENT EXCEEDS	3.4		0.53		2.5	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.
i From slope area measurement of peak flow.
e Estimated

08155400 Barton Creek above Barton Springs, Austin, TX—Continued



08155400 Barton Creek above Barton Springs, Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Nov. 1969 and Jan. 1998 to current year.
BIOCHEMICAL DATA: Nov. 1969 and Jan. 1998 to current year.
PESTICIDE DATA: May 2000 to current year.
SUSPENDED SEDIMENT CHEMISTRY: May 2000 to Feb.2003.
SEDIMENT DATA: May 1999 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis- charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho- phos- phate, water, fltrd, mg/L as P (00671)
JAN													
17-17	0615	69	35d	12	7.9	307	98	15	.37	<.04	.47	E.005n	E.02n
APR													
07-08	0115	58	25	3.2	7.7	514	165	<10	.26	<.04	.26	<.008	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
JAN													
17-17	E.02n	.07	.87	.84	6.4	20	E.03n	1.9	.69	8	<.009	<.02	<.02mc
APR													
07-08	<.01	.02	.50	.52	3.4	<10	<.12d	E1.2nd	.36d	E4nd	<.009	<.02	<.02mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,6-Di- ethyl- aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3- Hydroxy carbo- furan, wat flt 0.7u GF ug/L (49308)	3-Keto- carbo- furan, water, fltrd, ug/L (50295)	Aceto- chlor, water, fltrd, ug/L (49260)	Aci- fluor- fen, water, fltrd 0.7u GF ug/L (49315)	Ala- chlor, water, fltrd, ug/L (46342)	Aldi- carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi- carb sulf- oxide, wat flt 0.7u GF ug/L (49314)	Aldi- carb, water, fltrd 0.7u GF ug/L (49312)	alpha- HCH, water, fltrd, ug/L (34253)
JAN													
17-17	<.006	E.005n	<.04mc	<.009mc	<.006	<2mc	<.006	<.007	<.010	<.02mc	<.008mc	<.04mc	<.005
APR													
07-08	<.006	E.018	<.01mc	E.012mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc	<.04mc	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atra- zine, water, fltrd, ug/L (39632)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	Bendio- carb, water, fltrd, ug/L (50299)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul- furon, water, fltrd, ug/L (61693)	Ben- tazon, water, fltrd 0.7u GF ug/L (38711)	Broma- cil, water, fltrd, ug/L (04029)	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl- ate, water, fltrd, ug/L (04028)	Caf- feine, water, fltrd, ug/L (50305)	Car- baryl, water, fltrd 0.7u GF ug/L (49310)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)
JAN													
17-17	.044	<.050	<.03	<.010	<.013	<.02	<.01mc	<.03mc	<.02mc	<.004	<.1428	<.03	<.041
APR													
07-08	.369	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.0757	<.03	<.041

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Clopyr- alid, water, fltrd 0.7u GF ug/L (49305)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)
JAN													
17-17	E2.84	<.020	<.09mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.04	<.003
APR													
07-08	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003

08155400 Barton Creek above Barton Springs, Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)
JAN													
17-17	E.003t	<.005	<.01	<.03	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005	<.03
APR													
07-08	<.012	<.005	<.12	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009	<.005	<.03

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)
JAN													
17-17	<.029	<.013	<.024	E.008n	<.01mc	<.03	<.003	<.02mc	<.02mc	<.011	<.004	<.01	<.035
APR													
07-08	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01	<.035

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
JAN													
17-17	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.005	<.02	<.007
APR													
07-08	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003	<.02	<.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p-' DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)
JAN													
17-17	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	E.011t	<.011	<.02	<.01	<.004
APR													
07-08	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)
JAN													
17-17	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.031	<.021	<.02	<.034	<.010mc	<.02
APR													
07-08	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.022	.292	<.02	<.034	<.010mc	<.02

08155400 Barton Creek above Barton Springs, Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
JAN							
17-17	<.010	<.002	--u	.23	<.009	--	--
APR							
07-08	<.010	<.002	--u	<.02	<.009	8	1.3

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

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08155500 Barton Springs at Austin, TX

LOCATION.--Lat 30°15'48", long 97°46'16", Travis County, Hydrologic Unit 12090205, at ground-water well (YD 58-42-903), on right bank 0.4 mi upstream from Barton Springs Road bridge over Barton Creek, 0.7 mi upstream from mouth, and 1.8 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--Not applicable.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Nov. 1894 to Apr. 1917 and Oct. 1918 to Feb. 1978 (discharge measurements only), May 1917 to Sept. 1918 (published as "Barton Creek"), Mar. 1978 to Sept. 1994 (daily mean discharge), Oct. 1994 to Sept. 1999 (discharge at 1200 hours), Oct. 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage, at ground-water well (YD-58-42-903), is 462.34 ft above NGVD of 1929. May 1917 to Sept. 1918, nonrecording gage at site 1,000 ft downstream at different datum. Satellite telemeter at station.

REMARKS.--Records poor. Only springflow from the Edwards and associated limestones in the Balcones Fault Zone is published for this station. Operation of Barton Springs pool significantly affects level recorded in well. Pool is periodically drained for cleaning and allowed to fill after cleaning operations. Under normal conditions gage height is in direct relation with discharge. Determination of flow from spring is considered best when pool/well level has stabilized at 1200 hrs. From Oct. 1, 1994, to Sept. 30, 1999, daily flow was determined using the recorded level at 1200 hrs. Beginning Oct. 1, 1999, flow is determined from daily mean.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	50	41	39	37	43	47	61	61	e88	94	77
2	60	49	41	39	36	41	47	61	60	e95	93	e76
3	60	47	41	39	36	43	48	61	60	e96	92	76
4	60	45	41	38	38	e43	47	60	60	e95	92	76
5	59	42	42	38	41	e43	47	61	61	92	91	75
6	59	39	42	38	40	e43	49	61	60	93	90	75
7	59	37	42	38	39	e44	53	61	59	94	90	74
8	58	38	41	38	38	e44	54	62	62	e94	89	74
9	58	40	41	38	38	e44	54	61	e65	95	89	74
10	59	41	40	38	39	e45	54	61	e75	96	88	73
11	58	43	40	38	42	e45	56	62	e84	96	88	73
12	58	43	40	38	46	45	58	62	e86	97	87	73
13	58	43	41	38	47	47	59	62	e88	98	87	72
14	58	43	40	38	46	48	59	65	e89	99	86	72
15	58	43	40	39	45	48	59	67	e91	100	86	73
16	57	43	39	43	44	48	59	67	e90	100	85	72
17	56	43	40	50	43	48	59	67	e90	100	85	72
18	56	45	39	50	43	48	59	67	e88	100	84	71
19	56	45	39	48	43	48	59	67	71	99	84	71
20	56	43	39	46	42	48	59	66	70	99	83	71
21	55	43	39	44	41	48	59	65	70	99	83	70
22	55	43	39	43	41	48	59	65	70	e98	83	70
23	55	43	39	42	41	48	59	64	71	97	82	69
24	55	43	39	42	45	48	59	63	72	97	82	69
25	54	43	39	43	47	48	59	63	73	97	81	68
26	54	43	39	42	46	48	59	62	76	96	81	68
27	54	43	39	39	45	47	59	62	79	96	80	68
28	53	43	39	38	45	47	60	61	81	96	79	67
29	53	43	39	38	44	47	e65	61	82	e95	79	67
30	52	42	39	37	---	47	e62	61	e82	95	78	67
31	52	---	39	37	---	47	---	61	---	95	78	---
TOTAL	1,756	1,291	1,238	1,256	1,218	1,429	1,686	1,950	2,226	2,987	2,649	2,153
MEAN	56.6	43.0	39.9	40.5	42.0	46.1	56.2	62.9	74.2	96.4	85.5	71.8
MAX	61	50	42	50	47	48	65	67	91	100	94	77
MIN	52	37	39	37	36	41	47	60	59	88	78	67
AC-FT	3,480	2,560	2,460	2,490	2,420	2,830	3,340	3,870	4,420	5,920	5,250	4,270

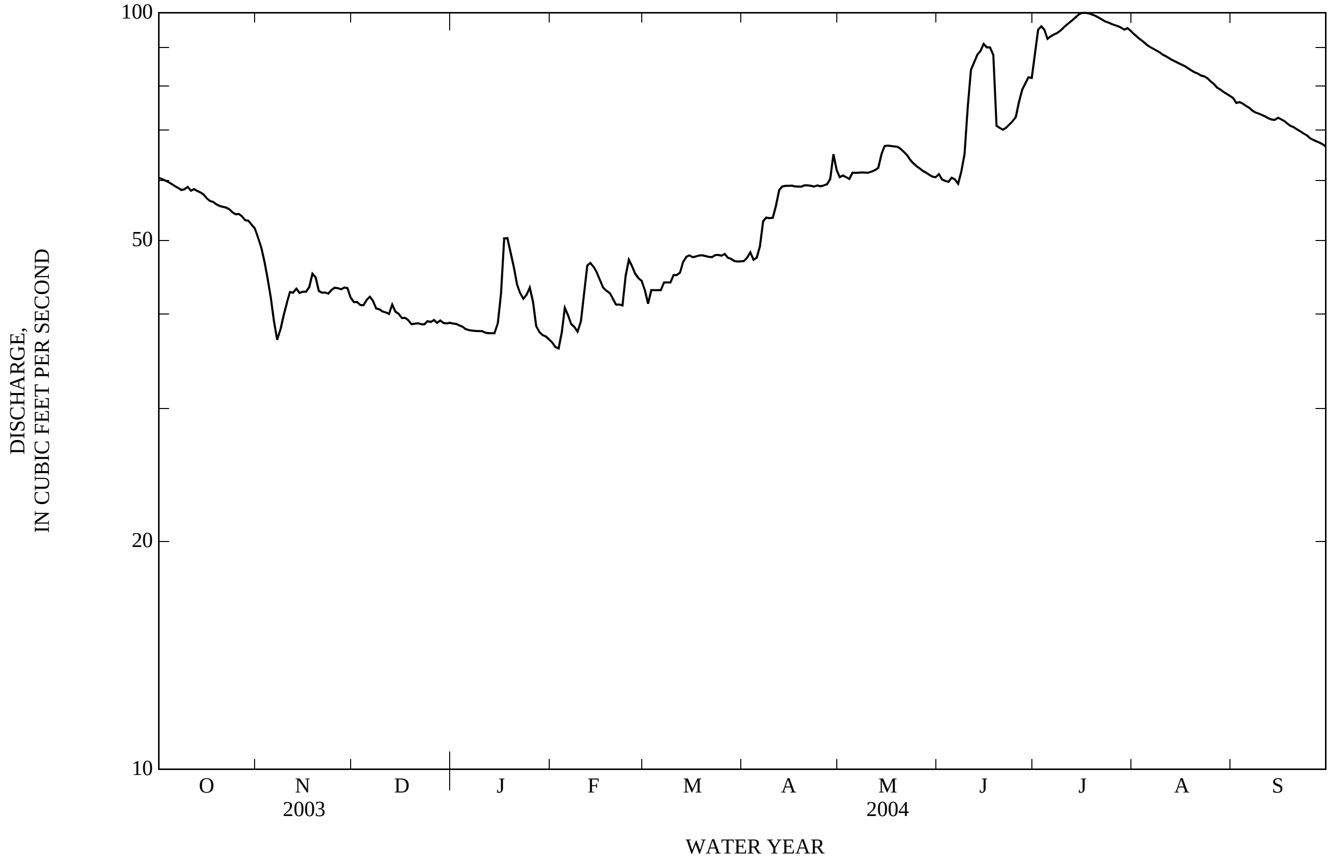
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	55.5	57.7	59.1	62.1	64.7	66.6	68.2	70.6	73.4	70.2	64.0	57.9
MAX	116	104	106	112	120	115	108	108	106	112	126	123
(WY)	(1993)	(1999)	(2003)	(2002)	(1992)	(2003)	(1993)	(1993)	(1987)	(1997)	(1992)	(1992)
MIN	18.5	20.6	18.2	15.8	16.8	21.6	25.2	20.7	26.2	21.0	21.5	21.1
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1996)	(1996)	(1996)	(1996)	(1996)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004h	
ANNUAL TOTAL	31,040		21,839			
ANNUAL MEAN	85.0		59.7		65.0	
HIGHEST ANNUAL MEAN					99.3	1993
LOWEST ANNUAL MEAN					26.8	1990
HIGHEST DAILY MEAN	125	Feb 22	100	Jul 15	130	Dec 24, 1991
LOWEST DAILY MEAN	37	Nov 7	36	Feb 2	14	Dec 30, 1989
ANNUAL SEVEN-DAY MINIMUM	39	Dec 18	37	Jan 28	15	Jan 9, 1990
ANNUAL RUNOFF (AC-FT)	61,570		43,320		47,120	
10 PERCENT EXCEEDS	113		90		102	
50 PERCENT EXCEEDS	92		58		66	
90 PERCENT EXCEEDS	42		39		27	

h See Period of Record paragraph.
e Estimated

08155500 Barton Springs at Austin, TX—Continued



08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1903, June 1941 to Feb. 1959, Dec. 1978 to current year.
BIOCHEMICAL DATA: Nov. 1969, Dec. 1978 to current year.
RADIOCHEMICAL DATA: Jan. to Sept. 1980.
PESTICIDE DATA: July 1978 to July 1982, Oct. 1984, June 1987 to Nov. 1993, May 2000 to current year.
SEDIMENT DATA: May 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instan- taneous dis- charge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	Baro- metric pres- sure, mm Hg (00025)	Dis- solved oxygen, mg/L (00300)	Dis- solved oxygen, percent of sat- uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, air, deg C (00020)	Temper- ature, water, deg C (00010)	Noncarb hard- ness, wat flt field, mg/L as CaCO3 (00904)	Hard- ness, water, mg/L as CaCO3 (00900)
JAN													
17-17	0815	--	--	--	--	--	--	--	--	--	--	--	--
17...	0830	50	20	11	--	--	--	7.1	587	--	--	--	--
JUN													
09-09	0845	--	--	--	--	--	--	--	--	--	--	--	--
09...	0900	67	2	5.0	750	6.0	70	7.1	574	27.0	21.9	--	--
09...	0900	--	--	--	--	--	--	--	--	--	--	--	--
21...	1430	--	--	--	754	5.9	69	7.0	622	30.0	22.1	51	310
JUL													
07...	1300	--	--	--	--	5.6	--	6.9	643	--	21.9	38	320
21...	0730	--	--	--	--	5.7	--	6.8	632	--	22.2	81	310
AUG													
04...	0800	--	--	--	755	6.0	70	6.9	622	28.0	22.2	39	300
25...	1000	--	--	--	752	5.6	65	6.9	586	--	21.8	45	310
SEP													
15...	0900	--	--	--	--	5.9	--	6.8	597	--	21.7	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Calcium water, fltrd, mg/L (00915)	Magnes- ium, water, fltrd, mg/L (00925)	Potas- sium, water, fltrd, mg/L (00935)	Sodium adsorp- tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnes- ium, bed sedimnt recover -able, mg/kg (00924)	Potas- sium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar- bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon- ate, wat flt incrm. titr., field, mg/L (00452)
JAN													
17-17	--	--	--	--	--	--	130,000	73,000	6,800	810	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	243	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	244	--	--
09...	--	--	--	--	--	--	100,000	47,000	8,000	710	--	--	--
21...	90.7	19.5	1.40	.4	14.6	9	--	--	--	--	256	--	--
JUL													
07...	95.6	18.8	1.30	.3	13.8	9	--	--	--	--	279	--	--
21...	91.4	20.2	1.29	.3	13.5	9	--	--	--	--	231	--	--
AUG													
04...	85.3	20.7	1.21	.3	13.5	9	--	--	--	--	260	--	--
25...	89.0	21.8	1.23	.3	13.9	9	--	--	--	--	268	327	.0
SEP													
15...	--	--	--	--	--	--	--	--	--	--	264	322	.0

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chlor-ide, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	<10	E.07n	<.04	1.26	<.008	E.01n	<.04	E.03n	1.40
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	<10	<.10	<.04	1.07	<.008	E.01n	<.04	E.02n	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	25.5	12.4	33.8	357	--	--	--	1.05d	--	--	--	--	--
JUL													
07...	23.7	12.2	33.9	372	--	--	--	1.02d	--	--	--	--	--
21...	24.7	12.0	33.0	340	--	--	--	.958	--	--	--	--	--
AUG													
04...	23.9	11.7	29.7	347	--	--	--	1.06d	--	--	--	--	--
25...	23.1	11.7	27.5	355	--	<.10	<.010	1.17d	<.008	<.02	<.04	<.04	--
SEP													
15...	--	--	--	--	--	--	--	1.31d	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, bed sedimnt total, mg/kg (00668)	Organic carbon, water, unfltrd mg/L (00680)	Inor-ganic carbon, bed sedimnt percent (30241)	Organic carbon, bed sedimnt percent (30243)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Stront-ium, water, fltrd, ug/L (01080)	Zinc, water, unfltrd recover -able, ug/L (01092)	Alum-inum, bed sedimnt recover -able, ug/g (01108)	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)
JAN													
17-17	470	--	6.7	1.2	--	--	--	--	--	--	45,000	.78	11
17...	--	3.5	--	--	<10	<.04	1.4	.39	--	E1n	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	4.4	--	--	<10	<.04	.9	.10	--	<2	--	--	--
09...	580	--	--	--	--	--	--	--	--	--	50,000	1.0	14
21...	--	--	--	--	--	--	--	--	701	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	563	--	--	--	--
21...	--	--	--	--	--	--	--	--	666	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	736	--	--	--	--
25...	--	--	--	--	--	--	--	--	827	--	--	--	--
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lantha-num, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)
JAN													
17-17	150	1.3	.202	.223	44	40	8.2	17	10	22,000	22	14	35
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	180	1.8	.330	.280	54	54	9.4	21	12	25,000	27	18	41
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Manganese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Mercury bed sed <62.5um dry svd lab, total, ug/g (34912)	Molybdenum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scandium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Strontium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tantalum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thallium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titanium, bed sedimnt total, ug/g (01153)	Vanadium, bed sed <62.5um wet svd fld,tot ug/g (35005)
JAN													
17-17	600	.04	1.2	22	8	7.9	<3	190	.8	.503	7.5	2,100	74
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	780	.05	1.2	27	14	8.6	<3c	130	.9	.630	9.0	2,600	83
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)
JAN													
17-17	18	62	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	<.009	<.02	<.02mc	<.006	E.007	<.04mc	<.008mc	<.006	<2mc	<.006	<.007
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	<.009	<.02	<.02mc	<.006	E.017	<.01mc	E.014mc	<.006	<.014mc	<.006	<.007
09...	18	73	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	<.006	E.011	--	--	--	--	<.006	--
JUL													
07...	--	--	--	--	--	<.006	E.012	--	--	--	--	<.006	--
21...	--	--	--	--	--	<.006	E.008	--	--	--	--	<.006	--
AUG													
04...	--	--	--	--	--	<.006	E.007	--	--	--	--	<.006	--
25...	--	--	--	--	--	<.006	E.009	--	--	--	--	<.006	--
SEP													
15...	--	--	--	--	--	<.006	E.008	--	--	--	--	<.006	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.005	<.02mc	<.008mc	<.04mc	<.005	.008	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.005	<.02mc	<.008mc	<.04mc	<.005	.062	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.005	--	--	--	<.005	.019	<.050	--	<.010	--	--	--	--
JUL													
07...	<.005	--	--	--	<.005	.017	<.050	--	<.010	--	--	--	--
21...	<.005	--	--	--	<.005	.011	<.050	--	<.010	--	--	--	--
AUG													
04...	<.005	--	--	--	<.005	.011	<.050	--	<.010	--	--	--	--
25...	<.005	--	--	--	<.005	.010	<.050	--	<.010	--	--	--	--
SEP													
15...	<.005	--	--	--	<.005	.012	<.050	--	<.010	--	--	--	--

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Brom- oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl- ate, water, fltrd, ug/L (04028)	Caf- feine, water, fltrd, ug/L (50305)	Car- baryl, water, fltrd 0.7u GF ug/L (49310)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo- furan, water, fltrd 0.7u GF ug/L (49309)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Chlor- amben methyl ester, water, fltrd, ug/L (61188)	Chlori- muron, water, fltrd, ug/L (50306)	Chloro- di- amino- s-tri- azine, wat flt ug/L (04039)	Chloro- thalo- nil, water, fltrd 0.7u GF ug/L (49306)	Chlor- pyrifos water, fltrd, ug/L (38933)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.02mc	<.004	<.0096	<.03	<.041	<.006	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.02mc	<.004	<.0096	<.03	<.041	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006
JUL													
07...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006
21...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006
AUG													
04...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006
25...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006
SEP													
15...	--	<.004	--	--	<.041	--	<.020	--	--	--	--	<.005	<.006

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Clopyr- alid, water, fltrd 0.7u GF ug/L (49305)	Cyana- zine, water, fltrd, ug/L (04041)	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Diel- drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, ug/L (04033)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.01	<.018	<.01mc	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.01	<.018	<.01mc	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02
JUL													
07...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02
21...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02
AUG													
04...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02
25...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02
SEP													
15...	--	<.018	--	--	<.003	<.012	<.005	--	--	<.009	--	--	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza- quin, water, fltrd, ug/L (50356)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.01	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.01	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--
JUL													
07...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--
21...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--
AUG													
04...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--
25...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--
SEP													
15...	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--	<.003	--

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.02mc	<.007	<.004	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.02mc	<.007	<.004	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013
JUL													
07...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013
21...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013
AUG													
04...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013
25...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013
SEP													
15...	--	--	<.004	--	<.035	<.027	--	--	--	--	--	<.015	<.013

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl) -N'-methylurea, ug/L (61692)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water fltrd 0.7u GF ug/L (49294)	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.006	<.03mc	<.003	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.006	<.03mc	<.003	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004
JUL													
07...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004
21...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004
AUG													
04...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004
25...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004
SEP													
15...	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003	<.010	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.022	<.011	<.02	Mn	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.007
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	<.022	<.011	<.02	.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.009
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	E.005n
JUL													
07...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	<.010
21...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	.007
AUG													
04...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	<.005
25...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	<.005
SEP													
15...	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--	--	<.005

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2 -Tetra-chloro-ethane, water, unfltrd ug/L (77562)	1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506)	1,1,2,2 -Tetra-chloro-ethane, water, unfltrd ug/L (34516)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	<.009	<.02	<.034	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	.009	<.02	<.034	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16
JUL													
07...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16
21...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16
AUG													
04...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16
25...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16
SEP													
15...	--	<.02	<.034	--	<.02	<.010	<.002	--	--	<.009	<.03b	<.03b	<.16

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	CFC-113 water unfltrd ug/L (77652)	1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511)	1,1-Di-chloro-ethane, water unfltrd ug/L (34496)	1,1-Di-chloro-ethene, water, unfltrd ug/L (34501)	1,1-Di-chloro-propene water unfltrd ug/L (77168)	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo chloro-propane water unfltrd ug/L (82625)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5
JUL													
07...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5
21...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5
AUG													
04...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5
25...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5
SEP													
15...	<.04b	<.06b	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di-chloro-propane water unfltrd ug/L (34541)	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,3-Di-chloro-propane water unfltrd ug/L (77173)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	14Bromo fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di-chloro-propane water unfltrd ug/L (77170)	2-Chloro-toluene water unfltrd ug/L (77275)	2-Ethyl-toluene water unfltrd ug/L (77220)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.04b	<.05b	<.1	101	<.03b	<.04b	<.03b	<.1b	<.03b	110	<.05b	<.04b	<.06b
JUL													
07...	<.04b	<.05b	<.1	107	<.03b	<.04b	<.03b	<.1b	<.03b	99.0	<.05b	<.04b	<.06b
21...	<.04b	<.05b	<.1	107	<.03b	<.04b	<.03b	<.1b	<.03b	95.0	<.05b	<.04b	<.06b
AUG													
04...	<.04b	<.05b	<.1	122	<.03b	<.04b	<.03b	<.1b	<.03b	105	<.05b	<.04b	<.06b
25...	<.04b	<.05b	<.1	112	<.03b	<.04b	<.03b	<.1b	<.03b	101	<.05b	<.04b	<.06b
SEP													
15...	<.04b	<.05b	<.1	116	<.03b	<.04b	<.03b	<.1b	<.03b	96.2	<.05b	<.04b	<.06b

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	3-Chloro-propene water unfltrd ug/L (78109)	4-Chloro-toluene water unfltrd ug/L (77277)	4-Iso-propyl-toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo-nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b
JUL													
07...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b
21...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b
AUG													
04...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b
25...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b
SEP													
15...	<.50mc	<.05b	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methac-rylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.1	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b
JUL													
07...	<.1	<.2mc	E.02n	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b
21...	<.1	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b
AUG													
04...	<.1	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b
25...	<.1	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b
SEP													
15...	<.1	<.2mc	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1
JUL													
07...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3b	<.08b	<.06b	<.5	<.7b	<.1
21...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1
AUG													
04...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1
25...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1
SEP													
15...	<.1	<.1	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1

08155500 Barton Springs at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)
JAN													
17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
09-09	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	.25	<.06b	<2	<.05b	103	<.03b
JUL													
07...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	.29	<.06b	<2	<.05b	100	<.03b
21...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	.11	<.06b	<2	<.05b	99.8	<.03b
AUG													
04...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	E.08b	<.06b	<2	<.05b	101	<.03b
25...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	E.09b	<.06b	<2	<.05b	98.3	<.03b
SEP													
15...	<.04b	<.04b	<.06b	<.04b	<.05b	<.2	<.06b	.24	<.06b	<2	<.05b	99.8	<.03b

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Aldrin, bed sedimnt ug/kg (39333)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)
JAN									
17-17	--	--	--	--	--	--	--	--	2.1
17...	--	--	--	--	--	--	--	--	--
JUN									
09-09	--	--	--	--	--	--	--	<42	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	2.3
21...	<.09b	<.7b	<.10	E.02t	<.16	E.06b	<.1b	--	--
JUL									
07...	<.09b	<.7b	<.10	E.03n	<.16	E.05b	<.1b	--	--
21...	<.09b	<.7b	<.10	<.04b	<.16	E.05b	<.1b	--	--
AUG									
04...	<.09b	<.7b	<.10	<.04b	<.16	E.08b	<.1b	--	--
25...	<.09b	<.7b	<.10b	<.04b	<.16	E.06b	<.1b	--	--
SEP									
15...	<.09b	<.7b	<.10b	E.01t	<.16	E.05b	<.1b	--	--

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

Value qualifier codes used in this table:
- b -- Value extrapolated at low end
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

08155501 Eliza Spring at Austin, TX

LOCATION.--Lat 30°15'51", long 97°46'12", Travis County, Hydrologic Unit 12090205, on left bank 0.4 mi upstream from Barton Springs Road bridge over Barton Creek, 0.7 mi upstream from mouth, and 1.8 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--Not applicable.

PERIOD OF RECORD.--
CHEMICAL DATA: Aug. 1997 to Sept. 1998, Aug. 2003 to current year.
BIOCHEMICAL DATA: Mar. 1978, Aug. 2003 to current year.
PESTICIDE DATA: May 2000 to May 2001.
SEDIMENT CHEMISTRY DATA: Nov. 2001.

REMARKS.--Only springflow from the Edwards and associated limestones in the Balcones Fault Zone is published for this station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Altitude of land surface feet (72000)	Sampling depth, feet (00003)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Specif. conductance, wat unf lab, uS/cm 25 degC (90095)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)
JUN													
21...	1700	--	80020	460	--	70	754	6.0	7.0	7.1	586	623	32.0
JUL													
07...	1130	--	80020	460	--	70	--	6.0	6.9	7.1	613	647	--
21...	0830	--	80020	460	--	70	--	5.7	6.8	6.9	598	632	--
AUG													
04...	1000	--	80020	460	--	70	755	6.0	7.0	7.3	575	623	31.0
25...	1030	1028	80020	460	.00	70	752	5.8	6.9	7.1	561	586	--
SEP													
15...	0930	1028	80020	460	.00	70	--	5.7	6.8	--	--	596	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
JUN													
21...	22.1	92.0	19.4	1.35	14.8	259	--	--	25.8	12.4	34.1	--	--
JUL													
07...	22.0	98.2	19.0	1.31	14.3	255	--	--	24.7	12.3	34.7	--	--
21...	22.3	93.0	20.1	1.25	13.8	234	--	--	25.3	12.0	33.1	--	--
AUG													
04...	22.2	82.8	20.4	1.28	13.3	227	--	--	24.6	11.6	29.6	--	--
25...	21.9	91.1	21.8	1.38	14.5	267	326	.0	23.6	11.8	27.3	<.10	<.010
SEP													
15...	21.7	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Strontium, water, fltrd, ug/L (01080)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)
JUN													
21...	.992d	--	--	--	--	754	--	--	--	--	--	--	--
JUL													
07...	.942	--	--	--	--	609	--	--	--	--	--	--	--
21...	.909	--	--	--	--	719	--	--	--	--	--	--	--
AUG													
04...	.985	--	--	--	--	752	--	--	--	--	--	--	--
25...	1.12d	<.008	<.02	<.04	<.04	888	<.006	E.008	<.006	<.005	<.005	106	.009
SEP													
15...	1.24d	--	--	--	--	--	--	--	--	--	--	--	--

08155501 Eliza Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	Dieldrin, water, fltrd, ug/L (39381)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	101	<.009
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetrachloroethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Trichloroethane, water, unfltrd ug/L (34511)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155501 Eliza Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,1-Di- chloro- ethane, water unfltrd ug/L (34496)	1,1-Di- chloro- ethene, water, unfltrd ug/L (34501)	1,1-Di- chloro- propene water unfltrd ug/L (77168)	1,2,3,4 Tetra- methyl- benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra- methyl- benzene water unfltrd ug/L (50000)	1,2,3- Tri- chloro- benzene water unfltrd ug/L (77613)	1,2,3- Tri- chloro- propane water unfltrd ug/L (77443)	1,2,3- Tri- methyl- benzene water unfltrd ug/L (77221)	1,2,4- Tri- chloro- benzene water unfltrd ug/L (34551)	1,2,4- Tri- methyl- benzene water unfltrd ug/L (77222)	Dibromo chloro- propane water unfltrd ug/L (82625)	1,2-Di- bromo- ethane, water, unfltrd ug/L (77651)	1,2-Di- chloro- benzene water unfltrd ug/L (34536)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.04b	<.02b	<.03b	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2-Di- chloro- ethane, water, unfltrd ug/L (32103)	1,2-Di- chloro- ethane- d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di- chloro- propane water unfltrd ug/L (34541)	1,3,5- Tri- methyl- benzene water unfltrd ug/L (77226)	1,3-Di- chloro- benzene water unfltrd ug/L (34566)	1,3-Di- chloro- propane water unfltrd ug/L (77173)	1,4-Di- chloro- benzene water unfltrd ug/L (34571)	14Bromo fluoro- benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di- chloro- propane water unfltrd ug/L (77170)	2- Chloro- toluene water unfltrd ug/L (77275)	2- Ethyl- toluene water unfltrd ug/L (77220)	3- Chloro- propene water unfltrd ug/L (78109)	4- Chloro- toluene water unfltrd ug/L (77277)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.1	111	<.03b	<.04b	<.03b	<.1b	<.03b	101	<.05b	<.04b	<.06b	<.50mc	<.05b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	4-Iso- propyl- toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo- nitrile water unfltrd ug/L (34215)	Benzene water unfltrd ug/L (34030)	Bromo- benzene water unfltrd ug/L (81555)	Bromo- chloro- methane water unfltrd ug/L (77297)	Bromo- di- chloro- methane water unfltrd ug/L (32101)	Bromo- ethene, water, unfltrd ug/L (50002)	Bromo- methane water unfltrd ug/L (34413)	Carbon di- sulfide water unfltrd ug/L (77041)	Chloro- benzene water unfltrd ug/L (34301)	Chloro- ethane, water, unfltrd ug/L (34311)	Chloro- methane water unfltrd ug/L (34418)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.08b	<6	<1	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	cis- 1,2-Di- chloro- ethene, water, unfltrd ug/L (77093)	cis- 1,3-Di- chloro- propene water unfltrd ug/L (34704)	Di- bromo- chloro- methane water unfltrd ug/L (32105)	Di- bromo- methane water unfltrd ug/L (30217)	Di- chloro- di- fluoro- methane wat unf ug/L (34668)	Di- chloro- methane water unfltrd ug/L (34423)	Di- ethyl ether, water, unfltrd ug/L (81576)	Diiso- propyl ether, water, unfltrd ug/L (81577)	Ethyl methac- rylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl- benzene water unfltrd ug/L (34371)	Hexa- chloro- buta- diene, water, unfltrd ug/L (39702)	Hexa- chloro- ethane, water, unfltrd ug/L (34396)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.02b	<.05b	<.1	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155501 Eliza Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.35mc	<.4b	<.04b	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.06b	<.04b	<.05b	<.2	<.06b	E.08b	<.06b	<2	<.05b	100	<.03b	<.09b	<.7b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)	Number of TICS from VOC by GCMS number (99871)	Purpose site visit, code (50280)	Sample purpose code (71999)	Sample volume, Sched-ule 2001, mL (99856)	Sampler type, code (84164)	Sam-pling condi-tion, code (72006)	Type of sample related QA data, code (99111)
JUN												
21...	--	--	--	--	--	--	1,001	10.00	--	3070	--	1
JUL												
07...	--	--	--	--	--	--	1,001	10.00	--	3070	--	30
21...	--	--	--	--	--	--	1,001	10.00	--	3070	--	--
AUG												
04...	--	--	--	--	--	--	1,001	10.00	--	3070	--	1
25...	<.10b	<.04b	<.16	E.06b	<.1b	.0	2,001	10.00	899	3070	4.00	--
SEP												
15...	--	--	--	--	--	--	2,001	10.00	--	8000	4.00	--

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

Value qualifier codes used in this table:
- b -- Value extrapolated at low end
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method

08155503 Old Mill Spring at Austin, TX

LOCATION.--Lat 30°15'46", long 97°46'02", Travis County, Hydrologic Unit 12090205, on right bank 0.3 mi upstream from Barton Springs Road bridge over Barton Creek, 0.6 mi upstream from mouth, and 1.7 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--

PERIOD OF RECORD.--
CHEMICAL DATA: Aug. 1997 to Sept. 1998, Oct. 2002 to Sept. 2003.
BIOCHEMICAL DATA: Mar. 1978, Oct. 2002 to Sept. 2003.
PESTICIDE DATA: May 2000 to May 2001.
SEDIMENT CHEMISTRY DATA: Nov. 2001.

REMARKS.--Only springflow from the Edwards and associated limestones in the Balcones Fault Zone is published for this station.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)
JUN													
21...	1600	754	5.6	65	7.0	671	30.5	21.6	68	310	89.4	21.3	1.60
JUL													
07...	1100	--	5.2	--	7.0	698	--	21.6	76	310	90.5	20.8	1.53
21...	0900	--	5.3	--	6.9	688	--	21.8	100	320	90.6	22.1	1.58
AUG													
04...	0930	755	5.5	63	7.1	699	30.0	21.8	92	310	85.2	22.7	1.61
25...	0900	752	5.0	58	6.9	677	30.0	21.6	68	330	92.5	23.7	1.72
SEP													
15...	0830	--	5.2	--	6.7	695	--	21.5	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)
JUN													
21...	.6	25.4	15	244	--	--	40.5	11.9	46.0	387	--	--	.960
JUL													
07...	.6	25.6	15	237	--	--	42.4	11.8	47.0	386	--	--	.906
21...	.6	25.1	15	217	--	--	42.4	11.8	45.9	374	--	--	.887
AUG													
04...	.7	26.8	16	215	--	--	44.4	11.5	45.0	371	--	--	.969
25...	.7	30.4	17	261	318	.0	46.7	11.6	44.2	414	<.10	<.010	1.14d
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	1.24d

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Strontium, water, fltrd, ug/L (01080)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)
JUN													
21...	--	--	--	--	818	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	712	--	--	--	--	--	--	--	--
21...	--	--	--	--	795	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	868	--	--	--	--	--	--	--	--
25...	<.008	<.02	<.04	<.04	1,000	<.006	E.007	<.006	<.005	<.005	.008	<.050	<.010
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155503 Old Mill Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Molinate, water, fltrd 0.7u GF ug/L (82671)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Napropamide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Simazine, water, fltrd, ug/L (04035)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	1,1,1,2-Tetrachloroethane, water, unfltrd ug/L (77562)	1,1,1-Trichloroethane, water, unfltrd ug/L (34506)	1,1,2,2-Tetrachloroethane, water, unfltrd ug/L (34516)	CFC-113 water unfltrd ug/L (77652)	1,1,2-Trichloroethane, water, unfltrd ug/L (34511)	1,1-Dichloroethane, water unfltrd ug/L (34496)	1,1-Dichloroethene, water, unfltrd ug/L (34501)	1,1-Dichloropropene water unfltrd ug/L (77168)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.034	<.02	<.010	<.002	<.009	<.03b	<.03b	<.16	<.04b	<.06b	<.04b	<.02b	<.03b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155503 Old Mill Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999)	1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000)	1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)	1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)	1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)	1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)	1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)	Dibromo chloro-propane water unfltrd ug/L (82625)	1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)	1,2-Di-chloro-benzene water unfltrd ug/L (34536)	1,2-Di-chloro-ethane, water, unfltrd ug/L (32103)	1,2-Di-chloro-ethane-d4, sur Sch2090 wat unf pct rcv (99832)	1,2-Di-chloro-propane water unfltrd ug/L (34541)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.1	<.1	<.3	<.18	<.1b	<.1	<.06b	<.5	<.04b	<.05b	<.1	114	<.03b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226)	1,3-Di-chloro-benzene water unfltrd ug/L (34566)	1,3-Di-chloro-propane water unfltrd ug/L (77173)	1,4-Di-chloro-benzene water unfltrd ug/L (34571)	14Bromo fluoro-benzene surrog. VOC Sch wat unf pct rcv (99834)	2,2-Di-chloro-propane water unfltrd ug/L (77170)	2-Chloro-toluene water unfltrd ug/L (77275)	2-Ethyl-toluene water unfltrd ug/L (77220)	3-Chloro-propene water unfltrd ug/L (78109)	4-Chloro-toluene water unfltrd ug/L (77277)	4-Iso-propyl-toluene water unfltrd ug/L (77356)	Acetone water unfltrd ug/L (81552)	Acrylo-nitrile water unfltrd ug/L (34215)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.04b	<.03b	<.1b	<.03b	99.2	<.05b	<.04b	<.06b	<.50mc	<.05b	<.08b	<6	<1
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Benzene water unfltrd ug/L (34030)	Bromo-benzene water unfltrd ug/L (81555)	Bromo-chloro-methane water unfltrd ug/L (77297)	Bromo-di-chloro-methane water unfltrd ug/L (32101)	Bromo-ethene, water, unfltrd ug/L (50002)	Bromo-methane water unfltrd ug/L (34413)	Carbon di-sulfide water unfltrd ug/L (77041)	Chloro-benzene water unfltrd ug/L (34301)	Chloro-ethane, water, unfltrd ug/L (34311)	Chloro-methane water unfltrd ug/L (34418)	cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093)	cis-1,3-Di-chloro-propene water unfltrd ug/L (34704)	Di-bromo-chloro-methane water unfltrd ug/L (32105)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.02b	<.03b	<.12	<.03b	<.1	<.3mc	<.04b	<.03b	<.1	<.2mc	<.02b	<.05b	<.1
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di-bromo-methane water unfltrd ug/L (30217)	Di-chloro-di-fluoro-methane wat unf ug/L (34668)	Di-chloro-methane water unfltrd ug/L (34423)	Di-ethyl ether, water, unfltrd ug/L (81576)	Diiso-propyl ether, water, unfltrd ug/L (81577)	Ethyl methac-rylate, water, unfltrd ug/L (73570)	Ethyl methyl ketone, water, unfltrd ug/L (81595)	Ethyl-benzene water unfltrd ug/L (34371)	Hexa-chloro-buta-diene, water, unfltrd ug/L (39702)	Hexa-chloro-ethane, water, unfltrd ug/L (34396)	Iodo-methane water unfltrd ug/L (77424)	Iso-butyl methyl ketone, water, unfltrd ug/L (78133)	Iso-propyl-benzene water unfltrd ug/L (77223)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.05b	<.18mc	<.1b	<.1b	<.10	<.2	<4.0	<.03b	<.1	<.1	<.35mc	<.4b	<.04b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

08155503 Old Mill Spring at Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Methyl acrylo-nitrile water unfltrd ug/L (81593)	Methyl acryl-ate, water, unfltrd ug/L (49991)	Methyl methac-rylate, water, unfltrd ug/L (81597)	Methyl tert-pentyl ether, water, unfltrd ug/L (50005)	meta- + para-Xylene, water, unfltrd ug/L (85795)	Naphth-alene, water, unfltrd ug/L (34696)	Methyl n-butyl ketone, water, unfltrd ug/L (77103)	n-Butyl benzene water unfltrd ug/L (77342)	n-propyl-benzene water unfltrd ug/L (77224)	o-Xylene, water, unfltrd ug/L (77135)	sec-Butyl-benzene water unfltrd ug/L (77350)	Styrene water unfltrd ug/L (77128)	t-Butyl ethyl ether, water, unfltrd ug/L (50004)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.8	<2.0	<.3	<.08b	<.06b	<.5	<.7b	<.1	<.04b	<.04b	<.06b	<.04b	<.05b
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Methyl t-butyl ether, water, unfltrd ug/L (78032)	tert-Butyl-benzene water unfltrd ug/L (77353)	Tetra-chloro-ethene, water, unfltrd ug/L (34475)	Tetra-chloro-methane water unfltrd ug/L (32102)	Tetra-hydro-furan, water, unfltrd ug/L (81607)	Toluene water unfltrd ug/L (34010)	Toluene -d8, surrog, Sch2090 wat unf percent recovry (99833)	trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546)	trans-1,3-Di-chloro-propene water unfltrd ug/L (34699)	trans-1,4-Di-chloro-2-butene, wat unf ug/L (73547)	Tri-bromo-methane water unfltrd ug/L (32104)	Tri-chloro-ethene, water, unfltrd ug/L (39180)	Tri-chloro-fluoro-methane water unfltrd ug/L (34488)
JUN													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	<.2	<.06b	E.08b	<.06b	<2	<.05b	99.6	<.03b	<.09b	<.7b	<.10b	<.04b	<.16
SEP													
15...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-chloro-methane water unfltrd ug/L (32106)	Vinyl chlor-ide, water, unfltrd ug/L (39175)
JUN		
21...	--	--
JUL		
07...	--	--
21...	--	--
AUG		
04...	--	--
25...	E.05b	<.1b
SEP		
15...	--	--

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

Value qualifier codes used in this table:
- b -- Value extrapolated at low end
- c -- See laboratory comment
- d -- Diluted sample: method hi range exceeded
- m -- Value is highly variable by this method

08156800 Shoal Creek at 12th Street, Austin, TX

LOCATION.--Lat 30°16'35", long 97°45'00", Travis County, Hydrologic Unit 12090205, on left bank at downstream side of bridge at 12th Street, and 0.6 mi west of the State Capitol Building in Austin.

DRAINAGE AREA.--12.3 mi^2.

PERIOD OF RECORD.--Nov. 1974 to Mar. 1975 (periodic discharge measurements, and associated peak discharges along with annual maximum), Apr. 1975 to Sept. 1984 (peak discharges greater than base discharge), Oct. 1984 to current year. Water quality records: Chemical and biochemical analyses: Feb. 1943, Nov. 1974 to Dec. 2002; Radiochemical anaylyses: Apr. 1980; Pesticide analyses: Jan. 1975 to Sept. 1985, Jan. 1993 to May 1996, Mar. 2002 to June 2002; Suspended sediment chemistry analyses: Mar. 1999 to Mar. 2001; Sediment analyses: Oct. 1998 to Dec. 2002.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 455.33 ft above NGVD of 1929. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.60	0.05	11	0.00	16	0.04	0.00
2	0.00	0.05	0.00	0.00	0.00	2.4	0.06	0.96	0.00	3.1	0.04	0.00
3	0.00	0.00	0.00	0.00	0.00	1.3	0.06	0.08	54	0.80	0.03	0.00
4	0.00	0.00	0.00	0.00	16	42	0.09	0.05	0.00	0.26	0.02	0.00
5	0.00	0.00	0.00	0.00	54	6.5	0.11	0.04	2.0	0.15	0.01	0.00
6	2.9	0.00	0.00	0.00	0.71	0.63	240	0.03	0.00	0.09	0.00	0.00
7	0.02	0.00	0.00	0.00	0.04	0.11	7.6	0.01	0.00	0.07	0.00	0.00
8	0.02	0.00	0.00	0.00	0.00	0.07	2.0	0.00	87	0.06	0.00	0.00
9	0.33	0.00	0.00	0.00	1.1	0.06	1.0	0.00	661	0.06	0.00	0.00
10	0.76	0.00	0.00	0.00	47	0.06	22	0.00	91	0.05	0.00	0.00
11	0.97	0.00	0.00	0.00	78	0.06	35	12	19	0.04	8.0	0.00
12	3.4	0.00	1.0	0.00	5.8	0.25	5.4	0.31	6.9	0.04	0.80	0.00
13	0.23	0.00	0.02	0.00	1.5	4.7	1.5	0.42	2.2	0.03	0.01	0.00
14	0.14	0.00	0.00	0.00	6.4	2.2	0.80	113	1.4	0.02	0.00	86
15	0.10	0.00	0.00	11	1.3	0.32	0.62	0.31	0.67	0.01	0.00	1.3
16	0.07	0.00	0.00	274	0.29	28	0.44	0.02	0.32	0.00	0.00	0.00
17	0.04	15	0.00	70	0.11	0.47	0.30	0.01	0.18	0.00	0.00	0.00
18	0.01	2.0	0.00	1.5	0.06	0.09	0.27	0.00	0.09	0.00	0.00	0.19
19	0.00	0.00	0.00	0.13	0.05	0.06	0.20	0.00	0.06	0.00	0.00	0.00
20	0.00	0.00	0.00	0.05	0.05	0.06	0.17	0.00	0.04	0.00	146	0.00
21	0.00	0.00	0.00	0.03	0.05	0.06	0.12	0.00	0.02	0.00	39	0.00
22	0.00	0.00	0.00	0.01	0.05	0.05	0.09	0.00	0.22	0.00	0.50	0.00
23	0.00	0.00	0.00	0.00	0.47	0.05	0.07	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	9.5	29	0.06	14	0.00	0.00	e0.00	0.00	0.00
25	0.00	0.00	0.00	3.7	1.3	0.94	1.1	0.00	60	3.8	0.00	0.00
26	0.00	0.00	0.00	0.08	0.14	0.08	0.36	0.00	120	0.39	0.00	0.00
27	0.00	0.00	0.00	0.03	0.06	0.06	0.11	0.00	41	0.01	0.00	0.00
28	0.00	0.00	0.00	0.01	0.05	0.06	0.08	0.00	6.4	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	2.1	0.06	0.27	0.00	35	14	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.05	0.08	0.00	186	7.6	0.00	0.00
31	0.00	---	0.00	0.00	---	0.05	---	0.23	---	0.06	0.00	---
TOTAL	8.99	17.05	1.02	370.04	245.63	91.46	333.95	138.47	1,374.50	46.64	194.45	87.49
MEAN	0.29	0.57	0.03	11.9	8.47	2.95	11.1	4.47	45.8	1.50	6.27	2.92
MAX	3.4	15	1.0	274	78	42	240	113	661	16	146	86
MIN	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.00	0.00	0.00	0.00	0.00
AC-FT	18	34	2.0	734	487	181	662	275	2,730	93	386	174

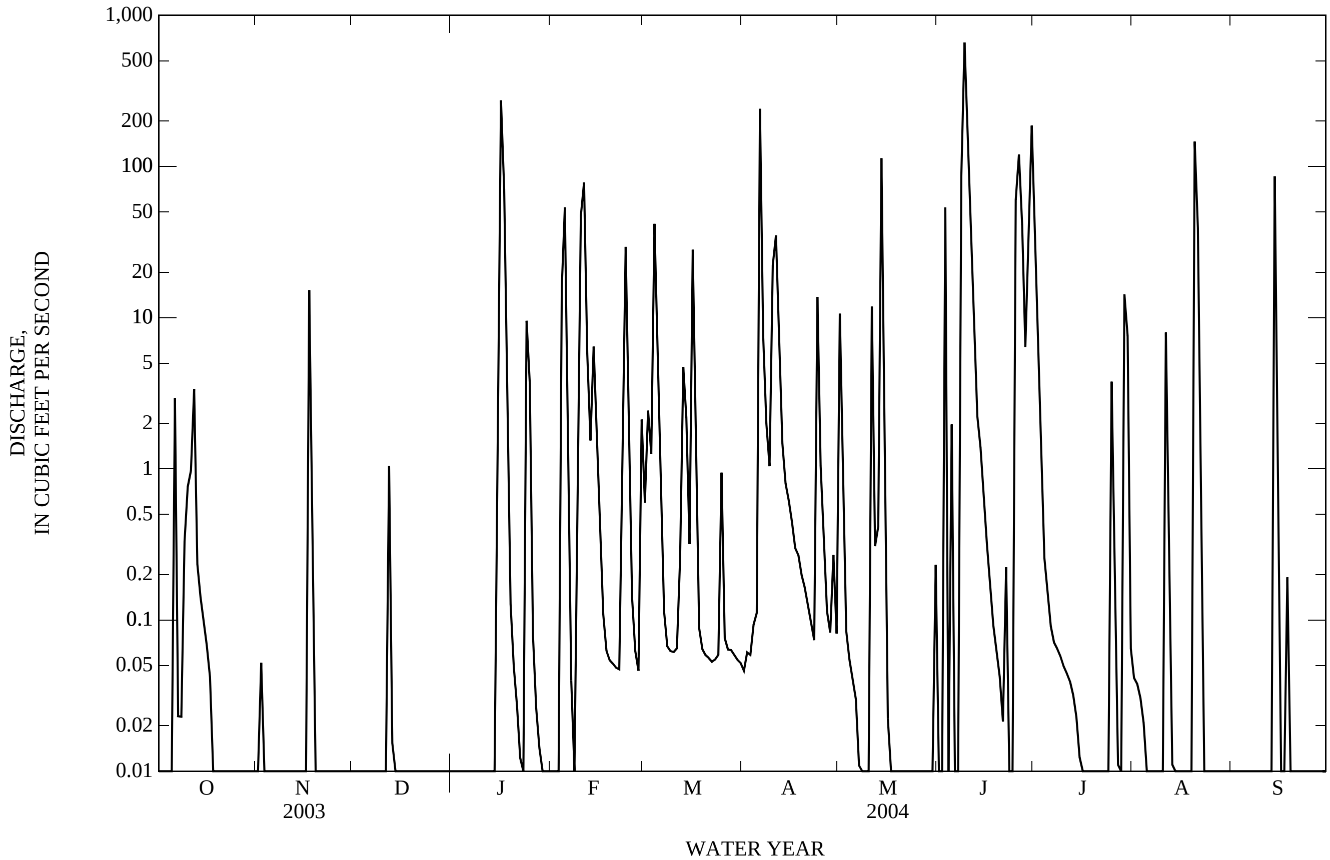
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	12.9	8.79	9.69	5.52	5.98	5.58	4.97	13.9	12.3	3.24	6.75	5.18
MAX	67.6	44.0	70.8	22.6	29.2	25.4	18.2	38.7	46.1	24.7	38.9	12.5
(WY)	(1999)	(2002)	(1992)	(1991)	(1992)	(2001)	(1997)	(1995)	(1987)	(2002)	(1996)	(1986)
MIN	0.22	0.00	0.03	0.00	0.00	0.01	0.17	0.11	0.29	0.00	0.00	0.00
(WY)	(1997)	(2000)	(2004)	(1996)	(1999)	(1996)	(2003)	(1998)	(2001)	(1989)	(1993)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004	
ANNUAL TOTAL	1,240.26		2,909.69			
ANNUAL MEAN	3.40		7.95		7.92	
HIGHEST ANNUAL MEAN					15.7	1992
LOWEST ANNUAL MEAN					3.26	1988
HIGHEST DAILY MEAN	299	Feb 20	661	Jun 9	1,040	Nov 15, 2001
LOWEST DAILY MEAN	0.00	Apr 25	0.00	Oct 1	0.00	Oct 1, 1984
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 25	0.00	Oct 19	0.00	May 6, 1985
MAXIMUM PEAK FLOW			4,880	Jun 9	i16,000	May 24, 1981
MAXIMUM PEAK STAGE			15.17	Jun 9	a23.22	May 24, 1981
ANNUAL RUNOFF (AC-FT)	2,460		5,770		5,740	
10 PERCENT EXCEEDS	2.0		7.6		12	
50 PERCENT EXCEEDS	0.03		0.01		0.02	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.
i From indirect measurement of peak flow.
e Estimated

08156800 Shoal Creek at 12th Street, Austin, TX—Continued



08158000 Colorado River at Austin, TX

LOCATION.--Lat 30°14'40", long 97°41'39", Travis County, Hydrologic Unit 12090205, on right bank, 1,000 ft upstream from upstream bridge on U.S. Highway 183 in Austin, 1.4 mi downstream from Longhorn Dam, and at mile 290.3.

DRAINAGE AREA.--39,009 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Feb. 1898 to current year. Records of daily discharge for Dec. 13-26, 1914, and Feb. 9-17, 1915, published in WSP 408, have been found unreliable and should not be used. Water-quality records: Chemical data: Oct. 1947 to Sept. 1993. Specific conductance: Oct. 1947 to Sept. 1991. Water temperature: Oct. 1947 to Sept. 1991.

REVISED RECORDS.--WSP 508: 1915(m). WSP 528: 1900(M), 1918(m). WSP 548: 1901-16. WSP 1342: Drainage area. WSP 1562: 1908, 1929(M), 1936.

GAGE.--Water-stage recorder. Datum of gage is 402.27 ft above NGVD of 1929. Prior to June 19, 1939, all records collected at or near Congress Avenue bridge 3.9 mi upstream at datum 19.6 ft higher; prior to June 18, 1915, nonrecording gages, recording gages thereafter; June 20, 1939, to Oct. 16, 1963, at site 1,000 ft downstream from present site at datum 5.0 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in 1898, at least 10% of contributing drainage area has been regulated. The city of Austin diverts water for municipal use upstream from station and returns wastewater effluent downstream. There are many other diversions above Lake Buchanan for irrigation, municipal supplies, and oil field operations.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1833, 51 ft July 7, 1869, present site and datum (adjusted to present site on basis of record for flood of June 15, 1935), determined from information concerning stage at former site furnished by Dean T.U. Taylor.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	859	273	266	293	278	406	455	1,760	1,520	5,330	882	1,390
2	806	251	263	293	284	409	479	1,430	1,720	4,870	891	1,270
3	670	289	278	293	279	488	487	1,570	2,480	4,570	878	1,220
4	938	246	267	290	333	502	476	1,640	2,120	4,470	858	1,240
5	819	277	296	287	392	263	351	1,540	2,610	3,490	844	1,250
6	771	246	273	282	270	460	1,380	1,370	2,090	4,290	926	1,330
7	833	251	269	381	297	376	356	1,420	1,980	2,120	1,010	1,250
8	711	250	276	292	304	380	334	1,990	2,880	1,960	1,080	1,240
9	719	289	265	309	339	418	403	2,100	6,680	1,840	1,210	1,250
10	480	257	266	299	432	411	608	1,890	12,300	1,820	1,260	1,290
11	456	309	266	300	497	402	600	1,680	18,500	1,690	1,520	1,390
12	453	286	306	315	305	446	546	2,230	18,300	2,090	1,600	1,980
13	442	280	262	296	266	475	500	1,770	16,300	1,810	1,700	1,060
14	509	285	271	313	346	431	404	2,010	12,400	1,440	1,550	1,980
15	450	282	272	382	297	354	405	1,850	7,600	1,240	1,630	1,750
16	162	277	256	1,030	301	495	402	1,990	6,560	1,150	1,580	1,730
17	209	494	263	1,190	345	373	397	1,850	4,020	1,210	1,610	1,580
18	212	310	270	369	295	417	392	1,860	4,080	1,190	1,550	1,740
19	210	273	254	382	299	504	376	1,940	4,250	1,160	1,600	1,680
20	220	275	275	415	327	647	383	2,020	4,260	1,040	2,320	1,580
21	213	274	281	388	318	368	476	2,480	4,170	1,100	1,690	1,370
22	332	278	273	371	314	393	1,010	1,480	4,240	1,090	1,600	1,620
23	407	282	256	312	353	462	510	1,450	4,370	1,110	4,670	1,540
24	400	263	260	359	497	464	713	1,520	4,140	1,040	1,660	1,020
25	351	270	262	323	336	467	912	1,520	4,330	1,120	1,800	1,030
26	352	276	250	313	337	462	814	1,640	5,050	1,030	1,850	1,000
27	347	270	275	301	325	469	918	1,730	4,600	971	1,790	928
28	409	275	263	309	306	477	1,260	1,560	4,510	890	1,170	960
29	369	271	184	283	318	470	1,550	1,770	4,560	1,040	1,720	1,280
30	372	268	259	263	---	466	1,720	1,820	6,130	906	1,460	990
31	365	---	273	287	---	520	---	1,990	---	949	1,420	---
TOTAL	14,846	8,427	8,250	11,520	9,590	13,675	19,617	54,870	178,750	60,026	47,329	40,938
MEAN	479	281	266	372	331	441	654	1,770	5,958	1,936	1,527	1,365
MAX	938	494	306	1,190	497	647	1,720	2,480	18,500	5,330	4,670	1,980
MIN	162	246	184	263	266	263	334	1,370	1,520	890	844	928
AC-FT	29,450	16,710	16,360	22,850	19,020	27,120	38,910	108,800	354,600	119,100	93,880	81,200

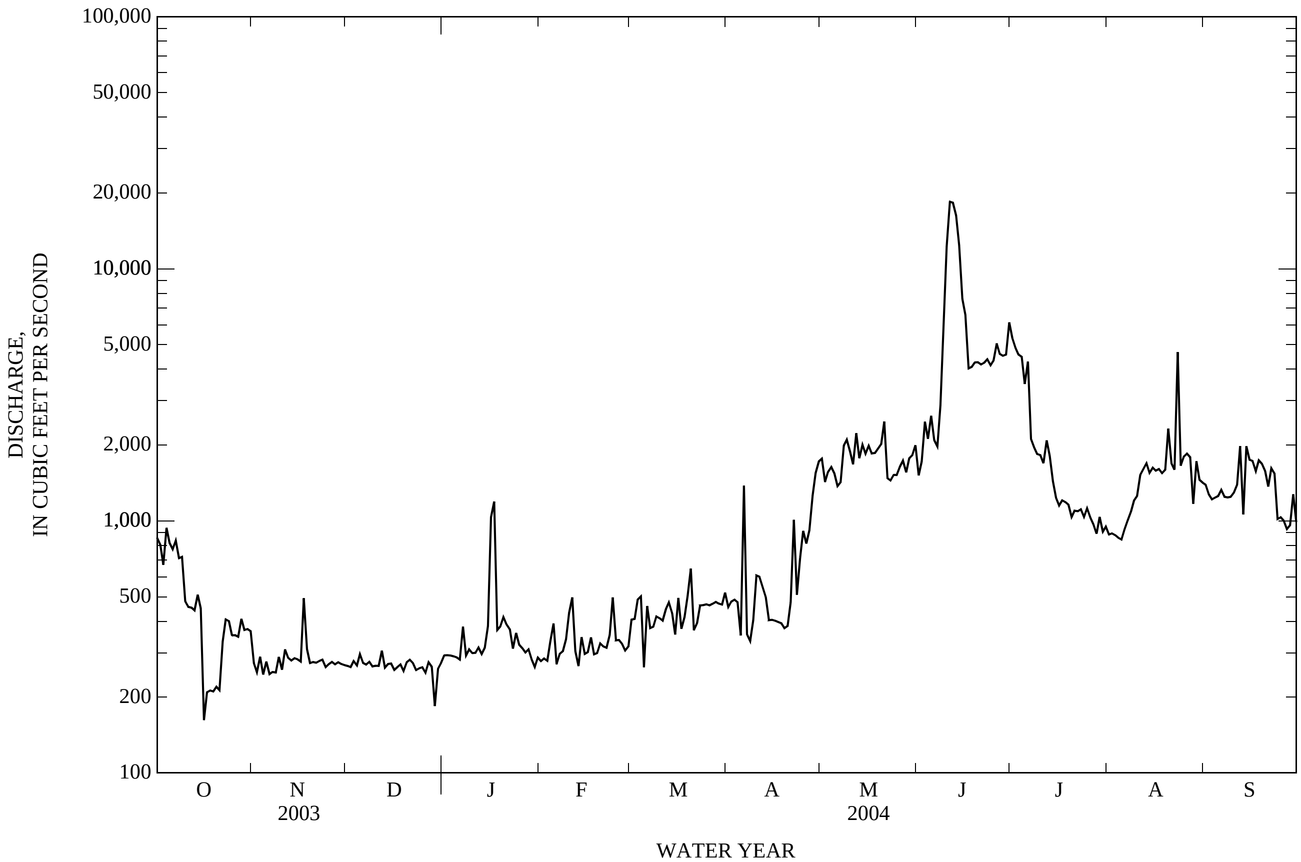
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1,927	1,447	1,321	1,209	1,460	1,525	2,615	4,065	3,783	2,808	1,781	2,511
MAX	20,080	11,050	23,800	15,080	25,890	13,640	21,800	30,710	31,940	36,110	12,310	42,630
(WY)	(1931)	(1919)	(1914)	(1992)	(1992)	(1992)	(1900)	(1922)	(1935)	(1938)	(1906)	(1936)
MIN	57.5	38.7	43.9	46.2	49.7	55.0	145	964	238	256	70.3	156
(WY)	(1935)	(1990)	(1964)	(1967)	(1964)	(1964)	(1907)	(1921)	(1910)	(1933)	(1917)	(1907)

08158000 Colorado River at Austin, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1898 - 2004	
ANNUAL TOTAL	472,742		467,838			
ANNUAL MEAN	1,295		1,278		2,168	
HIGHEST ANNUAL MEAN					7,535	1914
LOWEST ANNUAL MEAN					590	1917
HIGHEST DAILY MEAN	6,200	Feb 20	18,500	Jun 11	323,000	Jun 15, 1935
LOWEST DAILY MEAN	160	Feb 1	162	Oct 16	0.00	Sep 29, 1914
ANNUAL SEVEN-DAY MINIMUM	223	Oct 16	223	Oct 16	18	Oct 25, 1990
MAXIMUM PEAK FLOW			26,600	Jun 9	481,000	Jun 15, 1935
MAXIMUM PEAK STAGE			20.55	Jun 9	g50.00	Jun 15, 1935
ANNUAL RUNOFF (AC-FT)	937,700		928,000		1,571,000	
10 PERCENT EXCEEDS	2,540		2,120		3,790	
50 PERCENT EXCEEDS	1,120		498		1,130	
90 PERCENT EXCEEDS	269		270		177	

g From floodmark at site and datum then in use.



08158600 Walnut Creek at Webberville Road, Austin, TX

LOCATION.--Lat 30°16'59", long 97°39'17", Travis County, Hydrologic Unit 12090205, on left bank, 190 ft downstream from bridge on Farm Road 969, 0.8 mi downstream from Little Walnut Creek, 2.8 mi upstream from Colorado River, 5.2 mi east of the State Capitol Building in Austin, and 2.8 mi upstream from mouth.

DRAINAGE AREA.--51.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1966 to current year.

REVISED RECORDS.--WDR TX-00-4: (daily mean discharge, Feb. 11, 1999).

GAGE.--Water-stage recorder. Datum of gage is 425.96 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair except those for daily discharges above 800 ft^3/s, which are poor. No known regulation or diversions. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 15, 1935, reached a stage of 24 ft due to backwater from Colorado River. A flood in 1919 reached a stage of 22 ft, from information by local residents. Maximum stage since at least 1891, that of May 25, 1981.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

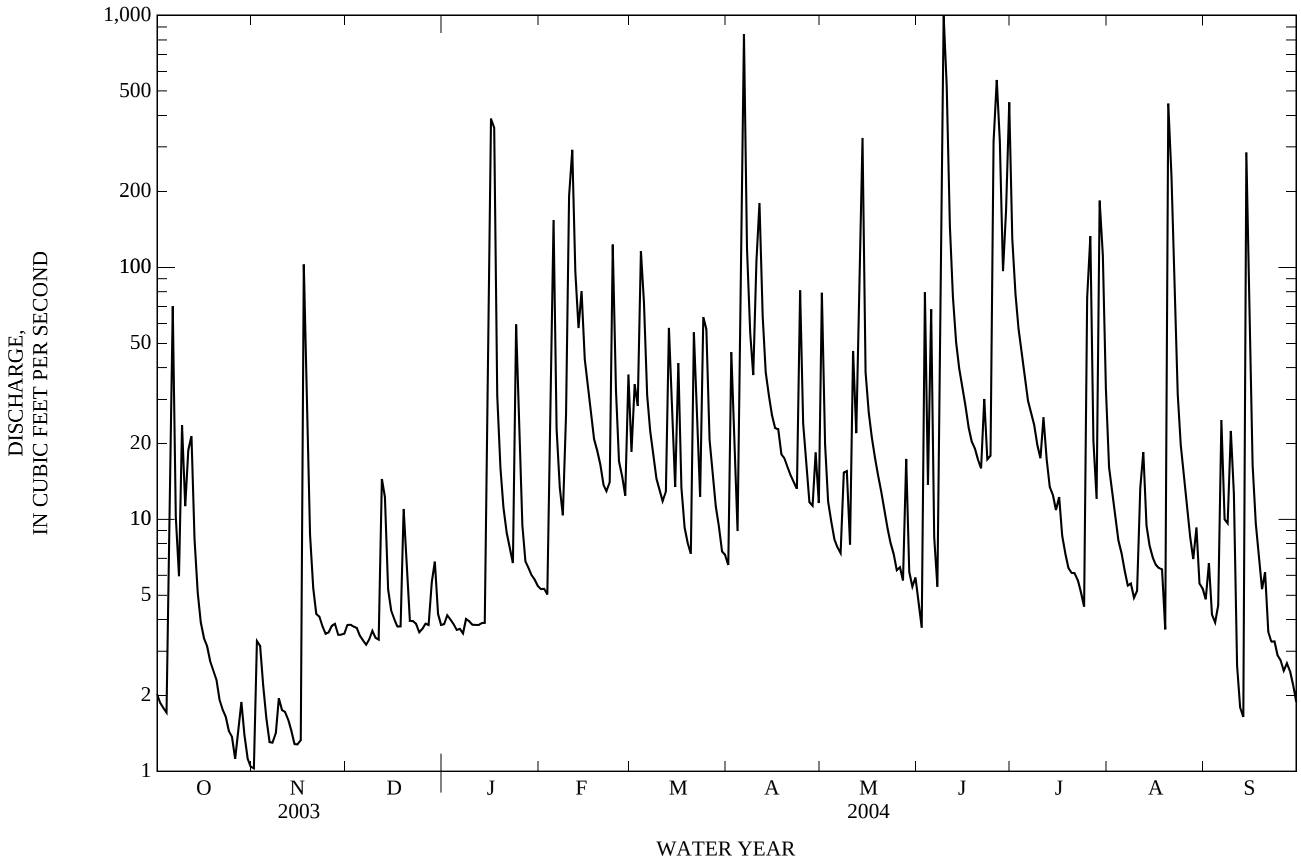
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.0	3.8	3.8	5.3	19	6.6	79	4.6	130	16	4.8
2	1.9	3.3	3.8	4.2	5.3	34	46	20	3.7	78	13	6.7
3	1.8	3.1	3.7	4.0	5.0	28	18	12	80	57	10	4.2
4	1.7	2.2	3.7	3.8	54	116	9.0	9.8	14	45	8.3	3.9
5	18	1.6	3.4	3.6	154	72	29	8.3	68	36	7.3	4.6
6	70	1.3	3.3	3.7	23	31	841	7.7	8.5	30	6.3	25
7	10	1.3	3.2	3.5	13	22	119	7.3	5.4	27	5.5	10
8	5.9	1.4	3.3	4.0	10	18	55	15	189	24	5.6	9.6
9	24	1.9	3.6	3.9	26	14	37	16	1,000	20	4.9	22
10	11	1.7	3.4	3.8	192	13	106	7.9	529	17	5.2	13
11	19	1.7	3.3	3.8	292	12	180	47	146	25	13	2.6
12	21	1.6	14	3.8	96	13	64	22	76	17	19	1.8
13	8.4	1.4	12	3.9	57	58	38	99	50	13	9.4	1.6
14	5.1	1.3	5.3	3.9	81	29	31	325	40	12	7.9	285
15	3.9	1.3	4.4	67	43	13	26	38	33	11	7.1	81
16	3.4	1.3	4.0	389	34	42	23	26	28	12	6.6	16
17	3.1	103	3.8	359	26	13	23	21	23	8.6	6.4	9.6
18	2.7	38	3.8	31	21	9.3	18	18	20	7.3	6.3	7.0
19	2.5	8.7	11	16	19	8.1	17	15	19	6.4	3.7	5.3
20	2.3	5.3	6.1	11	17	7.3	16	13	17	6.1	447	6.2
21	1.9	4.2	4.0	8.8	14	55	15	11	16	6.1	230	3.6
22	1.8	4.1	3.9	7.6	13	23	14	9.2	30	5.7	80	3.3
23	1.6	3.8	3.8	6.7	14	12	13	8.1	17	5.1	31	3.3
24	1.4	3.5	3.6	59	123	63	81	7.3	18	4.5	20	2.9
25	1.4	3.6	3.7	25	33	57	24	6.3	315	76	15	2.7
26	1.1	3.8	3.9	9.5	17	21	16	6.5	555	133	11	2.5
27	1.4	3.8	3.8	6.8	15	15	12	5.7	319	21	8.5	2.7
28	1.9	3.5	5.6	6.4	12	11	11	17	97	12	6.9	2.5
29	1.4	3.5	6.8	6.0	38	9.4	18	6.2	167	184	9.3	2.2
30	1.1	3.5	4.2	5.8	---	7.5	12	5.4	451	112	5.6	1.9
31	1.0	---	3.8	5.4	---	7.2	---	5.9	---	33	5.3	---
TOTAL	233.7	219.7	150.0	1,073.7	1,452.6	852.8	1,918.6	895.6	4,339.2	1,174.8	1,031.1	547.5
MEAN	7.54	7.32	4.84	34.6	50.1	27.5	64.0	28.9	145	37.9	33.3	18.2
MAX	70	103	14	389	292	116	841	325	1,000	184	447	285
MIN	1.0	1.0	3.2	3.5	5.0	7.2	6.6	5.4	3.7	4.5	3.7	1.6
AC-FT	464	436	298	2,130	2,880	1,690	3,810	1,780	8,610	2,330	2,050	1,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.6	28.4	36.4	30.4	33.2	28.6	24.9	54.7	44.1	14.4	14.0	14.4
MAX	215	161	367	237	203	121	90.0	170	435	118	100	51.7
(WY)	(1999)	(1975)	(1992)	(1968)	(1992)	(1992)	(1977)	(1981)	(1981)	(2002)	(2001)	(1973)
MIN	1.37	1.03	1.22	1.07	1.88	1.06	1.79	0.58	0.23	0.05	0.32	0.59
(WY)	(1979)	(1967)	(1967)	(1967)	(1967)	(1967)	(1971)	(1971)	(1967)	(1971)	(1977)	(1999)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL TOTAL	8,843.25		13,889.3			
ANNUAL MEAN	24.2		37.9		29.9	
HIGHEST ANNUAL MEAN					94.6	1992
LOWEST ANNUAL MEAN					1.91	1967
HIGHEST DAILY MEAN	1,320	Feb 20	1,000	Jun 9	4,330	Dec 21, 1991
LOWEST DAILY MEAN	0.12	Aug 10	1.0	Oct 31	0.00	Jun 17, 1967
ANNUAL SEVEN-DAY MINIMUM	0.19	Aug 4	1.3	Oct 26	0.00	Jun 17, 1967
MAXIMUM PEAK FLOW			4,620	Jun 9	14,300	May 25, 1981
MAXIMUM PEAK STAGE			17.59	Jun 9	27.24	May 25, 1981
ANNUAL RUNOFF (AC-FT)	17,540		27,550		21,650	
10 PERCENT EXCEEDS	47		80		47	
50 PERCENT EXCEEDS	7.3		10		7.9	
90 PERCENT EXCEEDS	1.4		2.5		1.1	

08158600 Walnut Creek at Webberville Road, Austin, TX—Continued



08158600 Walnut Creek at Webberville Road, Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Apr. 1976 to current year.
BIOCHEMICAL DATA: Apr. 1976 to current year.
RADIOCHEMICAL DATA: Jan. 1980 to June 1981.
PESTICIDE DATA: Nov. 1976 to June 1985, Apr. 2002 to May 2002.
SUSPENDED SEDIMENT CHEMISTRY: Jan 1980, May 2002 to June 2002.
SEDIMENT DATA: Dec. 1976, Jan. 1978 to Apr. 1980, July 1982, May 1999, Mar. 2001 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis- charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid- ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Alka- linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus- pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)
OCT													
05-06	2250	203	50d	630d	7.2	236	71	910d	2.3	<.04	.46	.47	.011
MAR													
21-21	1255	118	50d	100	7.9	479	164	163	1.1	<.04	.69	.70	.014

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ortho- phos- phate, water, fltrd, mg/L as P (00671)	Phos- phorus, water, fltrd, mg/L (00666)	Phos- phorus, water, unfltrd mg/L (00665)	Total nitro- gen, wat unf by anal ysis, mg/L (62855)	Total nitro- gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment dis- charge, tons/d (80155)
OCT													
05-06	<.02	<.04	.83	--	2.8	26.8	90	.4	14.2	18.4	89	988	540
MAR													
21-21	<.02	<.04	.21	1.64	1.8	9.8	<10	.08	3.8	3.05	20	218	70

Remark codes used in this table:
< -- Less than

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded

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08158700 Onion Creek near Driftwood, TX

LOCATION.--Lat 30°04'58", long 98°00'27", Hays County, Hydrologic Unit 12090205, on left bank, 160 ft left of the upstream side of bridge at low-water crossing on Farm Road 150, 3.2 mi southeast of Driftwood, and 10 mi west of Buda.

DRAINAGE AREA.--124 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1958, Nov. 1961 to June 1979 (periodic discharge measurements only), July 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 878.13 ft above NGVD of 1929. Satellite telemeter at station.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.29	0.18	0.21	0.27	0.34	7.3	16	76	24	511	58	9.5
2	0.28	0.18	0.21	0.27	0.37	8.5	17	76	21	412	53	9.3
3	0.28	0.18	0.21	0.28	0.29	9.2	16	69	23	351	49	8.3
4	0.28	0.18	0.21	0.29	0.64	12	17	65	20	300	44	8.0
5	0.28	0.17	0.21	0.29	1.7	13	19	63	29	258	40	7.9
6	0.27	0.17	0.21	0.28	1.0	15	61	61	18	236	38	9.0
7	0.27	0.16	0.22	0.28	0.87	16	89	58	18	211	38	7.8
8	0.27	0.16	0.22	0.27	0.86	15	54	60	60	195	36	6.5
9	0.27	0.15	0.22	0.27	0.99	13	45	57	578	178	34	6.2
10	0.26	0.15	0.22	0.26	1.9	13	43	52	407	158	33	5.9
11	0.27	0.15	0.22	0.26	5.9	13	136	51	232	149	31	5.3
12	0.26	0.15	0.22	0.26	4.6	14	148	50	190	138	28	5.1
13	0.26	0.15	0.22	0.26	3.4	16	105	51	161	123	26	4.8
14	0.26	0.15	0.22	0.27	3.5	16	94	140	141	109	25	7.4
15	0.26	0.16	0.24	0.29	2.8	18	87	87	138	97	23	6.1
16	0.26	0.16	0.24	2.2	2.7	19	81	77	140	95	20	4.9
17	0.26	0.16	0.24	5.1	2.7	19	76	74	121	88	18	4.4
18	0.25	0.17	0.24	0.99	2.5	19	72	65	108	82	17	4.2
19	0.24	0.19	0.24	0.27	2.8	19	67	59	97	78	17	4.0
20	0.24	0.19	0.24	0.24	3.6	18	65	54	90	73	16	3.9
21	e0.23	0.19	0.24	0.22	4.2	20	64	49	84	68	20	3.6
22	0.23	0.20	0.25	e0.22	4.6	24	61	45	84	64	19	3.5
23	0.22	0.21	0.26	e0.24	4.8	22	56	42	82	60	23	3.2
24	0.22	0.21	0.26	e0.26	7.5	20	82	42	78	78	22	3.2
25	0.21	0.22	0.26	e0.29	5.2	20	83	43	243	68	19	3.4
26	0.21	0.22	0.26	e0.26	6.2	20	68	38	517	278	17	3.5
27	0.21	0.21	0.27	0.24	6.8	19	60	33	448	96	16	3.1
28	0.20	0.21	0.27	0.22	7.0	19	58	30	335	78	14	3.1
29	0.20	0.21	0.27	0.24	7.8	19	85	30	338	69	13	2.9
30	0.19	0.21	0.28	0.27	---	18	83	28	1,500	66	12	2.9
31	0.19	---	0.27	0.28	---	17	---	27	---	64	11	---
TOTAL	7.62	5.40	7.35	15.64	97.56	511.0	2,008	1,752	6,325	4,831	830	160.9
MEAN	0.25	0.18	0.24	0.50	3.36	16.5	66.9	56.5	211	156	26.8	5.36
MAX	0.29	0.22	0.28	5.1	7.8	24	148	140	1,500	511	58	9.5
MIN	0.19	0.15	0.21	0.22	0.29	7.3	16	27	18	60	11	2.9
AC-FT	15	11	15	31	194	1,010	3,980	3,480	12,550	9,580	1,650	319
CFSM	0.00	0.00	0.00	0.00	0.03	0.13	0.54	0.46	1.70	1.26	0.22	0.04
IN.	0.00	0.00	0.00	0.00	0.03	0.15	0.60	0.53	1.90	1.45	0.25	0.05

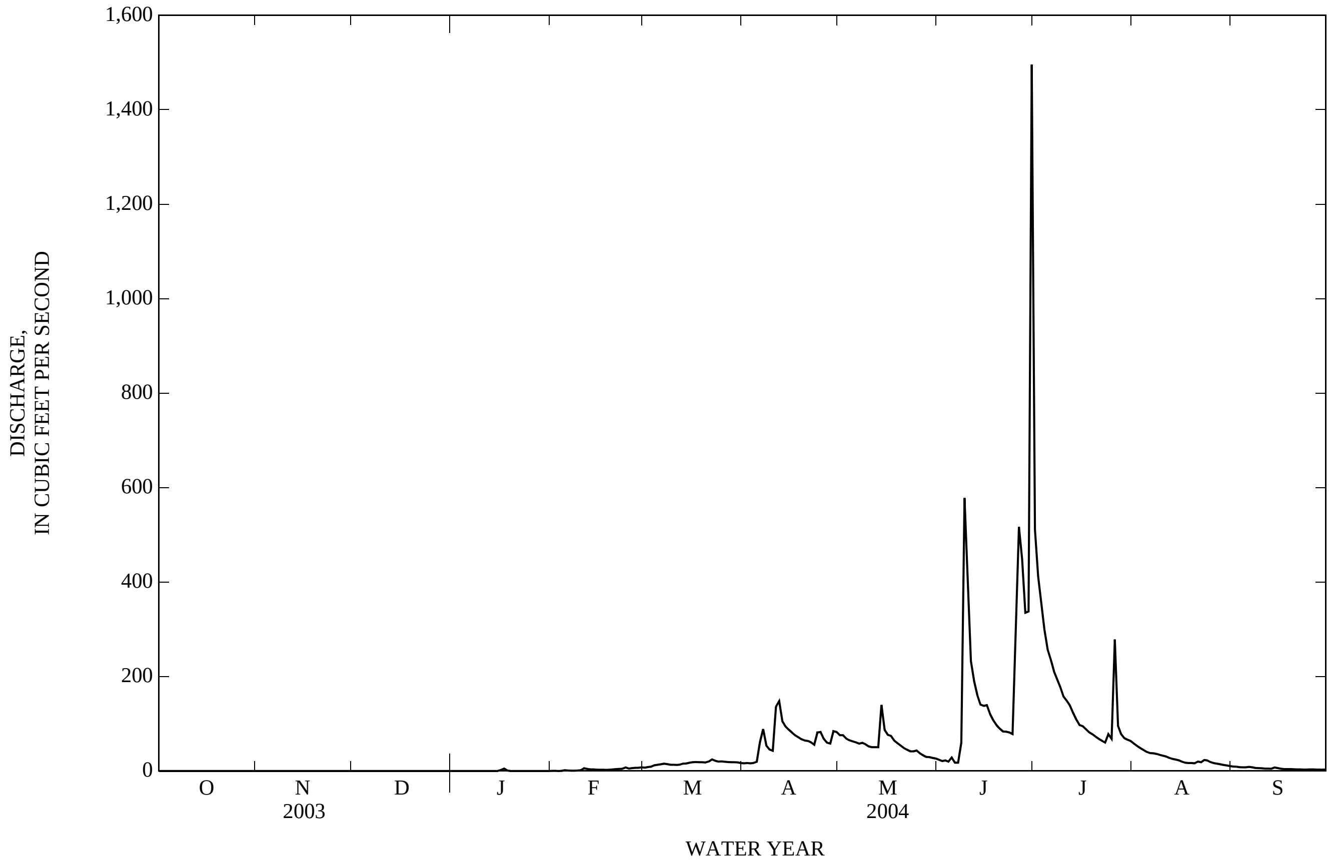
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	33.6	44.8	73.0	58.0	68.6	71.9	49.9	66.5	133	49.7	7.50	7.48
MAX	391	320	548	316	506	356	231	202	792	567	44.4	49.8
(WY)	(1999)	(1999)	(1992)	(1992)	(1992)	(1992)	(1997)	(1992)	(1987)	(2002)	(2002)	(1998)
MIN	0.02	0.10	0.10	0.25	0.26	0.40	0.25	0.27	0.09	0.13	0.05	0.01
(WY)	(2001)	(1989)	(1989)	(2000)	(2000)	(2000)	(2000)	(1996)	(1996)	(1996)	(1996)	(1994)

08158700 Onion Creek near Driftwood, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004	
ANNUAL TOTAL	15,641.53		16,551.47			
ANNUAL MEAN	42.9		45.2		55.3	
HIGHEST ANNUAL MEAN					196	1992
LOWEST ANNUAL MEAN					1.11	2000
HIGHEST DAILY MEAN	630	Feb 20	1,500	Jun 30	5,060	Dec 21, 1991
LOWEST DAILY MEAN	0.15	Nov 9	0.15	Nov 9	0.00	Aug 21, 1984
ANNUAL SEVEN-DAY MINIMUM	0.15	Nov 8	0.15	Nov 8	0.00	Sep 14, 1984
MAXIMUM PEAK FLOW			4,350	Jun 30	i15,800	Oct 17, 1998
MAXIMUM PEAK STAGE			10.59	Jun 30	a25.10	Oct 17, 1998
ANNUAL RUNOFF (AC-FT)	31,020		32,830		40,040	
ANNUAL RUNOFF (CFSM)	0.346		0.365		0.446	
ANNUAL RUNOFF (INCHES)	4.69		4.97		6.06	
10 PERCENT EXCEEDS	145		97		134	
50 PERCENT EXCEEDS	4.5		9.2		9.8	
90 PERCENT EXCEEDS	0.21		0.21		0.28	

a From floodmark.
i From indirect measurement of peak flow.
e Estimated



08158700 Onion Creek near Driftwood, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Jan. 1974 to current year.
BIOCHEMICAL DATA: Jan. 1974 to current year.
RADIOCHEMICAL DATA: Jan. 1980 to June 1981.
PESTICIDE DATA: Jan. 1978 to June 1985 and Sept. 2003 to current year.
SEDIMENT DATA: Nov. 2000 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Discharge, cfs (00060)	Instantaneous discharge, cfs (00061)	Color, water, fltrd, Pt-Co units (00080)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
APR 06-07	1710	131	--	12	<2.0	--	8.0	500	--	185	<10	.27	<.04
JUL 21...	1200	--	68	--	--	7.6	7.8	504	25.6	--	--	--	--
JUL 26-26	0210	459	--	62d	140	--	7.7	457	--	207	460d	1.0	<.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, wat unf by analysis, mg/L (62855)	Total nitrogen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)
APR 06-07	E.05n	<.008	<.02	<.01	.01	.22	--	6.2	<10	<.12d	2.1d	<.18d	<6d
JUL 21...	.130	--	--	--	--	--	--	--	<10	--	--	--	--
JUL 26-26	.08	<.008	<.02	<.04	.10	--	1.1	29.1	10	.07	3.2	3.04	7

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Acetochlor, water, fltrd, ug/L (49260)	Alachlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Butylate, water, fltrd, ug/L (04028)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)
APR 06-07	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.006	<.006	<.006	<.005	<.005	<.007	<.050	<.010	<.004	<.041	<.020	<.005	<.006
JUL 26-26	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cyanazine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dieldrin, water, fltrd, ug/L (39381)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Desulfinyl-fipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)
APR 06-07	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.018	<.003	<.012	<.005	<.009	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016
JUL 26-26	--	--	--	--	--	--	--	--	--	--	--	--	--

08158700 Onion Creek near Driftwood, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)
APR 06-07	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.003	<.004	<.035	<.027	<.015	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022
JUL 26-26	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
APR 06-07	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 21...	<.011	<.01	<.004	<.025	<.011	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009
JUL 26-26	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
APR 06-07	15	5.3
JUL 21...	--	--
JUL 26-26	313	388

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
n -- Below the LRL and above the LT-MDL

08158810 Bear Creek below Farm Road 1826 near Driftwood, TX

LOCATION.--Lat 30°09'19", long 97°56'23", Hays County, Hydrologic Unit 12090205, on left bank, 0.8 mi southeast of Farm Road 1826 and 5.9 mi northeast of Driftwood.

DRAINAGE AREA.--12.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Mar. 1978 to Sept. 1978 (periodic discharge measurements only), Oct. 1978 to June 1979 (peak discharges greater than base discharge), July 1979 to current year. Water-quality records: Chemical data: Mar. 1978 to June 1997. Biochemical data: Mar. 1978 to June 1997. Radiochemical data: Jan. 1980. Pesticide data: June 1978 to Sept. 1986.

GAGE.--Water-stage recorder. Elevation of gage is 860 ft above NGVD of 1929 from topographic map. Satellite telemeter at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 9, 1939, reached a stage of 16.2 ft, discharge, 14,200 ft^3/s, and is the highest since at least 1924, from information by local resident. A flood in 1915 was reported to be 2.0 ft higher than the 1939 flood, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.08	0.34	0.89	2.2	0.95	97	2.2	0.47
2	0.00	0.00	0.00	0.00	0.11	0.39	1.0	1.8	0.85	67	2.1	0.47
3	0.00	0.00	0.00	0.00	0.08	0.37	0.91	1.7	0.88	53	1.8	0.45
4	0.00	0.00	0.00	0.00	0.10	0.73	1.0	1.5	0.88	44	1.6	0.46
5	0.00	0.00	0.00	0.00	0.19	0.48	1.0	1.4	0.80	37	1.5	0.43
6	0.00	0.00	0.00	0.00	0.15	0.48	2.0	1.4	0.72	32	1.4	0.42
7	0.00	0.00	0.00	0.00	0.04	0.51	2.0	1.4	0.76	27	1.4	0.37
8	0.00	0.00	0.00	0.00	0.05	0.56	1.5	1.4	2.4	23	1.1	0.34
9	0.00	0.00	0.00	0.00	0.07	0.65	1.4	1.3	97	20	1.1	0.33
10	0.00	0.00	0.00	0.00	0.20	0.70	1.6	1.3	34	17	0.99	0.32
11	0.00	0.00	0.00	0.00	0.95	0.78	3.4	1.6	17	15	0.94	0.31
12	0.00	0.00	0.00	0.00	0.35	0.83	3.7	1.4	13	13	0.91	0.30
13	0.00	0.00	0.00	0.00	0.30	0.96	3.0	1.5	e10	11	0.88	0.29
14	0.00	0.00	0.00	0.00	0.33	0.92	3.0	7.8	e7.7	9.9	0.85	0.44
15	0.00	0.00	0.00	0.00	0.30	0.94	2.9	3.6	11	8.4	0.80	0.37
16	0.00	0.00	0.00	0.00	0.30	1.1	3.0	3.0	10	7.7	0.71	0.34
17	0.00	0.00	0.00	0.03	0.28	1.2	2.8	2.8	7.3	6.9	0.64	0.32
18	0.00	0.00	0.00	0.02	0.26	1.2	2.7	2.6	6.0	6.0	0.67	0.29
19	0.00	0.00	0.00	0.02	0.28	1.3	2.6	2.4	4.8	5.4	0.68	0.28
20	0.00	0.00	0.00	0.02	0.28	1.4	2.5	2.3	4.1	4.9	0.64	0.26
21	0.00	0.00	0.00	0.02	0.21	1.4	2.5	2.2	3.6	4.8	0.88	0.24
22	0.00	0.00	0.00	0.02	0.26	1.3	2.3	2.1	3.7	4.4	0.86	0.24
23	0.00	0.00	0.00	0.02	0.26	1.3	2.2	2.0	3.2	4.3	1.1	0.23
24	0.00	0.00	0.00	0.03	0.41	1.3	2.8	2.0	2.8	4.2	0.77	0.20
25	0.00	0.00	0.00	0.03	0.30	1.3	2.6	1.7	6.7	3.7	0.67	0.20
26	0.00	0.00	0.00	0.03	0.28	1.2	2.3	1.5	38	4.0	0.59	0.22
27	0.00	0.00	0.00	0.02	0.29	1.2	2.0	1.4	37	3.3	0.53	0.20
28	0.00	0.00	0.00	0.03	0.29	1.1	2.0	1.4	32	3.0	0.53	0.18
29	0.00	0.00	0.00	0.04	0.35	0.90	2.6	1.3	49	2.8	0.51	0.17
30	0.00	0.00	0.00	0.04	---	0.89	2.1	1.3	356	2.6	0.48	0.15
31	0.00	---	0.00	0.04	---	0.86	---	1.1	---	2.6	0.47	---
TOTAL	0.00	0.00	0.00	0.41	7.35	28.59	66.30	62.4	762.14	544.9	30.30	9.29
MEAN	0.00	0.00	0.00	0.01	0.25	0.92	2.21	2.01	25.4	17.6	0.98	0.31
MAX	0.00	0.00	0.00	0.04	0.95	1.4	3.7	7.8	356	97	2.2	0.47
MIN	0.00	0.00	0.00	0.00	0.04	0.34	0.89	1.1	0.72	2.6	0.47	0.15
AC-FT	0.00	0.00	0.00	0.8	15	57	132	124	1,510	1,080	60	18
CFSM	0.00	0.00	0.00	0.00	0.02	0.08	0.18	0.16	2.08	1.44	0.08	0.03
IN.	0.00	0.00	0.00	0.00	0.02	0.09	0.20	0.19	2.32	1.66	0.09	0.03

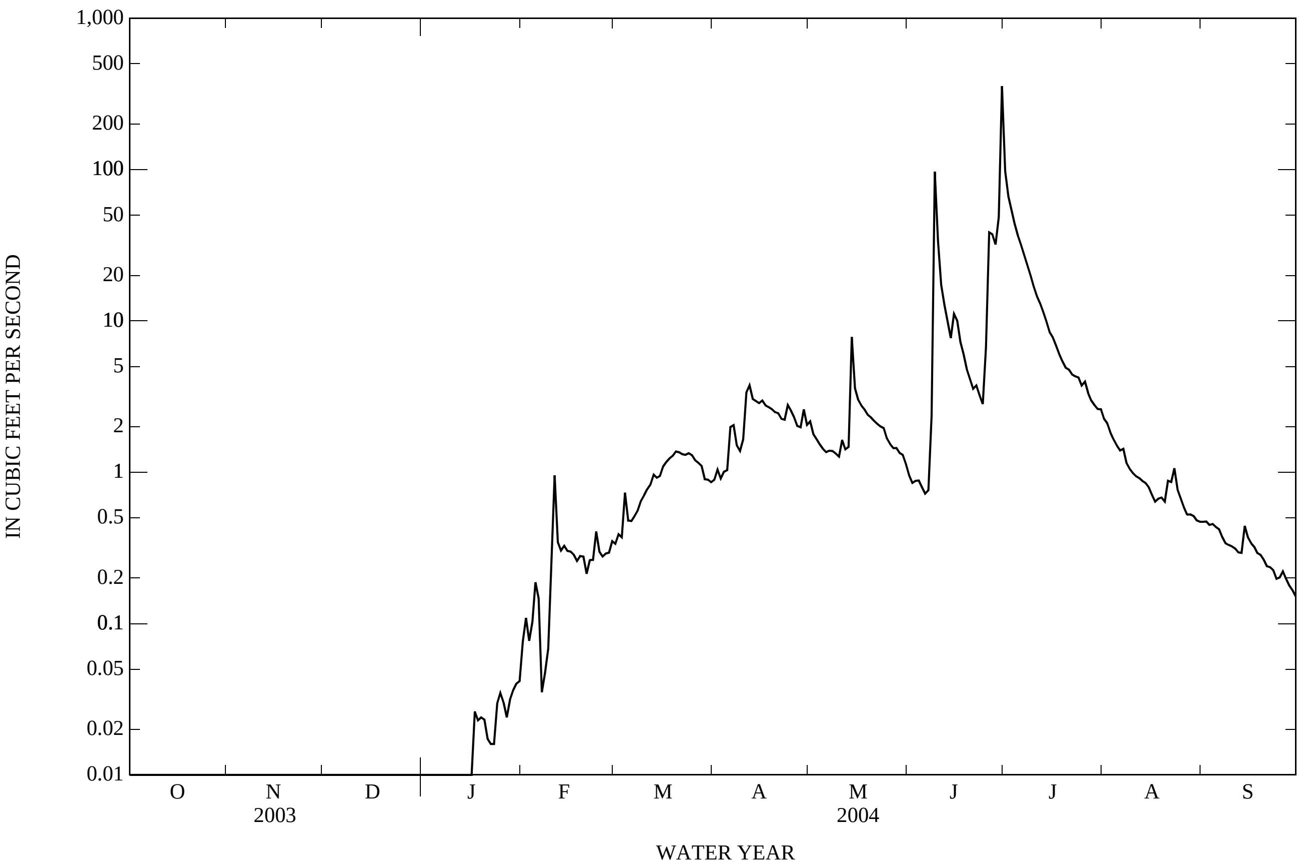
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	4.02	4.95	10.4	6.68	8.16	7.50	5.47	7.05	16.5	5.12	0.80	0.55
MAX	46.3	30.5	91.8	33.3	49.4	32.3	26.2	23.7	144	63.2	3.92	2.71
(WY)	(1999)	(2001)	(1992)	(1992)	(1992)	(1992)	(1991)	(1992)	(1981)	(2002)	(2002)	(1991)
MIN	0.00	0.00	0.00	0.00	0.02	0.05	0.05	0.01	0.00	0.00	0.00	0.00
(WY)	(1989)	(1989)	(1989)	(1989)	(1990)	(1996)	(1996)	(1996)	(1984)	(1984)	(1984)	(1984)

08158810 Bear Creek below Farm Road 1826 near Driftwood, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004	
ANNUAL TOTAL	1,469.85		1,511.68			
ANNUAL MEAN	4.03		4.13		6.40	
HIGHEST ANNUAL MEAN					22.3	1992
LOWEST ANNUAL MEAN					0.10	1996
HIGHEST DAILY MEAN	162	Feb 20	356	Jun 30	1,000	Dec 20, 1991
LOWEST DAILY MEAN	0.00	Jul 19	0.00	Oct 1	0.00	Aug 28, 1980
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 19	0.00	Oct 1	0.00	Aug 28, 1980
MAXIMUM PEAK FLOW			2,300	Jun 30	10,300	Jul 2, 2002
MAXIMUM PEAK STAGE			8.39	Jun 30	a14.27	Jul 2, 2002
ANNUAL RUNOFF (AC-FT)	2,920		3,000		4,640	
ANNUAL RUNOFF (CFSM)	0.330		0.339		0.524	
ANNUAL RUNOFF (INCHES)	4.48		4.61		7.13	
10 PERCENT EXCEEDS	11		5.1		14	
50 PERCENT EXCEEDS	0.13		0.47		1.1	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.
e Estimated



08158810 Bear Creek below Farm Road 1826, near Driftwood, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Mar. 1978 to June 1997, Mar. 2000 to current year.
BIOCHEMICAL DATA: Mar. 1978 to June 1997, Mar. 2000 to current year.
RADIOCHEMICAL DATA: Jan. 1980 to June 1981.
PESTICIDE DATA: June 1978 to Feb. 1983 and Jan. 1993.
SUSPENDED SEDIMENT: June 2002 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
MAY													
14-14	0150	11	25	7.3	7.9	640	200	<10	.27	E.03n	.16	E.005n	<.02
JUN													
09-10	1800	118	150d	230	7.6	310	111	280d	1.8	<.04	.13	E.005n	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
MAY												
14-14	<.01	.01	.41	.44	7.9	<10	<.04	1.0	.17	E2n	27	.82
JUN												
09-10	<.04	.18	--	2.0	19.2	50	.08	3.7	4.02	13	321	102

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
n -- Below the LRL and above the LT-MDL

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08158819 Bear Creek near Brodie Lane near Manchaca, TX

LOCATION.--Lat 30°08'39", long 97°51'40", Travis County, Hydrologic Unit 12090205, on left bank of Bear Creek on the City of Austin Watershed Development property, approximately 2 miles west-northwest of Manchaca, TX.

DRAINAGE AREA.--23.8 mi^2.

PERIOD OF RECORD.--Oct. 1, 2003 to Jan. 26, 2004, Mar. 30, 2004, to Sept. 30, 2004.

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is 698 ft above NAD 1983. Satellite telemeter at gage.

REMARKS.--No estimated daily discharges. Records fair except for those daily discharges below 10 ft^3/s, which are poor, and for those daily discharges of no flow, which are excellent. No known regulation or diversions. No flow at times.

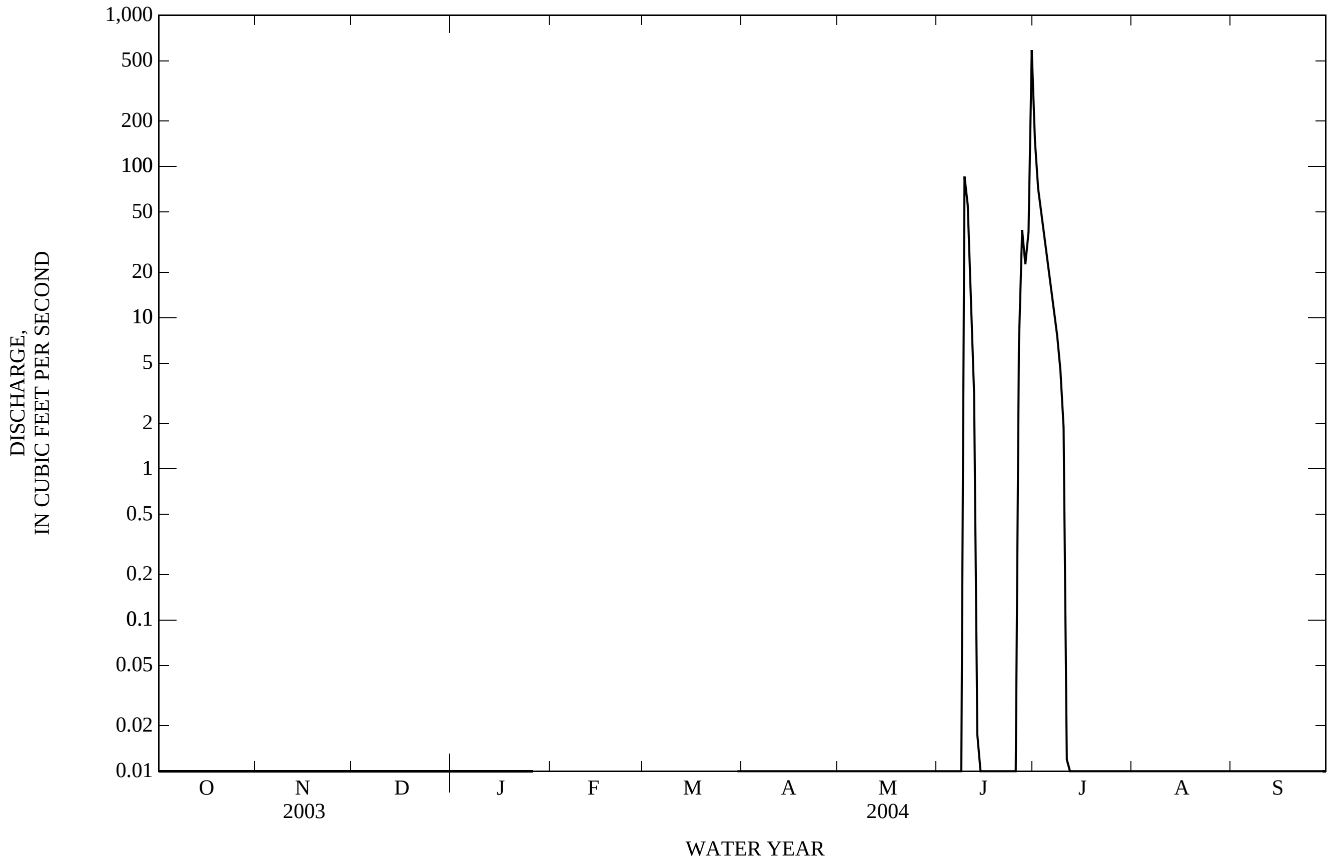
EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 2002, 10.95 ft, July 2, 2002, from floodmark at City of Austin gaging station at same location and datum, discharge unknown.

EXTREMES FOR CURRENT YEAR.--Maximum discharge June 30, 2004, 2,970 ft^3/s, from indirect measurement of peak flow (gage-height 9.78 ft); minimum no flow many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	148	0.00	0.00
2	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	71	0.00	0.00
3	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	47	0.00	0.00
4	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	33	0.00	0.00
5	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	23	0.00	0.00
6	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	16	0.00	0.00
7	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	11	0.00	0.00
8	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	7.6	0.00	0.00
9	0.00	0.00	0.00	0.00	---	---	0.00	0.00	86	4.5	0.00	0.00
10	0.00	0.00	0.00	0.00	---	---	0.00	0.00	56	1.9	0.00	0.00
11	0.00	0.00	0.00	0.00	---	---	0.00	0.00	9.5	0.01	0.00	0.00
12	0.00	0.00	0.00	0.00	---	---	0.00	0.00	3.1	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.02	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	---	---	0.00	0.00	6.7	0.00	0.00	0.00
27	0.00	0.00	0.00	---	---	---	0.00	0.00	38	0.00	0.00	0.00
28	0.00	0.00	0.00	---	---	---	0.00	0.00	23	0.00	0.00	0.00
29	0.00	0.00	0.00	---	---	---	0.00	0.00	37	0.00	0.00	0.00
30	0.00	0.00	0.00	---	---	0.00	0.00	0.00	588	0.00	0.00	0.00
31	0.00	---	0.00	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	---	---	---	0.00	0.00	847.32	363.01	0.00	0.00
MEAN	0.00	0.00	0.00	---	---	---	0.00	0.00	28.2	11.7	0.00	0.00
MAX	0.00	0.00	0.00	---	---	---	0.00	0.00	588	148	0.00	0.00
MIN	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	---	---	---	0.00	0.00	1,680	720	0.00	0.00

08158819 Bear Creek near Brodie Lane near Manchaca, TX—Continued



08158827 Onion Creek at Twin Creeks Road near Manchaca, TX

LOCATION.--Lat 30°07'34", long 97°49'15", Travis County, Hydrologic Unit 12090205, on upstream, left side of bridge over Onion Creek at intersection of Twin Creeks Rd and Arroyo Doble Rd , approximately 3 miles south-southeast of Manchaca.

DRAINAGE AREA.--181 mi^2.

PERIOD OF RECORD.--Oct. 1, 2003 to Jan. 26, 2004, Jun. 8, 2004 to Sep. 30, 2004.

GAGE.--Water-stage recorder. Elevation of gage is 595 ft NGVD 1929 from topographic map. Satellite telemeter at gage.

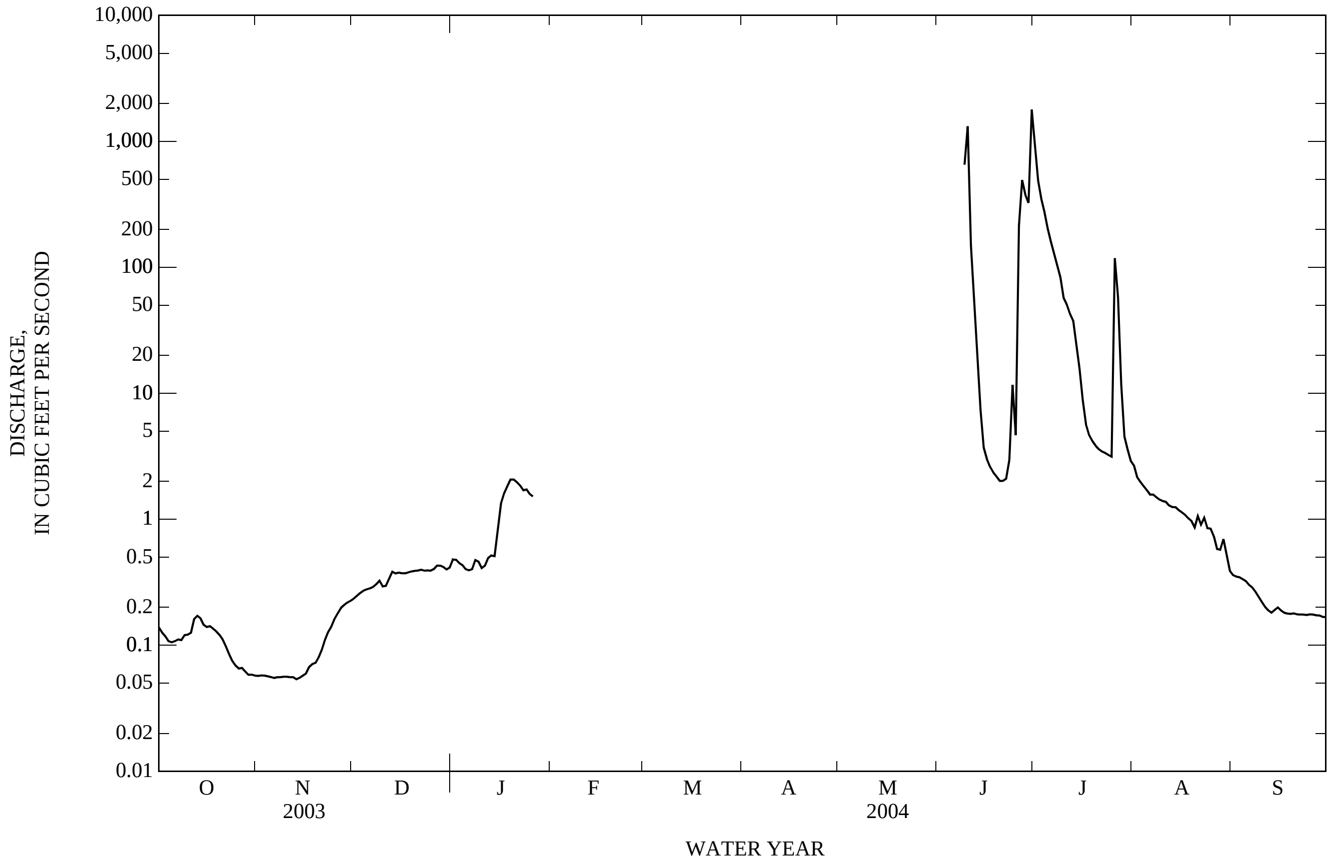
REMARKS.--No estimated daily discharges. Records fair except for those daily discharges below 1 ft^3/s, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, Jun. 9 and 10, discharge, 6,340 ft^3/s (gage-height 16.10 ft).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.14	0.06	0.24	0.48	---	---	---	---	---	901	2.7	0.36
2	0.13	0.06	0.25	0.48	---	---	---	---	---	485	2.2	0.35
3	0.12	0.06	0.26	0.45	---	---	---	---	---	348	2.0	0.35
4	0.11	0.06	0.27	0.43	---	---	---	---	---	277	1.8	0.33
5	0.11	0.06	0.28	0.40	---	---	---	---	---	205	1.7	0.32
6	0.11	0.06	0.28	0.39	---	---	---	---	---	161	1.6	0.30
7	0.11	0.06	0.29	0.40	---	---	---	---	---	129	1.6	0.29
8	0.11	0.06	0.30	0.47	---	---	---	---	---	104	1.5	0.27
9	0.12	0.06	0.33	0.46	---	---	---	---	652	83	1.4	0.24
10	0.12	0.06	0.29	0.41	---	---	---	---	1,320	57	1.4	0.22
11	0.13	0.06	0.30	0.43	---	---	---	---	150	51	1.4	0.20
12	0.16	0.06	0.34	0.49	---	---	---	---	59	43	1.3	0.19
13	0.17	0.05	0.38	0.52	---	---	---	---	21	38	1.2	0.18
14	0.16	0.06	0.37	0.51	---	---	---	---	7.4	25	1.2	0.19
15	0.15	0.06	0.38	0.83	---	---	---	---	3.7	15	1.2	0.20
16	0.14	0.06	0.37	1.3	---	---	---	---	3.0	8.8	1.1	0.19
17	0.14	0.07	0.37	1.6	---	---	---	---	2.6	5.7	1.1	0.18
18	0.14	0.07	0.38	1.8	---	---	---	---	2.3	4.6	1.0	0.18
19	0.13	0.07	0.39	2.1	---	---	---	---	2.2	4.2	0.97	0.18
20	0.12	0.08	0.39	2.1	---	---	---	---	2.0	3.8	0.86	0.18
21	0.11	0.09	0.39	2.0	---	---	---	---	2.0	3.6	1.1	0.18
22	0.10	0.11	0.40	1.9	---	---	---	---	2.1	3.5	0.91	0.18
23	0.09	0.13	0.39	1.7	---	---	---	---	2.9	3.4	1.0	0.18
24	0.07	0.14	0.39	1.7	---	---	---	---	12	3.2	0.85	0.17
25	0.07	0.16	0.39	1.6	---	---	---	---	4.6	3.1	0.84	0.18
26	0.07	0.18	0.40	1.5	---	---	---	---	214	118	0.73	0.18
27	0.07	0.20	0.43	---	---	---	---	---	492	58	0.58	0.17
28	0.06	0.21	0.43	---	---	---	---	---	378	12	0.57	0.17
29	0.06	0.22	0.42	---	---	---	---	---	324	4.5	0.69	0.17
30	0.06	0.23	0.40	---	---	---	---	---	1,780	3.6	0.52	0.17
31	0.06	---	0.41	---	---	---	---	---	---	2.9	0.39	---
TOTAL	3.44	2.91	10.91	---	---	---	---	---	---	3,164.9	37.41	6.65
MEAN	0.11	0.10	0.35	---	---	---	---	---	---	102	1.21	0.22
MAX	0.17	0.23	0.43	---	---	---	---	---	--	901	2.7	0.36
MIN	0.06	0.05	0.24	---	---	---	---	---	--	2.9	0.39	0.17
AC-FT	6.8	5.8	22	---	---	---	---	---	---	6,280	74	13

08158827 Onion Creek at Twin Creeks Road near Manchaca, TX—Continued



08158840 Slaughter Creek at Farm to Market Road 1826 near Austin, TX

LOCATION.--Lat 30°12'32", long 97°54'11", Travis County, Hydrologic Unit 12090205, on left bank at downstream side of bridge embankment, 1.7 mi south of the intersection on U.S. Highway 290 and Farm Road 1826, and 11.9 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--8.24 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1978 to current year.

GAGE.--Water-stage recorder. Datum of gage is 876.14 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those estimated daily discharges and daily discharges below 1 ft^3/s, which are poor. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.74	2.1	0.49	66	1.2	e0.01
2	0.00	0.00	0.00	0.00	0.00	0.00	0.75	1.8	0.45	30	1.1	e0.01
3	0.00	0.00	0.00	0.00	0.00	0.05	0.65	1.6	0.45	18	0.91	0.01
4	0.00	0.00	0.00	0.00	0.00	0.80	0.65	1.6	0.44	14	0.79	0.01
5	0.00	0.00	0.00	0.00	0.01	0.75	0.65	1.5	0.43	12	0.67	0.01
6	0.00	0.00	0.00	0.00	0.00	0.75	2.8	1.4	0.41	11	0.64	0.01
7	0.00	0.00	0.00	0.00	0.00	0.78	1.8	1.4	0.41	10	0.66	0.01
8	0.00	0.00	0.00	0.00	0.00	0.83	1.2	1.4	1.9	9.2	0.61	0.00
9	0.00	0.00	0.00	0.00	0.00	0.84	1.2	1.3	37	8.4	0.55	0.00
10	0.00	0.00	0.00	0.00	0.00	0.87	1.4	1.3	61	7.4	0.52	0.00
11	0.00	0.00	0.00	0.00	0.09	0.87	11	1.4	26	7.0	0.51	0.00
12	0.00	0.00	0.00	0.00	0.00	0.90	11	1.4	16	6.0	0.46	0.00
13	0.00	0.00	0.00	0.00	0.00	1.0	e5.8	1.4	11	e5.5	0.44	0.00
14	0.00	0.00	0.00	0.00	0.00	1.0	e4.4	4.1	7.8	4.7	0.41	0.00
15	0.00	0.00	0.00	0.00	0.00	1.0	4.0	2.1	6.6	4.3	0.38	0.00
16	0.00	0.00	0.00	0.20	0.00	1.0	3.6	1.7	8.2	3.6	0.34	0.00
17	0.00	0.00	0.00	0.00	0.00	1.0	3.3	1.5	5.5	3.3	0.28	0.00
18	0.00	0.00	0.00	0.00	0.00	1.1	3.0	1.4	5.6	3.0	0.27	0.00
19	0.00	0.00	0.00	0.00	0.00	1.1	2.8	1.3	4.8	2.8	0.25	0.00
20	0.00	0.00	0.00	0.00	0.00	1.1	2.8	1.2	4.2	2.4	0.21	0.00
21	0.00	0.00	0.00	0.00	0.00	1.0	2.7	1.1	3.7	2.3	0.23	0.00
22	0.00	0.00	0.00	0.00	0.00	1.0	2.5	1.1	3.8	2.1	0.23	0.00
23	0.00	0.00	0.00	0.00	0.00	1.1	2.4	1.00	3.4	2.3	0.27	0.00
24	0.00	0.00	0.00	0.00	0.10	1.1	2.5	0.91	3.2	2.5	0.20	0.00
25	0.00	0.00	0.00	0.00	0.00	1.0	2.4	0.82	4.1	2.0	0.16	0.00
26	0.00	0.00	0.00	0.00	0.00	0.95	2.3	0.75	14	1.9	0.13	0.00
27	0.00	0.00	0.00	0.00	0.00	0.89	2.0	0.69	15	1.7	0.09	0.00
28	0.00	0.00	0.00	0.00	0.00	0.89	1.9	0.64	15	1.6	0.08	0.00
29	0.00	0.00	0.00	0.00	0.00	0.86	2.4	0.61	40	1.6	0.08	0.00
30	0.00	0.00	0.00	0.00	---	0.84	2.1	0.59	311	1.5	0.03	0.00
31	0.00	---	0.00	0.00	---	0.80	---	0.55	---	1.3	0.01	---
TOTAL	0.00	0.00	0.00	0.20	0.20	26.17	86.74	41.66	611.88	249.4	12.71	0.07
MEAN	0.00	0.00	0.00	0.01	0.01	0.84	2.89	1.34	20.4	8.05	0.41	0.00
MAX	0.00	0.00	0.00	0.20	0.10	1.1	11	4.1	311	66	1.2	0.01
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.55	0.41	1.3	0.01	0.00
AC-FT	0.00	0.00	0.00	0.4	0.4	52	172	83	1,210	495	25	0.1
CFSM	0.00	0.00	0.00	0.00	0.00	0.10	0.35	0.16	2.48	0.98	0.05	0.00
IN.	0.00	0.00	0.00	0.00	0.00	0.12	0.39	0.19	2.76	1.13	0.06	0.00

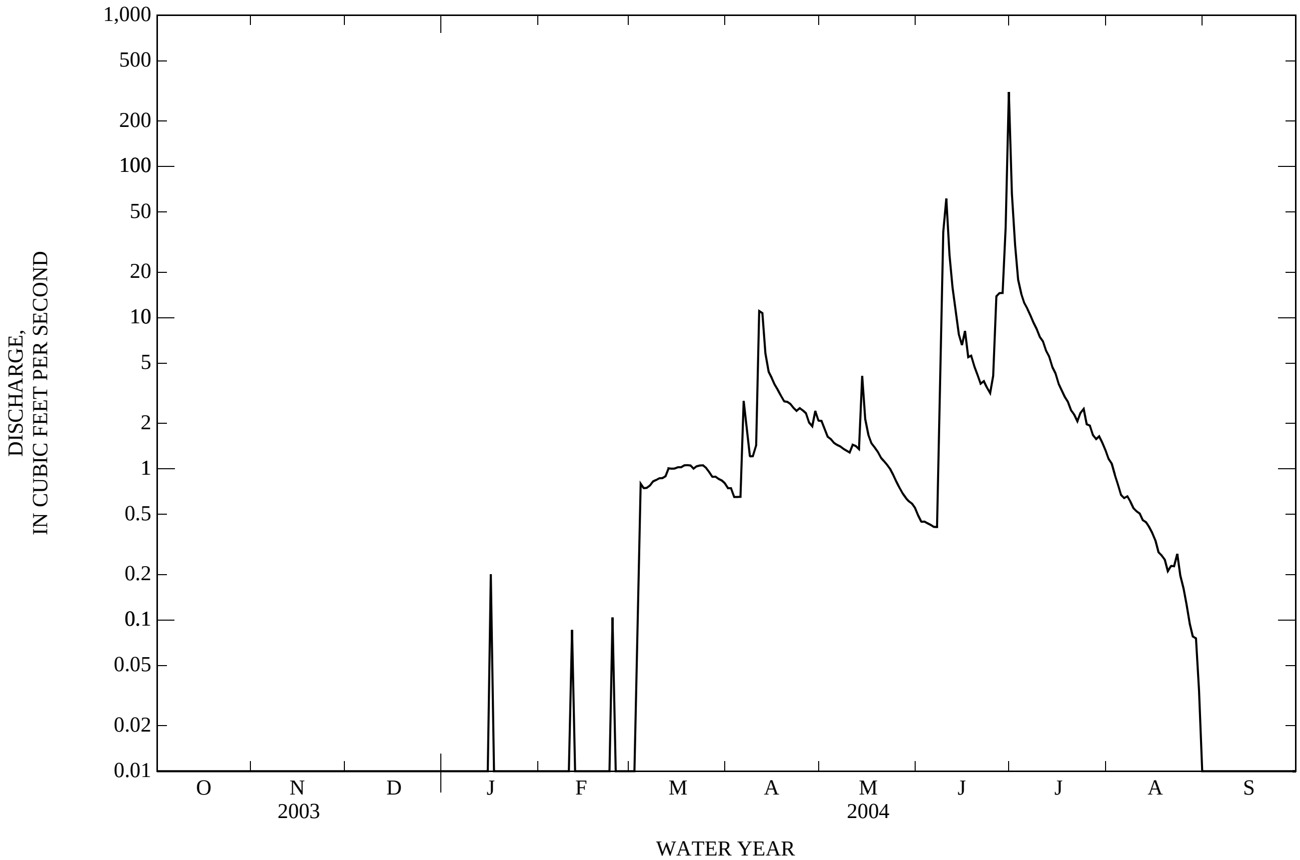
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.72	3.29	9.11	5.60	6.20	6.16	4.30	8.53	14.1	2.49	0.34	0.35
MAX	35.5	19.9	75.0	24.4	40.6	25.4	27.1	33.0	101	33.1	2.28	4.33
(WY)	(1987)	(2001)	(1992)	(1992)	(1992)	(2001)	(1979)	(1995)	(1981)	(2002)	(1983)	(1991)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
(WY)	(1983)	(1989)	(1989)	(1990)	(1996)	(1989)	(1996)	(2000)	(1996)	(1984)	(1980)	(1984)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	1,036.59		1,029.03			
ANNUAL MEAN	2.84		2.81		5.48	
HIGHEST ANNUAL MEAN					17.9	1992
LOWEST ANNUAL MEAN					0.00	1996
HIGHEST DAILY MEAN	87	Feb 21	311	Jun 30	901	Jun 11, 1981
LOWEST DAILY MEAN	0.00	Jul 1	0.00	Oct 1	0.00	Jan 26, 1978
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 18	0.00	Oct 1	0.00	Jan 26, 1978
MAXIMUM PEAK FLOW			1,920	Jun 30	i6,330	Dec 20, 1991
MAXIMUM PEAK STAGE			8.12	Jun 30	a10.79	Jun 11, 1981
ANNUAL RUNOFF (AC-FT)	2,060		2,040		3,970	
ANNUAL RUNOFF (CFSM)	0.345		0.341		0.665	
ANNUAL RUNOFF (INCHES)	4.68		4.65		9.03	
10 PERCENT EXCEEDS	8.5		4.1		11	
50 PERCENT EXCEEDS	0.03		0.04		0.42	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.
i From indirect measurement of peak flow.
e Estimated

08158840 Slaughter Creek at Farm to Market Road 1826 near Austin, TX—Continued



08158840 Slaughter Creek at Farm to Market Road 1826 near Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: June 1983 to Feb. 1995, Mar. 1997 to current year.
BIOCHEMICAL DATA: June 1983 to Feb. 1995, Mar. 1997 to current year.
PESTICIDE DATA: Oct. 1984.
SEDIMENT DATA: June 2000 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-charge, cfs (00060)	Color, water, fltrd, Pt-Co units (00080)	Turbid-ity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Residue total at 105 deg. C, sus-pended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
MAY													
14-14	0240	5.3	25	2.1	8.0	664	204	<10	.30	E.03n	.11	E.004n	<.02
JUN													
09-10	1735	79	62d	38	7.6	466	151	59	.56	<.04	.11	E.005n	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Total nitro-gen, wat unf by anal ysis, mg/L (62855)	Total nitro-gen, water, unfltrd mg/L (00600)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
MAY												
14-14	<.01	.01	.38	.41	5.2	<10	<.04	1.3	.12	E2n	15	.21
JUN												
09-10	<.04	E.03n	--	.67	11.1	20	E.02n	1.6	.93	5	58	12

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

Value qualifier codes used in this table:
d -- Diluted sample: method hi range exceeded
n -- Below the LRL and above the LT-MDL

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08158860 Slaughter Creek at Farm to Market Road 2304 near Austin, TX

LOCATION.--Lat 30°09'43", long 97°49'55", Travis County, Hydrologic Unit 12090205, at downstream side of bridge on Farm Road 2304, 5.2 miles south of the intersection of Ben White Blvd., and 9.4 miles southwest of the State Capitol Building at Austin.

DRAINAGE AREA.--23.1 mi^2.No Remarks

PERIOD OF RECORD.--Mar. 23, 1978, to Oct. 11, 1983 (flood-hydrograph partial record station), Oct. 1, 2003, to Jan. 26, 2004, Mar. 30, 2004, to Sep. 30, 2004. Water quality records: Chemical, biochemical, and pesticide analyses: Dec. 18, 1978, to May 13, 1982.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 654.80 ft NGVD 1929 (levels to City of Austin benchmark). Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Record fair. No known regulation or diversions. No flow at times.

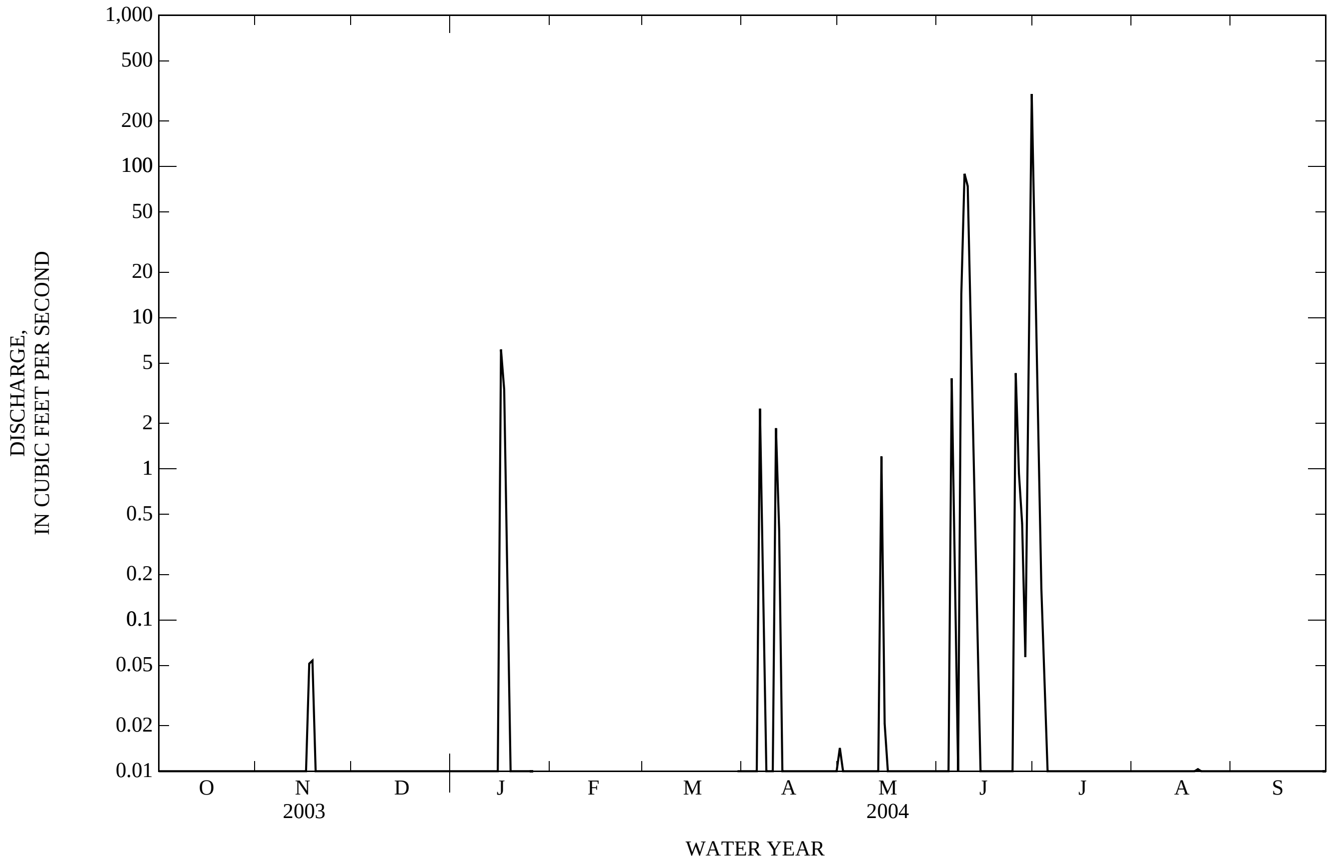
EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,340 ft^3/s, Jun. 11, 1981 (Gage-height 12.40 ft).

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 4.94 ft, Jun. 30, discharge, 1,270 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	---	---	0.00	0.01	0.00	71	0.00	0.00
2	0.00	0.00	0.00	0.00	---	---	0.01	0.00	0.00	5.1	0.00	0.00
3	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.16	0.00	0.00
4	0.00	0.00	0.00	0.00	---	---	0.01	0.00	0.00	0.04	0.00	0.00
5	0.00	0.00	0.00	0.00	---	---	0.00	0.00	4.0	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	---	---	2.5	0.00	0.14	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	---	---	0.27	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	---	---	0.00	0.00	14	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	---	---	0.00	0.00	90	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	---	---	0.01	0.00	74	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	---	---	1.9	0.00	2.3	0.00	0.00	0.00
12	0.00	0.00	0.01	0.00	---	---	0.39	0.00	0.29	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	---	---	0.00	0.01	0.07	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	---	---	0.00	1.2	0.00	0.00	0.00	0.01
15	0.00	0.00	0.00	0.00	---	---	0.00	0.02	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	6.2	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.05	0.00	3.4	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	0.00	0.05	0.00	0.08	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.00	0.00	0.01	0.00
24	0.00	0.00	0.00	0.01	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	---	---	0.00	0.00	4.3	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	---	---	0.00	0.00	0.93	0.00	0.00	0.00
27	0.00	0.00	0.00	---	---	---	0.00	0.00	0.43	0.00	0.00	0.00
28	0.00	0.00	0.00	---	---	---	0.00	0.00	0.06	0.00	0.00	0.00
29	0.00	0.00	0.00	---	---	---	0.00	0.00	2.5	0.00	0.00	0.00
30	0.00	0.00	0.00	---	---	0.00	0.00	0.00	302	0.00	0.00	0.00
31	0.00	---	0.00	---	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	0.10	0.01	---	---	---	5.09	1.24	495.02	76.30	0.02	0.01
MEAN	0.00	0.00	0.00	---	---	---	0.17	0.04	16.5	2.46	0.00	0.00
MAX	0.00	0.05	0.01	---	---	---	2.5	1.2	302	71	0.01	0.01
MIN	0.00	0.00	0.00	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.2	0.02	---	---	---	10	2.5	982	151	0.04	0.02

08158860 Slaughter Creek at Farm to Market 2304 near Austin, TX—Continued



08158920 Williamson Creek at Oak Hill, TX

LOCATION.--Lat 30°14'06", long 97°51'36", Travis County, Hydrologic Unit 12090205, at downstream side of bridge on U.S. Highway 290 and State Highway 71 at intersection with McCarty Lane, and 7.7 mi southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--6.30 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Jan. 1974 to Feb. 1977, (periodic discharge measurements only), Jan. 10, 1978 to Mar. 9, 1993 (discontinued) at a 2.0 ft higher datum than current, Mar. 10, 2003 (re-activated) to current year. Water quality records: Chemical and biochemical analyses: Jan. 1974 to Mar. 17, 1993. Pesticide analyses: Jun. 1978 to Sep. 1986. Radiochemical analyses: Apr. 1980.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 798.68 ft NGVD of 1929 (levels to City of Austin benchmark). Satellite telemeter at station.

REMARKS.--Water-discharge records for period Mar. 10 to Sept. 30, 2003 are rated fair. No estimated daily discharges. Water-discharge records for 2004 water year are rated fair.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.4	0.13	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	1.2	0.08	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	1.1	0.11	0.00	0.03	0.00	0.00
4	---	---	---	---	---	---	1.2	0.10	1.5	3.3	0.00	0.00
5	---	---	---	---	---	---	1.1	0.13	1.7	0.33	0.00	0.00
6	---	---	---	---	---	---	1.2	0.12	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	1.0	0.11	0.00	0.01	0.00	0.00
8	---	---	---	---	---	---	0.92	0.09	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.86	0.09	0.00	0.34	0.00	0.00
10	---	---	---	---	---	---	0.81	0.08	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.80	0.07	0.00	0.00	0.00	0.03
12	---	---	---	---	---	3.5	0.72	0.26	0.00	0.00	0.00	4.4
13	---	---	---	---	---	3.4	0.86	0.12	2.8	0.00	0.00	0.00
14	---	---	---	---	---	3.1	0.68	0.12	0.76	0.00	0.00	3.8
15	---	---	---	---	---	3.0	0.54	0.00	0.11	0.00	0.00	0.04
16	---	---	---	---	---	2.9	0.56	0.00	0.07	0.00	0.00	0.00
17	---	---	---	---	---	2.8	0.35	0.00	0.06	0.00	0.00	0.00
18	---	---	---	---	---	3.1	0.39	0.00	0.03	0.00	0.00	0.00
19	---	---	---	---	---	2.8	0.51	0.00	0.02	0.00	0.00	0.00
20	---	---	---	---	---	2.4	0.46	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	2.3	0.32	0.00	0.00	0.00	0.00	0.35
22	---	---	---	---	---	2.3	0.30	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	2.0	0.50	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	1.9	0.51	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	2.3	0.19	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	2.0	0.13	0.42	0.00	0.00	0.00	0.00
27	---	---	---	---	---	1.7	0.15	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	1.6	0.13	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	1.4	0.12	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	1.4	0.15	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	1.4	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	19.16	2.03	7.05	4.01	0.00	8.62
MEAN	---	---	---	---	---	---	0.64	0.07	0.23	0.13	0.00	0.29
MAX	---	---	---	---	---	--	1.4	0.42	2.8	3.3	0.00	4.4
MIN	---	---	---	---	---	--	0.12	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	38	4.0	14	8.0	0.00	17
CFSM	---	---	---	---	---	---	0.10	0.01	0.04	0.02	0.00	0.05
IN.	---	---	---	---	---	---	0.11	0.01	0.04	0.02	0.00	0.05

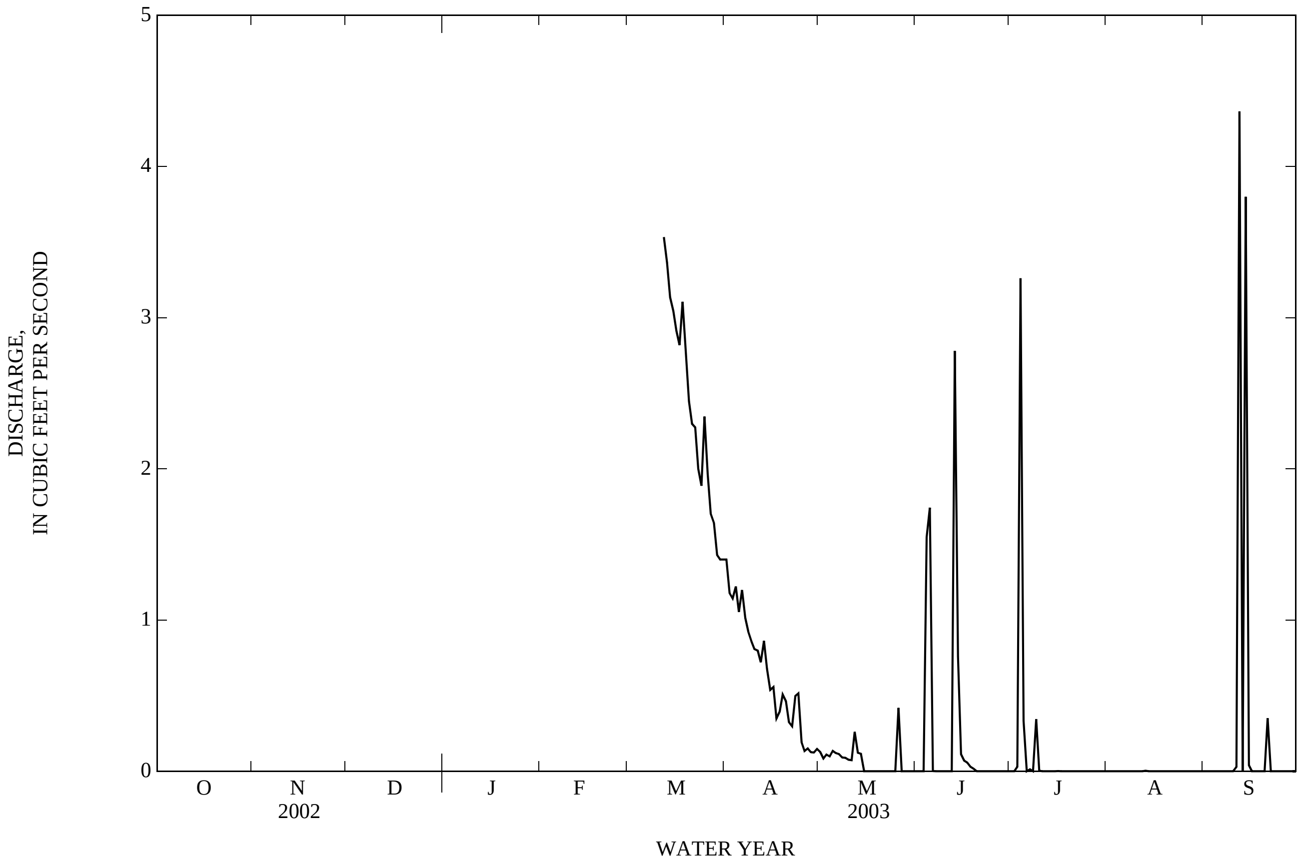
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	3.16	3.25	6.90	3.93	4.93	4.34	3.81	11.2	12.0	0.99	0.49	0.98
MAX	21.9	32.4	57.2	15.5	26.6	13.8	20.1	29.0	88.7	4.83	3.89	5.76
(WY)	(1987)	(1986)	(1992)	(1991)	(1992)	(1992)	(1979)	(1992)	(1981)	(1981)	(1991)	(1983)
MIN	0.00	0.00	0.00	0.00	0.00	0.17	0.15	0.02	0.19	0.00	0.00	0.00
(WY)	(1979)	(1980)	(1990)	(1990)	(1982)	(1982)	(1988)	(1984)	(1990)	(1980)	(1980)	(1984)

SUMMARY STATISTICS	WATER YEARS 1979 - 2003h	
ANNUAL MEAN	4.91	
HIGHEST ANNUAL MEAN	12.8	1992
LOWEST ANNUAL MEAN	0.34	1988
HIGHEST DAILY MEAN	977	Jun 11, 1981
LOWEST DAILY MEAN	0.00	Oct 1, 1978
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 1, 1978
MAXIMUM PEAK FLOW	i4,750	May 18, 1992
MAXIMUM PEAK STAGE	g9.97	May 18, 1992
ANNUAL RUNOFF (AC-FT)	3,560	
ANNUAL RUNOFF (CFSM)	0.780	
ANNUAL RUNOFF (INCHES)	10.59	
10 PERCENT EXCEEDS	8.7	
50 PERCENT EXCEEDS	0.23	
90 PERCENT EXCEEDS	0.00	

g At datum then in use.
i From indirect measurement of peak flow.
h See period of record paragraph.

08158920 Williamson Creek at Oak Hill, TX—Continued



08158920 Williamson Creek at Oak Hill, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.49	2.2	0.93	1.4	0.22	32	0.72	0.00
2	0.00	0.00	0.00	0.00	0.45	3.2	0.98	0.86	0.14	17	0.43	0.00
3	0.00	0.00	0.00	0.00	0.44	2.6	0.80	0.69	1.3	12	0.36	0.00
4	0.00	0.00	0.00	0.00	2.3	9.9	0.89	0.57	0.24	8.6	0.28	0.00
5	0.00	0.00	0.00	0.00	4.0	7.4	0.93	0.55	0.17	6.5	0.18	0.00
6	0.08	0.00	0.00	0.00	1.1	4.4	7.8	0.54	0.12	5.3	0.14	0.00
7	0.00	0.00	0.00	0.00	0.71	3.4	2.2	0.55	0.37	4.5	0.14	0.00
8	0.00	0.00	0.00	0.00	0.71	2.9	1.4	0.51	18	3.9	0.11	0.00
9	0.54	0.00	0.00	0.00	0.90	2.6	1.2	0.47	50	3.4	0.08	0.00
10	0.00	0.00	0.00	0.00	3.0	2.5	2.3	0.45	41	3.0	0.03	0.00
11	0.15	0.00	0.00	0.00	9.6	2.3	6.1	0.54	18	2.7	0.02	0.00
12	0.00	0.00	0.06	0.00	5.1	2.4	4.6	0.58	11	2.3	0.00	0.00
13	0.00	0.00	0.00	0.00	3.3	3.5	2.8	0.81	7.1	1.9	0.01	0.00
14	0.00	0.00	0.00	0.00	3.9	2.5	2.2	10	5.2	1.8	0.00	1.1
15	0.00	0.00	0.00	0.45	2.8	2.4	2.1	1.6	3.9	1.5	0.00	0.00
16	0.00	0.00	0.00	20	2.3	2.7	2.0	1.3	3.2	1.2	0.00	0.00
17	0.00	0.08	0.00	7.2	1.9	2.5	1.7	1.3	3.0	1.1	0.00	0.00
18	0.00	0.00	0.00	e0.90	1.8	2.3	1.8	1.2	3.2	0.95	0.02	0.00
19	0.00	0.00	0.00	e0.60	1.8	2.3	1.9	1.1	2.3	0.88	0.00	0.00
20	0.00	0.00	0.00	e0.40	1.7	2.2	1.9	0.91	2.1	0.76	0.00	0.00
21	0.00	0.00	0.00	e0.30	1.5	2.1	1.2	0.75	1.8	0.74	0.75	0.00
22	0.00	0.00	0.00	e0.20	1.5	2.0	1.1	0.64	2.4	0.64	0.00	0.00
23	0.00	0.00	0.00	0.05	1.8	1.9	1.0	0.49	1.7	0.92	0.23	0.00
24	0.00	0.00	0.00	1.1	9.3	1.7	1.3	0.41	1.3	0.73	0.00	0.00
25	0.00	0.00	0.00	0.75	3.8	1.6	1.2	0.36	3.2	1.2	0.00	0.00
26	0.00	0.00	0.00	0.48	3.0	1.5	1.0	0.48	8.6	1.0	0.00	0.00
27	0.00	0.00	0.00	0.48	2.3	1.4	0.81	0.25	6.1	0.68	0.00	0.00
28	0.00	0.00	0.00	0.51	2.1	1.3	0.77	0.25	7.6	0.56	0.00	0.00
29	0.00	0.00	0.00	0.51	2.9	1.1	2.1	0.20	14	4.6	0.00	0.00
30	0.00	0.00	e0.00	0.52	---	1.1	0.91	0.21	79	2.0	0.00	0.00
31	0.00	---	0.00	0.52	---	1.1	---	0.56	---	1.0	0.00	---
TOTAL	0.77	0.08	0.06	34.97	76.50	83.0	57.92	30.53	296.26	125.36	3.50	1.10
MEAN	0.02	0.00	0.00	1.13	2.64	2.68	1.93	0.98	9.88	4.04	0.11	0.04
MAX	0.54	0.08	0.06	20	9.6	9.9	7.8	10	79	32	0.75	1.1
MIN	0.00	0.00	0.00	0.00	0.44	1.1	0.77	0.20	0.12	0.56	0.00	0.00
AC-FT	1.5	0.2	0.1	69	152	165	115	61	588	249	6.9	2.2
CFSM	0.00	0.00	0.00	0.18	0.42	0.42	0.31	0.16	1.57	0.64	0.02	0.01
IN.	0.00	0.00	0.00	0.21	0.45	0.49	0.34	0.18	1.75	0.74	0.02	0.01

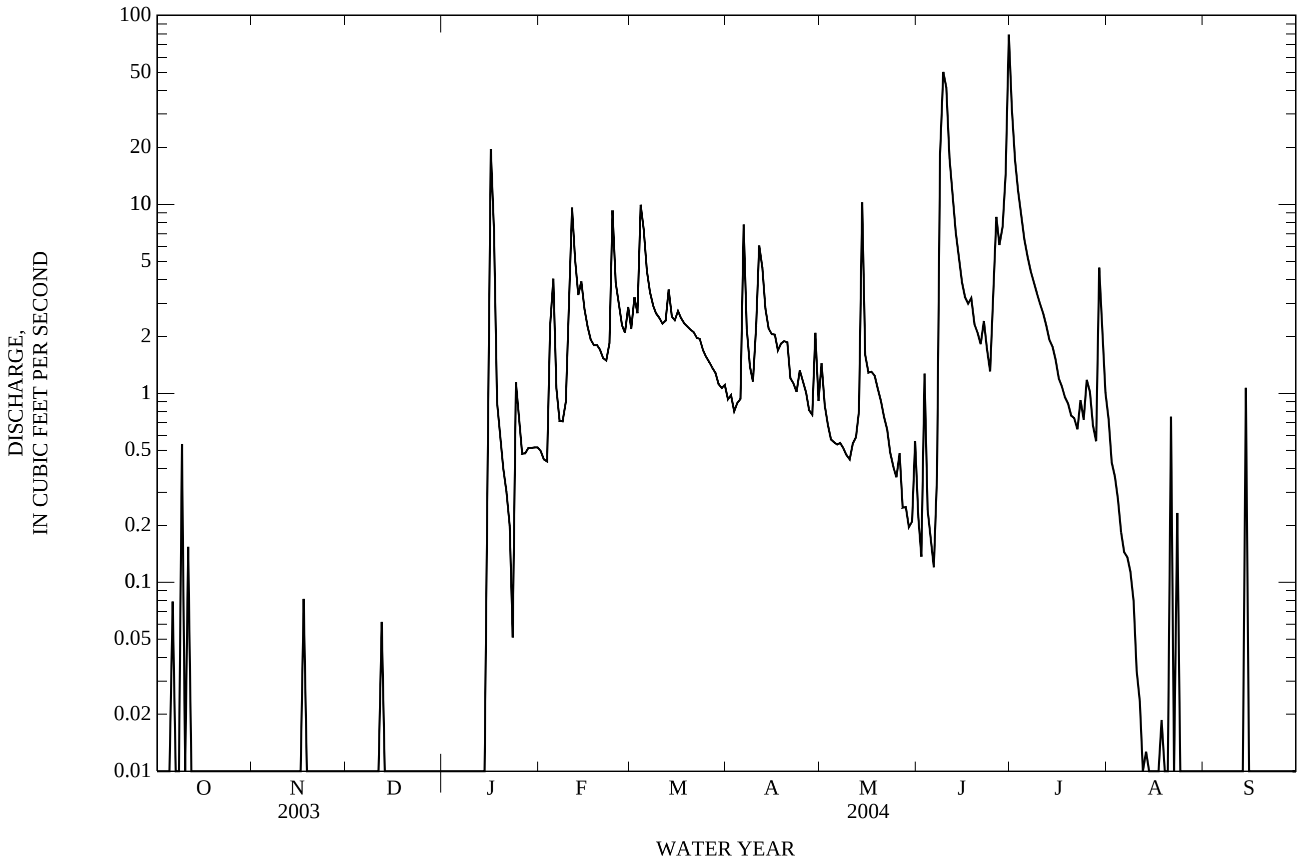
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2.97	3.05	6.47	3.76	4.78	4.23	3.69	10.5	11.9	1.18	0.47	0.92
MAX	21.9	32.4	57.2	15.5	26.6	13.8	20.1	29.0	88.7	4.83	3.89	5.76
(WY)	(1987)	(1986)	(1992)	(1991)	(1992)	(1992)	(1979)	(1992)	(1981)	(1981)	(1991)	(1983)
MIN	0.00	0.00	0.00	0.00	0.00	0.17	0.15	0.02	0.19	0.00	0.00	0.00
(WY)	(1979)	(1980)	(1990)	(1990)	(1982)	(1982)	(1988)	(1984)	(1990)	(1980)	(1980)	(1984)

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1979 - 2004h	
ANNUAL TOTAL	710.05			
ANNUAL MEAN	1.94		4.71	
HIGHEST ANNUAL MEAN			12.8	1992
LOWEST ANNUAL MEAN			0.34	1988
HIGHEST DAILY MEAN	79	Jun 30	977	Jun 11, 1981
LOWEST DAILY MEAN	0.00	Oct 1	0.00	Oct 1, 1978
ANNUAL SEVEN-DAY MINIMUM	0.00	Oct 12	0.00	Oct 1, 1978
MAXIMUM PEAK FLOW	334	Jun 30	i4,750	May 18, 1992
MAXIMUM PEAK STAGE	a7.14	Jun 30	g9.97	May 18, 1992
ANNUAL RUNOFF (AC-FT)	1,410		3,420	
ANNUAL RUNOFF (CFSM)	0.308		0.748	
ANNUAL RUNOFF (INCHES)	4.19		10.17	
10 PERCENT EXCEEDS	3.8		8.3	
50 PERCENT EXCEEDS	0.46		0.23	
90 PERCENT EXCEEDS	0.00		0.00	

a From floodmark.
g At datum then in use.
i From indirect measurement of peak flow.
h See period of record paragraph.
e Estimated

08158920 Williamson Creek at Oak Hill, TX—Continued



08158920 Williamson Creek at Oak Hill, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Jan. 1974 to Mar. 1993.
BIOCHEMICAL DATA: Jan. 1974 to Mar. 1993.
RADIOCHEMICAL DATA: Apr. 1980.
PESTICIDE DATA: Jun. 1978 to Sep. 1986.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Nitrite + nitrate water fltrd, mg/L as N (00631)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	COD, high level, water, unfltrd mg/L (00340)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)
JUL													
21...	1100	8.1	7.7	670	24.9	.264	<2.0	<10	<.006	E.008	<.006	<.005	<.005

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Diel-drin, water, fltrd, ug/L (39381)
JUL													
21...	.010	<.050	<.010	<.004	<.041	<.020	<.005	<.006	<.018	<.003	<.012	<.005	<.009

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Fonofos water, fltrd, ug/L (04095)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)
JUL													
21...	<.02	<.004	<.009	<.005	<.029	<.013	<.024	<.016	<.003	<.004	<.035	<.027	<.015

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)
JUL													
21...	<.013	<.006	<.003	<.007	<.003	<.010	<.004	<.022	<.011	<.01	<.004	<.025	<.011

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Sima-zine, water, fltrd, ug/L (04035)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)
JUL								
21...	<.02	<.005	<.02	<.034	<.02	<.010	<.002	<.009

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

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08158930 Williamson Creek at Manchaca Road, Austin, TX

LOCATION.--Lat 30°13'16", long 97°47'36", Travis County, Hydrologic Unit 12090205, on upstream side of the bridge on Manchaca Road, 0.7 mile south of the intersection of Ben White Boulevard and Manchaca Road, and 4.9 miles southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--19.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1975 to Sept. 1985 (selected storm events), Oct. 1984 to Sept. 1985, Jan. 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 618.39 ft above NGVD of 1929. Satellite telemeter at gage.

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

EXTREMES FOR PERIOD OF SELECTED STORM EVENT RECORD.-- WATER YEARS 1975-1985: Maximum discharge, 8,490 ft^3/s, June 11, 1981, gage height, 16.00 ft; minimum discharge, no flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.08	0.01	2.5	0.09	31	0.01	0.00
2	0.00	0.06	0.00	0.00	0.00	0.80	0.76	0.32	0.06	2.6	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.11	0.61	0.45	0.00	0.00
4	0.00	0.00	0.00	0.00	e0.55	6.9	0.45	0.07	0.07	0.31	0.00	0.00
5	0.00	0.00	0.00	0.00	e15	3.6	0.50	0.04	11	0.23	0.00	0.00
6	0.00	0.00	0.00	0.00	0.17	0.18	17	0.00	0.10	0.19	0.00	0.01
7	0.00	0.00	0.00	0.00	0.06	0.09	0.82	0.00	0.11	0.19	0.00	0.00
8	0.01	0.00	0.00	0.00	0.03	0.07	0.12	0.00	30	0.17	0.00	0.00
9	1.5	0.00	0.00	0.00	1.3	0.06	0.09	0.00	406	0.13	0.00	0.00
10	0.31	0.00	0.00	0.00	5.4	0.06	2.3	0.00	51	0.11	0.00	0.00
11	1.5	0.00	0.00	0.00	20	0.05	6.7	0.04	4.0	0.10	0.00	0.00
12	0.45	0.00	1.2	0.00	1.9	0.43	0.91	0.12	0.70	0.10	0.00	0.00
13	0.09	0.00	e0.11	0.00	0.32	3.3	0.23	2.6	0.36	0.08	0.00	0.00
14	0.03	0.00	e0.07	0.00	1.3	0.41	e0.14	13	0.25	0.05	0.00	3.3
15	0.00	0.00	e0.00	8.1	0.12	0.10	0.11	0.31	0.20	0.03	0.00	0.26
16	0.00	0.00	0.00	57	0.07	0.70	0.08	0.10	0.19	0.01	0.00	0.04
17	0.00	13	0.00	26	0.04	0.11	0.07	0.06	0.15	0.00	0.00	0.00
18	0.00	0.20	0.00	0.15	0.03	0.08	0.07	0.02	0.08	0.00	0.00	0.00
19	0.00	0.00	0.00	0.05	0.02	0.07	0.07	0.00	0.07	0.00	0.00	0.00
20	0.00	0.00	0.04	0.02	0.02	0.07	0.06	0.00	0.05	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.01	0.07	0.05	0.00	0.04	0.00	0.28	0.00
22	0.00	0.00	0.00	0.00	0.00	0.06	0.04	0.00	0.56	0.00	0.09	0.00
23	0.00	0.00	0.00	0.00	1.9	0.06	e0.04	0.00	0.10	0.04	0.97	0.00
24	0.00	0.00	0.00	3.0	25	0.07	e1.0	0.00	0.05	0.19	0.07	0.00
25	0.00	0.00	0.00	0.32	0.56	0.07	0.13	0.00	10	0.04	0.01	0.00
26	0.00	0.00	0.00	0.06	0.11	0.06	0.22	0.00	34	0.09	0.00	0.00
27	0.00	0.00	0.00	0.01	0.07	0.05	0.11	0.01	7.2	0.03	0.00	0.00
28	0.00	0.00	0.00	0.00	0.06	0.12	0.10	0.18	0.83	0.01	0.00	0.00
29	0.00	0.00	0.00	0.00	0.78	0.08	3.0	0.05	27	2.9	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.05	0.18	0.01	206	0.38	0.00	0.00
31	0.00	---	0.00	0.00	---	0.03	---	1.7	---	0.09	0.00	---
TOTAL	3.89	13.26	1.42	94.71	74.82	18.00	35.48	21.24	790.87	39.52	1.43	3.61
MEAN	0.13	0.44	0.05	3.06	2.58	0.58	1.18	0.69	26.4	1.27	0.05	0.12
MAX	1.5	13	1.2	57	25	6.9	17	13	406	31	0.97	3.3
MIN	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.04	0.00	0.00	0.00
AC-FT	7.7	26	2.8	188	148	36	70	42	1,570	78	2.8	7.2

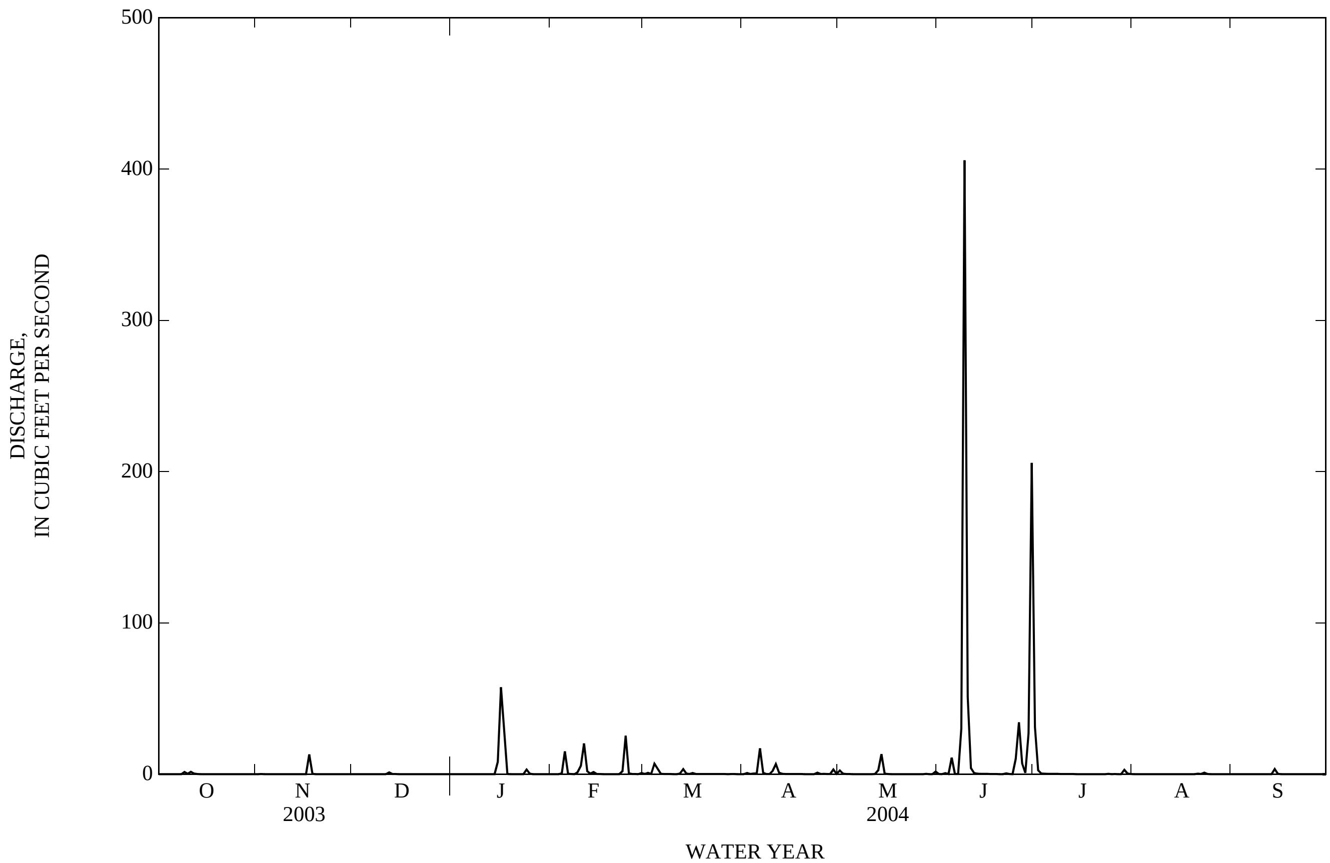
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	13.6	19.2	8.72	3.65	5.45	3.32	2.18	3.14	13.0	5.42	5.49	2.17
MAX	60.8	54.7	19.7	7.43	14.5	15.2	10.7	9.65	27.2	22.9	27.0	10.7
(WY)	(1985)	(2002)	(2002)	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	(2002)	(2001)	(1985)
MIN	0.13	0.44	0.05	1.06	0.40	0.31	0.02	0.11	0.14	0.00	0.05	0.00
(WY)	(2004)	(2004)	(2004)	(2003)	(2002)	(2003)	(2003)	(2003)	(2001)	(2000)	(2004)	(2000)

08158930 Williamson Creek at Manchaca Road, Austin, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004h	
ANNUAL TOTAL	517.94		1,098.25			
ANNUAL MEAN	1.42		3.00		7.46	
HIGHEST ANNUAL MEAN					15.7	1985
LOWEST ANNUAL MEAN					2.48	2003
HIGHEST DAILY MEAN	274	Feb 20	406	Jun 9	1,230	Nov 15, 2001
LOWEST DAILY MEAN	0.00	Apr 13	0.00	Oct 1	0.00	Apr 22, 2000
ANNUAL SEVEN-DAY MINIMUM	0.00	Apr 13	0.00	Oct 1	0.00	Apr 22, 2000
MAXIMUM PEAK FLOW			3,120	Jun 9	i5,830	Nov 15, 2001
MAXIMUM PEAK STAGE			11.52	Jun 9	a16.85	Nov 15, 2001
ANNUAL RUNOFF (AC-FT)	1,030		2,180		5,410	
10 PERCENT EXCEEDS	0.47		1.6		8.5	
50 PERCENT EXCEEDS	0.00		0.01		0.14	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From floodmark.
i From indirect measurement of peak flow.
h See PERIOD OF RECORD paragraph.
e Estimated



08158930 Williamson Creek at Manchaca Road, Austin, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Mar. 2002 to current year.
BIOCHEMICAL DATA: Mar. 2002 to current year.
PESTICIDE DATA: May 2000, and Mar. 2002 to current year.
SUSPENDED SEDIMENT CHEMISTRY: May 2000 to current year.
SEDIMENT DATA: May 2000, and Mar. 2002 to current year.

INSTRUMENTATION.--Stage-activated automatic sampler.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Discharge, cfs (00060)	Drainage area, mi2 (81024)	Sampling method, code (82398)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnesium, bed sedimnt recover -able, mg/kg (00924)	Potassium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV 17-17	1555	--	79	19.0	--	--	--	--	110,000	8,100	13,000	1,000	--
NOV 17-17	1600	1028	79	19.0	4033	220	7.2	144	--	--	--	--	47
APR 29-29	0240	1028	18	19.0	50	19	7.6	346	--	--	--	--	138

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Residue total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Orthophosphate, water, fltrd, mg/L (00660)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	446d	2.5	.07	.05	1.70	.39	.40	.043	.013	2.4	.132	.04	.05
APR 29-29	44	1.2	--	<.04	.328	.07	.09	.053	.016	--	--	<.02	.03

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Phosphorus, water, unfltrd mg/L (00665)	Total nitrogen, water, unfltrd mg/L (00600)	Phosphorus, bed sedimnt total, mg/kg (00668)	Organic carbon, water, unfltrd mg/L (00680)	COD, high level, water, unfltrd mg/L (00340)	Cadmium water, unfltrd ug/L (01027)	Copper, water, unfltrd recover -able, ug/L (01042)	Lead, water, unfltrd recover -able, ug/L (01051)	Zinc, water, unfltrd recover -able, ug/L (01092)	Aluminum, bed sedimnt recover -able, ug/g (01108)	Antimony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)
NOV 17-17	--	--	1,000	--	--	--	--	--	--	60,000	2.6	11	240
NOV 17-17	.56	2.9	--	24.4	60	.34	14.3	29.5	118	--	--	--	--
APR 29-29	.16	1.3	--	18.9	30	E.03n	1.9	3.37	14	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Beryllium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chromium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lanthanum, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Manganese, bed sed <62.5um wet svd fld,tot ug/g (34905)
NOV 17-17	1.9	.345	.701	64	65	9.8	30	14	25,000	33	61	51	590
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 29-29	--	--	--	--	--	--	--	--	--	--	--	--	--

08158930 Williamson Creek at Manchaca Road, Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Molybdenum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scandium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Strontium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tantalum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thallium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titanium, bed sedimnt total, ug/g (01153)	Vanadium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)
NOV 17-17	2.4	23	11	9.9	<3	140	1.1	.544	10	3,600	85	24	270
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 29-29	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Keto-carbofuran, water, fltrd, ug/L (50295)	3-ydroxy carbofuran, at flt .7u GF ug/L 49308)	3-Keto-carbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.009	<.02	<.02mc	<.006	E.003t	<.04mc	<.027mc	<.011c	<2mc	<.011c	<2mc	<.006	<.007	<.005	<.02mc
APR 29-29	<.009	.07	<.02mc	<.006	E.046	<.01mc	E.085mc	<.014mc	<.006	<.014mc	<.006	<.006	<.007	<.005	<.02mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.008mc	<.04mc	<.005	.129	<.050	<.05c	<.010	<.027c	<.02	<.01mc	<.03mc	<.02mc	<.004
APR 29-29	<.008mc	<.04mc	<.005	.540	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Caffeine, water, fltrd, ug/L (50305)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.3276c	E.01	E.042	<.006	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018
APR 29-29	E1.34	<.03	E.088	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.010	<.006	<.01	<.018

08158930 Williamson Creek at Manchaca Road, Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Cyclo- ate, water, fltrd, ug/L (04031)	Dacthal mono- acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf- inyl fipro- nil, water, fltrd, ug/L (62170)	Diazi- non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di- chlor- prop, water, fltrd 0.7u GF ug/L (49302)	Diel- drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen- amid, water, fltrd, ug/L (04033)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.01mc	<.01	<.003	E.007n	.015	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004
APR 29-29	<.01mc	<.01	<.003	<.012	.032	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethal- flur- alin, water, fltrd 0.7u GF ug/L (82663)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water fltrd 0.7u GF ug/L (49297)	Desulf- inyl- fipro- nil amide, wat flt ug/L (62169)	Fipro- nil sulfide water, fltrd, ug/L (62167)	Fipro- nil sulfone water, fltrd, ug/L (62168)	Fipro- nil, water, fltrd, ug/L (62166)	Flumet- sulam, water, fltrd, ug/L (61694)	Fluo- meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza- quin, water, fltrd, ug/L (50356)	Imaze- thapyr, water, fltrd, ug/L (50407)	Imida- cloprid water, fltrd, ug/L (61695)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.009	<.005	<.03	E.005t	<.013	E.006t	E.028	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007
APR 29-29	<.009	<.005	<.03	<.029	<.013	<.024	<.030	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala- thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta- laxyl, water, fltrd, ug/L (50359)	Methio- carb, water, fltrd 0.7u GF ug/L (38501)	Meth- omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	Metola- chlor, water, fltrd, ug/L (39415)	Metri- buzin, water, fltrd, ug/L (82630)	Metsul- furon, water, fltrd, ug/L (61697)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.004	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	E.005t	<.006	<.03mc
APR 29-29	<.004	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	E.044mc	<.015	.015	<.006	E.05mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	N-(4- Chloro- phenyl) -N'- methyl- urea, ug/L (61692)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico- sul- furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory- zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'- DDE, water, fltrd, ug/L (34653)	Para- thion, water, fltrd, ug/L (39542)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.003	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011
APR 29-29	<.003	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011

08158930 Williamson Creek at Manchaca Road, Austin, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)
NOV 17-17	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17-17	<.09c	.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.023	.192	<.02
APR 29-29	<.02	.04	<.004	<.025	.013	<.02	<.010	<.02	<.008	<.02	<.010	.333	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribenuron water, fltrd, ug/L (61159)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 17-17	--	--	--	--	--	--	--	--	2.0	90	590	126
NOV 17-17	<.034	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--
APR 29-29	<.034	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	43	2.1

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

Value qualifier codes used in this table:
c -- See laboratory comment
d -- Diluted sample: method hi range exceeded
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

08159000 Onion Creek at U.S. Highway 183, Austin, TX

LOCATION.--Lat 30°10'40", long 97°41'18", Travis County, Hydrologic Unit 12090205, on right bank at downstream side of downstream bridge on U.S. Highway 183, 2.4 mi downstream from Williamson Creek, 3.2 mi southwest of Del Valle, and 7.5 mi southeast of the State Capitol Building in Austin.

DRAINAGE AREA.--321 mi^2.

PERIOD OF RECORD.--May 1924 to Mar. 1930 station was published as "near Del Valle", Mar. 1976 to current year. Water-quality records: Chemical data: Oct. 1976 to Sept. 1988. Biochemical data: Oct. 1976 to Sept. 1988. Radiochemical data: Jan. 1980. Pesticide data: Oct. 1976 to Sept. 1986. Sediment data: Oct. 1976 to Sept. 1982.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 442.85 ft above NGVD of 1929 (Texas Department of Transportation datum). May 15, 1924, to Mar. 15, 1930, nonrecording gage at highway bridge 1,700 ft upstream at 6.42 ft higher datum. Satellite telemeter at station.

REMARKS.--Records fair except those below 1 ft^3/s, which are poor. No known regulation or diversions. Flow is slightly affected by several small ponds on main channel and tributaries above station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1869 occurred about July 3, 1869, stage about 38 ft, from newspaper accounts, and Sept. 9, 1921, stage 38.0 ft, from floodmark, present site and datum.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.27	0.13	0.10	0.47	4.0	17	6.1	15	11	1,680	9.7	0.00
2	e0.17	0.14	0.29	0.61	3.8	13	6.3	14	2.6	783	7.3	0.00
3	e0.12	0.11	0.31	0.64	3.3	15	9.8	7.1	7.7	539	6.2	0.00
4	0.07	0.02	0.23	0.50	6.6	21	8.3	5.2	5.3	414	5.3	0.02
5	0.08	0.02	0.18	0.38	28	36	9.5	4.1	283	316	4.5	1.5
6	0.07	0.01	0.10	0.20	13	16	91	3.8	32	258	3.8	0.36
7	0.09	0.01	0.06	0.18	7.4	12	32	3.6	17	208	3.5	0.03
8	0.08	0.06	0.00	0.24	5.9	9.5	15	3.5	310	164	3.1	0.00
9	0.21	0.16	0.07	0.59	5.5	8.6	9.8	3.1	2,370	136	3.0	0.00
10	4.0	0.16	0.00	0.72	57	8.3	8.2	3.1	3,090	106	3.0	0.00
11	1.8	0.13	0.00	0.82	183	8.2	55	2.8	319	77	2.6	0.00
12	4.7	0.09	0.62	1.1	69	8.2	36	3.3	164	67	2.4	0.00
13	2.6	0.05	e0.42	1.2	27	24	18	3.5	83	52	2.3	0.00
14	0.33	0.00	e0.32	1.5	21	28	12	70	47	45	2.0	30
15	0.20	0.00	e0.23	10	15	15	9.3	18	32	32	1.8	22
16	0.20	0.02	e0.13	66	11	12	8.0	9.6	25	26	1.6	3.7
17	0.20	8.7	e0.16	142	9.3	11	7.2	6.5	20	19	1.8	1.9
18	0.48	18	e0.17	20	8.5	10	6.5	5.7	17	14	1.6	1.0
19	0.78	2.4	e0.20	10	8.0	9.9	6.2	4.4	14	12	1.3	0.49
20	0.20	0.81	e0.15	6.9	7.4	9.3	6.0	3.4	12	10	1.1	0.44
21	0.16	0.17	e0.19	5.5	6.8	9.1	5.8	2.7	11	9.1	5.9	0.36
22	0.00	0.22	e0.32	4.8	6.6	9.3	5.8	2.4	11	8.4	3.7	0.22
23	0.00	0.22	0.29	4.2	6.6	7.9	5.5	2.1	13	7.9	3.8	0.04
24	0.00	0.01	0.29	14	274	8.1	9.6	1.9	11	7.9	3.5	0.00
25	0.01	0.00	0.38	18	79	8.2	10	1.6	33	8.0	2.0	0.00
26	0.10	0.00	0.42	9.2	35	7.8	13	1.3	275	39	1.3	0.00
27	0.11	0.15	0.38	6.0	22	7.9	9.4	0.92	543	112	0.75	0.04
28	0.08	0.18	0.55	4.8	17	7.6	6.0	1.1	357	39	0.60	0.00
29	0.09	0.08	0.85	4.4	16	7.3	5.5	1.8	607	20	0.46	0.00
30	0.15	0.04	0.47	4.3	---	7.0	7.1	1.1	2,490	22	0.31	0.00
31	0.13	---	0.41	4.0	---	6.4	---	0.91	---	15	0.02	---
TOTAL	17.48	32.09	8.29	343.25	956.7	378.6	437.9	207.53	11,212.6	5,246.3	90.24	62.10
MEAN	0.56	1.07	0.27	11.1	33.0	12.2	14.6	6.69	374	169	2.91	2.07
MAX	4.7	18	0.85	142	274	36	91	70	3,090	1,680	9.7	30
MIN	0.00	0.00	0.00	0.18	3.3	6.4	5.5	0.91	2.6	7.9	0.02	0.00
AC-FT	35	64	16	681	1,900	751	869	412	22,240	10,410	179	123

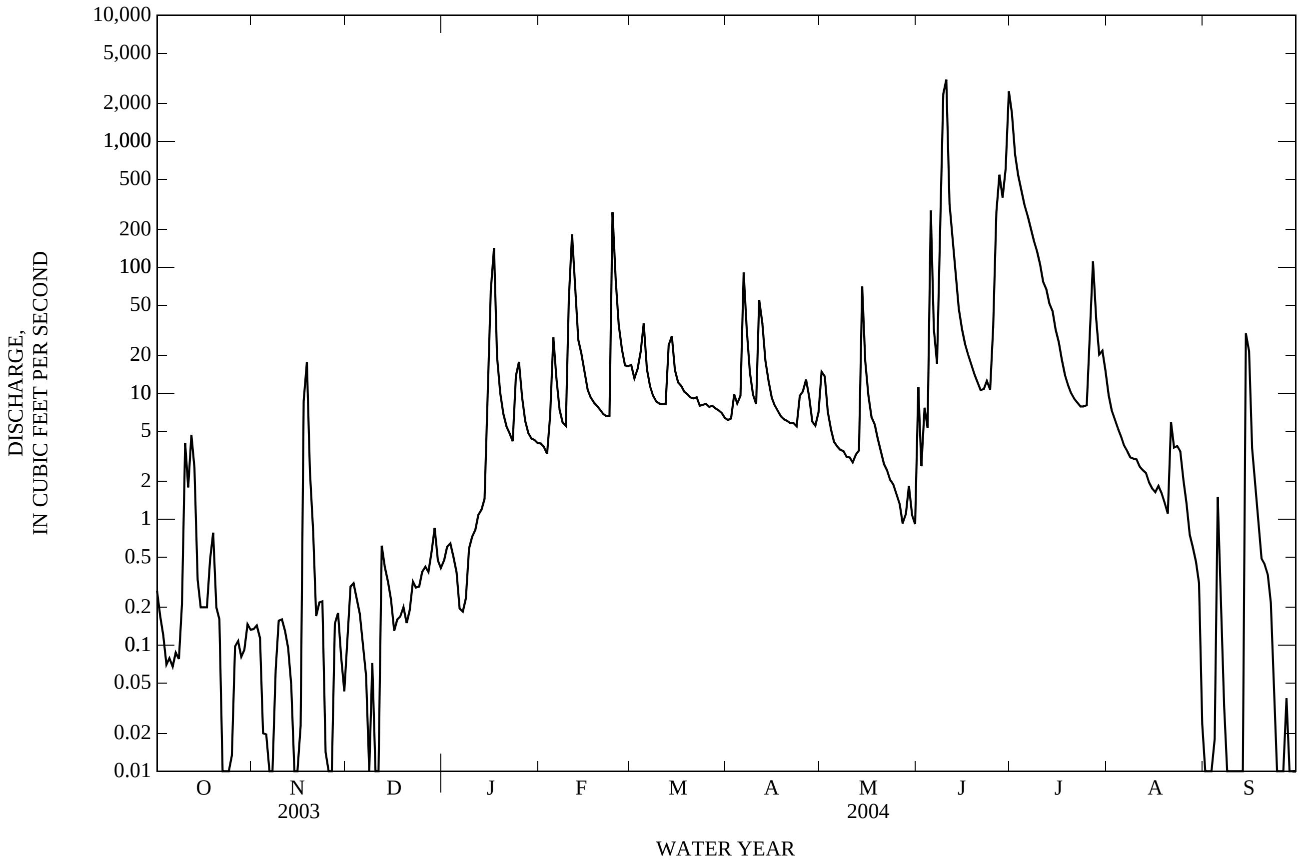
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	75.2	77.2	99.6	54.8	81.1	79.9	92.8	158	222	57.1	8.15	8.33
MAX	1,346	1,019	1,526	487	908	576	847	1,767	2,305	828	59.2	48.0
(WY)	(1999)	(2002)	(1992)	(1992)	(1992)	(1992)	(1926)	(1929)	(1981)	(2002)	(2001)	(1986)
MIN	0.00	0.27	0.00	0.00	1.65	1.80	1.39	1.40	0.01	0.00	0.00	0.00
(WY)	(1929)	(1994)	(1990)	(1990)	(1925)	(1996)	(1994)	(1984)	(1925)	(1925)	(1925)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1924 - 2004h	
ANNUAL TOTAL	17,513.83		18,993.08			
ANNUAL MEAN	48.0		51.9		83.7	
HIGHEST ANNUAL MEAN					379	1992
LOWEST ANNUAL MEAN					1.49	1925
HIGHEST DAILY MEAN	3,270	Feb 20	3,090	Jun 10	30,500	May 28, 1929
LOWEST DAILY MEAN	0.00	Jul 30	0.00	Oct 22	0.00	Jun 3, 1925
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 30	0.00	Sep 7	0.00	Jun 3, 1925
MAXIMUM PEAK FLOW			12,200	Jun 9	i93,200	Nov 16, 2001
MAXIMUM PEAK STAGE			21.89	Jun 9	a36.50	Nov 16, 2001
ANNUAL RUNOFF (AC-FT)	34,740		37,670		60,650	
10 PERCENT EXCEEDS	117		48		130	
50 PERCENT EXCEEDS	3.9		4.2		6.3	
90 PERCENT EXCEEDS	0.01		0.04		0.00	

a From floodmark.
i From indirect measurement of peak flow.
h See PERIOD OF RECORD paragraph.
e Estimated

08159000 Onion Creek at U.S. Highway 183, Austin, TX—Continued



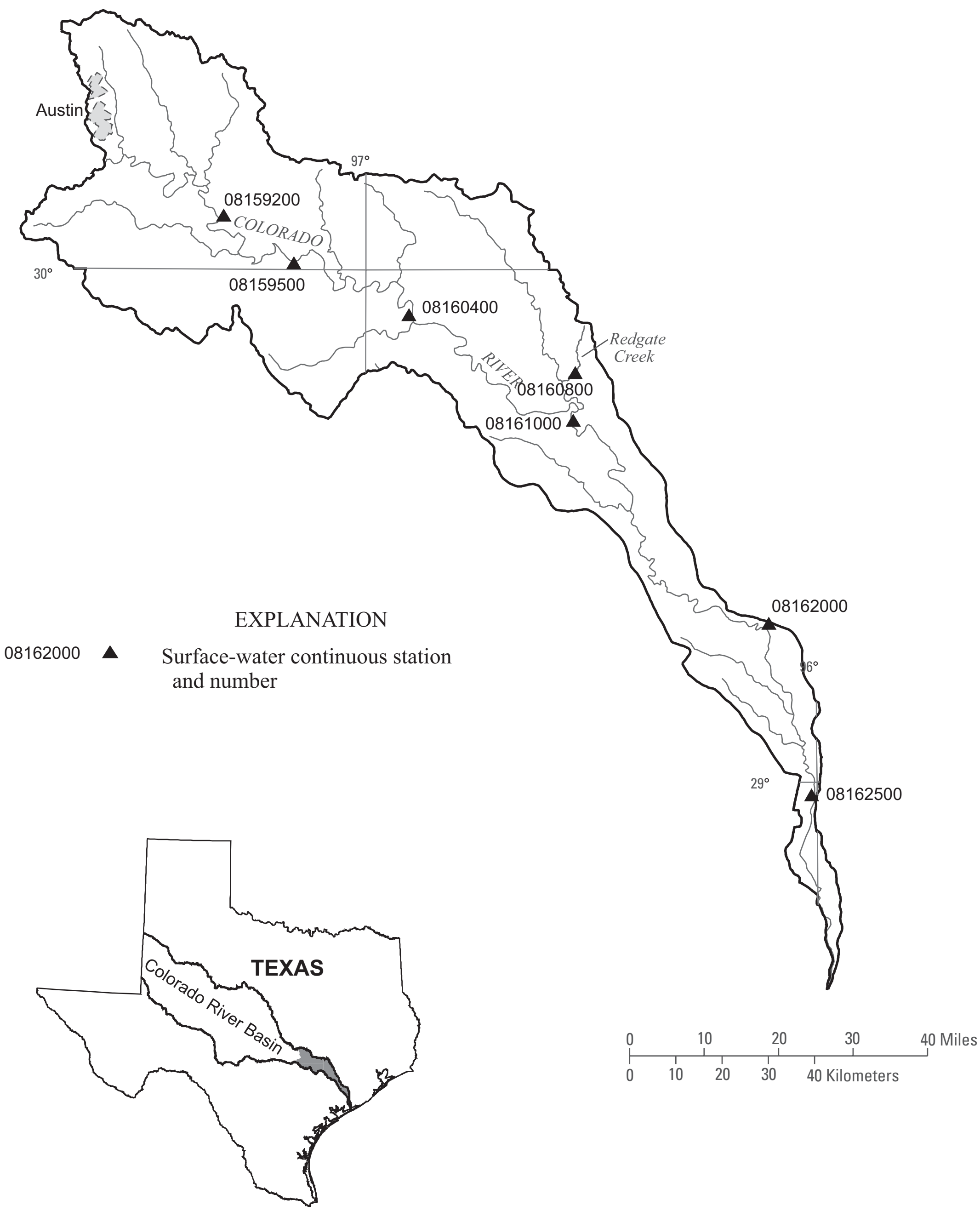


Figure 8.--Map showing location of gaging stations in the fifth section of the Colorado River Basin

08159200 Colorado River at Bastrop, TX

LOCATION.--Lat 30°06'16", long 97°19'09", Bastrop County, Hydrologic Unit 12090301, on downstream side of State Highway 71 bridge on Water Street, at Bastrop, 0.3 mi upstream from Gills Creek, 1.2 mi downstream from Piney Creek, and at mile 236.6.

DRAINAGE AREA.--39,979 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Mar. 1960 to current year. Oct. 1973 to Sept. 1975, daily discharges estimated by hydrographic comparison with Colorado River at Austin (station 08158000) and Colorado River near Smithville (station 08159500). Water-quality records: Chemical data: Mar. 1944, Feb. 1968 to Sept. 1994. Biochemical data: Feb. 1968 to Sept. 1994. Specific conductance: Nov. 1986 to Sept. 1994.
pH: Nov. 1986 to Sept. 1994. Water temperature: Nov. 1986 to Sept. 1994. Dissolved oxygen: Nov. 1986 to Sept. 1994.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 307.38 ft above NGVD of 1929. Prior to May 10, 1960, nonrecording gage at a site 400 ft upstream from present site and at same datum. May 10, 1960, to Sept. 30, 1973, Oct. 1, 1975, to Oct. 28, 1986, at a site 400 ft upstream from present site and at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Since installation of gage in 1960, at least 10% of contributing drainage area has been regulated. There are many diversions above station for irrigation and municipal supply. The city of Austin diverts water into Decker Lake (by pumpage) upstream from this station. The Lower Colorado River Authority also diverts water from the Colorado into Lake Bastrop (by pumpage) upstream from this station.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes, and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1845, 60.3 ft July 7 or 8, 1869. Flood of June 16, 1935, reached a stage of 57.0 ft, and flood of Dec. 4, 1913, reached a stage of 53.3 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	885	513	461	413	454	674	804	1,950	2,080	11,800	1,320	1,560
2	902	470	460	413	451	705	776	2,230	1,660	7,580	1,170	1,550
3	946	e453	461	434	444	781	814	1,680	1,840	5,800	1,130	1,480
4	873	e437	451	430	455	872	850	1,630	2,440	5,260	1,120	1,420
5	928	429	467	422	511	931	804	1,660	2,690	4,890	1,090	1,430
6	975	416	434	418	897	919	886	1,670	3,110	4,240	1,060	1,450
7	1,070	465	438	416	597	778	3,520	1,530	2,340	4,410	1,080	1,510
8	971	364	437	424	524	772	1,150	1,550	2,370	2,760	1,150	1,480
9	e950	387	452	474	531	729	793	1,790	4,830	2,510	1,190	1,470
10	917	410	433	442	632	730	688	2,020	17,600	2,220	e1,280	1,510
11	873	442	420	439	1,840	767	930	1,940	22,300	2,240	e1,380	1,560
12	714	435	426	441	3,520	729	1,330	1,860	19,300	2,040	1,540	1,580
13	735	434	433	444	1,250	771	1,090	2,100	19,500	2,190	1,660	1,840
14	694	426	487	444	831	862	891	2,210	17,400	2,010	1,710	1,500
15	675	446	455	463	838	879	759	2,460	12,800	1,910	1,650	2,330
16	655	446	426	660	766	787	718	2,000	8,620	1,760	1,700	2,130
17	614	476	426	1,900	715	856	703	1,980	6,750	1,670	1,680	1,990
18	415	592	420	1,790	682	750	694	1,900	4,640	1,680	1,700	1,900
19	399	771	416	770	691	739	678	1,880	4,500	1,680	1,680	1,890
20	400	548	417	638	654	813	648	1,920	4,550	1,660	2,320	1,830
21	393	513	444	628	640	917	635	1,980	4,540	1,600	3,010	1,790
22	376	499	448	637	643	879	649	2,350	4,470	1,600	3,400	1,710
23	379	498	430	e620	655	641	976	1,700	4,560	1,610	2,340	1,820
24	482	491	422	589	706	771	937	1,530	4,630	1,620	3,950	1,700
25	527	483	404	633	1,190	816	967	1,580	4,440	1,660	2,060	1,340
26	524	480	401	641	870	964	1,070	1,580	5,490	1,790	1,910	1,320
27	508	478	404	540	742	842	1,050	1,630	6,940	1,620	1,940	1,300
28	517	468	419	498	691	809	1,040	1,740	6,420	1,400	1,820	1,340
29	517	457	434	505	660	836	1,320	1,650	5,860	1,390	1,530	1,180
30	512	448	412	489	---	798	1,590	1,780	7,820	1,740	1,680	1,370
31	515	---	353	448	---	774	---	1,850	---	1,490	1,600	---
TOTAL	20,841	14,175	13,391	18,503	24,080	24,891	29,760	57,330	216,490	87,830	53,850	48,280
MEAN	672	472	432	597	830	803	992	1,849	7,216	2,833	1,737	1,609
MAX	1,070	771	487	1,900	3,520	964	3,520	2,460	22,300	11,800	3,950	2,330
MIN	376	364	353	413	444	641	635	1,530	1,660	1,390	1,060	1,180
AC-FT	41,340	28,120	26,560	36,700	47,760	49,370	59,030	113,700	429,400	174,200	106,800	95,760

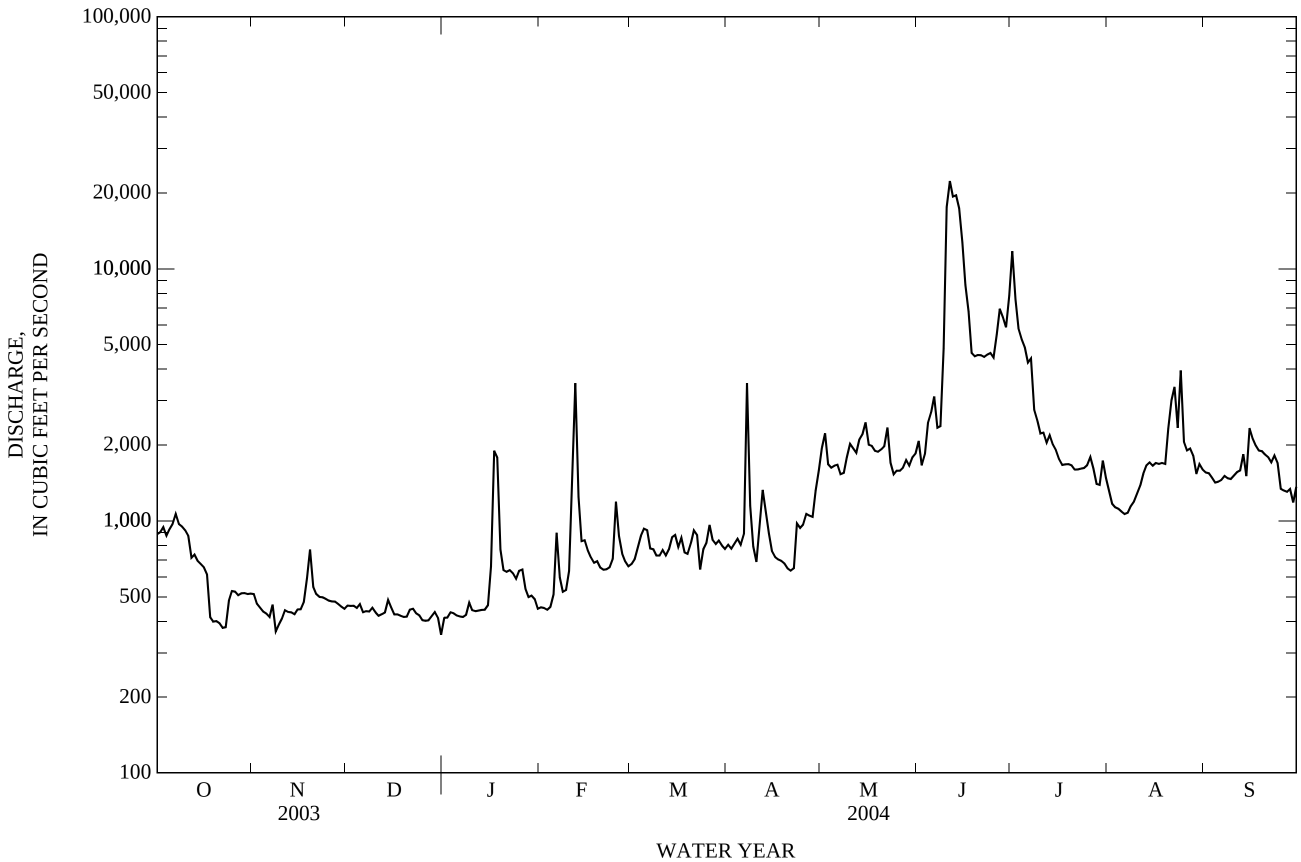
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1,395	1,324	1,510	1,667	2,126	2,286	2,416	3,296	4,353	2,791	1,874	1,704
MAX	6,380	11,330	14,770	17,490	29,140	16,910	11,080	10,420	23,620	13,010	3,705	4,930
(WY)	(1974)	(1975)	(1992)	(1992)	(1992)	(1992)	(1977)	(1975)	(1987)	(2002)	(1961)	(1974)
MIN	291	94.6	111	109	138	131	565	1,471	1,489	1,302	1,125	1,003
(WY)	(1965)	(1964)	(1964)	(1964)	(1964)	(1964)	(1962)	(1962)	(1993)	(1967)	(1999)	(1999)

08159200 Colorado River at Bastrop, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	622,719		609,421			
ANNUAL MEAN	1,706		1,665		2,227	
HIGHEST ANNUAL MEAN					9,073	1992
LOWEST ANNUAL MEAN					828	1964
HIGHEST DAILY MEAN	30,400	Feb 21	22,300	Jun 11	65,800	Dec 22, 1991
LOWEST DAILY MEAN	353	Dec 31	353	Dec 31	75	Apr 1, 1964
ANNUAL SEVEN-DAY MINIMUM	404	Dec 25	404	Dec 25	84	Oct 19, 1964
MAXIMUM PEAK FLOW			29,000	Jun 10	79,600	Oct 29, 1960
MAXIMUM PEAK STAGE			20.68	Jun 10	37.48	Dec 22, 1991
ANNUAL RUNOFF (AC-FT)	1,235,000		1,209,000		1,614,000	
10 PERCENT EXCEEDS	2,440		2,710		4,180	
50 PERCENT EXCEEDS	1,390		910		1,530	
90 PERCENT EXCEEDS	440		434		267	

e Estimated



08159500 Colorado River at Smithville, TX

LOCATION.--Lat 30°00'45", long 97°09'42", Bastrop County, Hydrologic Unit 12090301, on right bank 28 ft downstream from bridge on Business State Highway 71 in Smithville, 500 ft below mouth of Gazley Creek, 3.9 mi below mouth of Alum Creek, and at mile 212.1.

DRAINAGE AREA.--40,371 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--July 1930 to Sept. 1975, Oct. 1997 to current year. Gage-height records collected in this vicinity since 1920 are contained in reports of the National Weather Service. Water-quality records: Chemical data: Oct. 1973 to Sept. 1975. Biological data: Oct. 1973 to Sept. 1975.

REVISED RECORDS.--WSP 1342: Drainage area. WSP 1562: 1934. WSP 1712: 1953, 1954(M), 1957-58.

GAGE.--Water-stage recorder. Datum of gage is 270.14 ft above NGVD of 1929. Prior to Apr. 9, 1931, nonrecording gage at same site and datum. Apr. 9, 1931, to Sept. 2, 1971, water-stage recorder at site 360 ft downstream at same datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in 1930, at least 10% of contributing drainage area has been regulated. At times, low-flow releases from Lake Travis are made for generation of electric power and to fulfill downstream water contracts. There are many diversions above station for irrigation and municipal supply.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes, and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1860, occurred July 8, 1869, and was several feet higher than flood of Dec. 4, 1913, which reached a stage of 47.4 ft and was the highest since 1869, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863	566	548	452	422	622	717	1,690	1,980	12,200	1,390	1,600
2	917	561	563	515	429	667	776	2,430	1,610	9,440	1,260	1,580
3	999	495	564	512	411	723	737	2,110	1,670	6,340	1,210	1,580
4	1,000	464	566	524	411	811	825	1,730	2,000	5,620	1,180	1,470
5	897	477	570	514	444	852	789	1,770	2,250	5,250	1,160	1,440
6	1,060	468	576	502	696	1,030	796	1,720	3,090	4,380	1,120	1,460
7	1,100	464	543	492	725	787	2,710	1,610	2,300	4,770	1,110	1,460
8	1,090	518	543	492	514	815	2,080	1,580	2,270	3,180	1,160	1,510
9	1,080	406	544	522	490	732	973	1,560	3,600	2,640	1,210	1,460
10	1,010	450	550	509	722	699	773	2,000	13,700	2,450	1,270	1,440
11	1,030	487	522	493	1,550	734	823	1,990	28,500	2,260	1,340	1,570
12	879	506	530	478	4,520	729	1,260	1,990	19,300	2,330	1,430	1,520
13	795	507	533	478	2,080	742	1,340	2,030	19,800	2,320	1,650	1,570
14	776	500	552	473	1,060	820	1,040	2,330	18,900	2,190	1,700	1,690
15	720	505	584	492	842	903	838	2,710	14,300	2,080	1,680	1,690
16	729	541	555	556	853	825	729	2,120	9,400	1,810	1,710	2,350
17	697	561	508	1,130	733	790	697	2,080	7,760	1,600	1,690	1,870
18	573	619	505	2,720	681	816	664	1,960	5,110	1,550	1,690	1,980
19	417	888	497	1,130	680	689	667	1,940	4,610	1,550	1,690	1,790
20	421	745	490	745	653	707	614	1,930	4,650	1,500	1,720	1,800
21	408	592	502	697	609	841	586	1,950	4,610	1,470	3,310	1,750
22	405	571	534	693	598	954	576	2,210	4,530	1,380	3,290	1,750
23	392	561	541	688	592	716	663	2,090	4,650	1,400	2,570	1,730
24	434	549	512	676	646	653	1,150	1,490	5,480	1,390	3,630	1,760
25	560	550	496	623	986	724	955	1,510	4,730	1,400	2,830	1,440
26	595	543	486	709	1,040	905	1,100	1,540	5,310	1,470	1,970	1,330
27	553	547	489	603	773	863	1,100	1,500	6,570	1,790	2,010	1,310
28	534	546	506	522	691	775	1,090	1,630	7,640	1,470	1,980	1,390
29	548	538	543	486	645	791	1,100	1,590	5,900	1,360	1,740	1,200
30	560	541	542	487	---	758	1,540	1,650	9,490	1,550	1,640	1,240
31	559	---	498	456	---	722	---	1,710	---	1,780	1,660	---
TOTAL	22,601	16,266	16,492	20,369	25,496	24,195	29,708	58,150	225,710	91,920	55,000	47,730
MEAN	729	542	532	657	879	780	990	1,876	7,524	2,965	1,774	1,591
MAX	1,100	888	584	2,720	4,520	1,030	2,710	2,710	28,500	12,200	3,630	2,350
MIN	392	406	486	452	411	622	576	1,490	1,610	1,360	1,110	1,200
AC-FT	44,830	32,260	32,710	40,400	50,570	47,990	58,930	115,300	447,700	182,300	109,100	94,670

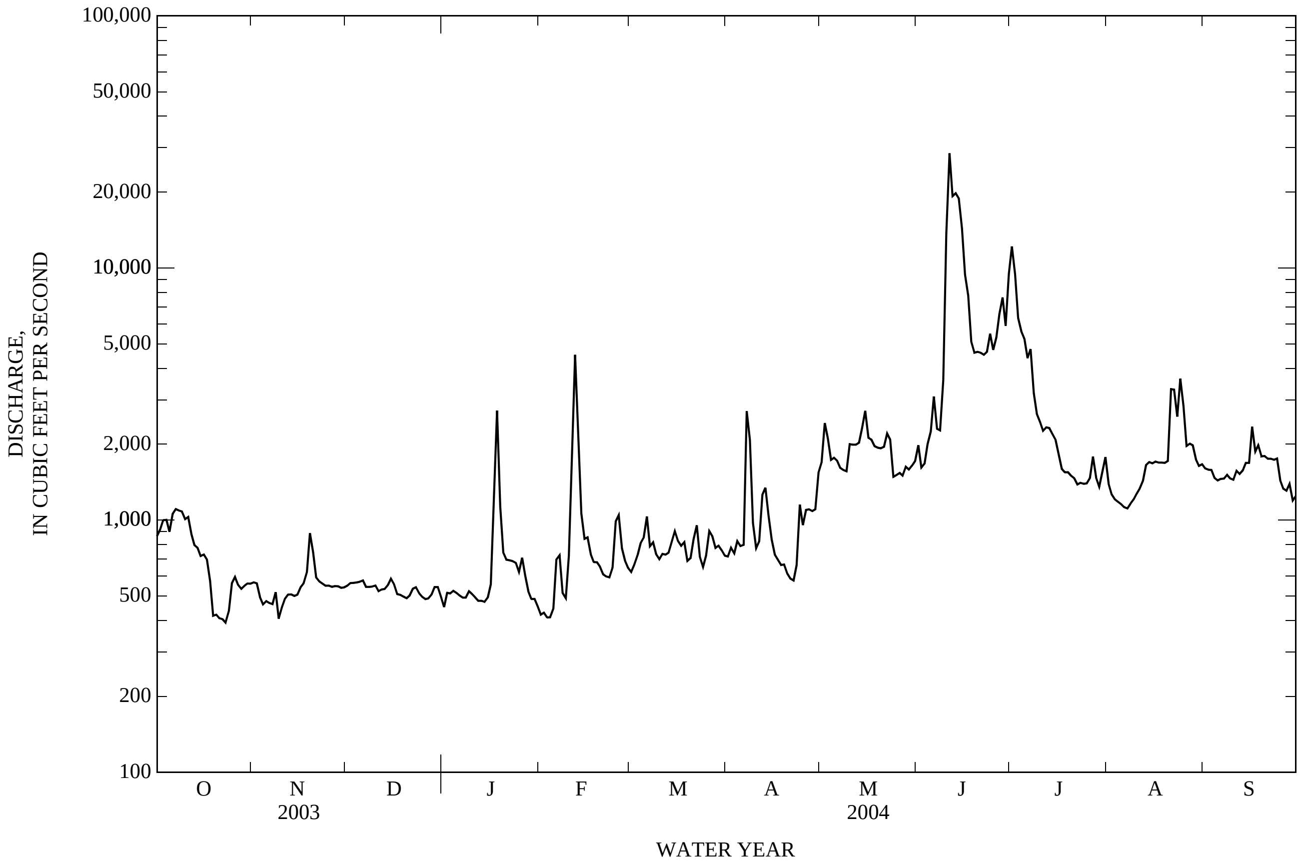
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004h, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2,740	1,968	1,729	1,871	2,181	2,025	2,453	4,285	4,122	3,600	1,910	2,880
MAX	20,380	13,480	5,738	7,823	8,516	7,292	11,300	27,980	31,510	31,310	7,303	38,090
(WY)	(1931)	(1975)	(1941)	(1968)	(1958)	(1958)	(1941)	(1957)	(1935)	(1938)	(1938)	(1936)
MIN	117	133	129	133	145	176	471	1,088	391	852	240	337
(WY)	(1935)	(1964)	(1964)	(1964)	(1964)	(1964)	(1952)	(1942)	(1934)	(1933)	(1930)	(1934)

08159500 Colorado River at Smithville, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1930 - 2004h	
ANNUAL TOTAL	689,983		633,637			
ANNUAL MEAN	1,890		1,731		2,654	
HIGHEST ANNUAL MEAN					6,780	1935
LOWEST ANNUAL MEAN					794	1952
HIGHEST DAILY MEAN	39,400	Feb 21	28,500	Jun 11	219,000	Jun 16, 1935
LOWEST DAILY MEAN	392	Oct 23	392	Oct 23	79	Nov 1, 1934
ANNUAL SEVEN-DAY MINIMUM	434	Oct 19	434	Oct 19	84	Oct 27, 1934
MAXIMUM PEAK FLOW			32,600	Jun 11	i305,000	Jun 16, 1935
MAXIMUM PEAK STAGE			18.12	Jun 11	a42.50	Jun 16, 1935
ANNUAL RUNOFF (AC-FT)	1,369,000		1,257,000		1,923,000	
10 PERCENT EXCEEDS	2,630		2,750		4,690	
50 PERCENT EXCEEDS	1,480		964		1,620	
90 PERCENT EXCEEDS	540		498		356	

h See PERIOD OF RECORD paragraph.
a From floodmark.
i From indirect measurement of peak flow.



08160400 Colorado River above LaGrange, TX

LOCATION.--Lat 29°54'44", long 96°54'13", Fayette County, Hydrologic Unit 12090301, at right downstream end of bridge on new State Highway 71, 1.4 mi upstream from Buckners Creek, and at mile 177.

DRAINAGE AREA.--40,874 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Dec. 1979 to Sept. 1982 (discharge measurements only), Apr. 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 210.04 ft above NGVD of 1929. Dec. 12, 1979, to Sept. 30, 1982, discharge measurements only were made at old State Highway 71 bridge, 1.0 mi downstream and at different datum. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in 1988, at least 10% of contributing drainage area has been regulated. At times, low-flow releases from Lake Travis are made for generation of electric power and to fulfill downstream water contracts. There are many diversions above station for irrigation and municipal supply.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes, and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, about 56.7 ft on July 9, 1869 (from marble high-water marker in LaGrange). Stages of other floods are as follows: Dec. 5, 1913, 56.4 ft, from floodmark; June 17, 1935, 50.84 ft, from floodmarks (discharge 255,000 ft^3/s from rating curve extended above 200,000 ft^3/s); July 27, 1938, 42.95 ft (discharge, 200,000 ft^3/s). These data were collected at a site 2.6 mi downstream at streamflow station and published as Colorado River at La Grange at datum different than at present site.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	874	536	524	460	541	1,430	844	1,890	1,910	13,400	1,500	1,590
2	935	539	527	413	501	1,170	933	2,310	2,100	12,400	1,340	1,540
3	983	527	537	474	498	919	1,750	2,720	1,730	7,600	1,230	1,530
4	1,080	460	533	475	490	927	1,020	2,130	1,880	6,170	1,180	1,490
5	1,060	433	522	474	532	1,030	1,000	1,980	2,440	5,580	1,150	1,420
6	1,110	439	522	463	534	1,040	941	1,970	2,760	4,970	1,120	1,430
7	1,140	421	530	454	871	1,100	1,100	1,980	3,030	4,610	1,100	1,420
8	1,210	429	514	461	731	881	3,430	1,830	3,150	4,350	1,100	1,440
9	1,150	462	515	455	599	888	1,570	1,820	3,350	3,040	1,150	1,430
10	1,120	368	502	485	2,040	808	1,060	2,040	13,500	2,770	1,220	1,410
11	1,050	401	509	481	4,790	791	1,120	2,330	22,400	2,490	1,310	1,440
12	1,120	435	505	472	5,700	840	1,420	2,270	22,900	2,510	1,360	1,490
13	887	440	516	469	3,940	843	1,660	2,420	19,100	2,390	1,520	1,490
14	817	428	496	477	1,890	959	1,400	4,300	19,100	2,400	1,630	1,700
15	772	424	526	527	1,350	1,430	1,120	3,360	16,800	2,270	1,680	1,490
16	722	440	533	587	1,130	1,100	928	2,810	12,300	1,990	1,640	2,060
17	722	495	500	949	1,010	951	827	2,360	8,880	1,780	1,670	1,940
18	682	533	466	2,240	896	951	783	2,280	6,600	1,650	1,650	1,850
19	559	524	461	1,950	822	885	749	2,160	4,990	1,620	1,670	1,780
20	427	929	456	1,030	799	817	738	2,120	4,800	1,570	1,650	1,750
21	413	743	453	781	754	860	683	2,140	4,750	1,520	2,380	1,720
22	398	628	469	742	720	999	664	2,180	4,700	1,430	2,850	1,700
23	391	595	486	737	716	1,030	659	2,510	4,610	1,410	3,160	1,640
24	375	571	494	1,040	746	778	1,000	1,910	5,560	1,390	2,530	1,690
25	416	567	478	2,630	813	826	1,900	1,680	5,100	1,400	3,520	1,620
26	522	566	464	1,060	1,270	873	2,530	1,700	6,420	1,380	2,120	1,370
27	557	551	461	843	1,070	1,080	1,560	1,680	7,350	1,620	1,940	1,310
28	535	541	491	698	877	969	1,350	1,710	8,330	1,570	1,940	1,290
29	528	537	513	623	807	904	1,310	1,810	6,790	1,410	1,810	1,340
30	535	528	506	594	---	925	1,550	1,710	10,600	1,370	1,620	1,170
31	542	---	505	580	---	883	---	1,840	---	1,720	1,650	---
TOTAL	23,632	15,490	15,514	24,124	37,437	29,887	37,599	67,950	237,930	101,780	53,390	46,540
MEAN	762	516	500	778	1,291	964	1,253	2,192	7,931	3,283	1,722	1,551
MAX	1,210	929	537	2,630	5,700	1,430	3,430	4,300	22,900	13,400	3,520	2,060
MIN	375	368	453	413	490	778	659	1,680	1,730	1,370	1,100	1,170
AC-FT	46,870	30,720	30,770	47,850	74,260	59,280	74,580	134,800	471,900	201,900	105,900	92,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1,811	1,383	2,360	2,533	3,540	3,492	2,577	3,096	4,252	3,362	1,705	1,616
MAX	10,510	4,762	16,350	18,640	31,160	18,080	7,333	8,290	15,180	13,280	2,293	2,541
(WY)	(1999)	(1999)	(1992)	(1992)	(1992)	(1992)	(1997)	(1992)	(1997)	(2002)	(2002)	(2001)
MIN	476	244	248	247	356	380	984	1,771	1,453	1,379	1,177	939
(WY)	(1997)	(1989)	(1990)	(1990)	(1990)	(2000)	(2000)	(2000)	(2001)	(2001)	(2000)	(1999)

08160400 Colorado River above LaGrange, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	759,756		691,273			
ANNUAL MEAN	2,082		1,889		2,662	
HIGHEST ANNUAL MEAN					9,913	1992
LOWEST ANNUAL MEAN					930	2000
HIGHEST DAILY MEAN	45,000	Feb 22	22,900	Jun 12	84,000	Dec 23, 1991
LOWEST DAILY MEAN	368	Nov 10	368	Nov 10	167	Dec 21, 1989
ANNUAL SEVEN-DAY MINIMUM	419	Nov 10	419	Nov 10	170	Dec 16, 1989
MAXIMUM PEAK FLOW			26,600	Jun 12	89,800	Oct 20, 1998
MAXIMUM PEAK STAGE			22.77	Jun 12	p45.47	Oct 20, 1998
ANNUAL RUNOFF (AC-FT)	1,507,000		1,371,000		1,928,000	
10 PERCENT EXCEEDS	2,680		3,350		4,720	
50 PERCENT EXCEEDS	1,580		1,120		1,480	
90 PERCENT EXCEEDS	506		475		402	

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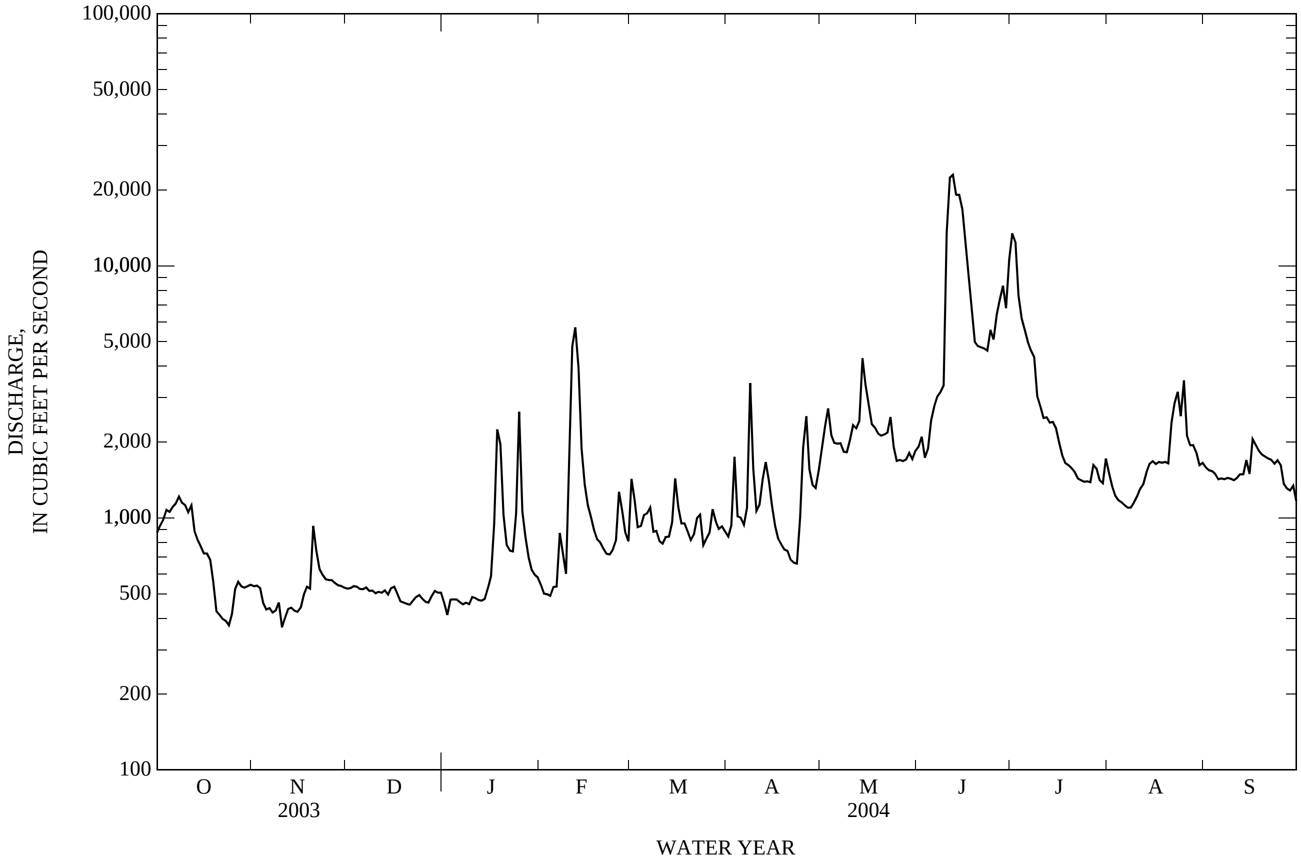


08160800 Redgate Creek near Columbus, TX

LOCATION.--Lat 29°47'56", long 96°31'55", Colorado County, Hydrologic Unit 12090301, on left bank at downstream side of bridge on Farm Road 109, 1.9 mi upstream from Cummins Creek, and 7.0 mi north of Columbus.

DRAINAGE AREA.--17.3 mi^2.

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

REVISED RECORDS.--WSP 2122: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 210.82 ft above NGVD of 1929. Prior to Oct. 1, 1975, datum 10.00 ft higher. Satellite telemeter at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1860, about 33.4 ft in late June or early July 1940, from information by Texas Department of Transportation and local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

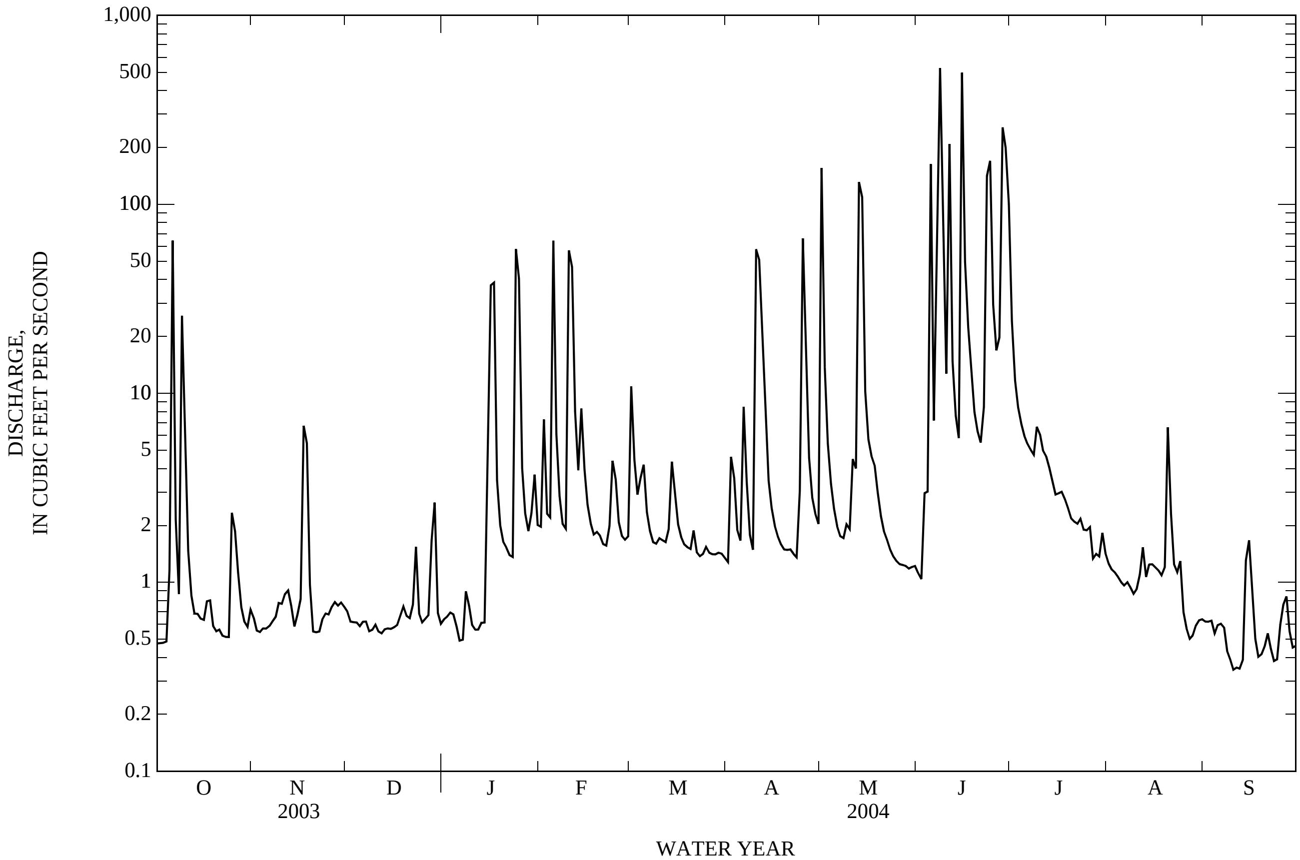
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.47	0.65	0.70	0.64	2.0	11	1.3	155	1.1	24	1.3	0.62
2	0.48	0.55	0.62	0.66	7.3	4.4	4.6	14	1.0	12	1.2	0.62
3	0.48	0.55	0.61	0.69	2.3	2.9	3.5	5.4	3.0	8.4	1.1	0.63
4	0.49	0.57	0.61	0.68	2.2	3.6	1.9	3.3	3.0	6.9	1.1	0.54
5	1.2	0.57	0.59	0.58	64	4.2	1.7	2.4	163	6.0	1.0	0.59
6	64	0.59	0.62	0.49	6.1	2.3	8.5	2.0	7.2	5.4	0.96	0.60
7	2.1	0.62	0.62	0.50	2.9	1.9	3.4	1.8	115	5.0	1.0	0.58
8	0.87	0.66	0.55	0.89	2.0	1.6	1.8	1.7	526	4.7	0.94	0.43
9	26	0.78	0.56	0.75	1.9	1.6	1.5	2.0	45	6.6	0.87	0.39
10	6.8	0.77	0.60	0.59	57	1.7	58	1.9	13	6.1	0.92	0.34
11	1.5	0.86	0.55	0.56	47	1.7	51	4.5	209	5.0	1.1	0.35
12	0.85	0.90	0.54	0.56	8.0	1.6	14	4.0	15	4.6	1.5	0.35
13	0.68	0.75	0.56	0.61	3.9	1.9	6.4	131	7.6	4.0	1.1	0.39
14	0.68	0.58	0.57	0.61	8.3	4.3	3.4	109	5.8	3.4	1.2	1.3
15	0.64	0.67	0.57	5.0	3.9	3.0	2.5	10	497	2.9	1.2	1.7
16	0.63	0.82	0.58	37	2.6	2.0	2.0	5.7	50	3.0	1.2	0.90
17	0.79	6.7	0.59	38	2.0	1.7	1.7	4.7	22	3.0	1.2	0.50
18	0.80	5.4	0.67	3.5	1.8	1.6	1.6	4.2	13	2.8	1.1	0.40
19	0.59	0.97	0.74	2.0	1.8	1.5	1.5	3.0	7.9	2.5	1.2	0.42
20	0.55	0.55	0.66	1.6	1.8	1.5	1.5	2.2	6.3	2.2	6.6	0.46
21	0.56	0.54	0.64	1.5	1.6	1.9	1.5	1.9	5.5	2.1	2.3	0.54
22	0.52	0.55	0.76	1.4	1.6	1.4	1.4	1.7	8.5	2.0	1.2	0.45
23	0.51	0.64	1.5	1.4	2.0	1.4	1.4	1.5	141	2.2	1.1	0.38
24	0.51	0.68	0.68	58	4.4	1.4	3.1	1.4	170	1.9	1.3	0.39
25	2.3	0.68	0.61	41	3.5	1.5	66	1.3	29	1.9	0.69	0.59
26	1.9	0.74	0.64	4.0	2.1	1.4	12	1.2	17	2.0	0.57	0.76
27	1.1	0.79	0.67	2.3	1.8	1.4	4.6	1.2	20	1.3	0.50	0.84
28	0.74	0.75	1.7	1.9	1.7	1.4	2.8	1.2	255	1.4	0.52	0.55
29	0.62	0.78	2.6	2.3	1.7	1.4	2.3	1.2	199	1.4	0.59	0.45
30	0.58	0.74	0.69	3.7	---	1.4	2.0	1.2	100	1.8	0.63	0.46
31	0.72	---	0.60	2.0	---	1.3	---	1.2	---	1.4	0.64	---
TOTAL	120.66	31.40	23.20	215.41	249.2	71.9	268.9	482.8	2,655.9	137.9	37.83	17.52
MEAN	3.89	1.05	0.75	6.95	8.59	2.32	8.96	15.6	88.5	4.45	1.22	0.58
MAX	64	6.7	2.6	58	64	11	66	155	526	24	6.6	1.7
MIN	0.47	0.54	0.54	0.49	1.6	1.3	1.3	1.2	1.0	1.3	0.50	0.34
AC-FT	239	62	46	427	494	143	533	958	5,270	274	75	35
CFSM	0.22	0.06	0.04	0.40	0.50	0.13	0.52	0.90	5.12	0.26	0.07	0.03
IN.	0.26	0.07	0.05	0.46	0.54	0.15	0.58	1.04	5.71	0.30	0.08	0.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	6.43	5.37	5.17	6.50	7.71	6.30	6.98	11.1	10.8	1.17	1.16	3.06
MAX	69.3	98.4	26.6	31.9	67.5	38.1	39.9	55.5	88.5	4.45	17.4	38.5
(WY)	(1999)	(1999)	(2003)	(1974)	(1992)	(1973)	(1991)	(1979)	(2004)	(2004)	(1974)	(1974)
MIN	0.00	0.07	0.25	0.24	0.21	0.19	0.24	0.33	0.07	0.01	0.00	0.04
(WY)	(1964)	(1967)	(1967)	(1967)	(1967)	(1967)	(1971)	(1971)	(1990)	(1971)	(1970)	(1965)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	1,199.54		4,312.62			
ANNUAL MEAN	3.29		11.8		6.00	
HIGHEST ANNUAL MEAN					20.7	1992
LOWEST ANNUAL MEAN					0.82	1964
HIGHEST DAILY MEAN	136	Feb 25	526	Jun 8	1,180	Jun 13, 1973
LOWEST DAILY MEAN	0.11	Aug 7	0.34	Sep 10	0.00	Aug 7, 1962
ANNUAL SEVEN-DAY MINIMUM	0.15	Aug 5	0.40	Sep 7	0.00	Aug 7, 1962
MAXIMUM PEAK FLOW			2,810	Jun 15	5,360	May 22, 1979
MAXIMUM PEAK STAGE			21.28	Jun 15	27.19	May 22, 1979
ANNUAL RUNOFF (AC-FT)	2,380		8,550		4,340	
ANNUAL RUNOFF (CFSM)	0.190		0.681		0.347	
ANNUAL RUNOFF (INCHES)	2.58		9.27		4.71	
10 PERCENT EXCEEDS	4.5		13		5.2	
50 PERCENT EXCEEDS	0.81		1.5		0.90	
90 PERCENT EXCEEDS	0.42		0.55		0.10	

08160800 Redgate Creek near Columbus, TX—Continued



08161000 Colorado River at Columbus, TX

LOCATION.--Lat 29°42'22", long 96°32'12", Colorado County, Hydrologic Unit 12090301, near right bank at downstream side of pier of bridge on U.S. Highway 90 at eastern edge of Columbus, 340 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.6 mi downstream from Cummins Creek, and at mile 135.1.

DRAINAGE AREA.--41,640 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--Jan. 1903 to Dec. 1911 (gage heights only), May 1916 to current year. Discharge records for 1902-11, published in WSP 84, 99, 132, 174, 210, 288, and 308, have been found to be unreliable and should not be used. Records collected at site 23 mi downstream Oct. 1930 to May 1939, published as "near Eagle Lake". Gage-height records collected in this vicinity since 1903 are contained in reports of the National Weather Service. Water-quality records: Chemical data: Oct. 1967 to Sept. 1981. Biochemical data: Feb. 1968 to Sept. 1981. Sediment data: Mar. 1957 to Sept. 1973.

REVISED RECORDS.--WSP 1562: 1920-21(M), 1922. WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 145.52 ft above NGVD of 1929. Prior to May 1, 1919, various nonrecording gages at sites in the immediate vicinity at datum 7.00 ft higher. May 1, 1919, to Nov. 23, 1930, water-stage recorder at site about 300 ft downstream at datum 7.00 ft higher. Sept. 17, 1930, to June 12, 1939 (Oct. 1, 1930, to May 31, 1939, used herein), water-stage recorder at site 23 mi downstream at different datum. May 17 to Nov. 14, 1939, nonrecording gage at present site and datum 10.00 ft higher; Nov. 15, 1939, to Dec. 31, 1988, water-stage recorder at present site and at datum 10.00 ft higher. Gage-height telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in May 1916, at least 10% of contributing drainage area has been regulated. There are many other diversions above this station for irrigation and municipal supply. Low-flow releases from Lake Travis (1,144,100 acre-ft) 251 mi upstream, are made for the generation of electric power to fulfill downstream water contracts.

COOPERATION.--Lower Colorado River Authority provides operation and maintenance of the gage and verification of stage-discharge relation at low stages. U.S. Geological Survey maintains stage-discharge relation at medium to high stages, computes, and publishes streamflow record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1852, 51.6 ft, present datum, in July 1869 and Dec. 6, 1913, from information by local resident. River divided each time and left city of Columbus on an island.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

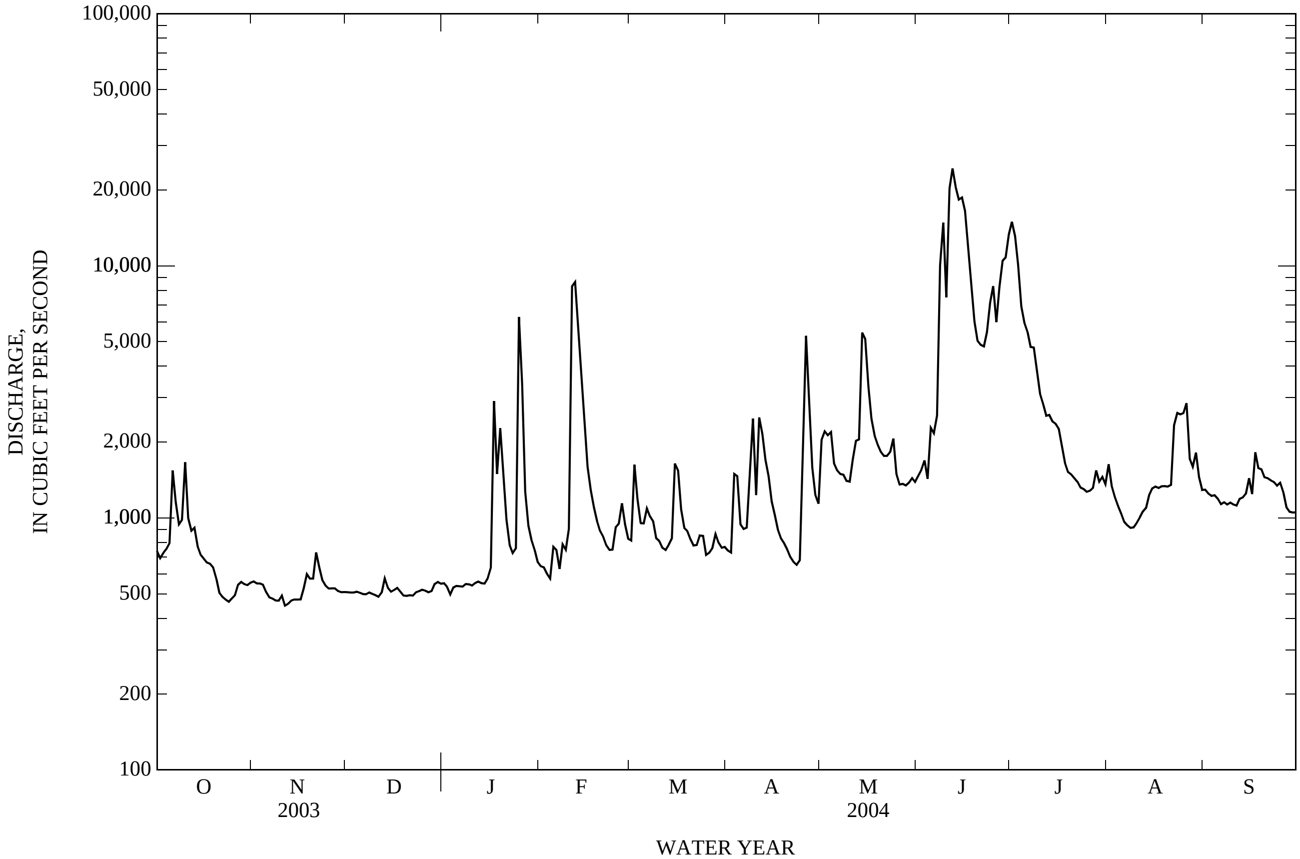
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	740	560	507	551	643	813	741	2,040	1,470	15,000	1,630	1,300
2	693	550	506	532	636	1,630	729	2,210	1,550	13,100	1,340	1,250
3	725	549	506	497	599	1,190	1,490	2,130	1,690	10,100	1,210	1,220
4	753	542	510	530	574	953	1,460	2,190	1,430	6,890	1,120	1,230
5	794	507	505	537	769	951	942	1,650	2,280	5,950	1,040	1,190
6	1,540	483	499	536	747	1,090	904	1,540	2,160	5,460	967	1,130
7	1,160	479	498	534	627	1,020	914	1,490	2,540	4,760	934	1,150
8	943	471	506	547	785	970	1,430	1,480	10,100	4,740	913	1,130
9	983	469	499	545	748	830	2,480	1,400	14,800	3,870	918	1,150
10	1,660	492	494	539	903	809	1,230	1,390	7,500	3,110	954	1,130
11	999	449	486	551	8,290	762	2,500	1,700	20,300	2,840	1,000	1,120
12	890	457	506	559	8,630	746	2,150	2,020	24,300	2,540	1,060	1,190
13	915	470	576	551	5,850	781	1,700	2,050	20,500	2,560	1,100	1,210
14	772	475	528	549	3,720	828	1,460	5,430	18,300	2,410	1,230	1,250
15	715	474	510	577	2,430	1,640	1,160	5,130	18,700	2,360	1,310	1,440
16	689	475	518	632	1,590	1,540	1,020	3,320	16,500	2,260	1,330	1,240
17	665	525	528	2,900	1,290	1,080	899	2,470	11,900	1,940	1,310	1,820
18	657	599	510	1,500	1,110	912	828	2,120	8,470	1,650	1,330	1,570
19	637	574	492	2,270	974	887	794	1,960	6,010	1,520	1,340	1,560
20	575	575	491	1,520	889	821	749	1,830	5,050	1,490	1,330	1,450
21	505	729	493	982	841	777	700	1,760	4,860	1,440	1,350	1,440
22	486	635	492	781	780	781	669	1,760	4,790	1,390	2,330	1,410
23	475	567	507	726	746	852	651	1,820	5,450	1,320	2,610	1,390
24	465	539	512	759	749	849	680	2,060	7,140	1,300	2,570	1,340
25	479	525	519	6,270	917	714	2,140	1,500	8,300	1,270	2,600	1,380
26	494	526	514	3,380	946	728	5,270	1,360	5,980	1,280	2,850	1,270
27	543	526	507	1,270	1,140	758	2,700	1,360	8,220	1,320	1,720	1,100
28	558	512	513	933	945	864	1,580	1,340	10,500	1,540	1,600	1,060
29	546	508	547	819	827	798	1,240	1,380	10,800	1,390	1,810	1,050
30	541	508	557	748	---	762	1,140	1,440	13,300	1,450	1,450	1,050
31	553	---	548	669	---	767	---	1,390	---	1,360	1,290	---
TOTAL	23,150	15,750	15,884	34,294	49,695	28,903	42,350	62,720	274,890	109,610	45,546	38,220
MEAN	747	525	512	1,106	1,714	932	1,412	2,023	9,163	3,536	1,469	1,274
MAX	1,660	729	576	6,270	8,630	1,640	5,270	5,430	24,300	15,000	2,850	1,820
MIN	465	449	486	497	574	714	651	1,340	1,430	1,270	913	1,050
AC-FT	45,920	31,240	31,510	68,020	98,570	57,330	84,000	124,400	545,200	217,400	90,340	75,810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2,955	2,370	2,157	2,354	2,686	2,541	3,436	5,274	5,219	3,359	1,923	2,825
MAX	25,310	13,360	16,450	19,800	33,800	20,220	17,350	40,630	30,060	25,710	10,030	32,690
(WY)	(1937)	(1975)	(1992)	(1992)	(1992)	(1992)	(1922)	(1922)	(1935)	(1938)	(1938)	(1936)
MIN	204	197	162	182	203	275	308	1,257	574	569	128	347
(WY)	(1935)	(1918)	(1964)	(1964)	(1967)	(1952)	(1925)	(1937)	(1934)	(1933)	(1917)	(1934)

08161000 Colorado River at Columbus, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1916 - 2004	
ANNUAL TOTAL	826,141		741,012			
ANNUAL MEAN	2,263		2,025		3,100	
HIGHEST ANNUAL MEAN					10,810	1992
LOWEST ANNUAL MEAN					653	1917
HIGHEST DAILY MEAN	49,400	Feb 22	24,300	Jun 12	164,000	Jun 19, 1935
LOWEST DAILY MEAN	449	Nov 11	449	Nov 11	93	Sep 1, 1918
ANNUAL SEVEN-DAY MINIMUM	469	Nov 8	469	Nov 8	106	Aug 22, 1917
MAXIMUM PEAK FLOW			25,200	Jun 12	190,000	Jun 18, 1935
MAXIMUM PEAK STAGE			27.09	Jun 12	48.50	Jun 18, 1935
ANNUAL RUNOFF (AC-FT)	1,639,000		1,470,000		2,246,000	
10 PERCENT EXCEEDS	3,050		4,770		5,930	
50 PERCENT EXCEEDS	1,680		1,070		1,620	
90 PERCENT EXCEEDS	508		508		406	



08162000 Colorado River at Wharton, TX

LOCATION.--Lat 29°18'32", long 96°06'13", Wharton County, Hydrologic Unit 12090302, near left bank at downstream side of downstream bridge on U.S. Highway 59 in Wharton, 1,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 12 mi upstream from Jones Creek, and at mile 66.6.

DRAINAGE AREA.--42,003 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--July 1916 to Aug. 1918 (intermittent periods), Mar. 1919 to Sept. 1925 and July and Aug. 1938 (flood discharge measurements only), Oct. 1938 to current year. June to Nov. 1901, May to Sept. 1902, daily records published in U.S. Department of Agriculture, Office of Experiment Stations, Bulletin Nos. 119 and 133. Gage-height records collected in this vicinity since 1935 are contained in reports of the National Weather Service. Water-quality records: Chemical data: Apr. 1944 to Sept. 1995. Biochemical data: Jan. 1968 to Sept. 1995. Radiochemical data: Dec. 1973 to Sept. 1995. Pesticide data: Oct. 1967 to June 1982. Sediment data: Oct. 1974 to Sept. 1995.

REVISED RECORDS.--WSP 878: 1938(M). WDR TX-81-3: Drainage area. WDR TX-88-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is 52.42 ft above NGVD of 1929. Prior to Oct. 1, 1938, various types of recording and nonrecording gages 800 ft upstream at different datum. Oct. 1, 1938, to June 1, 1956, nonrecording gage 100 ft upstream at datum 13.00 ft higher. June 1, 1966, to Sept. 30, 1975, water-stage recorder at present site at datum 13.00 ft higher. Oct. 1, 1975, to Mar. 1, 1983, water-stage recorder at present site at datum 10.00 ft higher. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Oct. 1938, at least 10% of contributing drainage area has been regulated. There are many diversions above station for irrigation, municipal supply, cooling water for thermal-electric power plant, and oil field operations.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1869, 51.9 ft Dec. 8, 1913, present datum, from information by local residents; below Wharton floodwater combined with that of the Brazos River. Flood of about July 12, 1869, reached about same height. Flood of June 20, 1935, reached a stage of 51.2 ft, present datum, furnished by National Weather Service (discharge, 159,000 ft^3/s), from rating curve defined by current-meter measurements below 145,000 ft^3/s. Flood of July 30, 1938, reached a stage of 50.4 ft, present datum, observed by U.S. Geological Survey personnel (discharge, 145,000 ft^3/s).

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

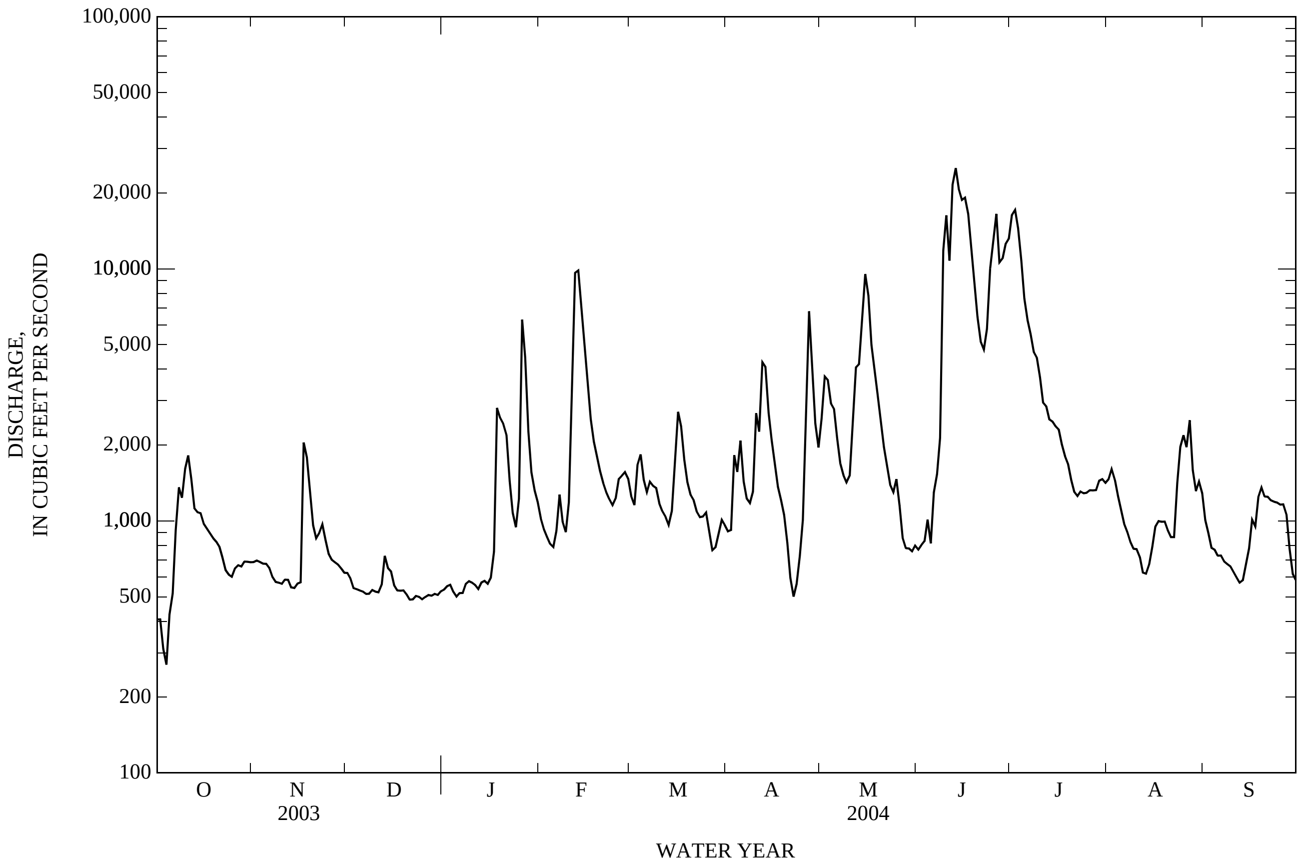
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	686	622	534	1,020	1,250	909	2,540	769	16,400	1,460	1,010
2	407	696	590	550	927	1,150	919	3,740	802	17,100	1,610	892
3	311	686	541	558	864	1,660	1,820	3,620	831	14,500	1,460	782
4	269	677	535	523	811	1,830	1,560	2,920	1,010	10,800	1,260	769
5	425	675	529	501	788	1,460	2,080	2,770	814	7,610	1,110	728
6	515	650	524	517	912	1,300	1,430	2,110	1,300	6,260	975	729
7	922	599	513	518	1,270	1,430	1,230	1,690	1,530	5,510	903	690
8	1,360	573	514	562	994	1,380	1,180	1,520	2,130	4,670	827	675
9	1,240	569	532	576	903	1,350	1,310	1,420	11,800	4,440	775	660
10	1,610	563	524	569	1,190	1,170	2,670	1,510	16,300	3,700	773	628
11	1,820	585	521	557	2,810	1,090	2,260	2,500	10,800	2,950	720	596
12	1,460	584	559	536	9,630	1,040	4,260	4,070	21,500	2,850	623	569
13	1,120	545	727	570	9,840	966	4,080	4,190	25,100	2,530	617	581
14	1,080	542	651	578	7,010	1,100	2,680	6,200	20,700	2,480	670	673
15	1,070	564	631	563	4,770	1,680	2,090	9,530	18,700	2,370	789	779
16	972	570	555	594	3,400	2,710	1,700	7,820	19,100	2,300	950	1,010
17	932	2,040	530	755	2,530	2,370	1,370	4,980	16,500	2,020	998	951
18	892	1,790	528	2,810	2,070	1,740	1,210	3,880	12,700	1,810	992	1,240
19	855	1,300	530	2,560	1,810	1,430	1,060	3,150	9,160	1,680	994	1,360
20	826	961	510	2,430	1,580	1,270	818	2,430	6,430	1,450	918	1,250
21	791	853	487	2,200	1,410	1,210	594	1,960	5,150	1,300	862	1,250
22	712	898	488	1,440	1,300	1,090	501	1,630	4,790	1,260	863	1,210
23	637	968	504	1,080	1,220	1,040	562	1,390	5,770	1,310	1,410	1,190
24	612	838	499	944	1,150	1,040	726	1,300	10,000	1,290	1,970	1,180
25	600	741	488	1,220	1,230	1,080	1,010	1,460	12,900	1,290	2,190	1,160
26	649	700	499	6,280	1,470	900	2,130	1,140	16,500	1,320	1,960	1,160
27	667	686	508	4,440	1,510	765	6,780	858	10,600	1,320	2,510	1,060
28	659	671	505	2,260	1,560	787	3,960	779	11,000	1,330	1,590	778
29	690	649	514	1,560	1,470	892	2,430	777	12,600	1,440	1,310	617
30	689	623	508	1,320	---	1,010	1,960	758	13,200	1,460	1,430	583
31	686	---	525	1,190	---	963	---	798	---	1,410	1,290	---
TOTAL	25,884	23,482	16,691	41,295	67,449	40,153	57,289	85,440	300,486	128,160	36,809	26,760
MEAN	835	783	538	1,332	2,326	1,295	1,910	2,756	10,020	4,134	1,187	892
MAX	1,820	2,040	727	6,280	9,840	2,710	6,780	9,530	25,100	17,100	2,510	1,360
MIN	269	542	487	501	788	765	501	758	769	1,260	617	569
AC-FT	51,340	46,580	33,110	81,910	133,800	79,640	113,600	169,500	596,000	254,200	73,010	53,080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2,283	2,503	2,321	2,506	2,995	2,790	3,023	3,988	4,642	2,666	1,360	1,858
MAX	14,590	13,870	15,060	21,810	35,520	21,550	13,730	27,300	30,910	15,010	3,916	9,394
(WY)	(1999)	(1975)	(1992)	(1992)	(1992)	(1992)	(1977)	(1957)	(1987)	(1997)	(1945)	(1961)
MIN	296	220	253	224	268	328	566	825	838	706	406	436
(WY)	(1957)	(1957)	(1990)	(1964)	(1967)	(1952)	(1951)	(1962)	(1948)	(1967)	(1964)	(1954)

08162000 Colorado River at Wharton, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1939 - 2004	
ANNUAL TOTAL	824,878		849,898			
ANNUAL MEAN	2,260		2,322		2,740	
HIGHEST ANNUAL MEAN					11,120	1992
LOWEST ANNUAL MEAN					615	1964
HIGHEST DAILY MEAN	42,700	Feb 24	25,100	Jun 13	90,600	Jul 3, 1940
LOWEST DAILY MEAN	269	Oct 4	269	Oct 4	42	Aug 22, 1964
ANNUAL SEVEN-DAY MINIMUM	419	Sep 30	465	Oct 1	110	Dec 11, 1956
MAXIMUM PEAK FLOW			25,600	Jun 13	100,000	Jul 3, 1940
MAXIMUM PEAK STAGE			29.26	Jun 13	48.99	Jul 3, 1940
ANNUAL RUNOFF (AC-FT)	1,636,000		1,686,000		1,985,000	
10 PERCENT EXCEEDS	3,430		5,030		5,490	
50 PERCENT EXCEEDS	1,360		1,130		1,320	
90 PERCENT EXCEEDS	561		540		476	



08162500 Colorado River near Bay City, TX

LOCATION.--Lat 28°58'26", long 96°00'44", Matagorda County, Hydrologic Unit 12090302, on left bank, 6,300 ft downstream from upstream bridge on State Highway 35, 7,100 ft downstream from Texas and New Orleans Railroad Co. bridge, 2.8 mi west of Bay City, and at mile 32.5.

DRAINAGE AREA.--42,240 mi^2 of which 11,403 mi^2 probably is noncontributing.

PERIOD OF RECORD.--July 1940 published in WSP 1046, Apr. 1948 to current year. Records of elevation collected in this vicinity since 1946 are contained in reports of the National Weather Service. Water-quality records: Chemical data: Oct. 1974 to Sept. 1975. Biochemical data: Oct. 1974 to Sept. 1975.

REVISED RECORDS.--WDR TX-81-3: Drainage area. WDR TX-88-3: 1985.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. July 2-6, 1940, nonrecording gage at highway bridge, 6,300 ft upstream at datum 30.60 ft lower. On Feb. 19, 1992, gage was temporarily moved 6,200 ft upstream at same datum. Gage re-established on left bank 6,300 ft downstream on May 12, 1993. Radio telemeter at station. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Apr. 1948, at least 10% of contributing drainage area has been regulated. There are many other diversions above this station for irrigation and municipal supply. No flow at times in 1951-53, 1956 and 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation since 1869, 56.1 ft Dec. 10, 1913. Flood in July 1869 probably reached about same elevation. Elevation of other floods are as follows: May 8, 1922, 55.4 ft; June 1929, 55.0 ft; June 22, 1935, 54.6 ft; Oct. 5, 1936, 52.2 ft; Aug. 2, 1938, 53.4 ft; Nov. 27, 1940, 47.6 ft. All above flood data from information by Texas and New Orleans Railroad Co. and adjusted to present site.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

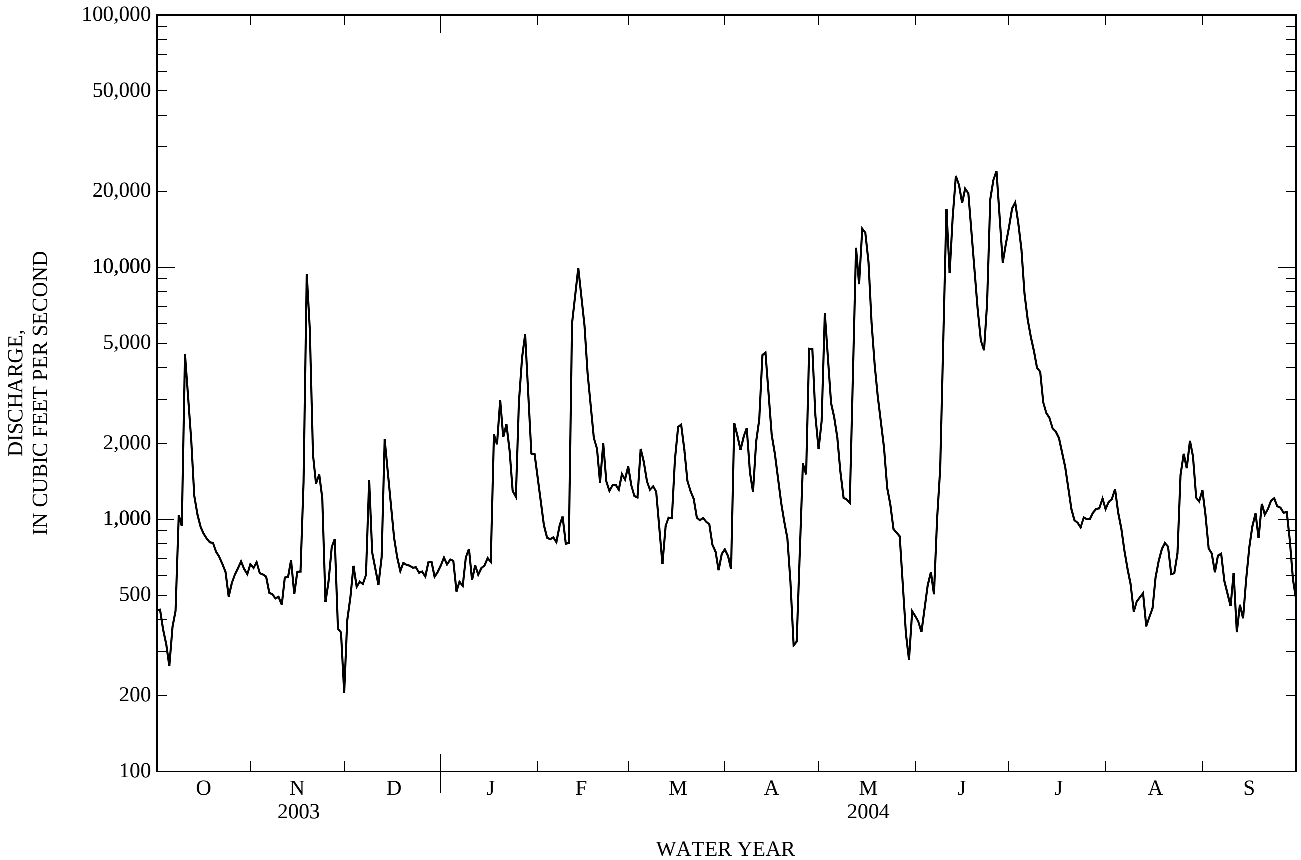
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	642	398	705	1,190	1,370	716	2,450	392	17,000	1,170	1,040
2	438	676	492	662	949	1,240	635	6,570	358	18,000	1,200	766
3	366	610	654	693	846	1,220	2,400	4,290	451	15,000	1,310	733
4	319	604	540	684	833	1,900	2,150	2,890	548	11,700	1,070	615
5	262	593	566	517	848	1,700	1,890	2,550	617	7,850	919	718
6	374	511	554	565	812	1,420	2,130	2,110	504	6,190	754	731
7	433	504	600	545	941	1,310	2,300	1,550	1,010	5,310	635	569
8	1,040	485	1,430	704	1,020	1,350	1,530	1,220	1,590	4,650	554	511
9	941	493	739	762	800	1,290	1,280	1,200	6,480	3,990	429	453
10	4,520	459	632	575	805	936	2,040	1,160	17,000	3,850	472	612
11	3,090	588	550	658	5,980	665	2,480	3,990	9,470	2,920	491	357
12	2,060	590	707	603	7,680	940	4,480	11,900	15,800	2,630	508	458
13	1,240	689	2,070	641	9,940	1,010	4,580	8,560	23,000	2,530	376	405
14	1,040	505	1,520	655	7,770	1,010	3,060	14,200	21,300	2,290	408	575
15	937	620	1,130	701	5,870	1,720	2,160	13,700	18,000	2,230	442	775
16	876	620	843	678	3,810	2,320	1,810	10,500	20,500	2,110	588	938
17	838	1,400	708	2,180	2,850	2,370	1,470	6,030	19,600	1,850	685	1,050
18	810	9,400	623	1,980	2,110	1,890	1,160	4,070	14,000	1,610	760	842
19	807	5,690	671	2,970	1,910	1,420	982	3,070	9,620	1,320	805	1,150
20	743	1,800	659	2,120	1,400	1,290	839	2,390	6,830	1,100	779	1,040
21	710	1,380	655	2,380	2,000	1,210	566	1,920	5,130	991	605	1,100
22	665	1,500	642	1,870	1,420	1,020	316	1,330	4,680	969	611	1,180
23	620	1,210	645	1,290	1,300	991	327	1,150	7,170	928	732	1,210
24	494	470	613	1,230	1,360	1,010	722	915	18,600	1,020	1,500	1,130
25	556	565	621	2,920	1,370	979	1,670	886	22,100	1,000	1,820	1,110
26	603	774	593	4,390	1,310	954	1,510	857	24,000	1,010	1,590	1,060
27	638	835	674	5,410	1,510	796	4,750	532	15,300	1,060	2,050	1,070
28	681	368	677	2,940	1,440	746	4,730	351	10,400	1,100	1,770	827
29	635	356	592	1,820	1,620	627	2,580	277	12,300	1,110	1,220	576
30	605	206	618	1,810	---	730	1,900	432	14,400	1,210	1,180	484
31	664	---	655	1,470	---	761	---	413	---	1,100	1,300	---
TOTAL	28,440	35,143	23,071	47,128	71,694	38,195	59,163	113,463	321,150	125,628	28,733	24,085
MEAN	917	1,171	744	1,520	2,472	1,232	1,972	3,660	10,700	4,053	927	803
MAX	4,520	9,400	2,070	5,410	9,940	2,370	4,750	14,200	24,000	18,000	2,050	1,210
MIN	262	206	398	517	800	627	316	277	358	928	376	357
AC-FT	56,410	69,710	45,760	93,480	142,200	75,760	117,300	225,100	637,000	249,200	56,990	47,770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2,496	2,519	2,361	2,587	3,248	2,810	2,764	3,751	4,391	1,901	848	1,789
MAX	16,110	13,470	16,200	25,780	42,200	25,780	13,410	27,750	30,360	14,240	2,876	11,160
(WY)	(1999)	(1975)	(1992)	(1992)	(1992)	(1992)	(1977)	(1957)	(1987)	(1997)	(1961)	(1961)
MIN	254	226	292	249	246	257	125	227	155	1.00	114	93.9
(WY)	(1990)	(1957)	(1990)	(1957)	(1967)	(1967)	(1964)	(1964)	(1971)	(1967)	(1964)	(1966)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1948 - 2004	
ANNUAL TOTAL	792,193		915,893			
ANNUAL MEAN	2,170		2,502		2,628	
HIGHEST ANNUAL MEAN					14,270	1992
LOWEST ANNUAL MEAN					375	1964
HIGHEST DAILY MEAN	44,500	Feb 24	24,000	Jun 26	79,300	Oct 23, 1998
LOWEST DAILY MEAN	115	May 25	206	Nov 30	0.00	Jun 1, 1951
ANNUAL SEVEN-DAY MINIMUM	214	May 21	375	Oct 1	0.44	Oct 4, 1969
MAXIMUM PEAK FLOW			25,300	Jun 26	84,100	Jun 26, 1960
MAXIMUM PEAK STAGE			24.38	Jun 26	46.40	Jun 26, 1960
ANNUAL RUNOFF (AC-FT)	1,571,000		1,817,000		1,904,000	
10 PERCENT EXCEEDS	4,470		6,080		5,820	
50 PERCENT EXCEEDS	1,140		1,040		928	
90 PERCENT EXCEEDS	494		494		250	

08162500 Colorado River near Bay City, TX—Continued



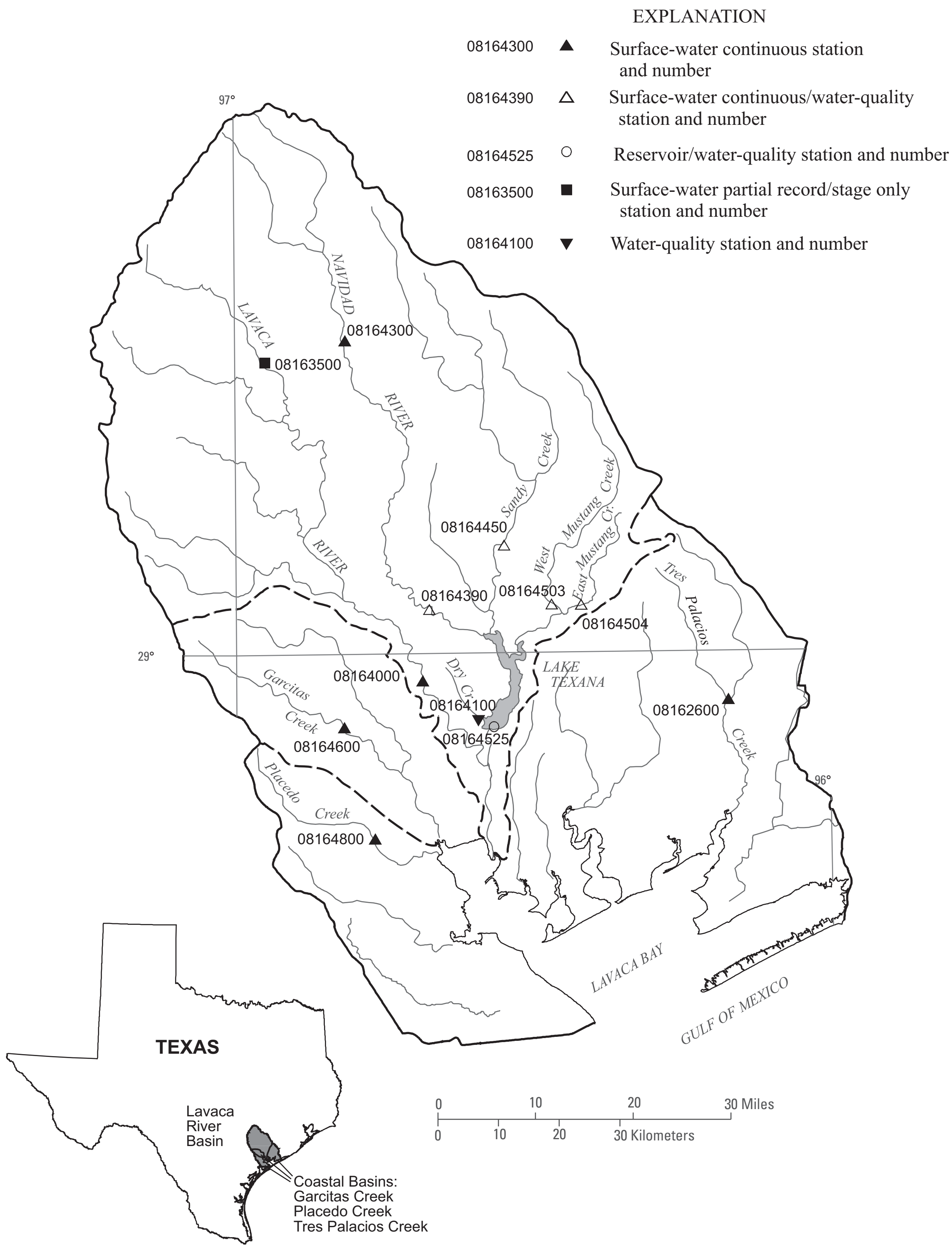


Figure 9.--Map showing location of gaging stations in the Lavaca and Coastal River Basins

08162600 Tres Palacios River near Midfield, TX

LOCATION.--Lat 28°55'40", long 96°10'15", Matagorda County, Hydrologic Unit 12100401, at left downstream end of bridge on Farm Road 456, 1.0 mi downstream from Juanita Creek, and 2.4 mi southeast of Midfield.

DRAINAGE AREA.--145 mi^2.

PERIOD OF RECORD.--June 1970 to current year. Prior to Oct. 1973, published as "Tres Palacios Creek near Midfield". Water-quality records: Chemical data: Oct. 1968 to Sept. 1981. Biochemical data: Oct. 1968 to Sept. 1981. Pesticide data: Oct. 1968 to Sept. 1981.

GAGE.--Water-stage recorder. Datum of gage is 5.38 ft above NGVD of 1929. Apr. 29, 1988 to Sept. 4, 1991, at right downstream end of bridge at same datum. Satellite telemeter at station.

REMARKS.--Records good. No known regulation. There are ten known diversions above station, but amounts are unknown. An undetermined amount of water from irrigated rice fields enters the river at various points upstream from station. Extensive channel cleaning upstream and downstream from the gage was begun during the 1983 water year and completed during the 1984 water year. Vegetation in the flood plain has increased in density in recent years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1885, 37 ft in June 1960, and 35 ft in Aug. 1945, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	31	15	15	80	27	21	274	25	1,320	24	46
2	15	28	15	14	47	24	27	1,470	26	535	23	22
3	15	17	14	14	37	20	316	621	27	215	23	17
4	14	14	14	13	31	19	294	211	25	108	20	15
5	14	13	13	12	28	19	128	101	27	72	18	26
6	31	12	12	11	30	20	610	57	29	58	17	77
7	31	11	12	11	30	20	1,260	39	28	42	19	36
8	20	10	14	18	23	19	409	140	186	30	21	22
9	22	10	15	27	20	22	152	176	914	26	18	16
10	443	9.8	14	22	175	22	90	103	350	37	18	13
11	475	9.8	14	21	1,510	20	89	1,290	134	212	22	11
12	193	9.7	25	18	978	18	468	5,330	68	129	33	12
13	94	9.4	1,290	14	315	19	292	4,210	39	67	38	15
14	55	9.1	695	14	412	27	127	6,830	29	42	30	17
15	36	9.6	204	13	385	103	67	5,070	30	31	26	22
16	27	14	100	21	153	138	41	2,710	1,270	27	22	36
17	24	302	48	642	79	68	33	1,010	2,800	26	18	36
18	e18	2,610	31	342	51	40	27	465	822	26	16	23
19	e16	1,690	24	113	41	29	24	219	246	23	15	17
20	e14	424	20	49	35	25	24	126	116	25	16	13
21	e12	164	18	39	31	22	29	81	71	27	16	11
22	13	87	17	30	31	20	30	61	92	34	19	12
23	14	55	18	23	54	18	28	48	2,330	48	18	13
24	15	39	16	19	47	18	117	41	4,410	41	17	10
25	17	34	16	797	67	18	216	35	4,290	31	19	11
26	37	27	15	739	45	18	197	33	2,540	32	18	10
27	63	22	14	201	36	20	103	34	964	31	14	9.6
28	46	20	14	82	29	22	49	30	461	31	13	9.9
29	27	17	16	61	28	18	33	27	237	32	15	9.8
30	17	16	18	246	---	18	27	32	872	31	75	10
31	16	---	17	161	---	24	---	27	---	28	72	---
TOTAL	1,851	5,724.4	2,768	3,802	4,828	915	5,328	30,901	23,458	3,417	733	598.3
MEAN	59.7	191	89.3	123	166	29.5	178	997	782	110	23.6	19.9
MAX	475	2,610	1,290	797	1,510	138	1,260	6,830	4,410	1,320	75	77
MIN	12	9.1	12	11	20	18	21	27	25	23	13	9.6
AC-FT	3,670	11,350	5,490	7,540	9,580	1,810	10,570	61,290	46,530	6,780	1,450	1,190

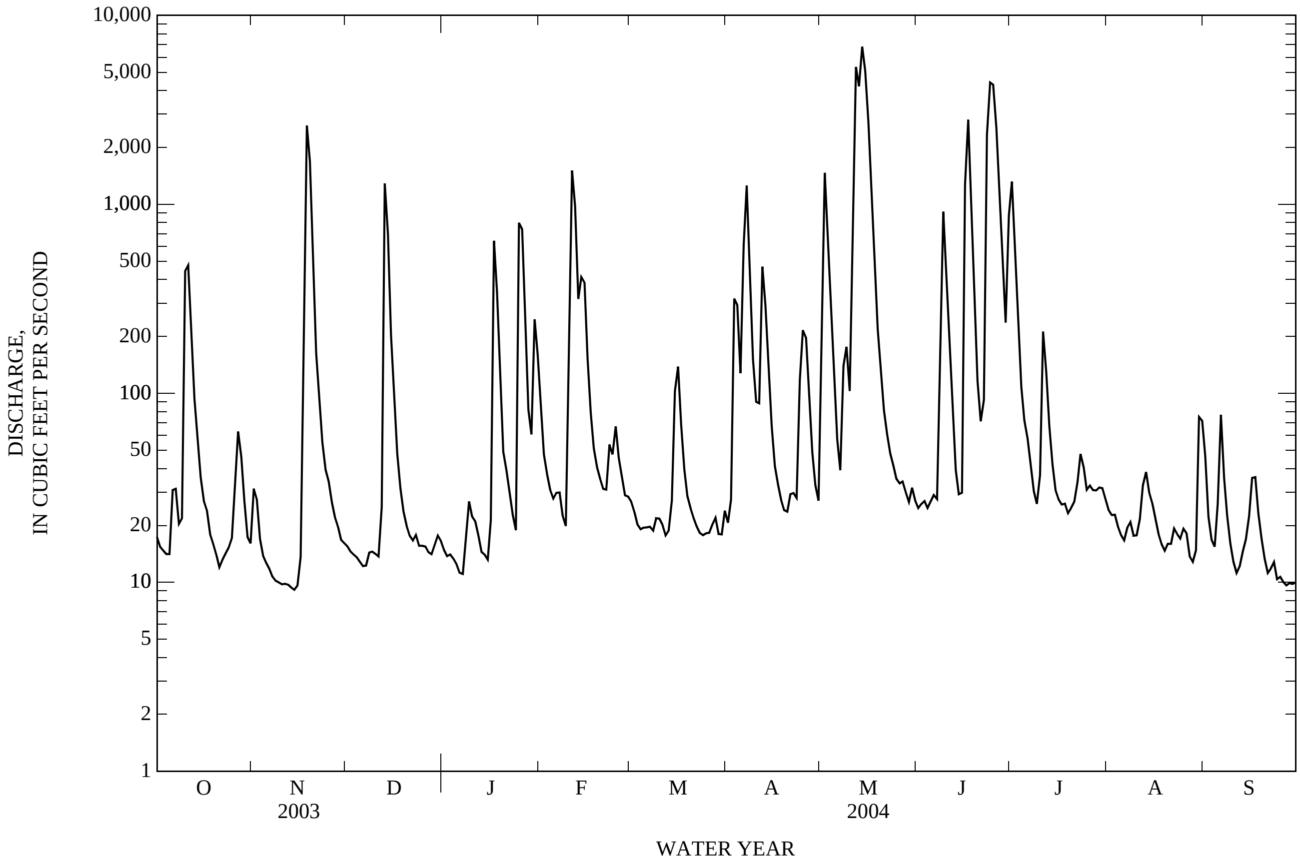
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	248	167	134	139	143	113	139	244	185	118	52.7	261
MAX	1,375	607	568	542	978	1,058	689	1,080	782	623	166	1,308
(WY)	(1985)	(2003)	(1992)	(1991)	(1992)	(1997)	(1997)	(1982)	(2004)	(1981)	(1998)	(1979)
MIN	8.43	3.66	5.29	4.83	6.66	7.79	10.4	14.4	10.4	11.1	9.95	6.45
(WY)	(2000)	(2000)	(2000)	(1971)	(1976)	(1996)	(1989)	(1998)	(1990)	(1998)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	42,550.7		84,323.7			
ANNUAL MEAN	117		230		162	
HIGHEST ANNUAL MEAN					325	1992
LOWEST ANNUAL MEAN					42.2	1986
HIGHEST DAILY MEAN	4,000	Jul 17	6,830	May 14	12,500	Oct 19, 1994
LOWEST DAILY MEAN	6.4	Jun 25	9.1	Nov 14	0.22	Aug 18, 2000
ANNUAL SEVEN-DAY MINIMUM	9.6	Nov 9	9.6	Nov 9	1.0	Aug 17, 2000
MAXIMUM PEAK FLOW			7,240	May 14	17,000	Oct 17, 1984
MAXIMUM PEAK STAGE			29.92	May 14	32.43	Oct 17, 1984
ANNUAL RUNOFF (AC-FT)	84,400		167,300		117,600	
10 PERCENT EXCEEDS	188		448		262	
50 PERCENT EXCEEDS	21		28		22	
90 PERCENT EXCEEDS	13		14		8.3	

e Estimated

08162600 Tres Palacios River near Midfield, TX—Continued



08164000 Lavaca River near Edna, TX

LOCATION.--Lat 28°57'35", long 96°41'10", Jackson County, Hydrologic Unit 12100101, at downstream side near center of upstream bridge of two bridges on U.S. Highway 59, 660 ft upstream from Texas and New Orleans Railroad Co. bridge, and 2.8 mi southwest of Edna.

DRAINAGE AREA.--817 mi^2.

PERIOD OF RECORD.--Aug. 1938 to current year. Water-quality records: Chemical data: Aug. 1945 to Aug. 1993. Biochemical data: Feb. 1971 to Aug. 1993. Pesticide data: Jan. 1968 to Aug. 1981. Sediment data: Nov. 1977 to Aug. 1993. Specific conductance: Nov. 1977 to Sept. 1981. Water temperature: Nov. 1977 to Sept. 1981.

REVISED RECORDS.--WSP 1923: 1955. WDR TX-73-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.10 ft above NGVD of 1929. Prior to Mar. 21, 1961, nonrecording gage. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. No known regulation. Small diversions above station for irrigation. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1880, 33.8 ft, May 25, 1936, discharge, 83,400 ft^3/s, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	62	98	101	224	162	72	825	104	5,540	164	86
2	80	59	92	85	170	152	74	5,090	97	7,650	142	74
3	75	56	88	78	174	156	399	6,140	92	3,010	121	73
4	72	53	86	75	159	161	222	827	85	828	112	72
5	69	51	83	72	181	149	127	439	84	577	105	69
6	67	50	80	69	217	141	102	313	91	447	100	70
7	65	48	78	66	329	125	112	252	189	369	106	73
8	64	47	79	69	194	113	155	506	1,950	317	97	63
9	84	47	79	71	134	102	95	624	6,290	280	91	62
10	4,810	47	76	68	149	95	75	511	9,240	282	87	58
11	2,480	48	74	67	2,030	91	1,100	1,360	7,210	349	87	57
12	736	48	78	67	4,040	88	4,400	5,380	3,620	377	88	54
13	360	47	103	66	1,970	107	4,190	2,590	1,050	280	78	52
14	244	46	111	65	611	356	547	8,600	604	224	76	55
15	176	47	106	67	479	3,610	346	12,700	540	199	75	59
16	137	46	105	83	377	6,310	228	9,910	860	182	73	53
17	115	403	86	982	282	2,700	173	2,010	1,170	169	71	61
18	98	6,040	79	3,010	220	522	141	743	1,390	158	73	55
19	87	11,400	75	1,290	184	345	123	511	977	151	76	51
20	79	2,910	72	357	163	255	112	383	422	144	70	49
21	73	547	71	230	148	199	104	309	278	139	67	47
22	68	365	71	175	136	163	99	258	266	141	69	47
23	65	278	71	146	130	131	94	220	982	136	81	46
24	62	219	69	214	296	117	219	191	5,830	134	143	45
25	61	179	69	1,290	1,440	107	2,220	170	8,910	130	96	45
26	63	157	70	2,380	868	100	4,780	154	7,890	146	81	47
27	105	141	70	1,120	422	94	3,620	142	8,870	136	73	47
28	101	124	73	367	247	89	691	132	10,300	131	70	45
29	82	111	86	250	187	85	372	123	3,800	126	93	45
30	68	104	96	325	---	82	311	116	3,030	124	124	44
31	62	---	97	383	---	77	---	110	---	136	111	---
TOTAL	10,795	23,780	2,571	13,688	16,161	16,984	25,303	61,639	86,221	23,012	2,900	1,704
MEAN	348	793	82.9	442	557	548	843	1,988	2,874	742	93.5	56.8
MAX	4,810	11,400	111	3,010	4,040	6,310	4,780	12,700	10,300	7,650	164	86
MIN	61	46	69	65	130	77	72	110	84	124	67	44
AC-FT	21,410	47,170	5,100	27,150	32,060	33,690	50,190	122,300	171,000	45,640	5,750	3,380

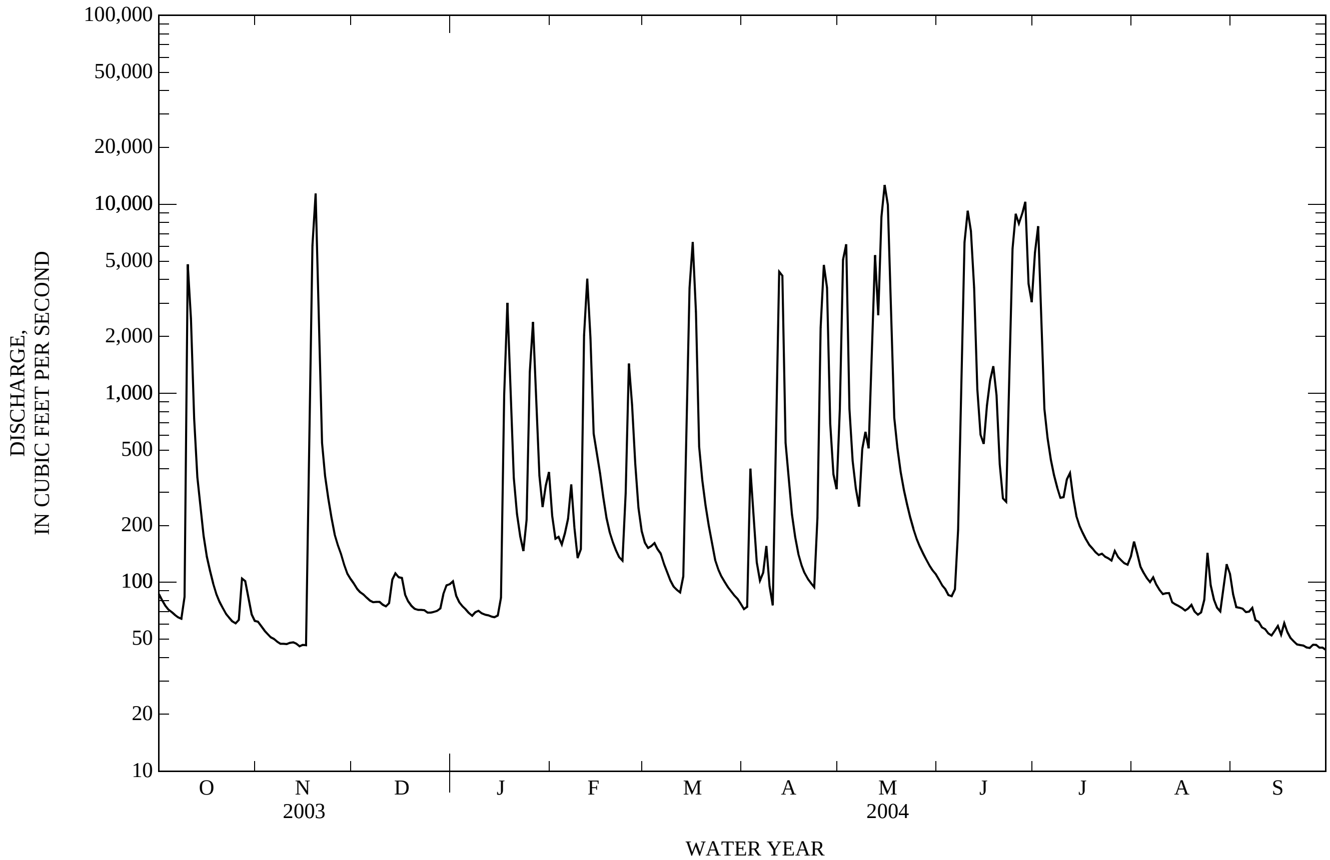
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	480	368	274	293	387	279	487	672	650	230	90.8	387
MAX	7,118	3,875	2,400	1,564	5,214	2,696	5,014	3,239	5,005	3,999	713	3,023
(WY)	(1995)	(1999)	(1977)	(1979)	(1992)	(1997)	(1997)	(1982)	(1973)	(1940)	(1946)	(2001)
MIN	0.58	0.00	0.19	0.05	13.5	6.58	4.43	8.16	0.72	2.14	0.16	0.13
(WY)	(1991)	(1957)	(1991)	(1957)	(1954)	(1956)	(1956)	(1956)	(1990)	(1954)	(1990)	(1989)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	124,435		284,758			
ANNUAL MEAN	341		778		383	
HIGHEST ANNUAL MEAN					1,385	1992
LOWEST ANNUAL MEAN					6.12	1956
HIGHEST DAILY MEAN	11,400	Nov 19	12,700	May 15	122,000	Oct 19, 1994
LOWEST DAILY MEAN	17	Aug 29	44	Sep 30	0.00	Nov 10, 1954
ANNUAL SEVEN-DAY MINIMUM	19	Aug 27	45	Sep 24	0.00	Jul 2, 1956
MAXIMUM PEAK FLOW			13,400	May 15	150,000	Oct 19, 1994
MAXIMUM PEAK STAGE			24.34	May 15	a35.54	Oct 19, 1994
ANNUAL RUNOFF (AC-FT)	246,800		564,800		277,200	
10 PERCENT EXCEEDS	576		2,270		440	
50 PERCENT EXCEEDS	96		124		56	
90 PERCENT EXCEEDS	32		61		9.9	

a From floodmark.

08164000 Lavaca River near Edna, TX—Continued



08164100 Dry Creek at Farm to Market 1822 near Edna, TX

LOCATION.--Lat 28°53'53", long 96°36'17", Jackson County, Hydrologic Unit 12100102, on FM1822 bridge, 9.3 mi south of Edna.

PERIOD OF RECORD.--
CHEMICAL DATA: July 2004 to Sept. 2004
PESTICIDE DATA: July 2004 to Sept. 2004

REMARKS.--Discharge is determined at the time of sample collection. No gage at site.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)
JUL													
13...	1420	11	70	769	6.7	92	7.4	287	32.5	--	--	--	--
13...	1430	--	70	--	--	--	--	--	--	--	--	--	--
SEP													
29...	1050	E.70	70	765	8.4	102	8.0	1,680	25.0	<2	800	.26	152
29...	1100	--	70	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Uranium natural water, fltrd, ug/L (22703)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	<.009
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.06	.12	<.8	4.09	3.0	.23	3.0	2.6	3.60	<.2	2.22	6.2	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)
JUL													
13...	<.02	<.02mc	<.006	<.006	<.01mc	E.208mc	<.006	<.014mc	<.006	<.007	.006	<.02mc	<.008mc
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	.12	<.02mc	<.006	<.006	<.01mc	E.024mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)
JUL													
13...	<.04mc	<.005	.021	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.1490
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.04mc	<.005	.018	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	<.0567
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164100 Dry Creek at Farm to Market 1822 near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)
JUL													
13...	E.01t	E.054	<.006	<.020	<.02mc	<.010	<.04mnc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.03	<.041	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)
JUL													
13...	<.01	<.003	<.012	.011	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)
JUL													
13...	<.005	<.03	<.029	<.013	<.024	<.016	--u	<.03	<.003	<.02mc	<.02mc	<.007	<.004
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	E.028	<.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)
JUL													
13...	<.01	<.035	.068	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.015	<.006	<.03mc	<.003
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.035	.093	<.09	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164100 Dry Creek at Farm to Market 1822 near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p-' DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)
JUL													
13...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	E1.05
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)
JUL													
13...	<.01	<.004	<.025	<.011	<.02	<.010	.36	<.008	<.02	<.005	.402	.05	<.034
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	<.005	E.094	<.02	<.034
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnes-ium, bed sedimnt recover -able, mg/kg (00924)	Potas-sium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alum-inum, bed sedimnt recover -able, ug/g (01108)
JUL													
13...	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	160	5,700	4,400	7,000	1,900	41,000
SEP													
29...	<.010mc	<.02	<.010	<.002	--u	E.09	<.009	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lantha-num, bed sed <62.5um wet svd fld,tot ug/g (34885)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	2.9	11	370	1.4	.170	.120	70	33	13	9.9	9.1	19,000	28
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164100 Dry Creek at Farm to Market 1822 near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Manganese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Molybdenum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scandium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Strontium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tantalum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thallium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titanium, bed sedimnt total, ug/g (01153)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	16	24	1,100	.4	16	9	6.5	3	45	.4	.400	7.9	2,400
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Vanadium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Carbophenothion, bed sedimnt ug/kg (39787)	Chlorpyrifos bed sedimnt ug/kg (81404)	Diazinon, bed sedimnt ug/kg (39571)	Dimethoate, bed sedimnt ug/kg (62043)	Disulfoton sulfone bed sedimnt ug/kg (62048)	Disulfoton, bed sedimnt ug/kg (81887)	Ethion monoxon bed sedimnt ug/kg (62050)	Ethion, bed sedimnt ug/kg (39399)	O-Et-O-Me-S-Pr -phosphorothioate bed sed ug/kg (62038)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	1.2	56	20	37	<2	<2	<2	<2	<2	<4	<2	<2	<3
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethoprop, bed sedimnt ug/kg (62040)	Fenthion, bed sedimnt ug/kg (62046)	Fonofos oxon, bed sedimnt ug/kg (62042)	Fonofos bed sedimnt ug/kg (82408)	Malathion, bed sedimnt ug/kg (39531)	Methidathion, bed sedimnt ug/kg (62047)	Methyl parathion, bed sedimnt ug/kg (39601)	Parathion, bed sedimnt ug/kg (39541)	Phorate oxon, bed sedimnt ug/kg (62039)	Phorate bed sedimnt ug/kg (81412)	Profenfos, bed sedimnt ug/kg (62049)	Propetamphos, bed sedimnt ug/kg (62045)	Sulfotepp, bed sedimnt ug/kg (62041)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<2	<3	<2	<3	<2	<2	<2	<2	<4	<3	<2	<2	<2
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulprofos, bed sedimnt ug/kg (62051)	Terbufos, bed sedimnt ug/kg (62044)	Tribuphos, bed sedimnt ug/kg (39050)
JUL			
13...	--	--	--
13...	<3	<4	<2
SEP			
29...	--	--	--
29...	--	--	--

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

Value qualifier codes used in this table:
c -- See laboratory comment
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

08164300 Navidad River near Hallettsville, TX

LOCATION.--Lat 29°28'00", long 96°48'45", Lavaca County, Hydrologic Unit 12100102, on right bank at downstream end of bridge on U.S. Highway 90-A, 0.8 mi downstream from Mixons Creek, 1.2 mi southwest of Sublime, and 8.0 mi northeast of Hallettsville.

DRAINAGE AREA.--332 mi^2.

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

REVISED RECORDS.--WSP 2123: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 159.28 ft above NGVD of 1929. Satellite telemeter at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1860, 40 ft in June 1940; flood in July 1936 reached a stage of 39 ft, from information by local residents and Southern Pacific Railroad Company.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	28	e16	24	53	66	49	440	55	7,850	e21	13
2	18	15	e16	e22	58	74	170	854	54	1,720	e20	13
3	18	14	e16	e21	42	56	554	178	53	620	e19	13
4	14	14	e15	e20	39	56	131	109	50	e390	e18	14
5	13	14	e15	e19	70	65	86	83	48	e250	e17	16
6	153	14	e15	e18	284	61	233	80	47	e165	e17	15
7	58	14	e15	e17	70	51	200	73	42	e120	e17	14
8	19	14	e14	e16	46	46	102	61	1,020	e86	e16	12
9	105	14	e15	e16	47	44	75	82	1,640	82	e16	12
10	471	15	e15	e15	301	42	99	61	1,480	76	e16	11
11	51	15	e16	e15	1,850	45	3,530	63	451	73	e16	9.9
12	26	15	e17	e15	979	43	2,760	150	176	68	e16	9.2
13	21	15	58	e14	189	45	354	345	98	61	e16	9.1
14	19	14	55	e15	117	1,700	197	4,550	207	56	e16	10
15	16	14	31	26	e96	5,250	155	3,100	227	51	16	13
16	15	14	26	45	e82	925	135	305	601	47	16	14
17	14	382	e23	1,290	72	188	123	195	598	43	15	12
18	13	306	e21	271	67	135	117	163	299	41	15	10
19	13	56	e19	93	62	119	111	130	110	40	15	8.7
20	16	38	e18	67	59	104	107	115	80	e37	14	8.1
21	15	31	e17	59	54	96	102	102	66	e35	16	8.1
22	15	e28	e16	54	48	84	96	96	145	e33	24	7.9
23	15	e25	e15	51	48	76	92	88	702	e31	25	8.1
24	14	e23	e14	71	55	72	153	80	2,900	e29	23	7.6
25	14	e22	e14	1,810	335	71	292	78	5,620	e28	20	7.2
26	18	e20	e14	1,170	133	66	1,160	74	4,920	e27	19	7.1
27	18	e19	e15	119	81	61	246	72	2,060	e26	16	7.2
28	17	e18	26	77	67	54	145	68	1,590	e25	15	6.8
29	14	e17	34	58	61	54	120	65	1,780	e24	15	6.0
30	13	e16	30	62	---	52	109	61	5,740	e23	15	5.6
31	51	---	26	51	---	51	---	60	---	e22	15	---
TOTAL	1,295	1,244	657	5,621	5,465	9,852	11,803	11,981	32,859	12,179	535	308.6
MEAN	41.8	41.5	21.2	181	188	318	393	386	1,095	393	17.3	10.3
MAX	471	382	58	1,810	1,850	5,250	3,530	4,550	5,740	7,850	25	16
MIN	13	14	14	14	39	42	49	60	42	22	14	5.6
AC-FT	2,570	2,470	1,300	11,150	10,840	19,540	23,410	23,760	65,180	24,160	1,060	612
CFSM	0.13	0.12	0.06	0.55	0.57	0.96	1.19	1.16	3.30	1.18	0.05	0.03
IN.	0.15	0.14	0.07	0.63	0.61	1.10	1.32	1.34	3.68	1.36	0.06	0.03

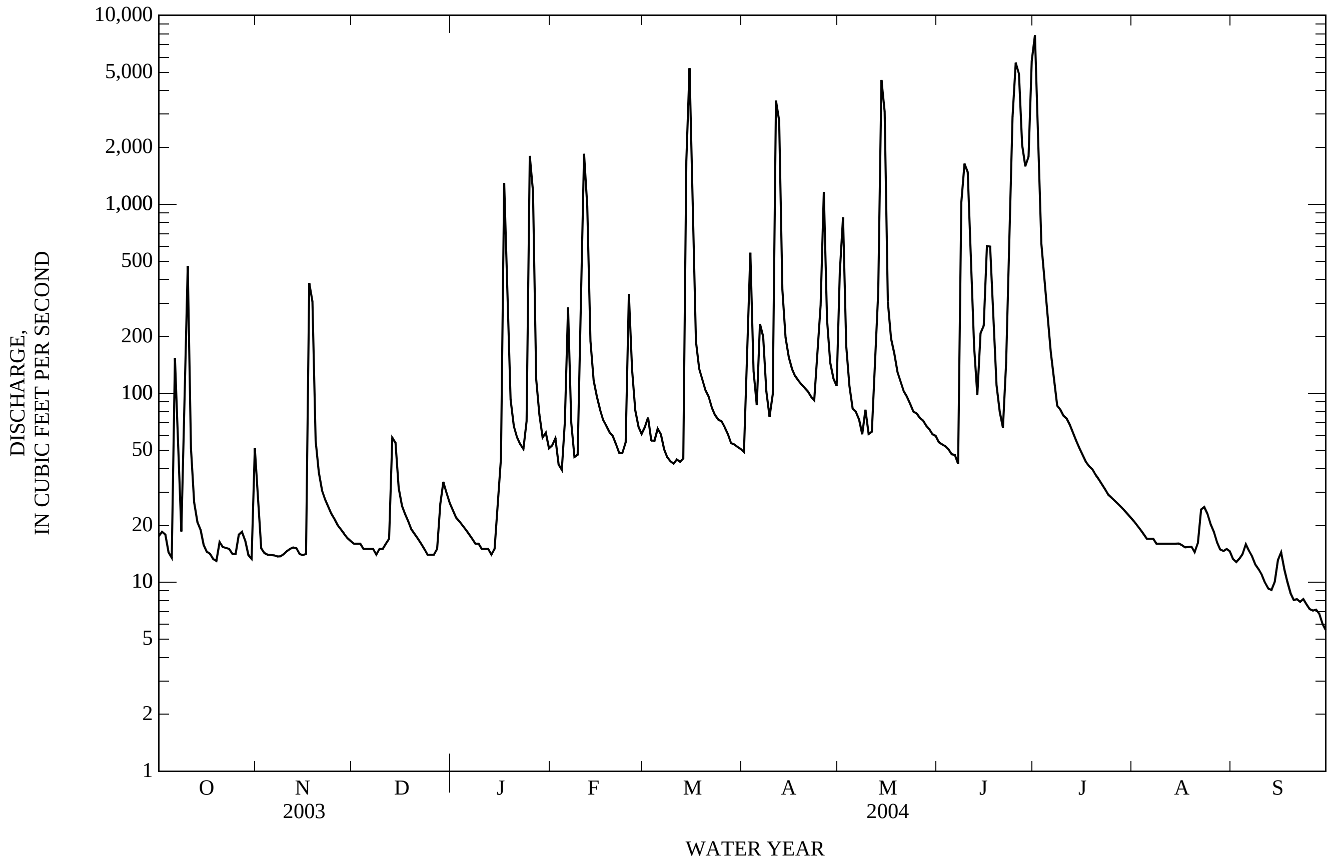
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	165	161	135	134	167	127	198	299	262	33.6	26.8	150
MAX	1,709	1,346	943	691	1,251	611	1,158	1,502	1,792	393	332	1,975
(WY)	(1999)	(1999)	(1977)	(1968)	(1992)	(1992)	(1973)	(1972)	(1973)	(2004)	(1971)	(1974)
MIN	0.00	0.04	0.97	6.38	8.46	9.87	7.17	2.39	0.68	0.16	0.01	0.01
(WY)	(1991)	(1991)	(1991)	(1990)	(1996)	(1991)	(1996)	(1996)	(1990)	(1990)	(1990)	(1990)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	33,159.5		93,799.6			
ANNUAL MEAN	90.8		256		154	
HIGHEST ANNUAL MEAN					508	1992
LOWEST ANNUAL MEAN					11.5	1990
HIGHEST DAILY MEAN	5,030	Feb 22	7,850	Jul 1	30,500	Sep 14, 1974
LOWEST DAILY MEAN	2.7	Aug 30	5.6	Sep 30	0.00	Aug 5, 1964
ANNUAL SEVEN-DAY MINIMUM	3.7	Aug 26	6.8	Sep 24	0.00	Sep 2, 1964
MAXIMUM PEAK FLOW			9,540	Jul 1	53,500	Sep 13, 1974
MAXIMUM PEAK STAGE			28.02	Jul 1	36.05	Sep 13, 1974
ANNUAL RUNOFF (AC-FT)	65,770		186,100		111,800	
ANNUAL RUNOFF (CFSM)	0.274		0.772		0.465	
ANNUAL RUNOFF (INCHES)	3.72		10.51		6.32	
10 PERCENT EXCEEDS	116		362		136	
50 PERCENT EXCEEDS	23		46		22	
90 PERCENT EXCEEDS	6.9		14		2.1	

e Estimated

08164300 Navidad River near Hallettsville, TX—Continued



08164390 Navidad River at Strane Park near Edna, TX

LOCATION.--Lat 29°03'55", long 96°40'26", Jackson County, Hydrologic Unit 12100102, on right bank at downstream side of bridge on County Road 401, and 6.3 mi north of Edna.

DRAINAGE AREA.--579 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 42.53 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair. Much of low flow during the irrigation season (Apr. to Sep) is drainage from rice fields irrigated by water originally diverted from the Colorado River. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	135	28	30	138	118	80	589	85	3,350	69	38
2	20	168	26	26	113	111	84	1,810	81	4,810	72	e37
3	19	57	25	24	156	125	447	1,400	76	4,160	65	e37
4	19	33	24	22	101	113	789	336	71	678	61	e36
5	18	26	24	21	211	110	207	199	66	419	57	e36
6	18	23	23	20	307	123	141	153	62	297	54	e48
7	38	21	23	20	409	92	282	123	68	243	53	e51
8	167	21	23	21	168	76	264	139	1,090	214	47	e44
9	161	21	22	20	111	66	139	215	3,810	191	44	e35
10	1,990	20	21	21	130	60	100	418	4,660	181	43	e31
11	1,060	21	22	22	1,770	56	1,190	964	5,750	211	43	e28
12	299	21	23	21	2,510	54	3,020	3,910	6,130	231	41	e26
13	149	21	35	21	1,600	63	3,870	1,610	1,810	189	38	e25
14	93	21	91	20	440	218	1,510	5,110	568	151	36	e23
15	64	21	86	21	315	2,250	329	6,190	570	129	35	e21
16	48	21	51	30	239	3,760	223	6,170	2,140	111	33	e20
17	39	81	34	762	183	4,860	183	3,230	2,840	99	32	e26
18	33	2,750	28	1,650	144	602	158	724	1,690	88	32	e33
19	30	2,140	24	588	115	278	138	393	822	78	32	e31
20	28	353	22	191	99	219	121	255	322	72	31	e27
21	26	181	22	114	89	187	109	210	221	73	30	e19
22	25	113	21	82	82	167	100	180	196	68	32	19
23	24	81	21	66	78	148	93	158	771	64	36	20
24	24	63	21	90	216	131	163	142	4,720	61	39	21
25	24	51	22	1,190	1,510	121	1,660	128	6,770	56	40	20
26	35	44	22	1,890	824	113	2,770	118	7,140	61	38	21
27	104	40	21	1,400	296	106	1,630	109	7,330	64	35	22
28	74	36	22	236	183	99	456	101	6,070	67	35	20
29	44	33	26	170	141	94	227	97	1,940	65	48	19
30	31	30	34	211	---	89	174	92	2,500	63	65	18
31	25	---	37	205	---	86	---	89	---	63	39	---
TOTAL	4,751	6,647	924	9,205	12,678	14,695	20,657	35,362	70,369	16,607	1,355	852
MEAN	153	222	29.8	297	437	474	689	1,141	2,346	536	43.7	28.4
MAX	1,990	2,750	91	1,890	2,510	4,860	3,870	6,190	7,330	4,810	72	51
MIN	18	20	21	20	78	54	80	89	62	56	30	18
AC-FT	9,420	13,180	1,830	18,260	25,150	29,150	40,970	70,140	139,600	32,940	2,690	1,690

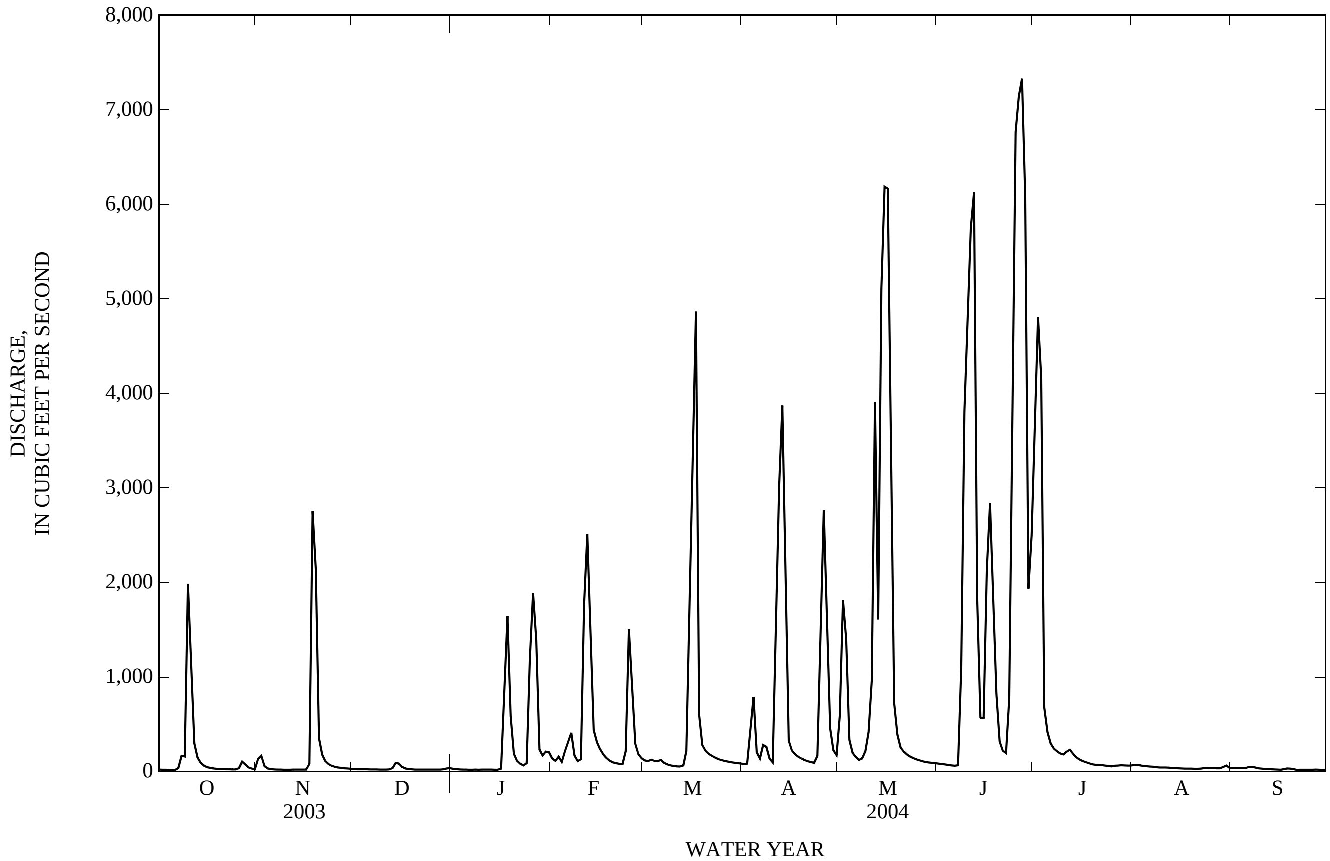
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	642	625	327	274	299	420	421	374	599	133	54.8	297
MAX	2,636	2,334	1,169	690	904	1,540	2,030	1,141	2,346	536	210	1,107
(WY)	(1999)	(1999)	(2003)	(1997)	(1998)	(1997)	(1997)	(2004)	(2004)	(2004)	(2001)	(2001)
MIN	3.70	7.73	10.8	16.5	22.7	27.5	33.6	19.0	9.73	2.80	0.69	0.04
(WY)	(2001)	(2000)	(2000)	(2000)	(2000)	(2002)	(2001)	(2002)	(2002)	(2000)	(2000)	(2000)

08164390 Navidad River at Strane Park near Edna, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	61,766.5		194,102			
ANNUAL MEAN	169		530		371	
HIGHEST ANNUAL MEAN					627	1997
LOWEST ANNUAL MEAN					44.8	2000
HIGHEST DAILY MEAN	4,290	Feb 23	7,330	Jun 27	23,300	Oct 19, 1998
LOWEST DAILY MEAN	5.5	Aug 19	18	Oct 5	0.00	Sep 23, 2000
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 14	20	Sep 24	0.00	Aug 20, 2001
MAXIMUM PEAK FLOW			7,500	Jun 27	i25,000	Oct 19, 1998
MAXIMUM PEAK STAGE			26.12	Jun 27	a30.08	Oct 19, 1998
ANNUAL RUNOFF (AC-FT)	122,500		385,000		269,000	
10 PERCENT EXCEEDS	291		1,670		635	
50 PERCENT EXCEEDS	48		84		46	
90 PERCENT EXCEEDS	16		21		7.6	

c From rating curve extended above discharge measurement of 9,150 ft^3/s.
a From floodmark.
e Estimated



08164390 Navidad River at Strane Park near Edna, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: June 1998 to current year.
PESTICIDE DATA: June 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover -able, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)
JUL													
13...	1240	184	70	769	7.5	93	7.9	553	26.5	--	--	--	--
13...	1250	--	70	--	--	--	--	--	--	--	--	--	--
SEP													
29...	1210	19	70	765	8.0	94	7.7	760	23.5	<2	80	<.20	251
29...	1220	--	70	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Uranium natural water, fltrd, ug/L (22703)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	<.009
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.06	<.04	<.8	.375	.5	<.08	40.2	1.6	.06	<.2	.54	E.6n	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)
JUL													
13...	<.02	<.02mc	<.006	<.006	<.01mc	<.008mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.02	<.02mc	<.006	<.006	<.01mc	E.009mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)
JUL													
13...	<.04mc	<.005	E.005n	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	<.0096
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.04mc	<.005	<.007	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	<.0096
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164390 Navidad River at Strane Park near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)
JUL													
13...	<.03	<.041	<.006	<.020	<.02mc	<.010	<.04mnc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.03	<.041	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)
JUL													
13...	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	E.01n	<.004	<.009
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	<.01	<.004	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)
JUL													
13...	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)
JUL													
13...	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164390 Navidad River at Strane Park near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)
JUL													
13...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)
JUL													
13...	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	<.02	<.034
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnes-ium, bed sedimnt recover -able, mg/kg (00924)	Potas-sium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alum-inum, bed sedimnt recover -able, ug/g (01108)
JUL													
13...	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	69	3,200	620	4,100	1,100	10,000
SEP													
29...	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lantha-num, bed sed <62.5um wet svd fld,tot ug/g (34885)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	1.1	2.0	200	.230	.040	.020	17	7.0	1.5	4.1	2.2	3,800	10
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164390 Navidad River at Strane Park near Edna, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Mangan-ese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Molyb-denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scand-ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Stront-ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tant-alum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thall-ium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titan-ium, bed sedimnt total, ug/g (01153)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	5.0	8.2	82	<.1	2	<2	1.2	<3	26	<.2	.100	1.8	960
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Vanad-ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Carbo-pheno-thion, bed sedimnt ug/kg (39787)	Chlor-pyrifos bed sedimnt ug/kg (81404)	Diazi-non, bed sedimnt ug/kg (39571)	Dimeth-oate, bed sedimnt ug/kg (62043)	Disulf-oton sulfone bed sedimnt ug/kg (62048)	Disul-foton, bed sedimnt ug/kg (81887)	Ethion monoxon bed sedimnt ug/kg (62050)	Ethion, bed sedimnt ug/kg (39399)	O-Et-O-Me-S-Pr -phos-phoro-thioate bed sed ug/kg (62038)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	.44	15	5.0	9	<2	<2	<2	<2	<2	<4	<2	<2	<3
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Etho-prop, bed sedimnt ug/kg (62040)	Fen-thion, bed sedimnt ug/kg (62046)	Fonofos oxon, bed sedimnt ug/kg (62042)	Fonofos bed sedimnt ug/kg (82408)	Mala-thion, bed sedimnt ug/kg (39531)	Methid-athion, bed sedimnt ug/kg (62047)	Methyl para-thion, bed sedimnt ug/kg (39601)	Para-thion, bed sedimnt ug/kg (39541)	Phorate oxon, bed sedimnt ug/kg (62039)	Phorate bed sedimnt ug/kg (81412)	Pro-fenfos, bed sedimnt ug/kg (62049)	Propet-amphos, bed sedimnt ug/kg (62045)	Sulfo-tepp, bed sedimnt ug/kg (62041)
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
13...	<2	<3	<2	<3	<2	<2	<2	<2	<4	<3	<2	<2	<2
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulpro-fos, bed sedimnt ug/kg (62051)	Terbu-fos, bed sedimnt ug/kg (62044)	Tribu-phos, bed sedimnt ug/kg (39050)
JUL			
13...	--	--	--
13...	<3	<4	<2
SEP			
29...	--	--	--
29...	--	--	--

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

Value qualifier codes used in this table:
c -- See laboratory comment
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

08164450 Sandy Creek near Ganado, TX

LOCATION.--Lat 29°09'36", long 96°32'46", Jackson County, Hydrologic Unit 12100102, on left bank at downstream end of bridge on Farm Road 710, 0.9 mi upstream from Goldenrod Creek, and 8.0 mi north of Ganado.

DRAINAGE AREA.--289 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1977 to current year. Prior to Oct. 1997, published as "near Louise".

GAGE.--Water-stage recorder. Datum of gage is 59.72 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Much of the low flow during the irrigation season (Apr. to Sept.) is drainage from rice fields irrigated by water originally diverted from the Colorado River. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.3	7.1	2.7	2.9	219	126	6.1	1,100	2.0	4,380	74	36
2	11	6.9	1.8	1.8	127	114	42	2,800	1.9	2,240	115	27
3	14	6.8	1.5	1.8	152	109	766	1,530	4.5	1,200	106	22
4	29	6.9	1.1	1.7	91	84	1,440	605	7.0	558	80	30
5	38	6.9	1.1	1.6	215	84	e1,230	229	3.6	305	68	43
6	43	6.8	1.1	1.4	761	111	e818	111	2.9	199	55	49
7	63	6.8	1.2	1.5	532	88	e764	60	11	125	53	50
8	70	7.1	1.3	1.7	217	64	e778	46	1,030	68	47	46
9	162	7.2	1.3	1.7	132	50	e917	135	3,860	48	39	37
10	835	7.2	1.2	1.6	182	45	e985	612	3,670	45	32	26
11	326	7.5	1.2	1.8	2,330	36	e1,130	890	2,700	69	38	20
12	224	7.4	1.4	1.9	2,310	32	e1,440	2,310	4,200	131	95	18
13	156	7.4	1.4	1.8	1,330	32	e1,320	2,070	1,350	144	90	14
14	125	7.4	31	1.9	690	93	e924	3,980	606	127	67	31
15	109	7.5	30	1.8	558	2,190	e975	4,820	363	114	49	178
16	85	7.7	8.8	3.0	324	1,150	e218	2,270	1,170	90	32	268
17	69	575	4.9	630	203	e685	e135	1,440	1,990	77	16	183
18	60	1,710	1.6	803	130	e214	e71	760	531	91	23	128
19	54	1,260	1.3	455	100	e112	e18	350	256	92	12	99
20	52	691	1.3	186	75	e49	16	178	144	97	8.6	74
21	44	214	1.4	122	57	e35	9.9	81	79	94	9.7	63
22	40	114	1.5	77	44	e30	9.0	28	84	143	12	73
23	29	66	1.4	61	45	20	23	7.9	336	149	34	75
24	19	38	1.4	65	108	15	48	5.1	3,310	180	56	74
25	15	25	1.5	743	1,480	11	1,210	2.4	4,890	182	46	68
26	17	15	1.6	1,040	934	7.7	1,310	1.8	5,810	160	33	68
27	70	9.6	1.7	544	431	6.7	1,110	1.8	3,340	124	19	56
28	52	6.2	1.6	192	210	8.2	582	1.8	2,150	140	11	45
29	36	3.8	2.0	119	148	4.4	162	1.8	2,020	123	37	40
30	25	2.1	6.0	287	---	4.8	76	1.9	3,610	107	62	38
31	14	---	4.9	370	---	5.1	---	1.9	---	94	52	---
TOTAL	2,894.3	4,844.3	122.2	5,723.9	14,135	5,615.9	18,533.0	26,431.4	47,531.9	11,696	1,471.3	1,979
MEAN	93.4	161	3.94	185	487	181	618	853	1,584	377	47.5	66.0
MAX	835	1,710	31	1,040	2,330	2,190	1,440	4,820	5,810	4,380	115	268
MIN	8.3	2.1	1.1	1.4	44	4.4	6.1	1.8	1.9	45	8.6	14
AC-FT	5,740	9,610	242	11,350	28,040	11,140	36,760	52,430	94,280	23,200	2,920	3,930

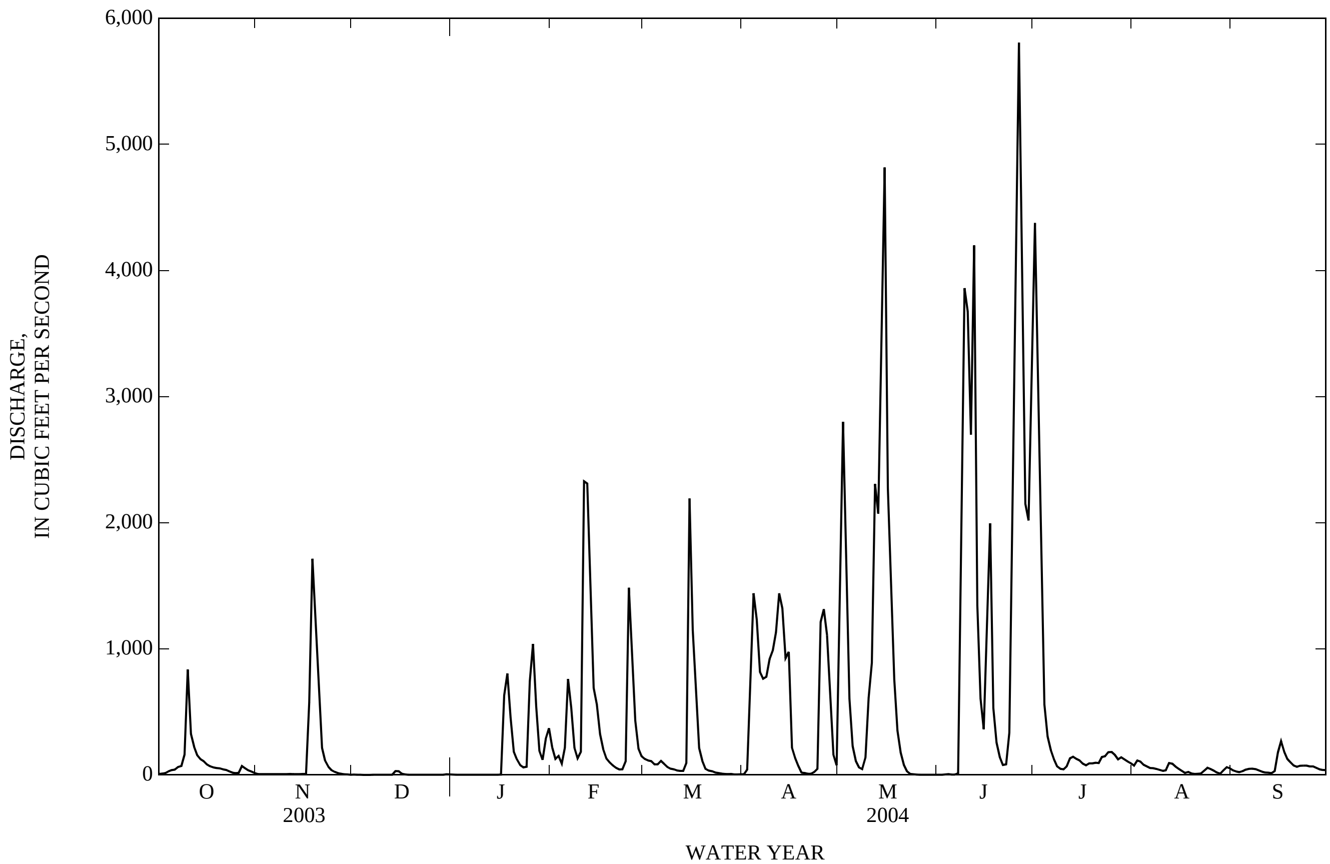
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	342	234	156	253	256	179	220	302	372	154	41.0	260
MAX	2,917	1,513	746	956	2,331	1,406	1,316	1,150	1,866	551	202	1,364
(WY)	(1999)	(1999)	(1992)	(1992)	(1992)	(1997)	(1997)	(1993)	(1993)	(2002)	(2001)	(1978)
MIN	18.6	0.00	0.00	0.02	0.28	0.08	3.14	0.43	0.03	7.25	3.21	11.8
(WY)	(2000)	(2000)	(2000)	(2000)	(1988)	(1996)	(1980)	(2002)	(1990)	(1997)	(1991)	(1988)

08164450 Sandy Creek near Ganado, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	38,173.64		140,978.2			
ANNUAL MEAN	105		385		230	
HIGHEST ANNUAL MEAN					606	1992
LOWEST ANNUAL MEAN					51.2	1990
HIGHEST DAILY MEAN	1,930	Jan 13	5,810	Jun 26	41,100	Oct 19, 1998
LOWEST DAILY MEAN	0.01	Aug 13	1.1	Dec 4	0.00	Apr 5, 1978
ANNUAL SEVEN-DAY MINIMUM	0.08	May 20	1.2	Dec 4	0.00	Mar 10, 1980
MAXIMUM PEAK FLOW			5,980	Jun 26	63,400	Oct 19, 1998
MAXIMUM PEAK STAGE			18.06	Jun 26	a32.72	Oct 19, 1998
ANNUAL RUNOFF (AC-FT)	75,720		279,600		166,700	
10 PERCENT EXCEEDS	297		1,200		498	
50 PERCENT EXCEEDS	23		64		22	
90 PERCENT EXCEEDS	0.49		1.8		0.06	

a From floodmark.
e Estimated



08164450 Sandy Creek near Ganado, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1977 to current year.
BIOCHEMICAL DATA: Oct. 1977 to Nov. 1992.
PESTICIDE DATA: Nov. 1977 to July 1981, Apr. 1996 to current year.
SEDIMENT DATA: Sept. 1978 to Apr. 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Temper-ature, water, deg C (00010)	Baro-metric pres-sure, mm Hg (00025)	Agency col-lecting sample, code (00027)	Agency ana-lyzing sample, code (00028)	Instan-taneous dis-charge, cfs (00061)	Gage height, feet (00065)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	pH, water, unfltrd lab, std units (00403)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Calcium bed sedimnt recover -able, mg/kg (00917)
JUL													
14...	0910	27.0	764	1028	80020	129	6.50	281	7.1	6.9	--	--	--
14...	0920	--	--	1028	80020	--	--	--	--	--	--	68	680
SEP													
29...	0950	22.5	765	1028	80020	42	5.51	529	7.4	7.4	8.1	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Magnes-ium, bed sedimnt recover -able, mg/kg (00924)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Potas-sium, bed sedimnt recover -able, mg/kg (00938)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Lead, water, fltrd, ug/L (01049)	Mangan-ese, water, fltrd, ug/L (01056)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	400	1,000	4,000	--	--	--	--	--	--	--	--	--	--
SEP													
29...	--	--	--	137	<.06	<.04	<.8	.359	.6	E.06n	8.0	1.1	.35

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Anti-mony, water, fltrd, ug/L (01095)	Alum-inum, water, unfltrd recover -able, ug/L (01105)	Alum-inum, water, fltrd, ug/L (01106)	Alum-inum, bed sedimnt recover -able, ug/g (01108)	Titan-ium, bed sedimnt total, ug/g (01153)	Iron, bed sedimnt total, ug/g (01170)	Propa-chlor, water, fltrd, ug/L (04024)	Butyl-ate, water, fltrd, ug/L (04028)	Broma-cil, water, fltrd, ug/L (04029)	Cyclo-ate, water, fltrd, ug/L (04031)	Terba-cil, water, fltrd, ug/L (04032)
JUL													
14...	--	--	--	--	--	--	--	--	<.025	<.004	<.03mc	<.01mc	<.010mc
14...	--	--	--	--	--	10,000	680	3,200	--	--	--	--	--
SEP													
29...	<.2	E.5n	<.20	180	<2	--	--	--	<.025	<.004	<.03mc	<.01mc	<.010mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diphen-amid, water, fltrd, ug/L (04033)	Sima-zine, water, fltrd, ug/L (04035)	Prome-ton, water, fltrd, ug/L (04037)	CEAT, water, fltrd, ug/L (04038)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	CIAT, water, fltrd, ug/L (04040)	Cyana-zine, water, fltrd, ug/L (04041)	Thall-ium, bed sed <62.5um dry svd total, ug/g (04064)	Fonofos water, fltrd, ug/L (04095)	Uranium natural water, fltrd, ug/L (22703)	alpha-HCH, water, fltrd, ug/L (34253)	p,p'-DDE, water, fltrd, ug/L (34653)	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)
JUL													
14...	<.03	<.005	<.01	<.01mc	<.04mnc	E.006	<.018	--	<.003	--	<.005	<.003	--
14...	--	--	--	--	--	--	--	.090	--	--	--	--	1.4
SEP													
29...	<.03	<.005	<.01	<.01mc	<.04mc	E.005n	<.018	--	<.003	.33	<.005	<.003	--

08164450 Sandy Creek near Ganado, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Arsenic, bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryllium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chromium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Lanthanum, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	3.0	170	.370	.050	.020	16	7.2	1.6	7.1	2.2	7.9	5.8	7.2
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Manganese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Molybdenum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scandium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Strontium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tantalum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)	Vanadium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	95	<.1	2	<2	1.2	<3	16	<.2	1.8	.48	12	4.7	10
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dicamba water fltrd 0.7u GF ug/L (38442)	Linuron water fltrd 0.7u GF ug/L (38478)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	Chlorpyrifos water, fltrd, ug/L (38933)	Tribuphos, bed sedimnt ug/kg (39050)
JUL													
14...	<.01	<.01	<.02	<.01mc	<.008mc	<.008	<.02	E.04mc	<.02mc	<.03	<.01	<.005	--
14...	--	--	--	--	--	--	--	--	--	--	--	--	<2
SEP													
29...	<.01	<.01	<.02	<.01mc	<.008mc	<.008	<.02	<.01mc	<.02mc	<.03	<.01	<.005	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lindane water, fltrd, ug/L (39341)	Dieldrin, water, fltrd, ug/L (39381)	Ethion, bed sedimnt ug/kg (39399)	Metolachlor, water, fltrd, ug/L (39415)	Malathion, bed sedimnt ug/kg (39531)	Malathion, water, fltrd, ug/L (39532)	Parathion, bed sedimnt ug/kg (39541)	Parathion, water, fltrd, ug/L (39542)	Diazinon, bed sedimnt ug/kg (39571)	Diazinon, water, fltrd, ug/L (39572)	Methyl parathion, bed sedimnt ug/kg (39601)	Atrazine, water, fltrd, ug/L (39632)	2,4-D water, fltrd, ug/L (39732)
JUL													
14...	<.004	<.009	--	<.013	--	.028	--	<.010	--	<.005	--	.013	.28
14...	--	--	<2	--	<2	--	<2	--	<2	--	<2	--	--
SEP													
29...	<.004	<.009	--	<.013	--	<.027	--	<.010	--	<.005	--	.018	<.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbophenothion, bed sedimnt ug/kg (39787)	Alachlor, water, fltrd, ug/L (46342)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Propham water fltrd 0.7u GF ug/L (49236)	Acetochlor, water, fltrd, ug/L (49260)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Neburon water, fltrd 0.7u GF ug/L (49294)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Diuron, water, fltrd 0.7u GF ug/L (49300)	Dinoseb water, fltrd 0.7u GF ug/L (49301)
JUL													
14...	--	<.005	<.02	<.010	<.006	<.02	<.02	<.02mc	<.01	<.004mc	<.03	<.01	<.01
14...	<2	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	--	<.005	<.02	<.010	<.006	<.02	<.02	<.02mc	<.01	<.004mc	<.03	<.01	<.01

08164450 Sandy Creek near Ganado, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)
JUL													
14...	<.01	<.01	<.01	<.04mc	<.006	<.006	.03	<.02mc	<.04mc	<.02mc	<.008mc	<.007	<.014mc
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.01	<.01	<.04mc	<.006	<.006	<.03	<.02mc	<.04mc	<.02mc	<.008mc	<.007	<.014mc

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Bendio-carb, water, fltrd, ug/L (50299)	Benomyl water, fltrd, ug/L (50300)	Caf-feine, water, fltrd, ug/L (50305)	Chlori-muron, water, fltrd, ug/L (50306)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	OIET, water, fltrd, ug/L (50355)	Imaza-quin, water, fltrd, ug/L (50356)	Meta-laxyl, water, fltrd, ug/L (50359)	Nico-sul-furon, water, fltrd, ug/L (50364)	Imaze-thapyr, water, fltrd, ug/L (50407)	2,4-D methyl ester, water, fltrd, ug/L (50470)	Propi-cona-zole, water, fltrd, ug/L (50471)	Tri-benuron water, fltrd, ug/L (61159)
JUL													
14...	<.03	<.004	<.0096	<.010	<.009	<.008mc	<.02mc	<.02	<.01	E.02mnc	<.014	E1.66	--u
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.03	<.004	E.1186	<.010	<.009	E.046mc	<.02mc	<.02	<.01	<.02mc	<.009	<.02	--u

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Bensul-furon, water, fltrd, ug/L (61693)	Flumet-sulam, water, fltrd, ug/L (61694)	Imida-cloprid water, fltrd, ug/L (61695)	Metsul-furon, water, fltrd, ug/L (61697)	O-Et-O-Me-S-Pr -phos-phoro-thioate bed sed ug/kg (62038)	Phorate oxon, bed sedimnt ug/kg (62039)	Etho-prop, bed sedimnt ug/kg (62040)	Sulfo-tepp, bed sedimnt ug/kg (62041)	Fonofos oxon, bed sedimnt ug/kg (62042)	Dimeth-oate, bed sedimnt ug/kg (62043)	Terbu-fos, bed sedimnt ug/kg (62044)
JUL													
14...	<.02mc	<.02	<.02	<.01mc	<.007	<.03mc	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	<3	<4	<2	<2	<2	<2	<4
SEP													
29...	<.02mc	<.02	<.02	<.01mc	<.007	<.03mc	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propet-amphos, bed sedimnt ug/kg (62045)	Fen-thion, bed sedimnt ug/kg (62046)	Methid-athion, bed sedimnt ug/kg (62047)	Disulf-oton sulfone bed sedimnt ug/kg (62048)	Pro-fenfos, bed sedimnt ug/kg (62049)	Ethion monoxon bed sedimnt ug/kg (62050)	Sulpro-fos, bed sedimnt ug/kg (62051)	Fipro-nil, water, fltrd, ug/L (62166)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Sample purpose code (71999)
JUL													
14...	--	--	--	--	--	--	--	<.016	.025	E.021n	<.029	E.007n	10.00
14...	<2	<3	<2	<2	<2	<2	<3	--	--	--	--	--	10.00
SEP													
29...	--	--	--	--	--	--	--	<.016	.014	E.012t	<.029	<.012	10.00

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Alti-tude of land surface feet (72000)	Drain-age area, mi2 (81024)	Chlor-pyrifos bed sedimnt ug/kg (81404)	Phorate bed sedimnt ug/kg (81412)	Disul-foton, bed sedimnt ug/kg (81887)	Sam-pling method, code (82398)	Fonofos bed sedimnt ug/kg (82408)	Metri-buzin, water, fltrd, ug/L (82630)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Phorate water fltrd 0.7u GF ug/L (82664)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)
JUL													
14...	59.72	289	--	--	--	70	--	<.006	<.006	<.009	<.009	<.011	<.034
14...	59.72	289	<2	<3	<4	70	<3	--	--	--	--	--	--
SEP													
29...	59.72	289	--	--	--	70	--	<.006	<.006	<.009	<.009	<.011	<.034

08164450 Sandy Creek near Ganado, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (82666)	Methyl para- thion, water, fltrd 0.7u GF ug/L (82667)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Peb- ulate, water, fltrd 0.7u GF ug/L (82669)	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Moli- nate, water, fltrd 0.7u GF ug/L (82671)	Etho- prop, water, fltrd 0.7u GF ug/L (82672)	Ben- flur- alin, water, fltrd 0.7u GF ug/L (82673)	Carbo- furan, water, fltrd 0.7u GF ug/L (82674)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Propy- zamide, water, fltrd 0.7u GF ug/L (82676)	Disul- foton, water, fltrd 0.7u GF ug/L (82677)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)
JUL													
14...	<.035	.030	<.004	<.004	<.02	<.005	<.005	<.010	<.020	<.02	<.004	<.02	<.002
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.035	<.015	<.004	<.004	<.02	<.003	<.005	<.010	<.020	<.02	<.004	<.02	<.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro- panil, water, fltrd 0.7u GF ug/L (82679)	Car- baryl, water, fltrd 0.7u GF ug/L (82680)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	DCPA, water fltrd 0.7u GF ug/L (82682)	Pendi- meth- alin, water, fltrd 0.7u GF ug/L (82683)	Naprop- amide, water, fltrd 0.7u GF ug/L (82684)	Propar- gite, water, fltrd 0.7u GF ug/L (82685)	Azin- phos- methyl, water, fltrd 0.7u GF ug/L (82686)	cis- Per- methrin water fltrd 0.7u GF ug/L (82687)	Sampler type, code (84164)	Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Iso- fenfos, surrog, Sch1320 bed sed percent recovry (90710)
JUL													
14...	<.011	E.310	<.010	<.003	<.022	<.007	<.02	<.050	<.006	3070	--	E52.8	--
14...	--	--	--	--	--	--	--	--	--	8010	--	--	79
SEP													
29...	<.011	<.041	<.010	<.003	<.022	<.007	<.02	<.050	<.006	3070	504	E8.4	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diazi- non-d10 surrog. wat flt 0.7u GF percent recovry (91063)	alpha- HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Sample volume, Sched- ules 2060 & 9060, mL (99840)	Sample volume, Sched- ule 2001, mL (99856)	Sample weight, Sched- ule 1320, grams (99953)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	Caf- feine- 13C, surrog, wat flt percent recovry (99959)
JUL							
14...	94.6	94.0	838	845	--	72.5	68.6
14...	--	--	--	--	21.0	--	--
SEP							
29...	98.8	90.3	868	915	--	E31.4	E201

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

Value qualifier codes used in this table:
c -- See laboratory comment
m -- Value is highly variable by this method
n -- Below the LRL and above the LT-MDL
t -- Below the long-term MDL

Null value qualifier codes used in this table:
u -- Unable to determine-matrix interference

08164503 West Mustang Creek near Ganado, TX

LOCATION.--Lat 29°04'17", long 96°28'01", Jackson County, Hydrologic Unit 12100102, on right bank at upstream end of southbound U.S. Highway 59 bridge, 2.1 mi upstream from Middle Mustang Creek, and 3.6 mi east of Ganado.

DRAINAGE AREA.--178 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 40.12 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Much of low flow during the irrigation season (Apr. to Sept.) is drainage from rice fields irrigated by water originally diverted from the Colorado River. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	4.9	2.2	3.2	43	10	2.3	473	26	906	59	59
2	5.4	3.9	1.7	1.9	30	6.8	6.0	2,950	35	443	54	36
3	8.6	2.3	1.5	1.3	55	5.1	1,200	3,130	27	224	63	29
4	12	1.5	1.3	0.86	37	4.3	2,360	1,170	30	120	42	33
5	14	1.1	1.0	0.59	20	4.2	1,020	221	30	83	30	33
6	19	1.3	0.90	0.47	46	3.9	197	105	33	54	31	26
7	18	1.0	0.85	2.0	50	3.6	138	65	39	42	45	23
8	19	0.77	0.88	2.1	24	3.1	94	93	527	42	32	23
9	126	0.60	0.87	1.3	11	2.4	45	183	759	39	20	21
10	1,640	0.50	0.78	0.78	26	2.2	23	497	450	51	18	19
11	888	0.52	0.75	0.85	1,180	2.3	320	447	258	141	23	15
12	365	0.53	0.82	2.0	2,290	2.7	1,660	2,160	236	194	92	13
13	216	0.60	1.2	1.3	927	1.9	1,150	2,370	95	150	97	13
14	160	0.47	46	0.85	221	24	275	4,310	49	106	46	18
15	118	0.38	25	0.71	201	876	100	4,910	37	83	28	94
16	78	0.33	10	0.69	99	581	47	2,800	157	66	20	115
17	56	167	4.1	57	50	157	26	985	115	56	18	76
18	49	1,540	2.5	200	31	77	16	408	92	70	23	53
19	47	1,420	1.5	68	23	53	9.6	274	64	80	31	37
20	30	376	1.1	29	17	31	6.2	133	45	71	21	28
21	20	147	0.86	17	21	18	5.5	72	41	97	15	20
22	11	76	0.68	14	16	12	4.3	45	44	95	13	21
23	6.9	41	0.64	11	10	9.8	7.2	30	258	112	15	18
24	7.3	29	0.52	6.3	7.2	8.5	174	22	2,730	115	44	17
25	5.3	18	0.52	184	72	6.9	450	20	4,490	125	38	18
26	4.1	11	0.50	343	111	4.9	320	19	3,450	100	31	13
27	29	8.4	0.49	135	64	3.9	196	22	2,300	76	18	12
28	28	5.8	0.57	49	34	3.1	112	18	1,240	70	9.8	10
29	17	4.1	0.73	21	19	2.3	56	20	717	83	17	9.3
30	11	3.0	0.59	24	---	2.5	24	27	893	80	328	15
31	7.3	---	0.82	108	---	3.2	---	24	---	71	138	---
TOTAL	4,023.6	3,867.00	111.87	1,287.20	5,735.2	1,926.6	10,044.1	28,003	19,267	4,045	1,459.8	917.3
MEAN	130	129	3.61	41.5	198	62.1	335	903	642	130	47.1	30.6
MAX	1,640	1,540	46	343	2,290	876	2,360	4,910	4,490	906	328	115
MIN	4.1	0.33	0.49	0.47	7.2	1.9	2.3	18	26	39	9.8	9.3
AC-FT	7,980	7,670	222	2,550	11,380	3,820	19,920	55,540	38,220	8,020	2,900	1,820
CFSM	0.73	0.72	0.02	0.23	1.11	0.35	1.88	5.07	3.61	0.73	0.26	0.17
IN.	0.84	0.81	0.02	0.27	1.20	0.40	2.10	5.85	4.03	0.85	0.31	0.19

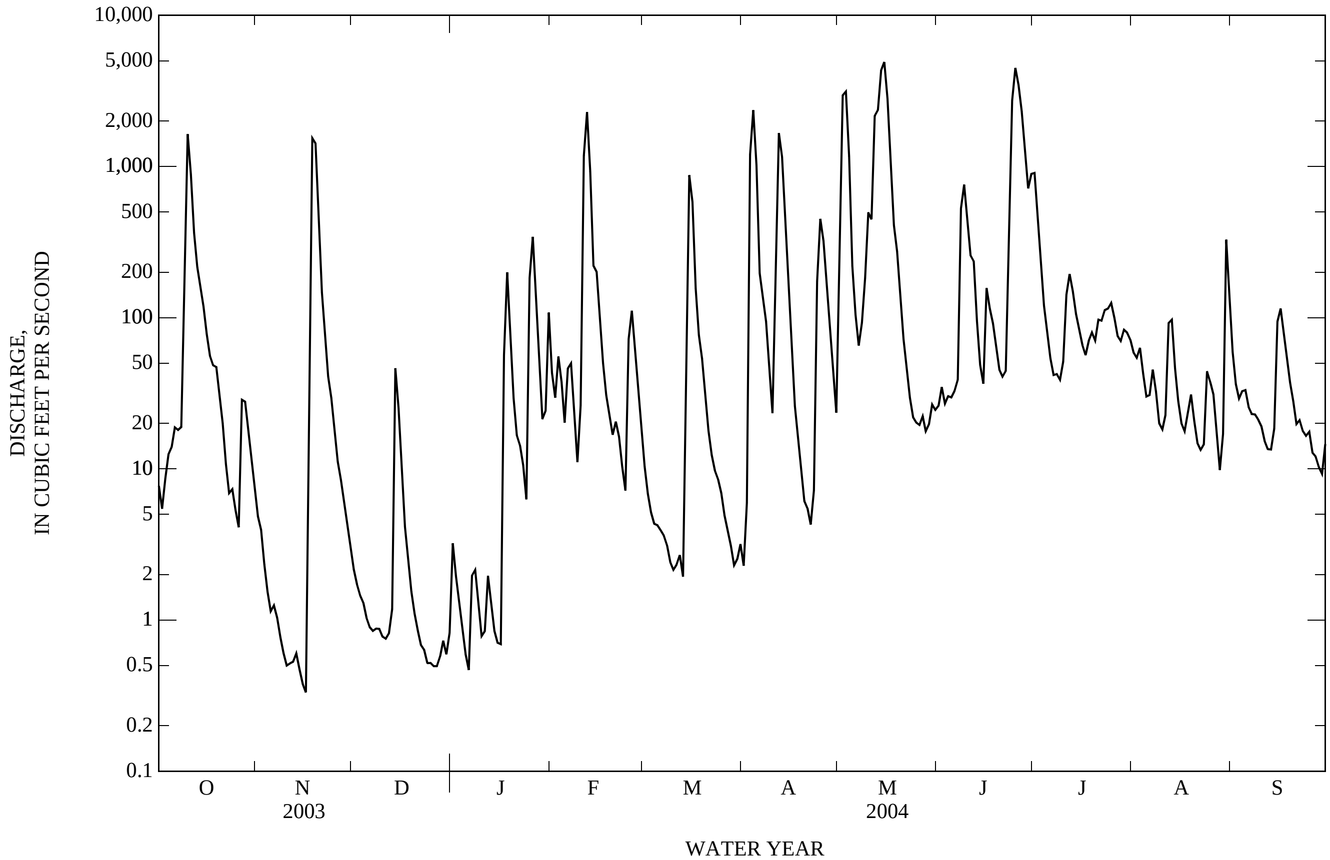
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	262	186	116	168	144	108	164	220	205	134	55.2	251
MAX	1,746	954	587	881	1,243	988	1,107	903	958	682	179	1,173
(WY)	(1995)	(2003)	(1992)	(1980)	(1992)	(1997)	(1997)	(2004)	(1993)	(2002)	(2001)	(2001)
MIN	14.2	1.32	0.17	0.72	0.87	0.81	12.3	8.35	5.56	38.1	14.0	5.33
(WY)	(1988)	(2000)	(1991)	(1982)	(1986)	(1986)	(1983)	(2003)	(1990)	(1986)	(2003)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	34,779.17		80,687.67			
ANNUAL MEAN	95.3		220		168	
HIGHEST ANNUAL MEAN					325	1997
LOWEST ANNUAL MEAN					45.2	1990
HIGHEST DAILY MEAN	2,860	Jul 16	4,910	May 15	18,700	Oct 19, 1994
LOWEST DAILY MEAN	0.33	Nov 16	0.33	Nov 16	0.00	Dec 19, 1990
ANNUAL SEVEN-DAY MINIMUM	0.48	Nov 10	0.48	Nov 10	0.01	Dec 19, 1990
MAXIMUM PEAK FLOW			5,550	May 15	20,000	Oct 19, 1994
MAXIMUM PEAK STAGE			18.36	May 15	a28.39	Oct 19, 1994
ANNUAL RUNOFF (AC-FT)	68,980		160,000		121,500	
ANNUAL RUNOFF (CFSM)	0.535		1.24		0.942	
ANNUAL RUNOFF (INCHES)	7.27		16.86		12.80	
10 PERCENT EXCEEDS	183		450		308	
50 PERCENT EXCEEDS	12		28		23	
90 PERCENT EXCEEDS	1.5		1.0		1.6	

a From floodmark.

08164503 West Mustang Creek near Ganado, TX—Continued



08164503 West Mustang Creek near Ganado, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1977 to current year.
BIOCHEMICAL DATA: Oct. 1977 to Nov. 1992.
PESTICIDE DATA: Nov. 1977 to July 1981, Apr. 1996 to current year.
SEDIMENT DATA: Sept. 1978 to Apr. 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover -able, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)
SEP													
29...	0850	8.9	70	765	5.8	67	7.2	587	23.0	Mn	460	E.13n	175
29...	0900	--	70	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Uranium natural water, fltrd, ug/L (22703)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)
SEP													
29...	<.06	<.04	<.8	.676	1.2	.10	15.7	1.2	1.67	<.2	.58	.7	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)
SEP													
29...	.07	<.02mc	<.006	E.005n	<.01mc	E.179mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)
SEP													
29...	<.04mc	<.005	.027	<.050	<.03	<.010	<.004	<.02	E.20mc	<.03mc	<.02mc	<.004	E.0849
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)
SEP													
29...	<.03	<.041	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164503 West Mustang Creek near Ganado, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)
SEP													
29...	<.01	<.003	E.006t	<.005	<.01	<.01	<.009	<.01	<.03	<.02	E.03	<.004	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)
SEP													
29...	<.005	<.03	<.029	E.012n	E.013n	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)
SEP													
29...	<.01	<.035	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	<.013	<.006	<.03mc	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	N-(4-Chloro-phenyl) -N'-methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)
SEP													
29...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)
SEP													
29...	<.01	<.004	<.025	<.011	<.02	<.010	E.34	<.008	<.02	<.005	<.009	<.02	<.034
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164503 West Mustang Creek near Ganado, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)	Triallate, water, fltrd 0.7u GF ug/L (82678)	Tribenuron water, fltrd, ug/L (61159)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
SEP							
29...	<.010mc	<.02	<.010	<.002	--u	E.56	<.009
29...	--	--	--	--	--	--	--

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

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08164504 East Mustang Creek near Louise, TX

LOCATION.--Lat 29°04'14", long 96°25'01", Wharton County, Hydrologic Unit 12100102, on right bank, 50 ft downstream from right end of bridge on Farm Road 647, and 2.7 mi south of Louise.

DRAINAGE AREA.--90.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Oct. 1996 to current year. Prior to Oct. 2000, published as "at FM 647 near Ganado".

GAGE.--Water-stage recorder. Datum of gage is 43.02 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records fair. Much of the low flow during the irrigation season (Apr. to Sept.) is drainage from rice fields irrigated by water originally diverted from the Colorado River. No known regulation or diversions. No flow at times.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

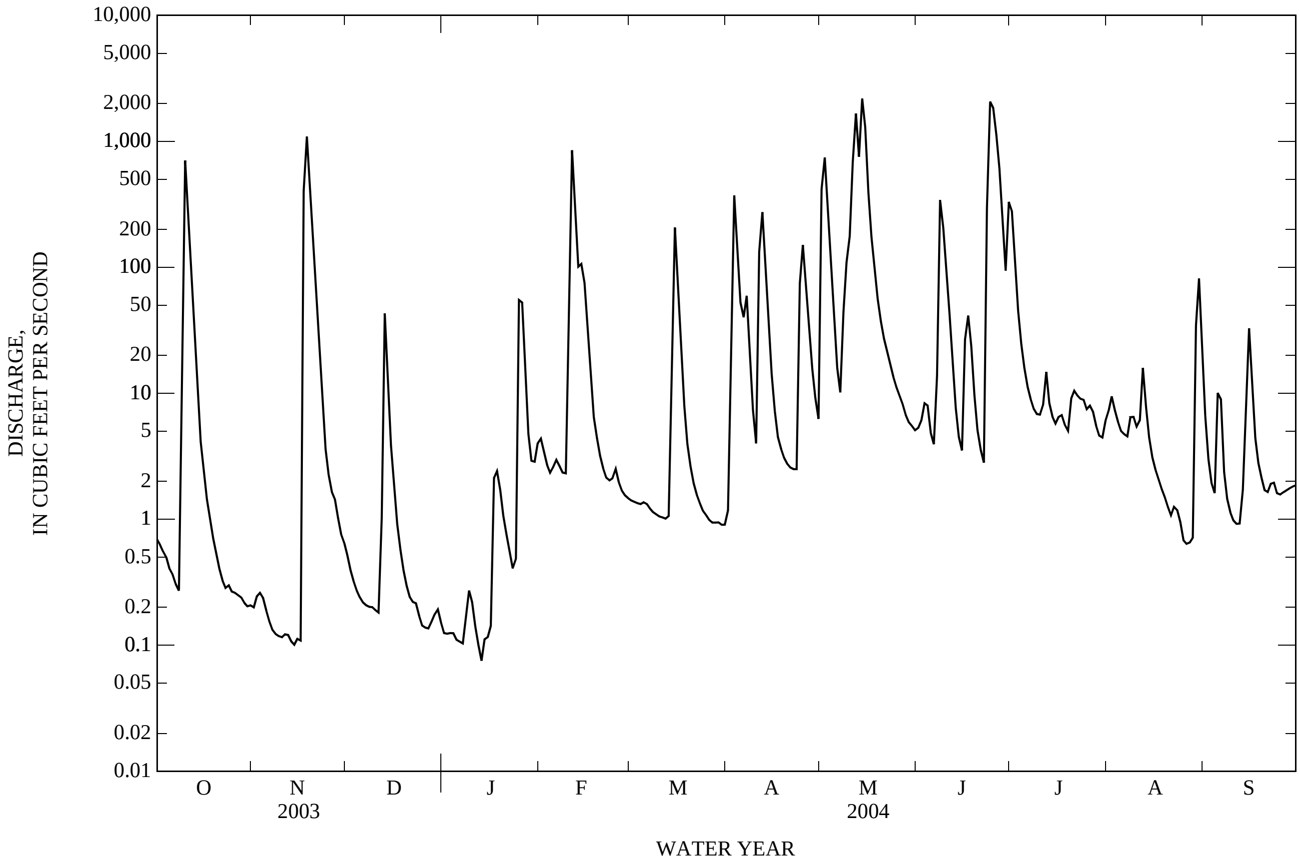
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	0.20	0.52	0.12	4.4	1.4	1.2	417	5.3	280	7.3	6.6
2	0.62	0.24	0.39	0.12	3.4	1.4	8.8	745	6.1	100	9.4	3.0
3	0.55	0.26	0.32	0.12	2.7	1.3	373	210	8.3	45	7.3	2.0
4	0.50	0.24	0.27	0.12	2.3	1.3	157	80	8.0	24	6.0	1.6
5	0.40	0.19	0.24	0.11	2.6	1.4	52	35	4.8	16	5.0	10
6	0.36	0.15	0.22	0.11	3.0	1.3	40	16	3.9	11	4.7	9.0
7	0.31	0.13	0.21	0.10	2.6	1.2	59	10	14	9.0	4.6	2.4
8	0.27	0.12	0.20	0.16	2.4	1.1	18	44	342	7.5	6.5	1.5
9	18	0.12	0.20	0.27	2.3	1.1	7.4	109	206	6.9	6.5	1.1
10	703	0.12	0.19	0.22	106	1.1	4.0	176	90	6.8	5.4	0.98
11	193	0.12	0.18	0.14	848	1.0	133	684	43	8.1	6.1	0.92
12	56	0.12	1.0	0.10	320	1.0	274	1,660	17	15	16	0.92
13	20	0.11	43	0.08	101	1.1	97	756	7.6	8.4	7.7	1.7
14	8.3	0.10	13	0.11	106	11	35	2,190	4.5	6.5	4.5	7.3
15	4.1	0.11	3.8	0.12	75	207	14	1,290	3.5	5.7	3.1	33
16	2.3	0.11	1.7	0.14	28	63	7.2	389	27	6.5	2.5	12
17	1.4	406	0.91	2.1	12	20	4.5	174	41	6.7	2.1	4.4
18	0.98	1,090	0.57	2.4	6.5	7.9	3.6	97	24	5.6	1.8	2.8
19	0.71	269	0.39	1.7	4.4	4.0	3.1	56	9.5	5.0	1.5	2.1
20	0.53	83	0.30	1.1	3.2	2.6	2.8	37	5.1	9.1	1.3	1.7
21	0.40	34	0.24	0.76	2.5	1.9	2.6	27	3.6	10	1.1	1.6
22	0.33	15	0.22	0.56	2.1	1.6	2.5	21	2.8	9.6	1.3	1.9
23	0.28	7.0	0.22	0.41	2.0	1.3	2.5	17	296	9.0	1.2	1.9
24	0.30	3.6	0.17	0.48	2.1	1.2	74	13	2,060	8.9	0.95	1.6
25	0.27	2.3	0.14	55	2.5	1.1	151	11	1,850	7.5	0.68	1.6
26	0.26	1.7	0.14	52	2.0	0.99	69	9.6	1,120	8.0	0.64	1.6
27	0.25	1.4	0.14	14	1.7	0.94	33	8.2	610	7.2	0.65	1.7
28	0.24	1.0	0.15	4.8	1.5	0.94	16	6.7	214	5.5	0.71	1.8
29	0.22	0.76	0.18	2.9	1.5	0.94	9.2	5.9	94	4.6	35	1.8
30	0.20	0.65	0.19	2.9	---	0.90	6.2	5.5	331	4.5	82	1.9
31	0.21	---	0.15	4.0	---	0.91	---	5.1	---	6.0	21	---
TOTAL	1,014.98	1,917.85	69.55	147.25	1,653.7	343.92	1,660.6	9,305.0	7,452.0	663.6	254.53	122.42
MEAN	32.7	63.9	2.24	4.75	57.0	11.1	55.4	300	248	21.4	8.21	4.08
MAX	703	1,090	43	55	848	207	373	2,190	2,060	280	82	33
MIN	0.20	0.10	0.14	0.08	1.5	0.90	1.2	5.1	2.8	4.5	0.64	0.92
AC-FT	2,010	3,800	138	292	3,280	682	3,290	18,460	14,780	1,320	505	243

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	115	113	36.5	37.0	25.4	54.0	60.4	71.1	41.9	39.5	22.1	130
MAX	371	279	87.0	161	63.3	310	374	300	248	176	83.5	368
(WY)	(1998)	(2003)	(2003)	(1997)	(1997)	(1997)	(1997)	(2004)	(2004)	(2002)	(1998)	(1998)
MIN	0.21	0.06	0.07	0.11	0.04	0.12	0.69	0.66	0.43	0.62	0.26	0.00
(WY)	(2000)	(2000)	(2000)	(2000)	(2002)	(2003)	(2003)	(2003)	(2001)	(2001)	(2000)	(2000)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	9,615.37		24,605.40			
ANNUAL MEAN	26.3		67.2		62.2	
HIGHEST ANNUAL MEAN					104	1997
LOWEST ANNUAL MEAN					13.0	2000
HIGHEST DAILY MEAN	1,360	Jul 16	2,190	May 14	3,640	Sep 11, 1998
LOWEST DAILY MEAN	0.06	Mar 23	0.08	Jan 13	0.00	Jul 14, 2000
ANNUAL SEVEN-DAY MINIMUM	0.07	Mar 19	0.11	Nov 10	0.00	Jul 14, 2000
MAXIMUM PEAK FLOW			2,310	May 14	4,100	Sep 11, 1998
MAXIMUM PEAK STAGE			20.75	May 14	22.16	Sep 11, 1998
ANNUAL RUNOFF (AC-FT)	19,070		48,800		45,040	
10 PERCENT EXCEEDS	36		106		74	
50 PERCENT EXCEEDS	0.71		3.0		1.6	
90 PERCENT EXCEEDS	0.11		0.20		0.08	

08164504 East Mustang Creek near Louise, TX—Continued



08164504 East Mustang Creek near Louise, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Apr. 1996 to current year
PESTICIDE DATA: Apr. 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	Sampling method, code (82398)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover -able, ug/L (01105)	Antimony, water, fltrd, ug/L (01095)	Barium, water, fltrd, ug/L (01005)
JUL													
14...	0750	6.2	70	764	4.9	63	7.0	261	28.0	--	--	--	--
14...	0800	--	70	--	--	--	--	--	--	--	--	--	--
SEP													
29...	0750	1.8	70	766	3.9	46	6.9	467	23.5	<2	780	E.11n	156
29...	0800	--	70	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Beryllium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Uranium natural water, fltrd, ug/L (22703)	Zinc, water, fltrd, ug/L (01090)	2,4-D methyl ester, water, fltrd, ug/L (50470)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	<.009
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.06	<.04	<.8	.506	1.0	<.08	80.3	.7	1.59	<.2	3.35	.9	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Ketocarbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)
JUL													
14...	<.02	<.02mc	<.006	E.016	<.01mc	E.558mc	<.006	<.014mc	<.006	<.007	.015	<.02mc	<.008mc
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.02	<.02mc	<.006	E.082	E.02mc	E.386mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)
JUL													
14...	<.04mc	<.005	.064	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.0570
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.04mc	<.005	.469	<.050	<.03	<.010	E.011	<.02	E.02mc	<.03mc	<.02mc	<.004	.0276
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164504 East Mustang Creek near Louise, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)	Carbofuran, water, fltrd 0.7u GF ug/L (82674)	Chloramben methyl ester, water, fltrd, ug/L (61188)	Chlorimuron, water, fltrd, ug/L (50306)	Chlorodiamino-s-triazine, wat flt ug/L (04039)	Chlorothalonil, water, fltrd 0.7u GF ug/L (49306)	Chlorpyrifos water, fltrd, ug/L (38933)	cis-Permethrin water fltrd 0.7u GF ug/L (82687)	Clopyralid, water, fltrd 0.7u GF ug/L (49305)	Cyanazine, water, fltrd, ug/L (04041)	Cycloate, water, fltrd, ug/L (04031)
JUL													
14...	<.03	<.041	<.006	<.020	<.02mc	<.010	E.03mnc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.03	<.041	<.006	<.020	<.02mc	<.010	E.01mtc	<.04mc	<.005	<.006	<.01	<.018	<.01mc
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Dacthal monoacid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulfinyl fipronil, water, fltrd, ug/L (62170)	Diazinon, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Dichlorprop, water, fltrd 0.7u GF ug/L (49302)	Dieldrin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphenamid, water, fltrd, ug/L (04033)	Disulfoton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethalfluralin, water, fltrd 0.7u GF ug/L (82663)
JUL													
14...	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	.02	<.004	<.009
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.003	<.012	<.005	<.01	<.01	<.009	<.01	<.03	<.02	E.03	<.004	<.009
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Ethoprop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulfinylfipronil amide, wat flt ug/L (62169)	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)
JUL													
14...	<.005	<.03	<.029	<.013	<.024	<.016	--u	.13	<.003	<.02mc	<.02mc	.051	<.004
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.005	<.03	<.029	<.013	<.024	<.016	<.01mc	E.19	<.003	<.02mc	<.02mc	<.007	<.004
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)
JUL													
14...	<.01	<.035	.350	<.02	<.01mc	E.02n	<.008mc	<.004mc	<.015	.055	<.006	<.03mc	.009
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.035	.132	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.103	<.006	<.03mc	<.003
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164504 East Mustang Creek near Louise, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)
JUL													
14...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	E1.31
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.02	<.007	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)
JUL													
14...	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008	<.02	<.005	<.009	.11	<.034
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
29...	<.01	<.004	<.025	<.011	<.02	<.010	E.01n	<.008	<.02	<.005	<.009	.14	<.034
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnes-ium, bed sedimnt recover -able, mg/kg (00924)	Potas-sium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alum-inum, bed sedimnt recover -able, ug/g (01108)
JUL													
14...	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	140	7,000	1,400	6,900	2,700	21,000
SEP													
29...	<.010mc	<.02	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lantha-num, bed sed <62.5um wet svd fld,tot ug/g (34885)	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	2.1	4.6	240	.640	.080	.050	28	16	3.2	4.5	7,700	14	13
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164504 East Mustang Creek near Louise, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Mangan-ese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Molyb-denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scand-ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Stront-ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tant-alum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thall-ium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titan-ium, bed sedimnt total, ug/g (01153)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	13	210	<.1	6	2	3.1	<3	35	<.2	.200	4.0	1,600	1.0
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Vanad-ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Carbo-pheno-thion, bed sedimnt ug/kg (39787)	Chlor-pyrifos bed sedimnt ug/kg (81404)	Diazi-non, bed sedimnt ug/kg (39571)	Dimeth-oate, bed sedimnt ug/kg (62043)	Disulf-oton sulfone bed sedimnt ug/kg (62048)	Disul-foton, bed sedimnt ug/kg (81887)	Ethion monoxon bed sedimnt ug/kg (62050)	Ethion, bed sedimnt ug/kg (39399)	O-Et-O-Me-S-Pr -phos-phoro-thioate bed sed ug/kg (62038)	Etho-prop, bed sedimnt ug/kg (62040)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	23	12	22	<2	<2	<2	<2	<2	<4	<2	<2	<3	<2
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fen-thion, bed sedimnt ug/kg (62046)	Fonofos oxon, bed sedimnt ug/kg (62042)	Fonofos bed sedimnt ug/kg (82408)	Mala-thion, bed sedimnt ug/kg (39531)	Methid-athion, bed sedimnt ug/kg (62047)	Methyl para-thion, bed sedimnt ug/kg (39601)	Para-thion, bed sedimnt ug/kg (39541)	Phorate oxon, bed sedimnt ug/kg (62039)	Phorate bed sedimnt ug/kg (81412)	Pro-fenfos, bed sedimnt ug/kg (62049)	Propet-amphos, bed sedimnt ug/kg (62045)	Sulfo-tepp, bed sedimnt ug/kg (62041)	Sulpro-fos, bed sedimnt ug/kg (62051)
JUL													
14...	--	--	--	--	--	--	--	--	--	--	--	--	--
14...	<3	<2	<3	<2	<2	<2	<2	<4	<3	<2	<2	<2	<3
SEP													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Terbu-fos, bed sedimnt ug/kg (62044)	Tribu-phos, bed sedimnt ug/kg (39050)
JUL		
14...	--	--
14...	<4	<2
SEP		
29...	--	--
29...	--	--

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- u -- Unable to determine-matrix interference

08164525 Lake Texana near Edna, TX

LOCATION.--Lat 28°53'30", long 96°34'39", Jackson County, Hydrologic Unit 12100102, on river outlet works structure on upstream side of Palmetto Bend Dam on the Navidad River, 4.0 mi north of Lolita, 4.9 mi upstream from confluence with Lavaca River, and 7.2 mi southeast of Edna.

DRAINAGE AREA.--1,370 mi^2.

WATER-STAGE RECORDS

PERIOD OF RECORD.--July 1999 to Sept. 2002 (contents), Oct 2002 to current year.

REVISED RECORDS.--WSP 1923: 1953(M), Drainage area.

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

REMARKS.--Records good. The lake is formed by a rolled earthfill dam 1.3 mi long, a concrete spillway 464 ft wide, and 6.6 mi of earthen dikes. The dam was completed and storage began May 1980. The spillway has twelve 35 ft wide by 22.5 ft high radial gates to discharge flood flows to the river channel downstream. Dual level municipal and industrial outlet works structures are located on each side of the spillway. These concrete structures provide for access to a conduit through the dam and for connecting a water delivery system. The river outlet works, a concrete structure with multi-level intake gates, discharge into the Navidad River through an 8 ft by 10 ft downstream conduit. The dam is owned by the Lavaca-Navidad River Authority. The primary purpose of Lake Texana is to provide municipal and industrial water supply of 75,000 acre-ft annually, and to provide recreational, fish and wildlife facilities for the public. The lake is not designed to store floods; therefore, flooding both downstream and upstream remains approximately the same as conditions were before construction. Data regarding the dam are given in the following table:

	Elevation (feet)
Top of dam	55.0
Top of gate	45.3
Crest of spillways (tainter gates sill)	23.0

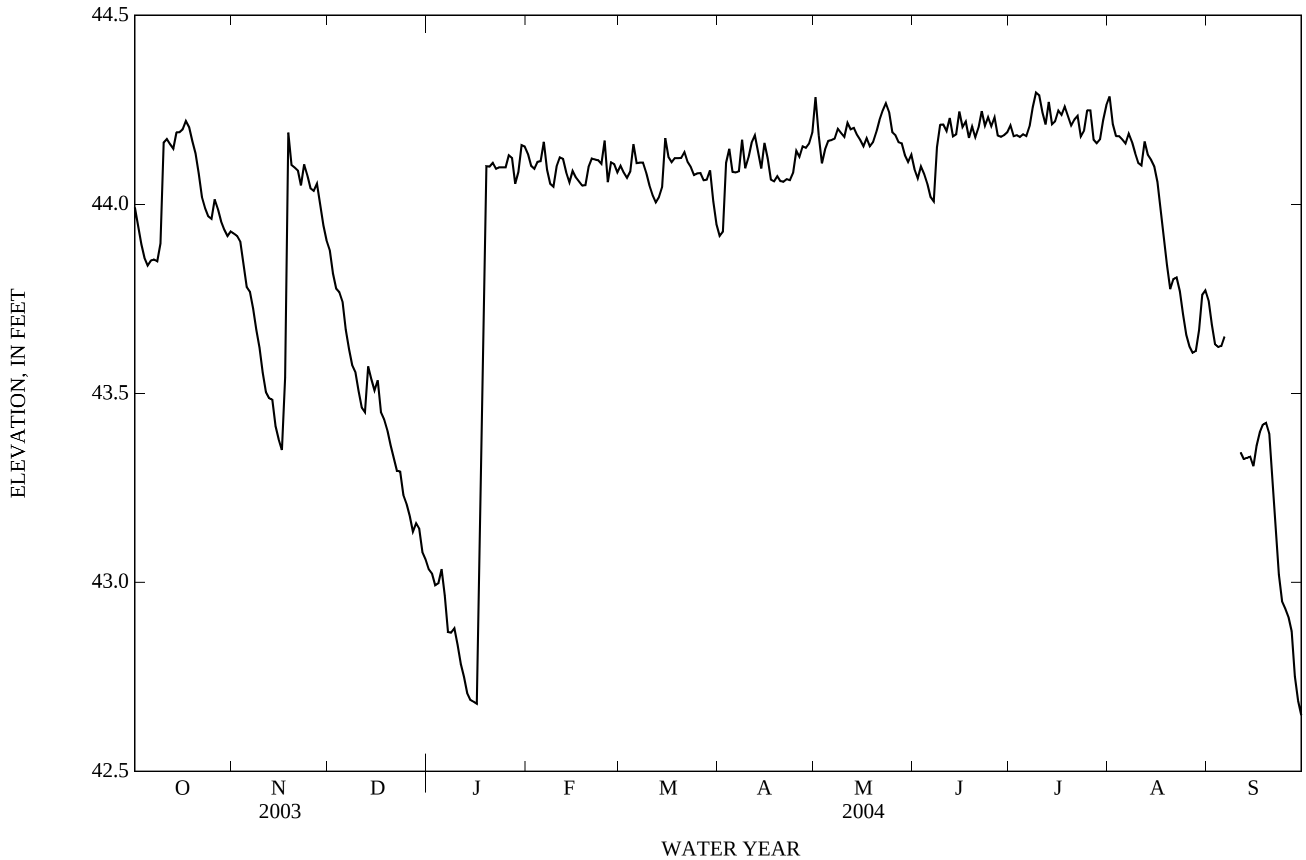
EXTREMES FOR PERIOD OF RECORD.--July 1999 to Sept. 2002: Maximum contents, 163,200 acre-ft, Nov. 27, 2001; minimum contents, 105,200 acre-ft, Feb. 22, 2000; July 1999 to current year: Maximum elevation, 44.74 ft, Nov. 27, 2001; minimum elevation, 38.33 ft, Feb. 22, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 44.49 ft, May 11; minimum elevation, 42.61 ft, Jan. 16.

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43.99	43.92	43.88	43.03	44.13	44.10	43.92	44.28	44.09	44.21	44.29	43.75
2	43.94	43.92	43.82	43.02	44.10	44.08	43.93	44.18	44.07	44.18	44.21	43.68
3	43.90	43.90	43.78	42.99	44.09	44.07	44.11	44.11	44.10	44.18	44.18	43.63
4	43.86	43.84	43.77	43.00	44.11	44.09	44.15	44.15	44.08	44.18	44.18	43.62
5	43.84	43.78	43.74	43.03	44.11	44.16	44.09	44.17	44.05	44.19	44.17	43.63
6	43.85	43.77	43.67	42.96	44.17	44.11	44.08	44.17	44.02	44.18	44.16	43.65
7	43.85	43.72	43.62	42.87	44.09	44.11	44.09	44.17	44.01	44.21	44.19	---
8	43.85	43.67	43.58	42.87	44.05	44.11	44.17	44.20	44.15	44.26	44.17	---
9	43.90	43.62	43.56	42.88	44.05	44.08	44.10	44.19	44.21	44.30	44.14	---
10	44.16	43.55	43.51	42.83	44.10	44.05	44.12	44.18	44.21	44.29	44.11	---
11	44.17	43.50	43.46	42.78	44.12	44.02	44.16	44.22	44.19	44.24	44.10	43.34
12	44.16	43.49	43.45	42.75	44.12	44.01	44.18	44.20	44.23	44.21	44.17	43.33
13	44.15	43.48	43.57	42.71	44.08	44.02	44.14	44.20	44.18	44.27	44.13	43.33
14	44.19	43.41	43.54	42.69	44.06	44.04	44.09	44.18	44.19	44.21	44.12	43.33
15	44.19	43.38	43.51	42.68	44.09	44.18	44.16	44.17	44.25	44.22	44.10	43.31
16	44.20	43.35	43.53	42.68	44.07	44.13	44.12	44.15	44.20	44.25	44.06	43.36
17	44.22	43.54	43.45	43.07	44.06	44.11	44.07	44.18	44.22	44.24	43.99	43.40
18	44.20	44.19	43.43	43.76	44.05	44.12	44.06	44.15	44.18	44.26	43.91	43.42
19	44.17	44.10	43.40	44.10	44.05	44.12	44.07	44.16	44.21	44.23	43.84	43.42
20	44.13	44.10	43.36	44.10	44.10	44.12	44.06	44.19	44.18	44.21	43.78	43.39
21	44.08	44.09	43.33	44.11	44.12	44.14	44.06	44.22	44.20	44.22	43.80	43.28
22	44.02	44.05	43.29	44.09	44.12	44.11	44.07	44.25	44.25	44.23	43.81	43.15
23	43.99	44.11	43.29	44.10	44.12	44.10	44.06	44.27	44.21	44.18	43.77	43.02
24	43.97	44.08	43.23	44.10	44.11	44.08	44.08	44.24	44.23	44.19	43.71	42.95
25	43.96	44.04	43.21	44.10	44.17	44.08	44.14	44.19	44.21	44.25	43.65	42.93
26	44.01	44.04	43.18	44.13	44.06	44.08	44.13	44.18	44.23	44.25	43.62	42.91
27	43.99	44.05	43.13	44.12	44.11	44.06	44.15	44.16	44.18	44.17	43.61	42.87
28	43.95	44.00	43.16	44.05	44.11	44.07	44.15	44.16	44.18	44.16	43.61	42.75
29	43.93	43.94	43.14	44.09	44.08	44.09	44.16	44.13	44.18	44.17	43.67	42.69
30	43.92	43.90	43.08	44.16	---	44.01	44.19	44.11	44.19	44.22	43.76	42.65
31	43.93	---	43.06	44.15	---	43.95	---	44.13	---	44.26	43.77	---
MEAN	44.02	43.82	43.44	43.42	44.10	44.08	44.10	44.18	44.17	44.22	43.96	---
MAX	44.22	44.19	43.88	44.16	44.17	44.18	44.19	44.28	44.25	44.30	44.29	---
MIN	43.84	43.35	43.06	42.68	44.05	43.95	43.92	44.11	44.01	44.16	43.61	---

08164525 Lake Texana near Edna, TX—Continued



08164525 Lake Texana near Edna, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Jan. 1988 to current year.
BIOCHEMICAL DATA: Jan. 1988 to Sept. 1993.
PESTICIDE DATA: May 1994 to current year.

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Elev-ation, feet above NGVD (72020)	Sam-pling depth, feet (00003)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)
MAR													
17...	0748	44.09	1.00	.12	768	8.7	93	7.8	186	19.0	67	22.3	2.78
17...	0750	--	10.0	--	768	8.7	91	7.7	185	18.0	--	--	--
17...	0752	--	20.0	--	768	8.3	86	7.6	186	17.5	--	--	--
17...	0754	--	30.0	--	768	8.2	85	7.6	186	17.5	--	--	--
17...	0756	--	40.0	--	768	8.2	85	7.6	186	17.5	--	--	--
17...	0758	--	50.0	--	768	7.8	81	7.6	186	17.5	--	--	--
17...	0800	--	60.0	--	768	4.9	48	7.3	197	15.0	--	--	--
17...	0802	--	69.0	--	768	4.3	44	7.2	199	16.5	73	24.2	2.94
MAY													
12...	0940	44.18	1.00	.12	764	6.9	80	7.4	153	22.5	55	18.8	2.04
12...	0942	--	10.0	--	764	6.9	80	7.4	153	22.5	--	--	--
12...	0944	--	20.0	--	764	6.8	78	7.4	153	22.5	--	--	--
12...	0946	--	30.0	--	764	3.4	38	6.9	132	21.0	--	--	--
12...	0948	--	40.0	--	764	2.7	30	6.8	124	21.0	--	--	--
12...	0950	--	50.0	--	764	2.1	24	6.7	117	21.0	--	--	--
12...	0952	--	60.0	--	764	1.7	19	6.7	115	20.5	--	--	--
12...	0954	--	66.0	--	764	1.9	21	6.9	115	20.5	40	13.4	1.65
12...	0956	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	0744	44.22	1.00	.34	765	6.0	80	7.5	126	30.5	54	18.3	1.99
21...	0746	--	10.0	--	765	6.0	80	7.5	126	30.5	--	--	--
21...	0748	--	20.0	--	765	2.9	37	7.0	119	28.5	--	--	--
21...	0750	--	30.0	--	765	E.1	--	6.8	115	27.5	--	--	--
21...	0752	--	40.0	--	765	E.1	--	6.8	114	27.0	--	--	--
21...	0754	--	50.0	--	765	E.1	--	6.7	111	26.5	--	--	--
21...	0756	--	60.0	--	765	E.1	--	6.7	110	25.5	--	--	--
21...	0758	--	68.0	--	765	E.3	--	6.9	115	25.5	44	14.4	1.94

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Calcium bed sedimnt recover -able, mg/kg (00917)	Magnes-ium, bed sedimnt recover -able, mg/kg (00924)	Potas-sium, bed sedimnt recover -able, mg/kg (00938)	Sodium, bed sedimnt recover -able, mg/kg (00934)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
MAR													
17...	4.38	10.7	24	--	--	--	--	55	67	<1	13.5	<.2	10.8
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	4.34	11.2	24	--	--	--	--	60	72	<1	14.2	<.2	12.2
MAY													
12...	3.79	7.74	22	--	--	--	--	--q	--q	--q	9.58	<.2	9.32
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	3.40	5.72	22	--	--	--	--	--q	--q	--q	7.48	<.2	8.21
12...	--	--	--	9,100	7,300	9,200	990	--	--	--	--	--	--
JUL													
21...	3.18	4.92	16	--	--	--	--	48	58	<1	6.36	<.2	13.3
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	2.72	4.61	17	--	--	--	--	40	49	<1	6.28	<.2	12.0

08164525 Lake Texana near Edna, TX—Continued

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Phos-phorus, bed sedimnt total, mg/kg (00668)	Alum-inum, water, fltrd, ug/L (01106)	Alum-inum, water, unfltrd recover -able, ug/L (01105)	Anti-mony, water, fltrd, ug/L (01095)	Arsenic water, fltrd, ug/L (01000)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
MAR													
17...	6.6	104	--	E2n	1,870	E.12n	E1n	75	<.06	<.04	<.8	.091	2.8
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	6.8	112	--	Mn	2,590	E.15n	<2	82	<.06	<.04	<.8	.130	2.8
MAY													
12...	5.1	--	--	2	1,950	E.12n	E1n	70	<.06	<.04	<.8	.091	2.5
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	4.4	--	--	2	2,700	E.10n	E1n	58	<.06	<.04	<.8	.096	2.9
12...	--	--	550	--	--	--	--	--	--	--	--	--	--
JUL													
21...	2.7	79	--	3	700	E.18n	E2n	66	<.06	<.04	<.8	.120	2.6
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	1.9	70	--	11	900	<.20	9	55	<.06	<.04	<.8	1.33	.4

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Mangan-ese, water, fltrd, ug/L (01056)	Mercury water, fltrd, ug/L (71890)	Molyb-denum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Stront-ium, water, fltrd, ug/L (01080)	Vanad-ium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)	Alum-inum, bed sedimnt recover -able, ug/g (01108)
MAR													
17...	21	E.04n	E2n	.6	<.02	.6	1.30	<3	<.2	73.7	E4n	1.0	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	18	<.08	E2n	19.3	<.02	.6	1.64	<3	<.2	78.0	E4n	2.1	--
MAY													
12...	27	<.08	E2n	1.6	<.02	.4	1.21	<3	<.2	62.7	E4n	.8	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	35	<.08	<3	16.4	<.02	E.4n	1.37	<3	<.2	46.8	E4n	3.1	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	85,000
JUL													
21...	52	E.04n	<3	5.9	<.02	.4	1.74	<3	<.2	56.2	E4n	2.6	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
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21...	1,610	.09	<3	541	<.02	E.3n	1.52	<3	<.2	51.5	E4n	11.8	--

08164525 Lake Texana near Edna, TX—Continued

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Anti-mony, bed sed <62.5um wet svd fld,tot ug/g (34795)	Arsenic bed sed <62.5um wet svd field, total, ug/g (34800)	Barium, bed sed <62.5um wet svd field, total, ug/g (34805)	Beryll-ium, bed sed <62.5um wet svd fld,tot ug/g (34810)	Bismuth bed sed <177um wet svd field, total, ug/g (34816)	Cadmium bed sed <62.5um wet svd field, total, ug/g (34825)	Cerium, bed sed <62.5um wet svd field, total, ug/g (34835)	Chrom-ium, bed sed <62.5um wet svd fld,tot ug/g (34840)	Cobalt, bed sed <62.5um wet svd field, total, ug/g (34845)	Copper, bed sed <62.5um wet svd field, total, ug/g (34850)	Gallium bed sed <62.5um wet svd field, total, ug/g (34860)	Iron, bed sedimnt total, ug/g (01170)	Lantha-num, bed sed <62.5um wet svd fld,tot ug/g (34885)
MAR													
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MAY													
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	1.1	7.1	410	2.6	.330	.170	99	70	12	23	20	38,000	48
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
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285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Lead, bed sed <62.5um wet svd field, total, ug/g (34890)	Lithium bed sed <62.5um wet svd field, total, ug/g (34895)	Mangan-ese, bed sed <62.5um wet svd fld,tot ug/g (34905)	Molyb-denum, bed sed <62.5um wet svd fld,tot ug/g (34915)	Nickel, bed sed <62.5um wet svd field, total, ug/g (34925)	Niobium bed sed <62.5um wet svd field, total, ug/g (34930)	Scand-ium, bed sed <62.5um wet svd fld,tot ug/g (34945)	Silver, bed sed <62.5um wet svd field, total, ug/g (34955)	Stront-ium, bed sed <62.5um wet svd fld,tot ug/g (34965)	Tant-alum, bed sed <62.5um wet svd fld,tot ug/g (34975)	Thall-ium, bed sed <62.5um dry svd total, ug/g (04064)	Thorium bed sed <62.5um wet svd field, total, ug/g (34980)	Titan-ium, bed sedimnt total, ug/g (01153)
MAR													
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MAY													
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	28	37	760	.7	26	29	14	<3	64	1.9	.800	16	4,900
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
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08164525 Lake Texana near Edna, TX—Continued

285331096343501 -- LK TEXANA SITE AC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Vanad-ium, bed sed <62.5um wet svd fld,tot ug/g (35005)	Yttrium bed sed <62.5um wet svd field, total, ug/g (35010)	Zinc, bed sed <62.5um wet svd field, total, ug/g (35020)	Oil and grease, water, unfltrd freon extract mg/L (00556)	Uranium natural water, fltrd, ug/L (22703)	Uranium bed sed <62.5um wet svd field, total, ug/g (35000)
MAR						
17...	--	--	--	--	.18	--
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	--	--	--	.13	--
MAY						
12...	--	--	--	<7	.12	--
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	--	--	--	<7	--	--
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	--	--	--	--	--	--
12...	--	--	--	--	.06	--
12...	94	36	100	--	--	2.3
JUL						
21...	--	--	--	--	.08	--
21...	--	--	--	--	--	--
21...	--	--	--	--	--	--
21...	--	--	--	--	--	--
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21...	--	--	--	--	--	--
21...	--	--	--	--	--	--
21...	--	--	--	--	.06	--

285326096342101 -- LK TEXANA SITE AL
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sam-pling depth, feet (00003)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
MAR								
17...	0836	1.00	769	8.8	94	7.7	185	19.0
17...	0838	10.0	769	8.7	91	7.7	185	18.0
17...	0840	20.0	769	8.5	89	7.7	185	18.0
17...	0842	30.0	769	8.4	87	7.7	185	17.5
17...	0844	36.0	769	8.3	86	7.6	185	17.5
MAY								
12...	1025	1.00	761	7.0	81	7.3	153	22.5
12...	1027	10.0	761	6.9	80	7.4	153	22.5
12...	1029	20.0	761	6.3	73	7.2	149	22.5
12...	1031	30.0	761	3.4	39	6.8	131	21.5
12...	1033	37.0	761	2.5	28	6.8	128	21.0
JUL								
21...	0818	1.00	766	8.2	108	7.5	126	30.0
21...	0820	10.0	766	5.7	75	7.4	125	30.0
21...	0822	20.0	766	5.0	65	7.2	123	29.5
21...	0824	30.0	766	E.1	--	6.7	114	27.0
21...	0826	37.0	766	E.2	--	6.7	121	27.0

08164525 Lake Texana near Edna, TX—Continued

285534096322301 -- LK TEXANA SITE BC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
MAR								
17...	0854	1.00	769	8.1	87	7.5	176	19.0
17...	0856	10.0	769	7.9	84	7.5	178	18.5
17...	0858	20.0	769	7.7	80	7.5	176	17.5
17...	0900	30.0	769	7.8	81	7.5	179	17.5
17...	0902	39.0	769	7.8	81	7.5	180	17.5
MAY								
12...	1049	1.00	761	6.4	75	7.1	113	23.5
12...	1051	10.0	761	6.3	74	7.1	114	23.0
12...	1053	20.0	761	6.3	74	7.3	120	23.0
12...	1055	30.0	761	6.0	70	7.1	119	23.0
12...	1057	39.0	761	3.0	34	6.7	106	22.0
JUL								
21...	0840	1.00	767	5.5	72	7.3	131	30.0
21...	0842	10.0	767	5.3	69	7.3	131	29.5
21...	0844	20.0	767	2.1	27	6.9	122	28.5
21...	0846	30.0	767	E.1	--	6.8	124	28.0
21...	0848	38.0	767	E.2	--	6.8	122	25.5

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, meters (00078)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Diethylaniline water fltrd 0.7u GF ug/L (82660)
MAR													
17...	0925	1.00	.15	769	6.5	70	7.4	187	19.5	--	--	--	--
MAR													
17-17	0925	--	--	--	--	--	--	--	--	<.009	.13	<.02mc	<.006
17...	0927	10.0	--	769	6.3	67	7.4	187	19.0	--	--	--	--
17...	0929	20.0	--	769	6.4	67	7.3	174	18.0	--	--	--	--
17...	0931	30.0	--	769	6.5	68	7.3	170	18.0	--	--	--	--
17...	0933	39.0	--	769	6.4	67	7.3	175	18.0	--	--	--	--
MAY													
12...	0745	1.00	.12	762	5.8	68	7.0	132	23.5	--	--	--	--
MAY													
12-12	0745	--	--	--	--	--	--	--	--	<.009	.07	<.02mc	<.006
12...	0747	10.0	--	762	5.8	68	7.1	131	23.5	--	--	--	--
12...	0749	20.0	--	762	5.8	68	7.1	124	23.5	--	--	--	--
12...	0751	30.0	--	762	5.8	68	7.1	124	23.5	--	--	--	--
12...	0753	39.0	--	762	5.7	67	6.9	121	23.5	--	--	--	--
12...	0755	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	0924	1.00	.30	767	4.6	61	7.2	150	30.0	--	--	--	--
JUL													
21-21	0924	--	--	--	--	--	--	--	--	<.009	.10	<.02mc	--r
21...	0926	10.0	--	767	4.3	56	7.3	150	29.5	--	--	--	--
21...	0928	20.0	--	767	E.2	--	7.0	178	29.0	--	--	--	--
21...	0930	30.0	--	767	E.1	--	6.9	145	28.5	--	--	--	--
21...	0932	39.0	--	767	E.1	--	6.9	147	28.0	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbofuran, wat flt 0.7u GF ug/L (49308)	3-Keto-carbofuran, water, fltrd, ug/L (50295)	Acetochlor, water, fltrd, ug/L (49260)	Acifluorfen, water, fltrd 0.7u GF ug/L (49315)	Alachlor, water, fltrd, ug/L (46342)	Aldicarb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldicarb sulfoxide, wat flt 0.7u GF ug/L (49314)	Aldicarb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atrazine, water, fltrd, ug/L (39632)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	E.066	E.02mc	E.218mc	<.006	<2mc	<.006	<.007	.045	<.02mc	<.008mc	<.04mc	<.005	.936
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	E.026	<.01mc	E.112mc	<.006	<.014mc	<.006	<.007	.046	<.02mc	<.008mc	<.04mc	<.005	.482
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.03mc	<.01mc	E.093mc	<.006	<.014mc	--r	<.007	--r	<.02mc	<.008mc	<.04mc	--r	.015
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
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285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azinphosmethyl, water, fltrd 0.7u GF ug/L (82686)	Bendiocarb, water, fltrd, ug/L (50299)	Benfluralin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensulfuron, water, fltrd, ug/L (61693)	Bentazon, water, fltrd 0.7u GF ug/L (38711)	Bromacil, water, fltrd, ug/L (04029)	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Carbaryl, water, fltrd 0.7u GF ug/L (49310)	Carbaryl, water, fltrd 0.7u GF ug/L (82680)	Carbofuran, water, fltrd 0.7u GF ug/L (49309)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.050	<.03	<.010	<.004	<.02	<.01mc	E.04mc	<.02mc	<.004	.0482	<.03	<.041	<.006
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.050	<.03	<.010	<.004	.05	E.05mc	<.03mc	<.02mc	<.004	.0615	<.03	<.041	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
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12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	--r	<.03	--r	<.004	<.02	E.04mc	<.03mc	<.02mc	--r	<.0191	<.03	--r	<.006
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003	E.004t
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003	E.004t
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	--r	<.02mc	<.010	<.04mnc	<.04mc	--r	--r	<.01	--r	<.01mc	<.01	--r	.004
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.005	<.01	<.01	<.009	<.01	<.03	<.02	.07	<.004	<.009	<.005	<.03	E.003t
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.005	<.01	<.01	<.009	<.01	.13	<.02	.18	<.004	<.009	<.005	<.03	<.029
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	--r	<.01	<.01	--r	<.01	<.03	--r	.02	--r	--r	--r	<.03	--r
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	E.007n	E.006t	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01	<.035	<.027
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	E.006n	E.007t	E.006t	<.01mc	.08	<.003	<.02mc	E.09mc	<.007	<.004	<.01	<.035	.086
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	.005	--r	--r	<.01mc	.04	--r	<.02mc	E.01mnc	<.007	--r	<.01	--r	.123
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl) -N-' methylurea, ug/L (61692)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.078	<.006	<.03mc	<.003	<.02	<.007	<.01
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.02	<.01mc	E.01	<.008mc	<.004mc	<.015	.267	<.010	<.03mc	.085	<.02	<.007	<.01
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.02	<.01mc	<.02	<.008mc	<.004mc	--r	.055	--r	<.03mc	.008	<.02	--r	<.01
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.025
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	.01	<.004	<.025
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.01	<.02mc	<.02	<.01	--r	--r	--r	--r	--r	<.02	.01	--r	--r
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb water fltrd 0.7u GF ug/L (82681)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.011	<.02	<.010	<.02	<.008	<.02	.058	<.009	<.02	<.034	<.010mc	<.02	<.010
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	.026	<.02	<.010	<.02	<.008	<.02	.010	<.009	<.02	<.034	<.010mc	<.02	.060
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	--r	--r	<.010	.25	<.008	<.02	--r	<.009	<.006	--r	<.010mc	--r	--r
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285816096320201 -- LK TEXANA SITE CC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Carbo-pheno-thion, bed sedimnt ug/kg (39787)	Diazi-non, bed sedimnt ug/kg (39571)	Ethion, bed sedimnt ug/kg (39399)	Mala-thion, bed sedimnt ug/kg (39531)	Methyl para-thion, bed sedimnt ug/kg (39601)	Para-thion, bed sedimnt ug/kg (39541)
MAR										
17...	--	--	--	--	--	--	--	--	--	--
MAR										
17-17	<.002	--u	.10	<.009	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
MAY										
12...	--	--	--	--	--	--	--	--	--	--
MAY										
12-12	<.002	--u	<.02	<.009	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	<.2	<.2	<.2	<.2	<.2	<.2
JUL										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
21-21	--r	--u	<.02	--r	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sam-pling depth, feet (00003)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Oil and grease, water, unfltrd freon extract mg/L (00556)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)
MAR													
17...	1000	1.00	.15	769	6.0	65	7.1	125	20.0	--	--	--	--
MAR													
17-17	1000	--	--	--	--	--	--	--	--	--	E.032	.40	<.02mc
17...	1002	10.0	--	769	6.0	65	7.2	131	19.5	--	--	--	--
17...	1004	20.0	--	769	6.3	68	7.3	154	19.5	--	--	--	--
MAY													
12...	0945	1.00	.09	764	5.7	65	6.4	62	22.0	<7	--	--	--
MAY													
12-12	0945	--	--	--	--	--	--	--	--	--	<.009	.06	<.02mc
12...	0947	10.0	--	764	5.7	65	6.5	61	22.0	--	--	--	--
12...	0949	20.0	--	764	5.7	65	6.4	62	22.0	--	--	--	--
12...	0951	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	1000	1.00	.27	767	5.4	72	7.6	277	31.0	--	--	--	--
JUL													
21-21	1000	--	--	--	--	--	--	--	--	--	<.009	.30	<.02mc
21...	1002	10.0	--	767	4.6	61	7.5	285	30.0	--	--	--	--
21...	1004	21.0	--	767	E.2	--	7.2	392	29.0	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.006	E.028	<.04mc	E.089mc	<.006	<2mc	<.006	<.007	.201	<.02mc	<.008mc	<.04mc	<.005
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.006	E.033	<.01mc	<.008mc	<.006	<.014mc	<.006	<.007	.033	<.02mc	<.008mc	<.04mc	<.005
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.006	<.006	<.01mc	E.076mc	<.006	<.014mc	<.006	<.007	<.005	<.02mc	<.008mc	<.04mc	<.005
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	.609	<.050	<.03	<.010	<.004	<.02	<.01mc	E.03mc	<.02mc	<.004	E.1038	<.03	<.041
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	.242	<.050	<.03	<.010	<.004	<.02	E.10mc	E.04mc	<.02mc	<.004	.1813	<.03	<.041
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	.012	<.050	<.03	<.010	<.004	<.02	E.02mc	<.03mc	<.02mc	<.004	<.0510	<.03	<.041
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.006	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.006	<.020	<.02mc	<.010	<.04mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.006	<.020	<.02mc	<.010	<.04mnc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.012	<.005	<.01	<.01	<.009	<.01	E.01	<.02	E.07	<.004	<.009	<.005	<.03
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.012	<.005	<.01	<.01	<.009	<.01	.12	<.02	.19	<.004	<.009	<.005	<.03
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	E.004t	<.005	<.01	<.01	<.009	<.01	<.03	<.02	.02	<.004	<.009	<.005	<.03
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.029	<.013	<.024	<.016	<.01mc	<.03	<.003	<.02mc	<.02mc	<.007	<.004	<.01	<.035
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.029	E.007n	E.007t	E.011n	<.01mc	<.03	<.003	<.02mc	E.04mc	<.007	<.004	<.01	<.035
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.029	E.006n	E.006t	<.016	<.01mc	E.01t	<.003	<.02mc	<.02mc	<.007	<.004	<.01	<.035
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Mala-thion, water, fltrd, ug/L (39532)	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.027	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.099	<.006	<.03mc	<.003	<.02	<.007
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	E.014n	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.109	<.006	<.03mc	2.61	<.02	<.007
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	.244	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.015	<.006	<.03mc	<.003	<.02	<.007
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Neburon water, fltrd 0.7u GF ug/L (49294)	Nico-sul-furon, water, fltrd, ug/L (50364)	Norflur azon, water, fltrd 0.7u GF ug/L (49293)	Ory-zalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p-' DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Pic-loram, water, fltrd 0.7u GF ug/L (49291)	Prome-ton, water, fltrd, ug/L (04037)	Propy-zamide, water, fltrd 0.7u GF ug/L (82676)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	.01	<.004
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	.032	<.011	<.02	.01	<.004
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.01	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	Mn	<.007
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propi-cona-zole, water, fltrd, ug/L (50471)	Pro-poxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Sima-zine, water, fltrd, ug/L (04035)	Sulfo-met-ruron, water, fltrd, ug/L (50337)	Tebu-thiuron water fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terba-cil, water, fltrd, ug/L (04032)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.025	<.011	<.02	<.010	<.02	<.008	<.02	.084	<.009	<.02	<.034	<.010mc	<.02
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.025	.874	<.02	<.010	<.02	<.008	<.02	.035	<.009	<.02	<.034	<.010mc	<.02
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.025	<.011	<.02	<.010	.41	<.008	<.02	<.005	<.009	<.02	<.034	<.010mc	<.02
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

290042096331401 -- LK TEXANA SITE DC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Thio-bencarb water fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Carbo-pheno-thion, bed sedimnt ug/kg (39787)	Diazi-non, bed sedimnt ug/kg (39571)	Ethion, bed sedimnt ug/kg (39399)	Mala-thion, bed sedimnt ug/kg (39531)	Methyl para-thion, bed sedimnt ug/kg (39601)	Para-thion, bed sedimnt ug/kg (39541)
MAR											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
17-17	<.010	<.002	--u	.14	<.009	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12...	--	--	--	--	--	--	--	--	--	--	--
MAY											
12-12	.137	<.002	--u	.10	<.009	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	<.2	<1.0	<.2	<.2	<.2	<.2
JUL											
21...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21-21	<.010	<.002	--u	<.02	<.009	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Sam-pling depth, feet (00003)	Trans-parency Secchi disc, meters (00078)	Baro-metric pres-sure, mm Hg (00025)	Dis-solved oxygen, mg/L (00300)	Dis-solved oxygen, percent of sat-uration (00301)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)
MAR													
17...	1014	1.00	.15	769	7.3	80	7.2	164	20.0	--	--	--	--
MAR													
17-17	1014	--	--	--	--	--	--	--	--	<.009	<.02	<.02mc	<.006
17...	1016	10.0	--	769	6.4	68	7.1	165	18.5	--	--	--	--
17...	1018	20.0	--	769	6.4	67	7.1	160	18.0	--	--	--	--
17...	1020	26.0	--	769	6.5	69	7.1	160	18.5	--	--	--	--
MAY													
12...	0805	1.00	.06	761	5.0	58	6.5	83	23.0	--	--	--	--
MAY													
12-12	0805	--	--	--	--	--	--	--	--	<.009	.08	<.02mc	<.006
12...	0807	10.0	--	761	5.1	60	6.6	82	23.0	--	--	--	--
12...	0809	20.0	--	761	5.1	59	6.6	81	22.5	--	--	--	--
12...	0811	26.0	--	761	5.1	59	6.5	81	22.5	--	--	--	--
12...	0813	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	0942	1.00	.34	767	4.4	58	7.1	142	30.5	--	--	--	--
JUL													
21-21	0942	--	--	--	--	--	--	--	--	<.009	.10	<.02mc	<.006
21...	0944	10.0	--	767	2.9	38	7.0	144	29.5	--	--	--	--
21...	0946	20.0	--	767	1.1	14	6.8	160	29.5	--	--	--	--
21...	0948	26.0	--	767	E.2	--	6.7	193	28.5	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	Atra-zine, water, fltrd, ug/L (39632)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	E.085	E.03mc	E.274mc	<.006	<2mc	<.006	<.007	.011	<.02mc	<.008mc	<.04mc	<.005	.987
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	E.062	<.01mc	E.244mc	<.006	<.014mc	<.010	<.007	.233	E.03mc	E.101mc	<.04mc	<.005	.501
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	E.006	<.01mc	E.164mc	<.006	<.014mc	<.006	<.007	.005	<.02mc	<.008mc	<.04mc	<.005	.034
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Bendio-carb, water, fltrd, ug/L (50299)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.050	<.03	<.010	<.004	<.02	<.01mc	<.03mc	<.02mc	<.004	.0211	<.03	<.041	<.006
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.050	<.03	<.010	<.004	.06	E.26mc	<.03mc	<.02mc	<.004	.0825	<.03	E.022n	<.006
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.050	<.03	<.010	<.004	<.02	E.05mc	<.03mc	<.02mc	<.004	<.0672	Mt	E.012t	<.006
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.020	<.02mc	<.010	<.01mc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003	<.012
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.020	<.02mc	<.010	<.04mc	<.04mc	<.010	<.006	<.01	<.018	<.01mc	<.01	<.003	E.006t
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.020	<.02mc	<.010	<.04mnc	<.04mc	<.005	<.006	<.01	<.018	<.01mc	<.01	<.003	E.004t
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Diazi-non, water, fltrd, ug/L (39572)	Dicamba water fltrd 0.7u GF ug/L (38442)	Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302)	Diel-drin, water, fltrd, ug/L (39381)	Dinoseb water, fltrd 0.7u GF ug/L (49301)	Diphen-amid, water, fltrd, ug/L (04033)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	Diuron, water, fltrd 0.7u GF ug/L (49300)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Fenuron water, fltrd 0.7u GF ug/L (49297)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.005	<.01	<.01	<.009	<.01	<.03	<.02	.02	<.004	<.009	<.005	<.03	<.029
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.005	<.01	<.01	<.009	<.01	.12	<.02	.16	<.004	<.009	<.005	<.03	E.003t
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.005	<.01	<.01	<.009	<.01	Mt	<.02	.06	<.004	<.009	<.005	<.03	E.004t
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)	Fipro-nil, water, fltrd, ug/L (62166)	Flumet-sulam, water, fltrd, ug/L (61694)	Fluo-meturon water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imaza-quin, water, fltrd, ug/L (50356)	Imaze-thapyr, water, fltrd, ug/L (50407)	Imida-cloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Mala-thion, water, fltrd, ug/L (39532)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.013	<.024	<.016	<.01mc	E.01	<.003	<.02mc	<.02mc	<.007	<.004	<.01	<.035	<.027
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	E.008n	E.009t	E.030	<.01mc	1.33	<.003	<.02mc	E.07mc	<.007	<.004	<.01	<.035	.095
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	E.006n	E.007t	<.016	<.01mc	.06	<.003	<.02mc	E.03mc	<.007	<.004	<.01	<.035	.178
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Meta-laxyl, water, fltrd, ug/L (50359)	Methio-carb, water, fltrd 0.7u GF ug/L (38501)	Meth-omyl, water, fltrd 0.7u GF ug/L (49296)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Metsul-furon, water, fltrd, ug/L (61697)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chloro-phenyl) -N-' methyl-urea, ug/L (61692)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.02	<.01mc	<.02	<.008mc	<.004mc	<.015	.038	<.006	<.03mc	<.003	<.02	<.007	<.01
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.14	<.01mc	.03	<.008mc	<.004mc	<.015	1.82	.048	<.03mc	.206	<.02	<.007	<.01
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.02	<.01mc	E.01t	<.008mc	<.004mc	<.015	.073	<.006	<.03mc	.217	<.02	<.007	<.01
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.025
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	.053	<.011	<.02	.01	<.004	<.025
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.01	<.02mc	<.02	<.01	<.003	<.010	<.004	<.022	<.011	<.14	.01	<.007	<.025
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	Sulfometuron, water, fltrd, ug/L (50337)	Tebuthiuron water fltrd 0.7u GF ug/L (82670)	Terbacil, water, fltrd 0.7u GF ug/L (82665)	Terbacil, water, fltrd, ug/L (04032)	Terbufos, water, fltrd 0.7u GF ug/L (82675)	Thiobencarb water fltrd 0.7u GF ug/L (82681)
MAR													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
17-17	<.011	<.02	<.010	<.02	<.008	<.02	.010	<.009	<.02	<.034	<.010mc	<.02	<.010
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12-12	.128	<.02	<.010	<.02	<.008	<.02	.008	.012	.04	<.034	<.010mc	<.02	.206
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
21-21	<.011	<.02	<.010	.38	<.008	<.02	<.005	<.009	<.02	<.034	<.010mc	<.02	E.005n
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

08164525 Lake Texana near Edna, TX—Continued

285940096312101 -- LK TEXANA SITE EC
WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-benuron water, fltrd, ug/L (61159)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Carbo-pheno-thion, bed sedimnt ug/kg (39787)	Diazi-non, bed sedimnt ug/kg (39571)	Ethion, bed sedimnt ug/kg (39399)	Mala-thion, bed sedimnt ug/kg (39531)	Methyl para-thion, bed sedimnt ug/kg (39601)	Para-thion, bed sedimnt ug/kg (39541)
MAR										
17...	--	--	--	--	--	--	--	--	--	--
MAR										
17-17	<.002	--u	.10	<.009	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--	--
MAY										
12...	--	--	--	--	--	--	--	--	--	--
MAY										
12-12	<.002	--u	.54	.017	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	<.2	<.4	<.2	<.2	<.2	<.2
JUL										
21...	--	--	--	--	--	--	--	--	--	--
JUL										
21-21	<.002	--u	<.18	<.009	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	--

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

Value qualifier codes used in this table:
- c -- See laboratory comment
- m -- Value is highly variable by this method
- n -- Below the LRL and above the LT-MDL
- t -- Below the long-term MDL

Null value qualifier codes used in this table:
- q -- Sample discarded: holding time exceeded
- r -- Sample ruined in preparation
- u -- Unable to determine-matrix interference

08164600 Garcitas Creek near Inez, TX

LOCATION.--Lat 28°53'28", long 96°49'08", Victoria County, Hydrologic Unit 12100402, at right downstream end of bridge on U.S. Highway 59 access road, 0.3 mi upstream from Southern Pacific Railroad bridge, 2.0 mi southwest of Inez, and 3.6 mi upstream from Casa Blanca Creek.

DRAINAGE AREA.--91.7 mi^2.

PERIOD OF RECORD.--June 1970 to current year. Water-quality records: Chemical data: Apr. 1965 to Aug. 1988. Biochemical data: Apr. 1965 to Aug. 1988. Pesticide data: July 1970 to July 1981.

REVISED RECORDS.--WDR TX-94-3: 1992-93.

GAGE.--Water-stage recorder. Datum of gage is 29.16 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. No known regulation or diversions. An undetermined amount of return water from irrigation enters the stream above this station. No flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage during period 1903-70, 24.5 ft Oct. 26, 1960. In 1929, a flood nearly as high as the 1960 flood occurred, and a flood in Sept. 1967 reached a stage of 23.4 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	7.8	4.3	5.6	25	19	7.7	208	15	733	6.1	2.3
2	4.2	6.2	4.3	4.1	18	16	88	342	14	273	8.6	2.2
3	3.6	5.0	4.1	3.3	13	e15	1,060	128	15	87	6.6	18
4	3.3	4.0	4.1	2.7	11	e14	350	43	14	45	6.2	16
5	3.1	3.4	3.9	2.4	11	13	114	22	14	28	5.6	5.9
6	2.9	3.0	3.8	2.1	24	13	109	14	13	20	9.8	3.4
7	3.5	2.7	4.0	1.9	22	11	126	10	20	15	7.7	2.6
8	3.1	2.3	3.6	4.6	14	9.4	62	43	413	13	4.8	2.2
9	5.3	2.3	3.6	2.8	10	8.1	35	182	1,690	11	4.3	2.0
10	367	2.3	3.5	2.4	18	7.3	26	293	497	11	4.0	1.9
11	1,750	2.2	3.2	2.5	218	6.7	186	485	627	14	9.2	1.9
12	259	2.0	5.1	2.2	190	6.4	842	1,480	277	26	24	1.8
13	85	2.0	33	2.0	86	7.3	260	559	103	28	6.3	2.5
14	56	1.9	34	1.9	63	265	98	4,380	56	17	4.2	4.0
15	38	1.8	17	2.1	67	690	52	3,150	36	12	3.5	3.1
16	27	1.8	10	5.0	46	425	34	475	e30	9.7	3.2	2.2
17	21	170	6.7	169	30	119	25	154	e44	8.5	3.1	2.0
18	16	639	4.7	185	21	67	20	88	37	7.9	3.0	1.9
19	12	955	3.7	65	15	46	15	60	27	7.3	3.0	1.8
20	9.6	114	3.1	33	12	35	12	42	21	6.9	2.9	1.9
21	7.7	51	2.7	20	10	28	9.6	33	16	6.7	2.9	1.9
22	6.3	32	2.4	13	8.9	23	8.2	27	37	6.6	e3.0	1.9
23	5.4	e21	2.4	8.9	8.1	19	7.1	24	38	6.4	e2.9	1.9
24	4.6	14	2.3	18	18	16	36	21	323	6.4	2.9	1.9
25	5.5	11	2.2	362	260	14	109	19	279	8.3	2.7	2.2
26	51	8.7	2.1	241	115	13	108	18	215	15	2.6	2.2
27	105	7.3	2.1	78	53	11	63	17	112	9.2	2.5	2.1
28	47	6.2	2.6	e32	32	10	29	16	77	7.3	19	2.0
29	26	5.4	8.6	24	23	9.4	17	16	92	7.0	7.5	1.9
30	15	4.7	17	21	---	8.8	12	15	311	6.6	3.4	1.9
31	11	---	8.9	28	---	8.2	---	15	---	5.7	2.6	---
MEAN	95.5	69.7	6.87	43.4	49.7	63.0	131	399	182	47.0	5.75	3.32
MAX	1,750	955	34	362	260	690	1,060	4,380	1,690	733	24	18
MIN	2.9	1.8	2.1	1.9	8.1	6.4	7.1	10	13	5.7	2.5	1.8
AC-FT	5,870	4,150	422	2,670	2,860	3,870	7,780	24,550	10,840	2,890	353	197

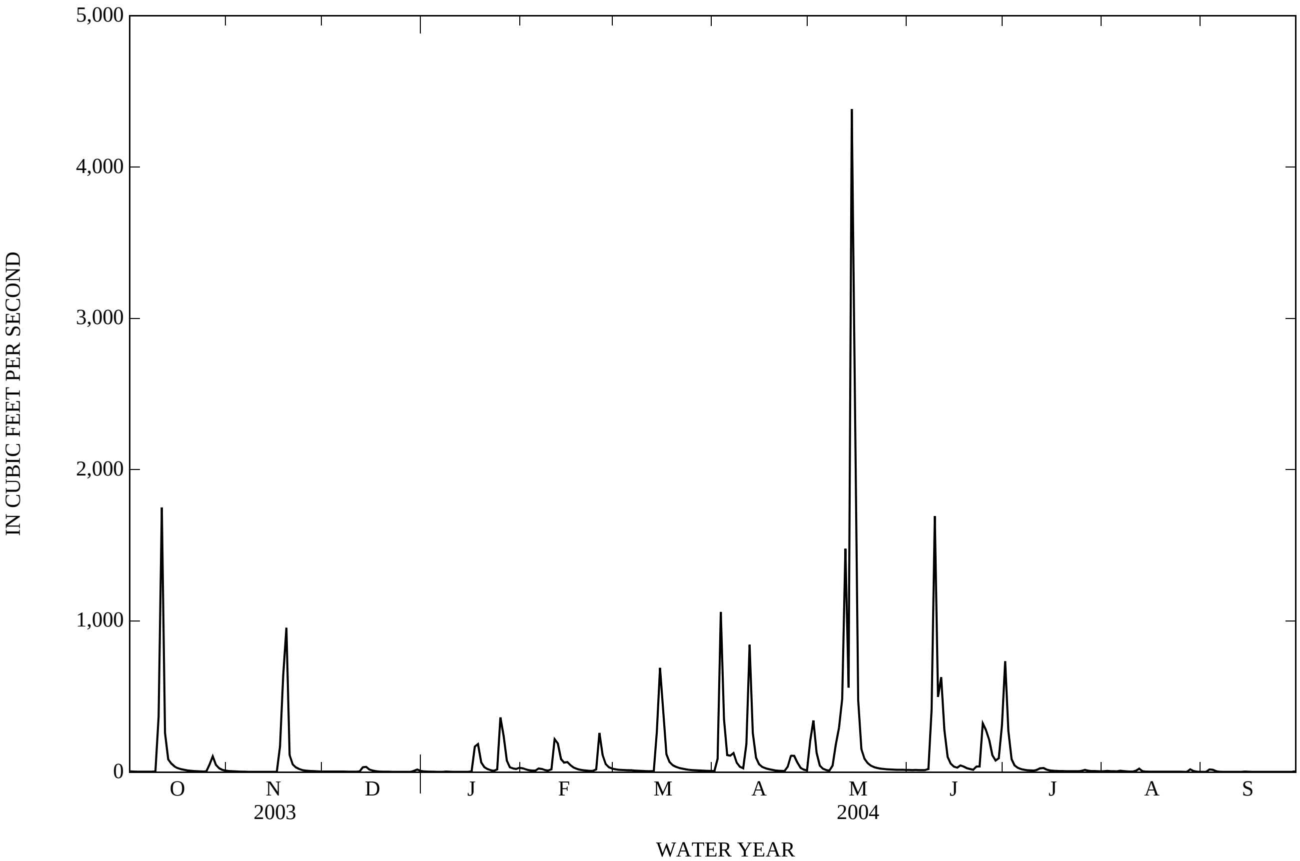
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	70.4	51.1	39.9	41.2	47.0	41.4	77.6	110	109	28.3	8.62	80.0
MAX	695	541	263	220	558	578	658	503	745	272	89.8	789
(WY)	(1995)	(1999)	(1977)	(1992)	(1992)	(1997)	(1991)	(1979)	(1981)	(2002)	(2001)	(1978)
MIN	0.00	0.00	0.01	0.02	0.14	0.48	0.25	0.05	0.00	0.00	0.06	0.00
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(1996)	(1996)	(1996)	(1990)	(2001)	(1988)	(1988)

08164600 Garcitas Creek near Inez, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL MEAN	34.9		91.5		58.7	
HIGHEST ANNUAL MEAN					144	1992
LOWEST ANNUAL MEAN					2.65	1989
HIGHEST DAILY MEAN	1,750	Oct 11	4,380	May 14	13,100	Oct 19, 1994
LOWEST DAILY MEAN	0.07	Jun 23	1.8	Nov 15	0.00	May 22, 1971
ANNUAL SEVEN-DAY MINIMUM	0.11	Jun 20	1.9	Sep 18	0.00	May 26, 1971
MAXIMUM PEAK FLOW			5,380	May 14	19,700	Jun 12, 1981
MAXIMUM PEAK STAGE			22.18	May 14	a33.43	Oct 19, 1994
ANNUAL RUNOFF (AC-FT)	25,260		66,450		42,560	
10 PERCENT EXCEEDS	51		195		58	
50 PERCENT EXCEEDS	3.6		12		3.2	
90 PERCENT EXCEEDS	0.27		2.3		0.23	

a From floodmark.
e Estimated



08164800 Placedo Creek near Placedo, TX

LOCATION.--Lat 28°43'30", long 96°46'07", Victoria County, Hydrologic Unit 12100402, on right bank at downstream end of bridge on Farm Road 616, 0.1 mi downstream from confluence of Lone Tree Creek and Arroyo Palo Alto, 1.2 mi upstream from Ninemile Creek, and 4.4 mi northeast of Placedo.

DRAINAGE AREA.--68.3 mi^2.

PERIOD OF RECORD.--June 1970 to current year. Water-quality records: Chemical data: Oct. 1968 to Sept. 1979. Biochemical data: Oct. 1968 to Sept. 1979. Pesticide data: Oct. 1968 to Sept. 1979.

GAGE.--Water-stage recorder. Datum of gage is 5.58 ft above NGVD of 1929. Satellite telemeter at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1930, 31.9 ft in Sept. 1967 and 30.4 ft in 1960 (probably Oct.), from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	3.6	e2.9	5.3	5.3	7.3	1.9	128	7.7	750	2.6	9.7
2	4.4	2.5	2.5	5.7	4.6	5.7	12	667	7.3	173	2.6	3.2
3	4.5	2.1	2.4	5.8	3.1	4.8	428	140	7.5	55	2.5	2.2
4	5.4	2.0	2.1	5.4	2.3	4.2	137	50	7.2	23	2.3	17
5	4.2	1.8	2.0	5.1	2.2	4.2	45	25	7.2	13	2.3	94
6	7.1	1.8	2.3	4.6	1.7	3.3	544	15	6.8	7.9	2.4	28
7	5.5	1.7	2.4	4.7	1.4	2.8	757	9.9	8.2	6.1	2.7	11
8	3.3	1.7	2.0	5.8	1.4	3.1	117	386	648	5.3	2.8	5.1
9	5.1	1.7	e2.3	5.6	1.4	2.8	45	1,110	1,440	4.9	2.9	3.1
10	5.0	1.7	e2.3	5.1	2.9	2.5	24	2,780	250	584	3.0	2.1
11	5.6	1.8	2.4	5.1	40	2.4	184	1,310	406	444	3.8	1.8
12	11	1.8	3.2	6.6	88	2.2	124	1,590	211	124	4.8	1.5
13	15	1.7	9.7	6.1	41	3.3	65	613	57	41	3.6	2.4
14	8.9	1.6	20	5.4	29	3.6	45	5,060	19	18	4.7	2.7
15	5.0	1.9	19	5.2	39	5.4	36	1,200	207	10	2.7	2.0
16	3.3	1.8	11	6.3	24	3.7	28	187	1,190	7.5	1.1	2.3
17	3.4	364	7.4	22	13	4.6	23	70	1,430	6.4	0.99	12
18	2.8	1,550	5.8	62	6.9	4.7	21	38	176	5.8	1.1	5.8
19	3.3	261	4.5	28	4.4	3.1	20	25	49	4.9	1.2	2.9
20	3.3	73	4.2	15	2.8	2.3	19	18	20	4.6	1.3	1.7
21	2.3	34	3.7	9.0	1.7	2.0	18	14	77	4.6	1.3	1.2
22	2.0	18	4.0	5.2	1.2	1.8	18	12	257	4.5	1.5	1.2
23	1.7	11	4.6	2.9	1.4	1.5	17	11	1,570	4.6	1.8	1.2
24	1.6	6.3	5.0	2.0	1.9	1.6	140	10	2,330	4.4	1.8	1.1
25	1.8	3.9	5.0	13	24	1.7	110	9.6	1,430	4.0	1.6	1.2
26	27	2.7	5.2	39	49	1.7	70	9.1	1,080	3.9	2.0	1.4
27	26	2.0	5.4	27	26	1.7	32	8.8	262	3.3	1.5	1.2
28	26	1.2	5.7	20	16	1.7	13	8.5	163	3.0	1.5	1.0
29	17	e1.2	5.6	13	10	1.6	5.9	8.2	102	3.0	3.9	0.86
30	9.9	e1.6	5.0	9.8	---	1.6	3.2	8.1	292	3.3	11	1.1
31	5.7	---	5.1	7.1	---	2.0	---	7.9	---	2.8	7.9	---
TOTAL	231.4	2,361.1	164.7	362.8	445.6	94.9	3,103.0	15,529.1	13,717.9	2,329.8	87.19	221.96
MEAN	7.46	78.7	5.31	11.7	15.4	3.06	103	501	457	75.2	2.81	7.40
MAX	27	1,550	20	62	88	7.3	757	5,060	2,330	750	11	94
MIN	1.6	1.2	2.0	2.0	1.2	1.5	1.9	7.9	6.8	2.8	0.99	0.86
AC-FT	459	4,680	327	720	884	188	6,150	30,800	27,210	4,620	173	440

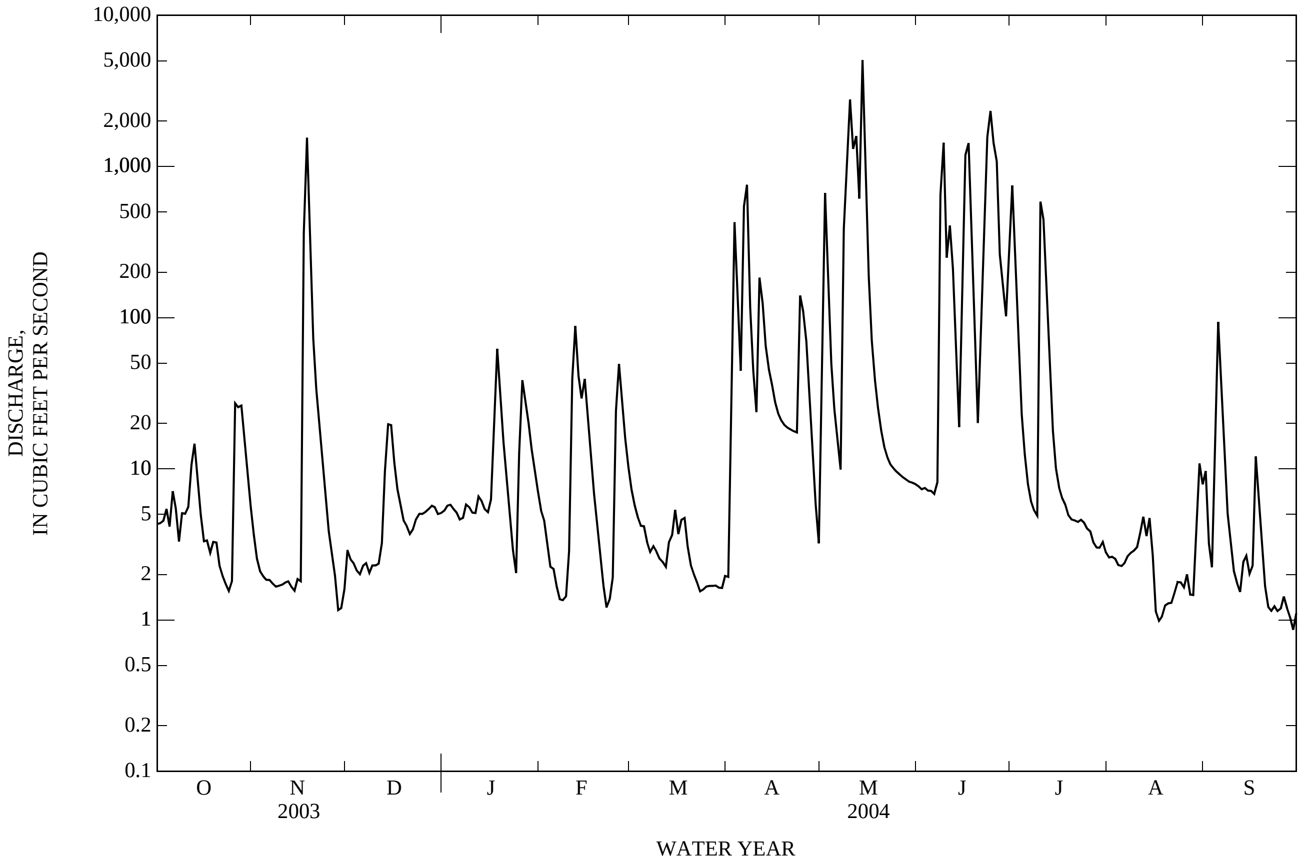
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	74.8	77.9	41.7	39.4	49.1	41.4	58.2	97.6	91.8	60.8	13.3	107
MAX	291	593	389	262	455	516	541	501	510	559	107	913
(WY)	(1998)	(1999)	(1992)	(1991)	(1992)	(1997)	(1991)	(2004)	(1973)	(1990)	(1972)	(1978)
MIN	0.00	0.02	0.02	0.05	0.00	0.09	0.02	0.17	0.00	0.03	0.01	0.01
(WY)	(1990)	(1989)	(1990)	(1990)	(1994)	(1989)	(1989)	(1996)	(1989)	(1989)	(1988)	(1988)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	12,040.85		38,649.45			
ANNUAL MEAN	33.0		106		62.5	
HIGHEST ANNUAL MEAN					154	1992
LOWEST ANNUAL MEAN					1.20	1989
HIGHEST DAILY MEAN	1,550	Nov 18	5,060	May 14	11,400	Nov 1, 1981
LOWEST DAILY MEAN	0.03	Jun 1	0.86	Sep 29	0.00	Aug 12, 1981
ANNUAL SEVEN-DAY MINIMUM	0.08	May 4	1.1	Sep 24	0.00	Jul 27, 1982
MAXIMUM PEAK FLOW			6,750	May 14	18,300	Oct 31, 1981
MAXIMUM PEAK STAGE			26.61	May 14	31.62	Nov 13, 1998
ANNUAL RUNOFF (AC-FT)	23,880		76,660		45,290	
10 PERCENT EXCEEDS	63		174		48	
50 PERCENT EXCEEDS	2.7		5.3		1.6	
90 PERCENT EXCEEDS	0.30		1.7		0.15	

e Estimated

08164800 Placedo Creek near Placedo, TX—Continued



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The U.S. Geological Survey collects limited streamflow data at sites other than continuous stream-gaging stations because the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage of those events. The data collected for special reasons are called measurements at miscellaneous sites.

Streamflow data collected at partial-record stations where water-quality data other than observations of water temperature are not obtained are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations; the second is a table of annual maximum stage and (or) discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low and high flows are given in a third table. Discharge measurements and water-quality data collected at partial-record stations are presented in downstream order in the section of this report entitled “Gaging-station records.”

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 2004

Station number	Station name	Location	Drainage area (mi^2)	Period of record	Measurements: Date	Measurements: Discharge (ft^3/s)
		Colorado River Basin				
08129500	Dove Creek Spring near Knickerbocker, TX	Lat 31º11'06", long 100º43'51", Irion County, Hydrologic Unit 12090102, at Winterbotham Ranch Headquarters about 500 ft above confluence with Dove Creek, 1.8 mi upstream from Stilson Dam on Dove Creek and 8.5 mi southwest of Knickerbocker.	--	1944-58†, 1959-2004	10-22-03 12-03-03 01-23-04 03-16-04 04-30-04 06-14-04 08-09-04	5.48 4.86 4.23 5.06 5.93 5.97 4.57
08143900	Springs at Fort McKavett, TX	Lat 30º50'03", long 100º05'37", Menard County, Hydrologic Unit 12090109, at the Fort McKavett-San Angelo road crossing on FM 864 and 0.7 mi northeast of Fort McKavett.	--	1902, 1905, 1922, 1942, 1948-49, 1951-52, 1955-56, 1958-2004	10-09-03 12-09-03 01-26-04 02-17-04 04-19-04 06-15-04 08-25-04	11.8 11.6 12.5 13.1 15.3 12.3 10.5
08146500	San Saba Springs at San Saba, TX	Lat 31º11'44", long 98º42'42", San Saba County, Hydrologic Unit 12090109, 0.75 mi east of court house and 1,000 ft upstream from bridge on U.S. Highway 190 at San Saba. The springs are in San Saba County and flow into Mill Creek, tributary to San Saba River.	--	1939, 1952, 1957, 1959-2004	10-07-03 11-17-03 01-06-04 02-19-04 04-21-04 06-17-04 08-31-04	6.66 7.24 7.07 6.84 11.2 13.1 13.4
08149400	South Llano River near Telegraph, TX	Lat 30º15'47", long 99º56'01", Edwards County, Hydrologic Unit 12090203, 3.7 mi upstream from Paint Creek, 5.7 mi south of Telegraph, and 18.7 mi southwest of Junction.	508	1939, 1952, 1956, 1959-2004	11-19-03 12-10-03 01-26-04 02-17-04 04-19-04 06-15-04 08-26-04	25.3 23.6 19.9 21.1 22.7 21.7 20.8
08149500	Seven Hundred Springs near Telegraph, TX	Lat 30º16'23", long 99º55'07", Edwards County, Hydrologic Unit 12090203, about 3 mi upstream from Paint Creek, about 5 mi south of Telegraph, and about 18 mi southwest of Junction.	--	1939, 1952, 1955-56, 1959-2004	11-19-03 12-10-03 01-26-04 02-17-04 04-19-04 06-15-04 08-26-04	21.7 15.1 31.5 22.5 22.2 17.3 16.8

† Operated as a continuous-record station.

Crest-stage partial-record stations

The following table contains annual maximum stage and (or) discharge at partial-record stations operated primarily for the purpose of defining the flooding characteristics of the streams. At stations where discharge is given, or is footnoted “to be determined”, a stage-discharge relation has been, or will be, defined by discharge measurements obtained by current meter or by indirect procedures. Water-stage recorders are located at these flood-hydrograph stations to facilitate complete hydrograph definition. At stations where only the maximum stage is given (discharge column is dashed), the data are generally collected for use in stage-frequency studies of flood-profile definition. Gages at these stations usually consist of a device that will register the peak stage occurring between inspection of the gage. The years used in the column “Period of record” identify the years in which the annual maximum has been determined.

Annual maximum stage and (or) discharge during water year 2004

Station name and number	Location	Period of record	Water Year 2003 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
			Lavaca River Basin					
Lavaca River at Hallettsville, TX 08163500	Lat 29º26’35”, long 96º56’41”, Lavaca County, Hydrologic Unit 12100101, at downstream side of bridge on U.S. Highway 77 and 90A in Hallettsville, 0.7 mi downstream from Campbell Branch, and 11.5 mi upstream from Rocky Creek. Drainage area is 108 mi^2.	1939-92✞ 1993-2004	06-07-04	20.66	--	08-31-81	a/ 41.1	i/ 99,500

✞ Operated as a continuous-record station.
a/ From floodmark.
i/ From indirect measurement of peak flow.

Measurements of streamflow at points other than gaging stations or partial-record stations are given in the following table:

Discharge measurements made at miscellaneous sites during water year 2004

Station number	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements: Date	Measurements: Discharge (ft^3/s)
		Colorado River Basin				
Clear Creek near Menard, TX 08143950	San Saba River	Lat 30º54'13", long 99º55'27", Menard County, Hydrologic Unit 12090109, at bridge on U.S. Highway 190 about 9.0 mi west of Menard.	106	1984-2004	10-09-03 12-09-03 08-25-04	18.0 11.4 12.5
Tanner Springs near Telegraph, TX 08149395	South Llano River	Lat 30º15'45", long 99º56'04", Edwards County, Hydrologic Unit 12090203, about 5.6 mi south of Telegraph, Kimble County, and 18.6 mi southwest of Junction at mouth. Prior to Oct. 1, 2004, published as 08149405.	--	1939, 1962, 1987-2004	11-19-03 12-10-03 01-26-04 02-17-04 04-19-04 06-15-04 08-26-04	12.8 12.4 10.5 11.2 12.0 10.5 11.6

✞ Operated as a continuous-record station.

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INDEX