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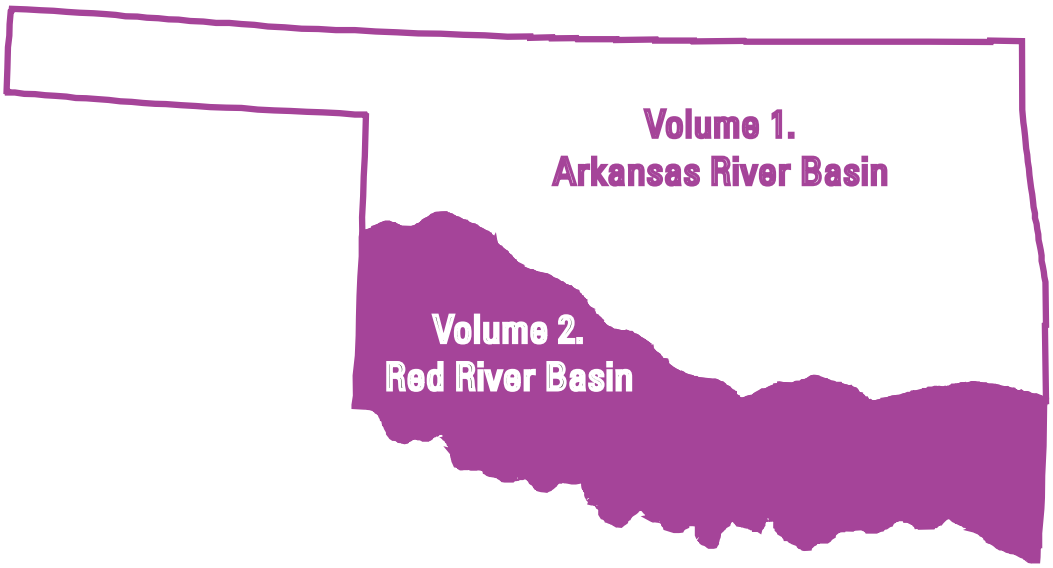
Water Resources Data State Oklahoma Water Year 2004

Volume 2. Red River Basin



Water-Data Report OK-04-2

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

Calendar for Water Year 2004

2003

October

S	M	T	W	T	F	S
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2004

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August

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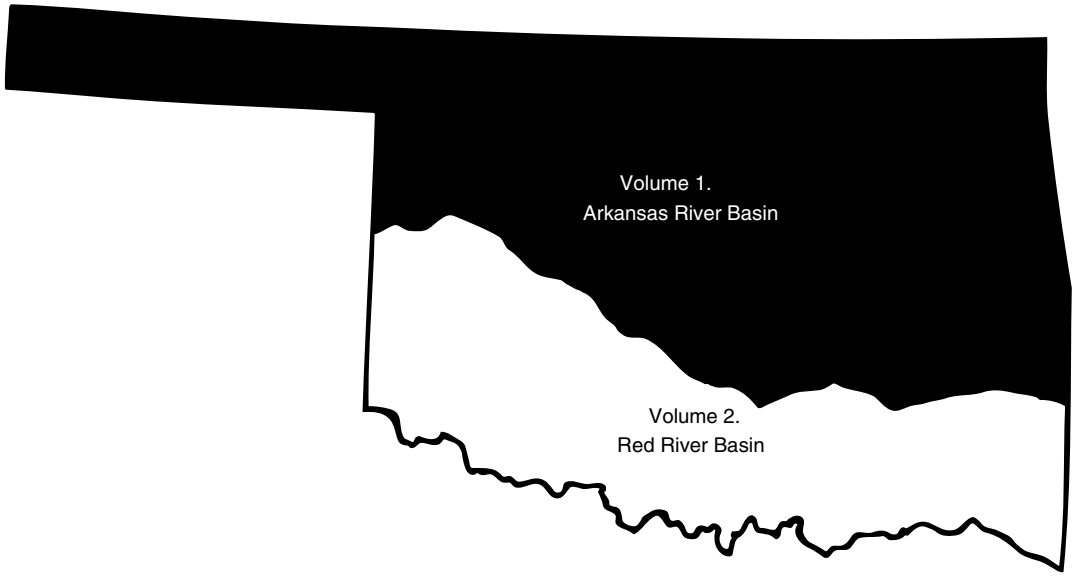
Water Resources Data Oklahoma

Water Year 2004

Volume 2. Red River Basin

By R.L. Blazs, D.M. Walters, T.E. Coffey, D.L. Boyle, J.J. Wellman

Water-Data Report OK-04-2



Prepared in cooperation with the State of Oklahoma and with other oagencies.

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

U.S. Department of the Interior
Gale A. Norton, Secretary

U.S. Geological Survey
Charles G. Groat, Director

2004

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405-810-4400

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This hydrologic-data report for Oklahoma is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface-water and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

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. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines.

The data were collected, computed, and processed by the following personnel:

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This report was prepared in cooperation with the State of Oklahoma and with other agencies under the general supervision of Robert L. Blazs, Hydrologic Records Section Chief, and Kim T. Winton, District Chief.

Data for Oklahoma are in two volumes as follows:
Volume 1. Arkansas River Basin
Volume 2. Red River Basin and Ground-Water Records

REPORT DOCUMENTATION PAGE

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13. ABSTRACT *(Maximum 200 words)*
Volumes 1 and 2 of the water resources data for the 2004 water year for Oklahoma consists of record of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes or reservoirs; and water levels of ground-water wells. This report contains discharge records for 138 gaging stations; stage and contents for 18 lakes or reservoirs and 2 gage height stations; water quality for 55 gaging stations; 38 partial-record or miscellaneous streamflow stations and 4 ground-water sites. Also included are lists of discontinued surface-water discharge and water-quality sites. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.

14. SUBJECT TERMS
*Oklahoma, *Hydrologic data, *Surface water, *Water quality, Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperature, Sampling sites, Water analyses, Ground water, Gage height

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ILLUSTRATIONS

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station names designate type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature, (e) elevation, gage heights, or contents]

SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

[Letters after station names designate type of data: (d) discharge, (c) chemical, (b) biological, (m) microbiological, (s) sediment, (t) temperature, (e) elevation, gage heights, or contents]

GROUND-WATER WELLS, BY COUNTY, FOR WHICH RECORDS ARE PUBLISHED IN THIS VOLUME

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

The following continuous-record surface-water discharge stations (gaging stations) in Oklahoma have been discontinued. Daily streamflow records were collected and published for the period of record, expressed in water years, shown for each station. Discontinued project stations with less than 2 years of record have not been included. Information regarding these stations may be obtained from the District Office at the address given on the back side of the title page of this report.

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Sandy Creek near Eldorado, OK	07299710	280	1960-63
Turkey Creek at Olustee, OK	07301100	317	1960-63
North Fork Red River near Sayre, OK	07301481	2,159	1978-87
North Fork Red River near Granite, OK	07302000	2,494	1904-08, 1938-44
Elm Fork of North Fork Red River near Reed, OK	07303420	579	1965-67
Elk Creek near Hobart, OK	07304500	549	1904-08, 1950-93
Elm Fork of North Fork Red River near Mangum, OK	07303500	838	1905-08, 1930-31, 1938-47, 1965-67, 1968-76
West Otter Creek at Snyder Lake near Mountain Park, OK	07305500	132	1903-08 1951-71 1972-2003
Otter Creek at Mountain Park, OK	07306500	164	1946-51
East Cache Creek near Elgin, OK	07309000	248	1956-58
Little Medicine Bluff Creek near Lawton, OK	07310000	7.00	1913-19
Medicine Bluff Creek near Lawton, OK	07310500	101	1913-19
Blue Beaver Creek near Cache, OK	07311200	24.6	1964-2003
Little Beaver Creek near Duncan, OK	07313000	158	1949-64
Beaver Creek near Waurika, OK	07313500	563	1953-93
Cow Creek at Waurika, OK	07313600	193	1966-70
Walnut Bayou near Burneyville, OK	07315900	314	1961-63, 1969-71
Sandstone Creek near Berlin, OK	07319500	44.9	1953-72
Sandstone Creek subwater shed 10A near Elk City, OK	07320000	2.87	1952-70
Sandstone Creek subwater shed 6 near Elk City, OK	07320500	6.46	1953-70
Sandstone Creek subwater shed 5 near Elk City, OK	07321000	3.89	1953-70
Sandstone Creek subwater shed 9 near Elk City, OK	07322000	3.50	1952-70
East Branch Sandstone Creek near Elk City, OK	07322500	23.0	1951-72
Sandstone Creek near Cheyenne, OK	07323000	87.1	1952-74
Barnitz Creek near Arapaho, OK	07324500	243	1946-63

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Lake Creek near Eakly, OK	07325850	52.0	1970-78
Willow Creek near Albert, OK	07325860	28.0	1971-78
Sugar Creek near Gracemont, OK	07327000	208	1956-74
Spring Creek near Gracemont	07327050	34.4	1991-94
Chetonia Creek Tributary below Cyril, OK	07327445	3.35	1990-91
Little Washita River near Ninnekah, OK	07327490	208	1964-85
Little Washita River at Ninnekah, OK	07327500	227	1952-63
Washita River near Tabler, OK	07328000	4,706	1940-52
Winter Creek near Alex, OK	07328070	33.0	1965-87
Washington Creek near Pauls Valley	07328550	7.56	1991-94
Rush Creek at Purdy	07329000	145	1940-54 1982-94
Rush Creek near Maysville, OK	07329500	206	1955-76
Wildhorse Creek near Hoover, OK	07329700	604	1969-93
Outflow from Vendome Well at Sulphur, OK	07329851	0	1986-89
Rock Creek at Dougherty, OK	07329900	138	1957-67
Caddo Creek near Ardmore	07330500	298	1936-50 1996-97
Caddo Creek Site 7CMP near Gene Autry	07330700	326	1996-98
Washita River near Berwyn, OK	07330000	6,815	1924-26
Mill Creek near Ravia, OK	07331250	89.2	1969-71
Red River at Denison Dam near Denison, TX	07331600	39,720	1959-89
Red River near Colbert, OK	07332000	39,777	1924-59
Blue River near Connerville, OK	07332390	162	1977-79
Blue River at Milburn, OK	07332400	203	1966-87
Coal Creek near Lehigh, OK	07332900	8.10	1978-81
Muddy Boggy Creek at Atoka, OK	07332950	445	1979-81
North Boggy Creek near Stringtown, OK	07333000	136	1956-59
Chickasaw Creek near Stringtown, OK	07333500	32.7	1956-68
McGee Creek near Stringtown, OK	07333800	86.6	1956-68
McGee Creek near Farris, OK	07333910	176	1978-82
Clear Boggy Creek near Wapanucka, OK	07334500	516	1940-43
Clear Boggy Creek near Caney, OK	07335000	720	1943-89
Tenmile Creek near Miller, OK	07336000	68	1956-70
Kiamichi River near Belzoni, OK	07336500	1,423	1926-72
Red River near DeKalb, TX	07336820	47,348	1967-98
Little River near Wright City, OK	07337500	645	1930-31, 1945-89
Little River near Idabel, OK	07338000	1,173	1930-46

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations are discontinued surface-water-quality discontinued stations. Stations with one year's record or less are not included. Information regarding these stations may be obtained from the District Office at address given on back of title page of this report.

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Prairie Dog Town Fork Red River near Lakeview, TX	07299495	6,794	1987-88
Prairie Dog Town Fork Red River at Estelline, TX	07299505	7,293	1987-88
Jonah Creek near Newlin, TX	07299510	46.3	1987-88
Jonah Creek near Estelline, TX	07299512	57.1	1987-88
Prairie Dog Town Fork Red River near Childress, TX	07299540	7,725	1987-88
Salt Creek near Childress, TX	07299542	113	1987-88
Buck Creek at Loco, TX	07299545	175	1987-88
Buck Creek near Loco, TX	07299548	205	1987-88
Buck Creek near Childress, TX	07299550	222	1987-88
Red River near Hollis, OK	07299565	8,154	1986-88
Red River near Quanah, TX	07299570	8,321	1986-88
Groesbeck Creek near Quanah, TX	07299580	322	1986-88
Bitter Creek near Hollis, OK	07299705	10.4	1986-88
Sandy Creek near Gould, OK	07299707	169	1987-88
Sandy Creek near Louis, OK	072997087	224	1987-88
Tributary to Sandy Creek near Lincoln, OK	07299709	6.32	1987-88
Sandy Creek at Lincoln, OK	072997092		1986-88
Sandy Creek near Lincoln, OK	072997095	255	1987-88
Sandy Creek near Eldorado, OK	07299710	280	1986-88
Sandy Creek at Eldorado, OK	07299712	297	1987-88
Sandy Creek South of Eldorado, OK, formerly published as Sandy Creek in Eldorado Township, OK	07299714	312	1987-88
Sandy Creek Southeast of Eldorado, OK, formerly published as Sandy Creek near OKlahoma-Texas State-line	07299716	320	1986-88
Wanderers Creek near Odell, TX	07299732	156	1986, 1988
Gypsum Creek North of Eldorado, OK, formerly published as Tributary to Gypsum Creek near Jackson Co Line, OK	07299760	2.12	1986-88
Gypsum Creek near Duke, OK	07299764	14	1986-88
Tributary to Gypsum Creek near Eldorado, OK	07299766	4.53	1986-88
Gypsum Creek near Prairie Hill, OK	07299768	28.1	1987-88
Gypsum Creek at Creta, OK	07299770	34.6	1987-88

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Gypsum Creek near Creta, OK	07299775	56.1	1987-88
Gypsum Creek near Olustee, OK	07299780	99.2	1986-88
Salt Fork Red River near Wellington, TX	07300000	1,222	1987-88
Panther Creek near Wellington, TX	07300005	4.61	1987-88
Salt Fork Red River near Dodson, TX	07300120	1,297	1987-88
Tributary to Salt Fork Red River near Madge, OK	07300140	4.79	1986-88
Salt Fork Red River near Madge, OK	07300145	1,388	1986-88
Bear Creek near Vinson, OK	07300150	7.24	1987-88
Salt Fork Red River near Vinson, OK	07300400	14.21	1959-63, 1976-78, 1987-88
Cave Creek near Reed, OK	07300470	46.7	1986-88
Mulberry Creek near Mangum, OK	07300485	9.3	1986-88
Fish Creek near Mangum, OK	07300495	5.3	1987-88
Salt Fork Red River at Mangum, OK	07300500	1,566	1938-51, 1953-56, 1959-70, 1972, 1974-79, 1986-89
Bitter Creek near Altus, OK	07300600		1986-88
Turkey Creek near McQueen, OK	07300960	51.5	1987-88
Turkey Creek Near Gould, OK, formerly published as Turkey Creek at Jackson-Harmon County-line, OK	07300965	76.9	1987-88
Turkey Creek near Duke, OK	07300970	84.8	1986-88
Tributary to Turkey Creek near Duke, OK	07300975	56.5	1987-88
Turkey Creek at U.S. Highway 62 near Duke, OK	07300980	148	1986-88
Cottonwood Creek near Duke, OK	07300985	54.5	1986-88
Spring Branch at Duke, OK	07300990	14	1986-88
Turkey Creek near Prairie Hill, OK	07300995	238	1987-88
Tributary to Turkey Creek near Prairie Hill, OK	07300997	13.7	1987-88
Horse Branch near Victory, OK	07301020	25.3	1986-88
Tributary to Horse Branch Northwest of Victory, OK, (formerly published as Trib to Horse Branch in Duke Twnp near Victory, OK)	07301030	8.39	1986-88
Tributary to Horse Branch at Victory, OK	07301040	0.23	1986, 1988
Turkey Creek near Altus, OK	07301050	309	1986-88
Turkey Creek at Olustee, OK	07301100	317	1986-88
Tributary to Salt Fork Red River near Elmer, OK	07301105		1986-88
Salt Fork Red River near Elmer,OK	07301110	1,878	1979-94

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Red River near Elmer, OK	07301150	16,459	1986-88
North Fork Red River near Texola, OK	07301315	1,284	1976-77
Sweetwater Creek near Sweetwater, OK	07301420	424	1986-90
North Fork Red River near Erick, OK	07301450		1960-63
North Fork Red River near Sayre, OK	07301481	2,159	1987-90
North Fork Red River near Carter, OK	07301500	2,337	1948-53, 1959-63, 1968-80, 1985-90 2000-01
North Fork Red River near Granite, OK	07302000	2,494	1938-44
Altus Canal Blw Lake Altus near Lugert, OK	07302510		1949-50
North Fork Red River Blw Altus Dam near Lugert, OK	07303000	2,515	1962-63, 1975-80, 1987-88
Elm Fork North Fork Red R at Salton Crossing, OK	07303395		1959-61, 1973-79
Elm Fork of the North Fork Red River near Carl, OK	07303400	416	1960-63 1968-82 1994-97
Fish Creek near Vinson, OK	07303402	31.5	1978-79
Salt Creek near Vinson, OK	07303404	5.64	1978-79
Elm Fork N Fork Red Rvr near Vinson, OK	07303406	428	1978-81
Elm Fork of North Fork Red River near Reed, OK	07303420	579	1978, 1981-82
Elm Fork of North Fork Red River near Mangum, OK	07303500	838	1938-47, 1951, 1960-65, 1968-80
Elk Creek near Hobart, OK	07304500	549	1949-51, 1955, 1958-63, 1969-90
North Ford Red River near Headrick, OK	07305000	4,244	1951-57, 1958-63, 1968-93
West Otter Creek at Snyder Lk near Mt. Park, OK	07305500	132	1947, 1960, 1988
Otter Creek near Snyder, OK	07307010	217	1959-63, 1987-89

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
North Fork Red River near Tipton, OK	07307028	4,691	1960, 1985-89
East Cache Creek near Elgin, OK	07309000	248	1975-80
East Cache Creek near Walters, OK	07311000	675	1947, 48, 1951-55, 1958-63, 1970-93
Blue Beaver Creek near Cache, OK	07311200	24.6	1964-96
Deep Red Run near Randlett, OK	07311500	617	1987-90
Beaver Creek near Lawton, OK	07312900		1947-48, 1961
Little Beaver Creek near Duncan, OK	07313000	158	1947-51, 1955, 1960, 1962-63
Beaver Creek near Waurika, OK	07313500	563	1986-90
Mud Creek near Courtney, OK	07315700	572	1985-90
Washita River near Reydon, OK	07316350	498	1949, 1977
Washita River near Cheyenne, OK	07316500	794	1938-40, 1942-47, 1950, 1960-61, 1969-73, 1985-90
Sandstone Creek SWS 17 near Cheyenne, OK	07319000	10.1	1968-70
Sandstone Creek SWS 10a near Elk City, OK	07320000	2.87	1975, 1979
Sandstone Creek SWS 1 near Cheyenne, OK	07324000	5.33	1968-70, 1979
Washita River near Moorewood, OK	07324150		1969-71
Quartermaster Creek near Hammon, OK	07324190		1969-71
Washita River near Hammon, OK	07324200	1,387	1969-87, 1989-90
Washita River near Foss, OK	07324400	1,551	1928, 1946-48, 1950-51, 1956-57, 1969-87, 1989-90
Barnitz Creek near Arapaho, OK	07324500	243	1947-49, 1951-52, 1955

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Washita River near Clinton, OK	07325000	1,977	1938-45, 1947-50, 1959-63, 1975, 1987-90
Washita River at Carnegie, OK	07325500	3,129	1942-51, 1955-90
Spring Creek near Eakly, OK	07325753		1960-61
Washita River at Anadarko, OK	07326500	3,656	1954, 1962-80, 1987-90
Tonkawa Creek near Anadarko, OK	07326720	26	1967-71
Sugar Creek near Gracemont, OK	07327000	208	1949-50, 1960, 1962-74
Delaware Creek near Anadarko, OK No. 131	07327040	40.1	1962-77
Salt Creek near Chickasha, OK	07327150	23.8	1967-77
Washita River near Chickasha, OK	07327300		1959-61
West Salt Creek near Chickasha, OK	07327320	22	1967-71
West Bitter Creek near Tabler, OK	07327420	59.4	1960-61, 1964-71
Spring Creek near Blanchard, OK	07327432	1	1968-71
Spring Creek near Tabler, OK	07327435	2	1967-71
Spring Creek Trib near Middleberg, OK	07327437		1968-71
East Bitter Creek near Tabler, OK	07327440	35.2	1960-61, 1964-77
Little Washita River near Ninnekah, OK	07327490	208	1948-52, 1954-55, 1963-78
Little Washita River at Ninnekah, OK	07327500	227	1960-63
Washita River near Tabler, OK	07328000	4,706	1942-53
Winter Creek near Alex, OK	07328070	33	1985-87
Washita River at Alex, OK	07328100	4,787	1962-80, 1986, 1989-90
Finn Creek near Payne, OK	07328250		1960-61
Washington Creek near Pauls Valley	07328550	7.56	1991-94

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Rush Creek at Purdy, OK	07329000	145	1938-53, 1985-90
Rush Creek near Maysville, OK	07329500	206	1938-39, 1944, 1953-75, 1977
Wildhorse Creek near Hennepin, OK	07329660		1949-50
Wildhorse Creek near Hoover, OK	07329700	604	1954-55, 1962-63, 1969-71, 1985-90
Honey Creek near Turner Falls, OK	07329790		1949, 1951
Honey Creek near Davis, OK	07329810	18.7	1953, 1955-56
Rock Creek N of Sulphur, OK	07329843		1958-60
Outflow from Vendome Well at Sulphur, OK	07329851		1985-90
Rock Creek at Sulphur, OK	07329852	44.1	1990-95
Rock Creek S of Platt Natl Pk near Sulphur, OK	07329853		1959-60
Rock Creek at Dougherty, OK	07329900	138	1951-57, 1960-63
Caddo Creek near Ardmore, OK	07330500	298	1996-98
Caddo Creek Site 6PT near Ardmore, OK	07330610		1996-97
Sand Creek Site 1WW near Ardmore, OK	07330615		1997
Sand Creek Site 2WW near Ardmore, OK	07330618		1997
Sand Creek Site 3CMP near Ardmore, OK	07330625		1996-97
Sand Creek Site 3A near Ardmore, OK	07330630		1996-97
Sand Creek Site 3B near Ardmore, OK	07330635		1996-97
Sand Creek Site 4CMP near Ardmore, OK	07330665		1996-97
Sand Creek Site 5CMP near Ardmore, OK	07330680		1996-97
Caddo Creek Site 7CMP neqr Gene Autry, OK	07330700	326	1996-98
Caddo Creek Site 8CMP near Gene Autry, OK	07330720		1996-97
Caddo Creek Site 9A nesr Gene Autry, OK	07330790		1996-97
Caddo Creek Site 9CMP near Gene Autry, OK	07330800		1997
Washita River near Dickson, OK	07331000	7,202	1944-95
Mill Creek near Ravia, OK	07331250	89.2	1968-69
Washita River near Tishomingo, OK	07331290		1953-55
Pennington Creek near Reagan, OK	07331300	65.7	1951-55, 1957-59
Butcher Pen Creek near Tishomingo, OK	07331450		1960-61

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Red River at Denison Dam near Denison, TX	07331600	39,720	1942-43, 1945-49, 1959-85
Red River near Colbert, OK	07332000	39,777	1930-31, 1936-62
Blue River at Connerville, OK	07332350		1951-56, 1961-62, 1977-79
Blue River near Connerville, OK	07332390	162	1977-79
Blue River at Armstrong, OK	07332450	224	1976-77
Blue River near Blue, OK	07332500	476	1936, 1938-42, 1944-50, 1953-80
Muddy Boggy Creek near Coalgate, OK	07332850		1961-62
Coal Creek near Lehigh, OK	07332900	8.1	1905, 1977-81
Muddy Boggy Creek at Atoka, OK	07332950	445	1978-81
Chickasaw Creek near Stringtown, OK	07333500	32.7	1955-58, 1960
Mcgee Creek near Farris, OK	07333910	176	1908, 1976-82
Muddy Boggy Creek near Farris, OK	07334000	1,087	1938-81
Byrds Mill Spring near Fittstown, OK	07334200		1953, 1955, 56, 1990-93
Clear Boggy Creek near Tupelo, OK	07334400	248	1957-58, 1960-62, 1983
Leader Creek at Tupelo, OK	07334420	64.3	1958, 1960
Clear Boggy Creek near Wapanucka, OK	07334500	516	1940-42
Clear Boggy Creek Abv Caney Creek near Caney, OK	07334800		1976-77
Clear Boggy Creek near Caney, OK	07335000	720	1943-80
Muddy Boggy Creek near Unger, OK	07335300	2273	1961-62, 1985-90
Red River at Arthur City, TX	07335500	44,531	1938-80, 1982
Kiamichi River near Big Cedar, OK	07335700	40.1	1966-96

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Kiamichi River near Clayton, OK	07335790	708	1976-77
Kiamichi River near Antlers, OK	07336200	1,138	1962, 1972-81
Kiamichi River near Belzoni, OK	07336500	1,423	1938-40, 1943-72
Kiamichi River near Sawyer, OK	07336700		1961-62, 1975, 1977-80
Red River near Valliant, OK	07336730		1921, 1923, 1970-76
Red River near Millerton, OK	07336760		1970-76
Red River near DeKalb, TX	07336820	47,348	1968-98
Little River near Cloudy, OK	07337100	324	1976-80
Little River near Ringold, OK	07337200		1961-62
Little River near Wright City, OK	07337500	645	1945-47, 1949, 1961-73, 1975-77
Glover River near Glover, OK	07337900	315	1961-80
Little River Blw Lukfata Creek, near Idabel, OK	07338500	1,226	1930-31, 1938-40, 1944-54, 1960-80
Mountain Fork near Smithville, OK	07338840		1976-80
Mountain Fork near Eagletown, OK	07339000	787	1938-40, 1944-45, 1947-48, 1960-70, 1973, 1975-80
Mountain Fork Blw Eagletown, OK	07339010		1960-63
Little River near Cerrogordo, Ar	07339100		1976, 1978
Blue R at Pexton Ranch near Milburn, OK	341835096342901		1976, 1978
Coal Ck Trib near Lehigh	342652096152202		1977-81
Coal Ck Tributary	342743096154701		1977-81
Little Blue Creek at Pontotoc, OK	342914096370701	11.6	1977-78
Blue River at Ford, OK	343554096250801		1976-77

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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Oklahoma each water year (Oct. 1 to Sept. 30). These 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 Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Oklahoma."

Volumes 1 and 2 of this report includes records on both surface water and ground water in the State. Specifically they contain: (1) Discharge records for 138 streamflow-gaging stations, and 38 partial-record or miscellaneous streamflow stations, (2) stage and content records for 18 lakes , reservoirs and gage height records for 2 stations; (3) water-quality records for 55 streamflow-gaging stations; (4) water-level records for 4 observation wells.

This series of annual reports for Oklahoma 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 format was changed to include, in one volume, data on quantity and quality of surface water. Data on ground-water levels were added to this format from 1975-79 and 1990 to present.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Oklahoma 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 7A and 7B." 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." Records of ground-water levels were published from 1935 to 1974 under the title "Ground-Water Levels in the United States," and 1980 to 1989 under the title "Ground-Water Levels in Observation Wells in Oklahoma." 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 Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official 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 OK-04-2" For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. Beginning with the 1990 water year, all water-data reports also will be available on Compact Disc - Read Only Memory (CD-ROM). All data reports published for the current water year for the entire Nation, including Puerto Rico and the Trust Territories, will be reproduced on a single CD-ROM disc.

A limited number of CD-ROM discs will be available for sale by the Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, Colorado 80225.

COOPERATION

The U.S. Geological Survey and organizations of the State of Oklahoma have had cooperative agreements for the systematic collection of streamflow and ground-water records since 1935, and for water-quality records since 1941. Organizations that assisted in collecting the data through cooperative agreement with the Survey are:

Oklahoma Water Resources Board.
Oklahoma Conservation Commission
Oklahoma City Water Utilities Trust.
City of Tulsa.
Oklahoma State University
Oklahoma Geological Survey.

The following Federal agencies assisted in the data collection program by providing funds or services:

Corps of Engineers, U.S. Army
Bureau of Reclamation, U.S. Department of Interior

Assistance in the form of funds or services was rendered by the following organizations through the **Oklahoma Water Resources Board: Grand River Dam Authority; Central Oklahoma Master Conservancy District; Fort Cobb Reservoir Master Conservancy District; Lugert-Altus Irrigation District; Foss Reservoir Master Conservancy District; Mountain Park Master Conservancy District; Chickasaw Nation; Choctaw Nation; the cities of Ada, Henryetta, and Lawton**.

Organizations that supplied data are acknowledged in the station descriptions.

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/*.

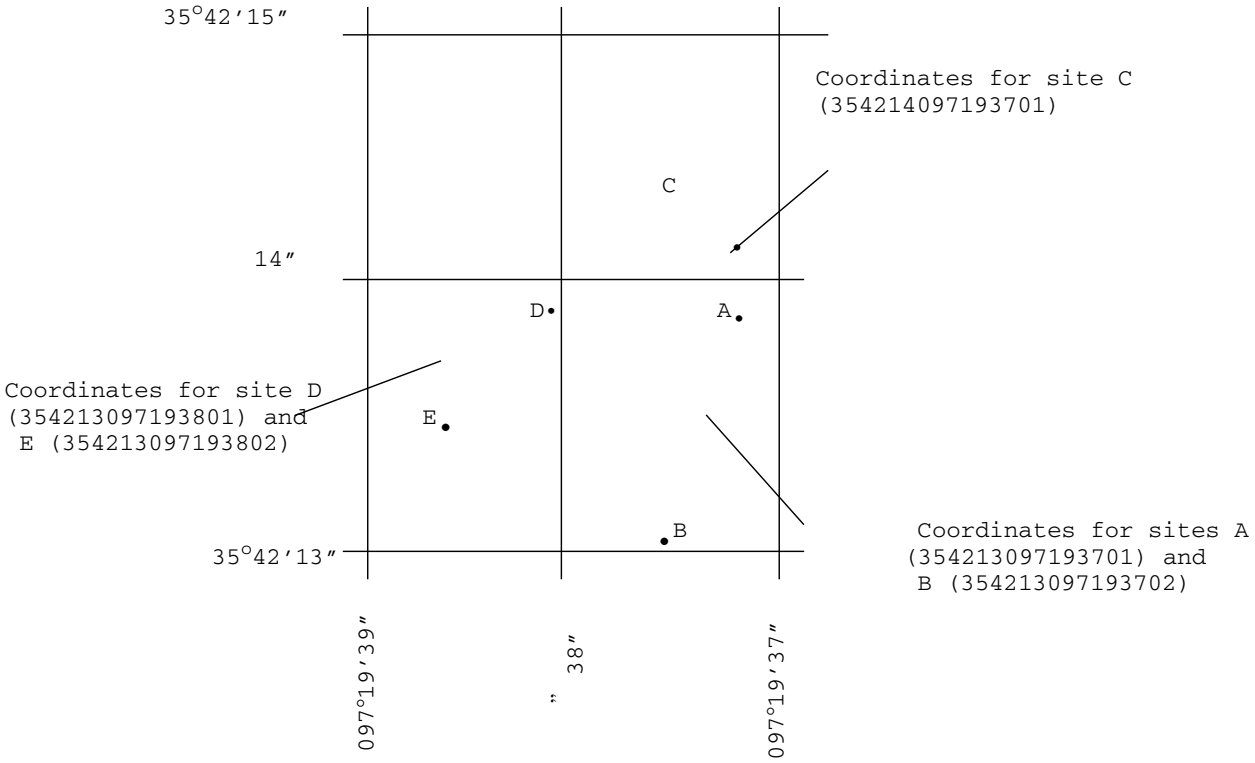

Fig.1: System for numbering miscellaneous and ground-water sites (latitude and longitude)

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2004 water year that began Oct. 1, 2003 and ended Sept. 30, 2004. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface water and water levels for ground water. The locations of the stations where the data were collected are shown in figures 2-4. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

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 07152500, which appears just to the left of the station name, includes a 2-digit part number “07” plus the 6-digit (or 8-digit) downstream order number “152500.” 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.

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The USGS well and miscellaneous site-numbering system is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, and the next 7 digits denote degrees, minutes, and seconds of longitude; the last 2 digits are a sequential number for wells within a 1-second grid. In the event that the latitude-longitude coordinates for a well and miscellaneous site are the same, a sequential number such as "01," "02," and so forth, would be assigned as one would for wells (see fig. 1). The 8-digit, downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

Records of Stage and Water Discharge

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

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records." Location of all complete-record, crest-stage partial-record, and low-flow partial-record stations for which data are given in this report are shown in figure 2.

Data Collection and Computation

The base data collected at gaging stations (fig. 2) 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. The methods are consistent with the American Society for Testing and Materials (ASTM) standards and generally follow the standards of the International Organization for Standards (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 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. A list of TWRIs is provided in this report.

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. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 3.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit

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.

Rating classifications for continuous water-quality records

[≤, less than or equal to; ±, plus or minus value shown; °C, degree Celsius; >, greater than; %, percent; mg/L, milligram per liter; pH unit, standard pH unit]

Measured physical property	Rating			
	Excellent	Good	Fair	Poor
Water temperature	≤ 0.2°C	> 0.2 to 0.5°C	> 0.5 to 0.8°C	> 0.8°C
Specific conductance	≤ 3%	> 3 to 10%	> 10 to 15%	> 15%
Dissolved oxygen	≤ 0.3 mg/L	> 0.3 to 0.5 mg/L	> 0.5 to 0.8 mg/L	> 0.8 mg/L
pH	≤ 0.2 unit	> 0.2 to 0.5 unit	> 0.5 to 0.8 unit	> 0.8 unit
Turbidity	≤ 5%	> 5 to 10%	> 10 to 15%	> 15%

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. These TWRIs are listed in this report. 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. 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 or e	Estimated value.
>	Actual value is known to be greater than the value shown.
<	Actual value is known to be less than the value shown.
K	Results based on colony count outside the acceptance range (non-ideal colony count).
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted).
D	Biological organism count equal to or greater than 15 percent (dominant).
V	Analyte was detected in both the environmental sample and the associated blanks.
&	Biological organism estimated as dominant.

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.

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Generally, only ground-water-level data from selected wells with continuous recorders from a basic network of observation wells are published in this report. This basic network contains observation wells located so that the most significant data are obtained from the fewest wells in the most important aquifers.

Site Identification Numbers

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude.Data Collection and Computation

Measurements are made in many types of wells, under varying conditions of access and at different temperatures; hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Most methods for collecting and analyzing water samples are described in the TWRIs referred to in the On-site Measurements and Sample Collection and the Laboratory Measurements sections in this report. In addition, TWRI Book 1, Chapter D2, describes guidelines for the collection and field analysis of ground-water samples for selected unstable constituents. 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 through A9. The values in this report represent water-quality conditions at the time of sampling, as much as possible, and that are consistent with available sampling techniques and methods of analysis. These methods are consistent with ASTM standards and generally follow ISO standards. Trained personnel collected all samples. The wells sampled were pumped long enough to ensure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface

at each well. If known, the elevation of the land-surface datum above sea level is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (EOM).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth of water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Data Presentation

Water-level data are presented in alphabetical order by county. The primary identification number for a given well is the 15-digit site identification number that appears in the upper left corner of the table. The secondary identification number is the local or county well number. Well locations are shown in figure 4*;* each well is identified on the map by its local well or county well number.

Each well record consists of three parts: the well description, the data table of water levels observed during the water year, and, for most wells, a hydrograph following the data table. Well descriptions are presented in the headings preceding the tabular data.

The following comments clarify information presented in these various headings.

LOCATION.—This paragraph follows the well-identification number and reports the hydrologic-unit number and a geographic point of reference. Latitudes and longitudes used in this report are reported as North American Datum of 1927 unless otherwise specified.

AQUIFER.—This entry designates by name and geologic age the aquifer that the well taps.

WELL CHARACTERISTICS.—This entry describes the well in terms of depth, casing diameter and depth or screened interval, method of construction, use, and changes since construction.

INSTRUMENTATION.—This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on continuous, monthly, or some other frequency of measurement.

DATUM.—This entry describes both the measuring point and the land-surface elevation at the well. The altitude of the land-surface datum is described in feet above the altitude datum; it is reported with a precision depending on the method of determination. The measuring point is described physically (such as top of casing, top of instrument shelf, and so forth), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above National Geodetic Vertical Datum of 1929 (NGVD 29); it is reported with a precision depending on the method of determination.

REMARKS.—This entry describes factors that may influence the water level in a well or the measurement of the water level, when various methods of measurement were begun, and the network (climatic, terrane, local, or areal effects) or the special project to which the well belongs.

PERIOD OF RECORD.—This entry indicates the time period for which records are published for the well, the month and year at the start of publication of water-level records by the USGS, and the words “to current year” if the records are to be continued into the following year. Time periods for which water-level records are available, but are not published by the USGS, may be noted.

EXTREMES FOR PERIOD OF RECORD.—This entry contains the highest and lowest instantaneously recorded or measured water levels of the period of published record, with respect to land-surface datum or sea level, and the dates of occurrence.

Water-Level Tables

A table of water levels follows the well description for each well. Water-level measurements in this report are given in feet with reference to either sea level or land-surface datum (lsd). Missing records are indicated by dashes in place of the water-level value.

For wells not equipped with recorders, water-level measurements were obtained periodically by steel or electric tape. Tables of periodic water-level measurements in these wells show the date of measurement and the measured water-level value.

Hydrographs

Hydrographs are a graphic display of water-level fluctuations over a period of time. In this report, current water year and, when appropriate, period-of-record hydrographs are shown. Hydrographs that display periodic water-level measurements show points that may be connected with a dashed line from one measurement to the next. Hydrographs that display recorder data show a solid line representing the mean water level recorded for each day. Missing data are indicated by a blank space or break in a hydrograph. Missing data may occur as a result of recorder malfunctions, battery

failures, or mechanical problems related to the response of the recorder's float mechanism to water-level fluctuations in a well.

GROUND-WATER-QUALITY DATA

Data Collection and Computation

The ground-water-quality data in this report were obtained as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some wells within a county but not for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide.

Most methods for collecting and analyzing water samples are described in the TWRIs. Procedures for on-site measurements and for collecting, treating, and shipping samples are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the USGS District office (see address shown on back of title page in this report).

Laboratory Measurements

Analysis for sulfide and measurement of alkalinity, pH, water temperature, specific conductance, and dissolved oxygen are performed on site. All other sample analyses are performed at the USGS laboratory in Lakewood, Colorado, unless otherwise noted. Methods used by the USGS laboratory are given in TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4.

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 ground-water 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. Definitions of common terms such as algae, water level, and precipitation are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. See also table for converting inch/pound units to International System (SI) units on the inside of the back cover.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Blue-green algae (*Cyanophyta*) are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

Bottom material (See "Bed material")

Bulk electrical conductivity is the combined electrical conductivity of all material within a doughnut-shaped volume surrounding an induction probe. Bulk conductivity is affected by different physical and chemical properties of

the material including the dissolved solids content of the pore water and lithology and porosity of the rock.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Dissolved-solids concentration in water is the quantity of dissolved material in a sample of water. It is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L $CaCO_3$) can be converted to carbonate concentration by multiplying by 0.60.

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

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

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

Drainage area of a stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface

runoff from precipitation that normally drains by gravity into a stream. Drainage areas given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Radioisotopes are isotopic forms of elements that exhibit radioactivity. Isotopes are varieties of a chemical element that differ in atomic weight but are very nearly alike in chemical properties. The difference arises because the atoms of the isotopic forms of an element differ in the number of neutrons in the nucleus; for example, ordinary chlorine is a mixture of isotopes having atomic weights of 35 and 37, and the natural mixture has an atomic weight of

about 35.453. Many of the elements similarly exist as mixtures of isotopes, and a great many new isotopes have been produced in the operation of nuclear devices such as the cyclotron. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

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

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

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

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

Return period (See "Recurrence interval")

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

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

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

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

Sea level, as used in this report, refers to one of the two commonly used national vertical datums (NGVD 1929 or NAVD 1988). 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 (<2mm, sand or finer). Below are the class categories expressed as the percentage covered by fine sediment:

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

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

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

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

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

ence, on the basis of determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in

solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

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

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. This group includes coliforms that inhabit the intestine of 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 the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved

methods for the measurement of turbidity in the USGS include those that conform to U.S. EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values.

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

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

Vertical datum (See "Datum")

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

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

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

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

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

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

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

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

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

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

TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

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

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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

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

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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

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

Section E. Subsurface Geophysical Methods

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

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

Section F. Drilling and Sampling Methods

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

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

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

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

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

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

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

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

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

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

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

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

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

3–A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and

F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 p.

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

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

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

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

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

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

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56 p.

Section B. Ground-Water Techniques

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Book 5. Laboratory Analysis

Section A. Water Analysis

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

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

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

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

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

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

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

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

6–A6. *A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction*, by Eric D. Swain and Eliezer J. Wexler: USGS–TWRI book 6, chap. A5,1996. 125 p.

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Book 7. Automated Data Processing and Computations

Section C. Computer Programs

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

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

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Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

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

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

Book 9. Handbooks for Water-Resources Investigations

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

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

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

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

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

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

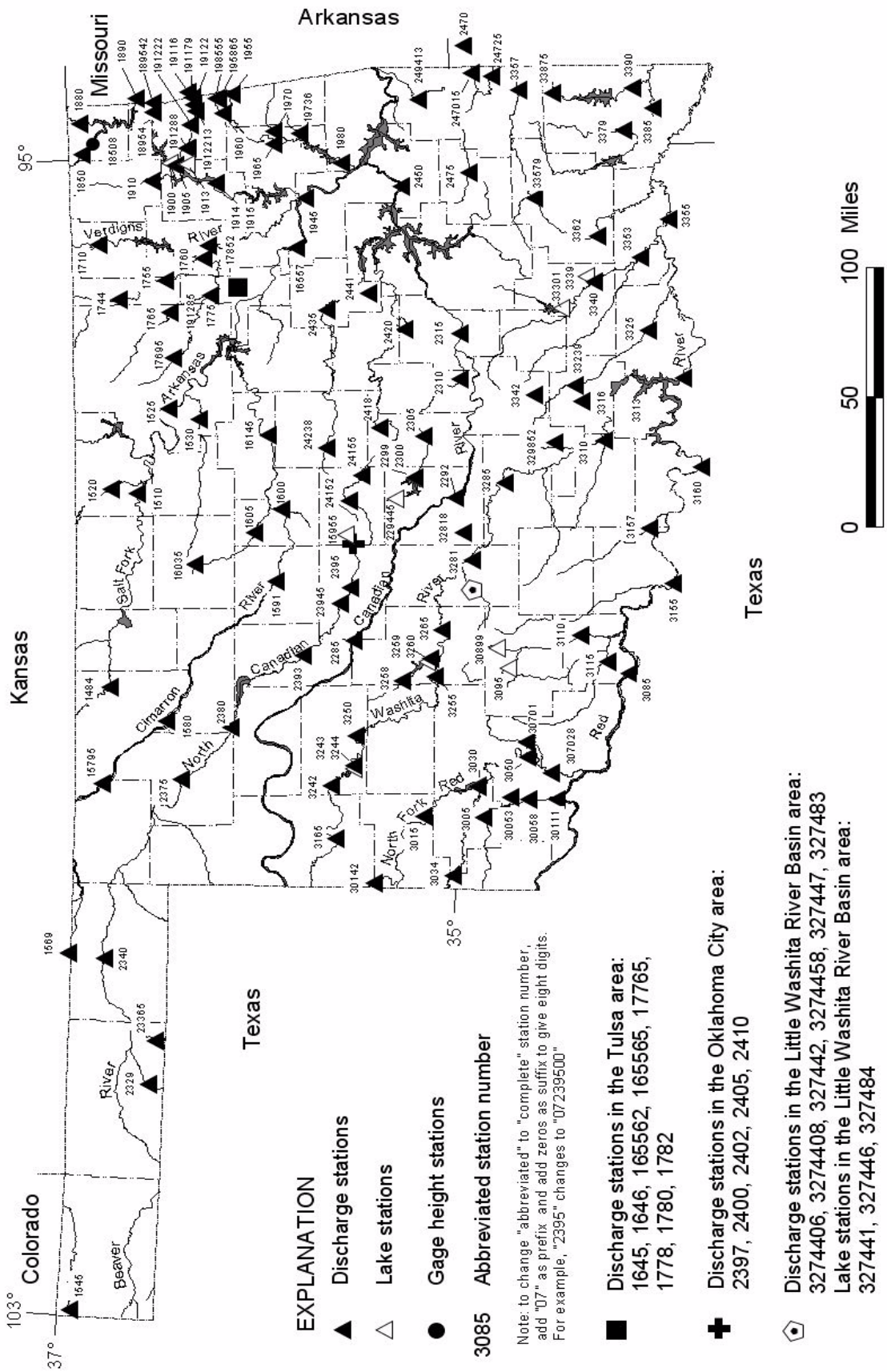


Figure 2.--Locations of continuous surface-water stations for water-year 2004.

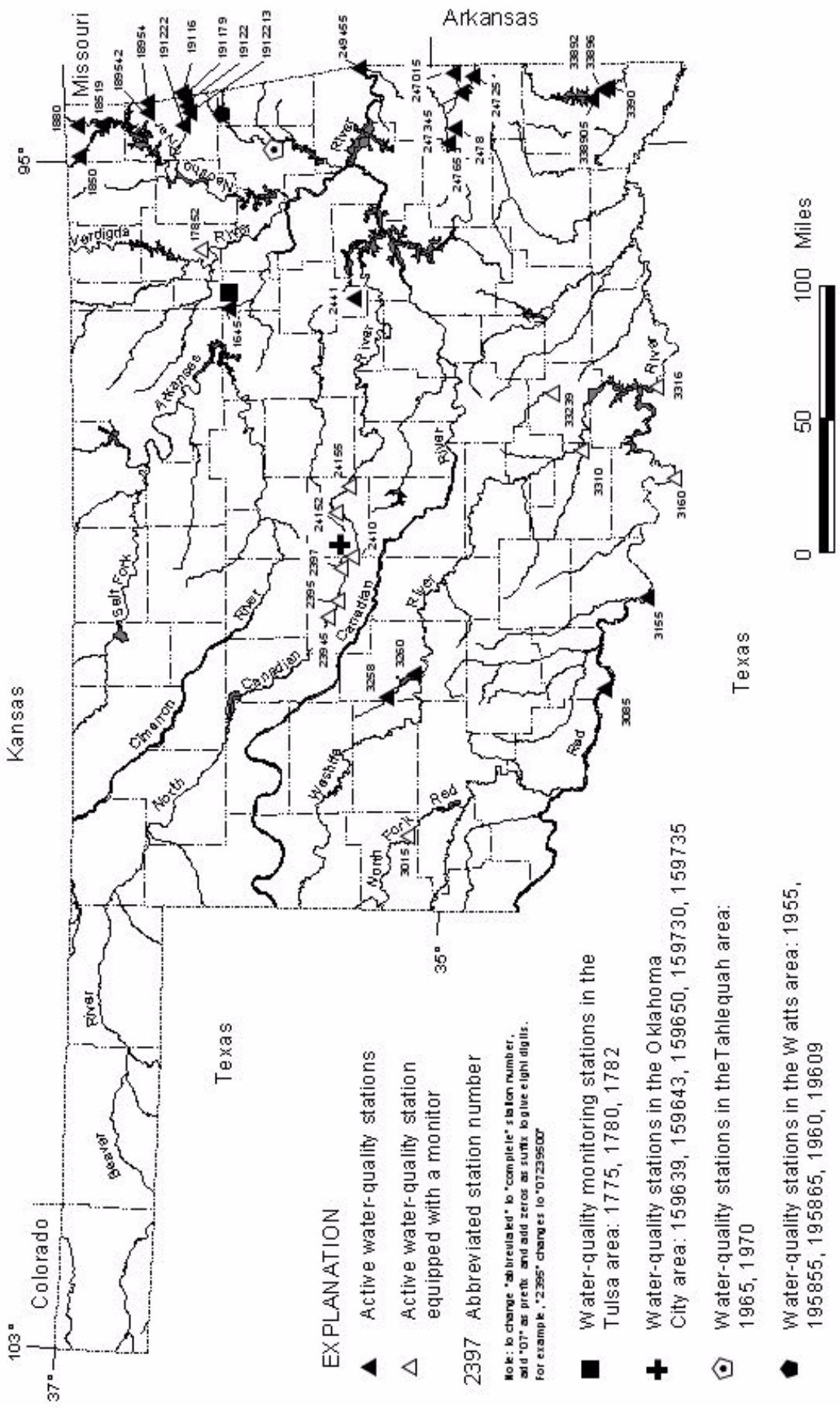


Figure 3.--Locations of water-quality stations for water-year 2004.

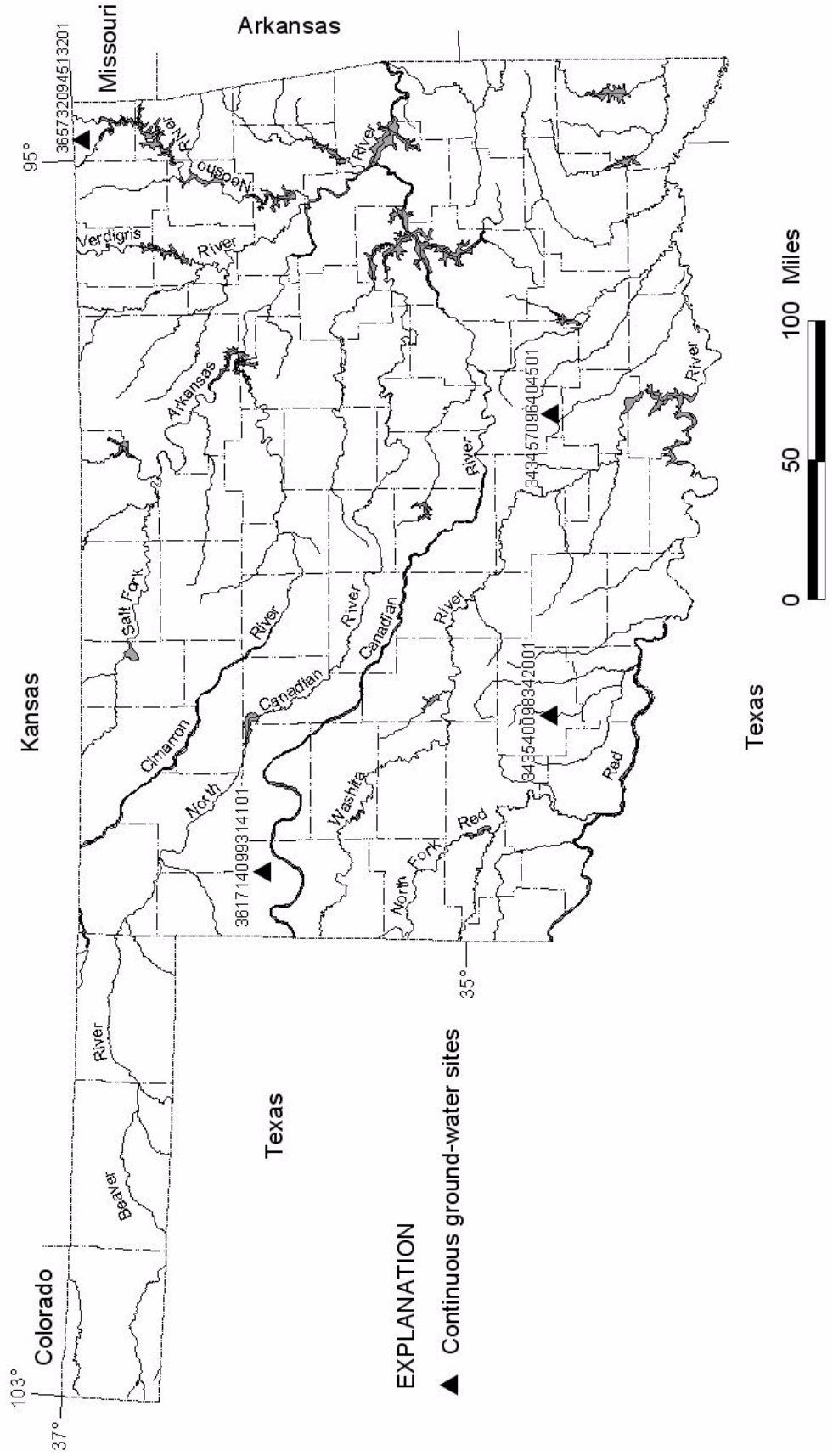


Figure 4.--Locations of ground-water wells for water-year 2004.

07300500 SALT FORK RED RIVER AT MANGUM, OK

LOCATION.--Lat 34°51'30", long 99°30'30", in SW ¼ SE ¼ sec.34. T.5 N, R.22 W., Greer County, Hydrologic Unit 11120202, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mi south of Mangum, 13.0 mi downstream from Fish Creek, and at mile 35.5.

DRAINAGE AREA.--1,566 mi^2, of which 209 mi^2 is probably noncontributing.

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

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

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

REMARKS.--Records fair. U.S. Geological Survey satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 4	1600	*3,090	*8.59				

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	3.5	1.2	8.8	15	31	67	86	64	0.01	95	2.2	0.54
2	2.8	1.1	9.3	15	e28	102	83	57	1.0	79	1.6	0.14
3	2.1	1.1	9.8	15	30	92	82	54	1.1	67	0.54	0.02
4	1.9	2.0	9.9	15	35	1,080	82	53	3.0	57	0.00	0.00
5	1.9	2.6	10	e12	36	522	87	51	39	46	0.00	0.00
6	2.1	2.5	e9.0	e10	37	301	94	49	25	38	0.00	0.00
7	2.6	5.2	e10	e10	e36	193	114	46	18	60	0.00	0.00
8	4.9	4.7	11	e11	40	172	183	44	15	47	0.00	0.00
9	12	6.2	12	e14	36	149	172	42	17	36	0.00	0.00
10	11	7.8	11	e15	34	138	195	39	21	25	0.00	0.00
11	9.4	8.5	e11	16	34	129	230	37	21	16	0.00	0.00
12	14	8.6	e10	19	33	122	163	32	19	12	0.00	0.00
13	13	8.7	e11	22	e31	122	121	29	12	8.4	0.00	0.00
14	11	9.1	e12	21	34	124	104	28	6.4	5.2	0.00	0.00
15	10	10	14	21	34	129	89	26	1.3	2.8	0.00	0.00
16	10	11	13	32	33	126	79	24	0.27	0.88	0.00	0.00
17	9.6	12	e11	54	33	e119	69	22	0.43	0.35	0.00	0.00
18	9.0	12	e13	63	35	e113	63	22	1.1	0.27	0.00	0.00
19	8.7	12	14	79	34	108	58	20	0.50	0.20	0.00	0.00
20	8.0	11	14	70	31	107	58	18	0.13	0.16	0.00	0.00
21	7.5	9.5	13	58	29	104	56	12	0.01	0.05	0.00	0.00
22	6.7	9.5	14	49	28	101	55	4.8	11	0.00	0.00	0.00
23	5.7	8.8	14	44	40	101	53	3.4	66	0.00	0.00	0.00
24	4.9	e7.0	14	41	36	98	53	3.1	77	0.00	0.00	0.00
25	4.2	e7.2	15	39	39	98	51	3.2	44	0.00	0.00	0.00
26	3.5	8.3	15	35	44	99	61	1.8	37	0.00	0.00	0.00
27	3.0	8.6	15	e32	52	99	63	1.4	28	0.06	0.00	0.00
28	2.7	8.1	15	33	50	98	77	1.1	39	0.70	2.5	0.00
29	2.3	8.4	15	32	60	99	77	0.48	33	2.7	3.4	0.00
30	1.9	8.6	14	e28	---	96	71	0.17	30	2.9	1.9	0.00
31	1.5	---	14	31	---	90	---	0.08	---	2.6	1.2	---
TOTAL	191.4	221.3	381.8	951	1,053	5,098	2,829	788.53	567.25	605.27	13.34	0.70
MEAN	6.17	7.38	12.3	30.7	36.3	164	94.3	25.4	18.9	19.5	0.43	0.02
MAX	14	12	15	79	60	1,080	230	64	77	95	3.4	0.54
MIN	1.5	1.1	8.8	10	28	67	51	0.08	0.01	0.00	0.00	0.00
AC-FT	380	439	757	1,890	2,090	10,110	5,610	1,560	1,130	1,200	26	1.4

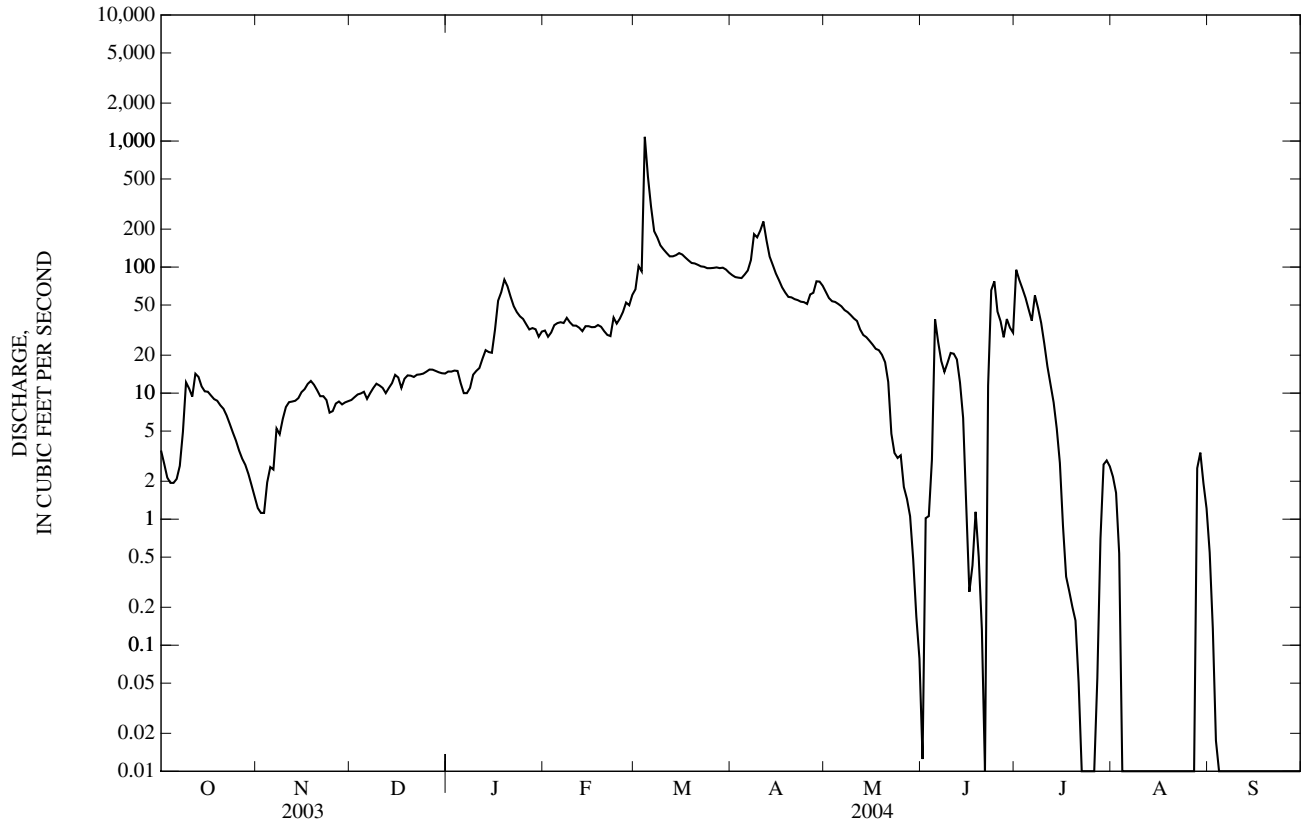
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	74.4	32.1	38.2	47.1	56.6	57.4	103	249	227	62.8	37.8	49.5
MAX	919	196	148	199	263	344	1,292	1,389	1,602	575	539	424
(WY)	(1961)	(1987)	(1992)	(1960)	(1998)	(1998)	(1997)	(1957)	(1941)	(1953)	(1995)	(1995)
MIN	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1941)	(1940)	(1940)	(1940)	(1953)	(1971)	(1955)	(1953)	(1952)	(1963)	(1943)	(1939)

e Estimated

07300500 SALT FORK RED RIVER AT MANGUM, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	11,062.06		12,700.59			
ANNUAL MEAN	30.3		34.7		86.3	
HIGHEST ANNUAL MEAN					277	1941
LOWEST ANNUAL MEAN					12.3	1940
HIGHEST DAILY MEAN	1,320	Sep 11	1,080	Mar 4	22,600	May 28, 1978
LOWEST DAILY MEAN	0.00	at times	0.00	at times	0.00	most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 13	0.00	Aug 4	0.00	Aug 14, 1938
MAXIMUM PEAK FLOW			3,090	Mar 4	72,000	May 16, 1957
MAXIMUM PEAK STAGE			8.59	Mar 4	14.70	Jun 16, 1938
ANNUAL RUNOFF (AC-FT)	21,940		25,190		62,510	
10 PERCENT EXCEEDS	49		95		126	
50 PERCENT EXCEEDS	11		12		19	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



07300530 BITTER CREEK NEAR MARTHA, OK

LOCATION.--Lat 34°43'00", long 99°22'09", in SW $^1/_4$ sec.23. T.3 N, R.21 W., Jackson County, Hydrologic Unit 11120202, on left bank of creek on county road, 1.0 mi east and 0.5 mi south of Martha, and at mile 17.4.

DRAINAGE AREA.--69.2 mi^2, revised.(Area at site used prior to Oct. 1, 2003, 42.7 mi^2.)

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

REVISED RECORDS.--WDR OK-00-2: 1999 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,347.52 ft above sea level.

REMARKS.--Records fair. Flow affected by irrigation from Lake Altus. U.S. Geological Survey satellite telemeter at station.

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	2.0	1.6	2.1	3.2	6.1	4.7	3.1	0.57	104	9.7	5.4
2	3.2	2.3	1.2	2.1	3.0	4.6	5.4	3.3	0.71	38	7.5	5.1
3	3.0	2.4	1.2	2.1	2.8	4.6	4.3	2.7	0.84	9.9	1.9	5.1
4	3.0	2.4	2.0	1.4	3.5	401	4.2	2.4	0.72	6.0	2.8	3.3
5	3.1	2.1	2.3	0.90	3.6	e555	4.2	2.5	0.75	4.9	7.0	3.5
6	2.9	1.8	2.2	e0.80	e3.1	36	5.0	2.4	0.72	4.4	4.7	4.6
7	4.0	1.5	2.4	e1.5	e2.8	21	5.2	2.6	0.72	43	11	2.9
8	3.3	1.8	2.4	e2.0	3.0	17	4.8	2.3	0.72	26	16	2.1
9	3.8	1.5	1.6	2.2	3.0	14	5.1	2.2	4.0	6.6	14	2.0
10	3.1	1.4	1.2	2.2	2.7	12	5.1	2.3	6.8	1.9	3.6	1.8
11	2.9	1.4	1.0	1.9	3.1	11	4.8	2.3	1.5	2.8	2.1	1.5
12	2.5	1.3	e0.90	1.5	2.7	10	4.5	2.2	0.88	2.6	3.2	1.4
13	2.5	1.2	e1.7	1.8	2.6	10	5.2	1.8	0.73	2.4	4.4	1.2
14	2.4	1.3	e2.0	1.2	2.8	10	5.0	1.6	0.53	3.6	5.5	1.2
15	2.3	1.4	2.4	0.98	2.9	9.8	4.3	1.4	0.42	11	6.1	0.99
16	2.4	1.3	2.1	2.2	2.8	8.9	4.0	1.4	0.39	6.5	4.3	0.80
17	2.3	2.0	e2.0	70	2.7	8.5	4.0	1.2	0.34	5.5	7.9	1.1
18	2.1	2.0	2.2	31	2.6	8.1	4.0	1.2	0.46	7.8	5.6	0.94
19	2.2	1.9	2.2	11	2.7	7.6	3.7	1.1	2.5	8.6	4.4	0.95
20	2.2	2.1	2.3	6.3	2.5	7.4	3.6	1.0	5.3	6.0	9.4	1.2
21	2.2	2.0	1.4	5.2	2.4	6.5	3.5	0.94	1.7	3.5	9.0	5.9
22	2.2	2.1	1.1	5.6	2.4	6.7	3.1	0.90	33	2.2	14	4.9
23	2.0	1.9	1.1	4.4	4.5	6.6	3.1	0.67	21	1.8	11	70
24	2.0	1.9	1.1	3.9	3.4	6.5	3.6	0.55	1.6	1.4	6.1	34
25	1.8	2.2	1.1	3.8	3.0	6.3	3.4	0.52	1.2	1.4	4.9	8.4
26	1.9	2.2	1.2	3.3	3.0	6.4	17	0.91	1.0	3.6	6.0	5.5
27	2.1	2.1	1.3	3.0	2.8	6.2	8.3	0.95	1.2	3.0	3.6	4.4
28	2.1	2.0	1.9	3.2	2.9	5.8	3.9	0.98	161	5.7	6.8	4.8
29	2.2	2.2	2.2	3.0	7.5	5.5	3.2	1.1	76	5.3	12	3.9
30	2.0	2.3	2.0	2.8	---	6.0	3.0	0.80	11	11	7.2	2.8
31	2.1	---	2.1	3.2	---	5.0	---	0.67	---	15	8.6	---
TOTAL	78.9	56.0	53.40	186.58	90.0	1,230.1	143.2	49.99	338.30	355.4	220.3	191.68
MEAN	2.55	1.87	1.72	6.02	3.10	39.7	4.77	1.61	11.3	11.5	7.11	6.39
MAX	4.0	2.4	2.4	70	7.5	555	17	3.3	161	104	16	70
MIN	1.8	1.2	0.90	0.80	2.4	4.6	3.0	0.52	0.34	1.4	1.9	0.80
AC-FT	156	111	106	370	179	2,440	284	99	671	705	437	380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

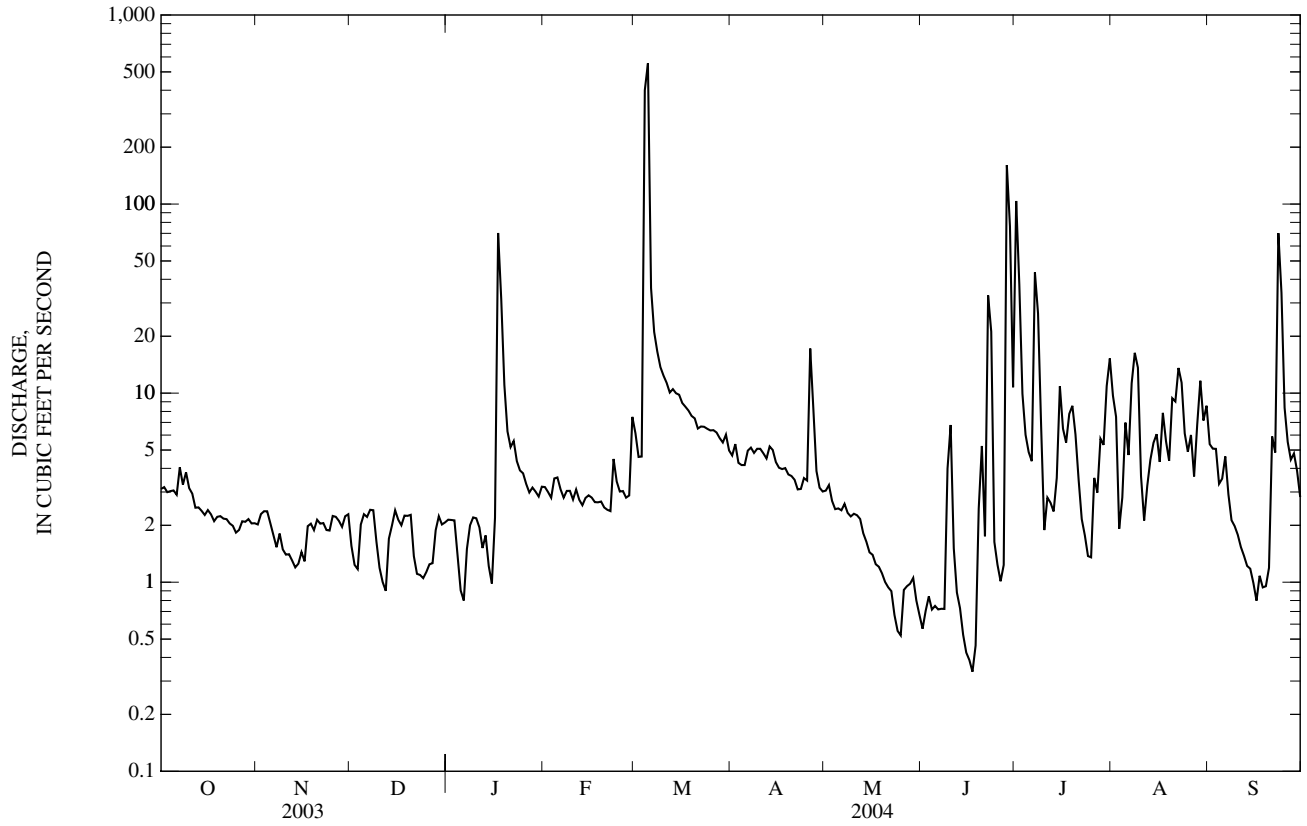
MEAN	4.78	5.23	4.65	5.55	7.98	19.8	16.9	29.9	22.1	15.5	19.2	8.82
MAX	7.66	10.6	7.53	9.89	23.4	55.5	46.3	78.2	82.6	22.8	27.5	12.2
(WY)	(2003)	(1999)	(2003)	(2002)	(2001)	(2000)	(2002)	(2001)	(1999)	(2001)	(2000)	(2001)
MIN	2.55	1.87	1.72	2.92	3.10	3.24	4.30	1.61	7.02	5.13	7.11	5.48
(WY)	(2004)	(2004)	(2004)	(2000)	(2004)	(2003)	(2001)	(2004)	(2002)	(2002)	(2004)	(2003)

e Estimated

07300530 BITTER CREEK NEAR MARTHA, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	2,035.41		2,993.85			
ANNUAL MEAN	5.58		8.18		13.4	
HIGHEST ANNUAL MEAN					19.8	1999
LOWEST ANNUAL MEAN					6.86	2003
HIGHEST DAILY MEAN	316	Aug 30	555	Mar 5	1,440	Jun 23, 1999
LOWEST DAILY MEAN	0.42	Jul 10	0.34	Jun 17	0.34	Jun 17, 2004
ANNUAL SEVEN-DAY MINIMUM	0.76	Jul 4	0.54	Jun 12	0.54	Jun 12, 2004
MAXIMUM PEAK FLOW			1,430	Mar 4	4,250	Jun 23, 1999
MAXIMUM PEAK STAGE			a12.31	Mar 4	13.04	Jun 23, 1999
ANNUAL RUNOFF (AC-FT)	4,040		5,940		9,680	
10 PERCENT EXCEEDS	8.8		9.8		22	
50 PERCENT EXCEEDS	3.1		2.8		4.6	
90 PERCENT EXCEEDS	1.3		1.1		2.2	

a From high-water mark.



07300580 BITTER CREEK WEST OF ALTUS, OK

LOCATION.--Lat 34°38'16", long 99°23'02", in NW $^1/_4$, NW $^1/_4$ sec.23. T.2 N, R.21 W., Jackson County, Hydrologic Unit 11120202, on left downstream end of eastbound bridge on U.S. Highway 62, 2.8 mi west of Altus, and at mile 8.9.

DRAINAGE AREA.--91.9 mi^2.

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

REVISED RECORDS.--WDR OK-01-1: 1999 (M)

GAGE.--Water-stage recorder. Datum of gage is 1,347.47 ft above sea level. Prior to May 12, 2004, gage located 1.4 mi downstream at datum 15.56 ft lower.

REMARKS.--Records fair. Flow affected at times by irrigation from Lake Altus. U.S. Geological Survey satellite telemeter at station.

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	5.2	3.4	2.8	3.1	6.5	13	10	6.8	1.3	53	30	19
2	5.4	3.5	3.0	3.2	6.2	9.0	10	6.8	1.5	84	22	15
3	5.5	3.7	3.7	3.2	6.2	8.0	11	6.9	14	56	23	21
4	5.5	3.6	2.7	3.2	6.7	220	9.5	6.5	2.3	14	7.5	15
5	5.5	3.3	3.0	2.8	7.2	1,390	9.5	6.1	23	7.6	4.8	12
6	5.4	3.4	3.2	e1.5	6.6	145	9.8	6.4	2.5	6.1	23	11
7	5.3	3.8	3.2	e2.0	e5.5	33	10	6.0	1.7	322	23	11
8	6.1	3.2	3.3	e2.8	6.8	29	9.9	5.2	1.7	67	38	14
9	5.7	3.3	3.2	3.1	6.4	25	9.9	5.1	37	17	37	5.9
10	5.5	3.2	2.8	3.0	6.2	22	9.9	5.3	25	6.5	22	3.8
11	4.9	3.1	2.4	3.0	6.1	20	9.4	4.6	5.5	3.8	8.7	3.0
12	4.6	2.3	e2.0	2.9	6.2	18	9.3	e3.9	3.1	4.3	1.4	2.7
13	4.5	2.6	e2.1	2.0	5.8	18	9.2	3.3	2.4	3.6	4.8	2.5
14	4.1	3.0	e3.0	1.9	6.0	18	9.8	2.5	2.4	3.3	13	2.3
15	4.2	2.9	3.5	1.9	6.1	17	7.5	1.6	2.2	3.3	13	2.1
16	4.0	2.9	3.3	2.9	6.1	16	10	1.4	2.0	22	17	2.0
17	4.0	3.0	3.0	64	5.9	16	8.2	1.3	2.0	13	13	1.8
18	4.0	3.3	3.1	60	5.0	15	8.1	1.2	1.9	13	13	1.9
19	3.9	3.0	2.6	23	6.4	15	8.1	1.0	3.6	13	11	1.7
20	3.9	3.1	3.4	11	5.7	14	7.8	1.0	8.3	18	26	1.6
21	3.9	3.5	3.1	8.7	5.7	13	7.7	0.99	7.1	12	30	2.5
22	3.7	3.4	2.7	7.9	5.6	13	7.4	1.0	46	7.9	36	7.2
23	3.7	3.3	2.5	8.3	6.2	13	7.0	0.95	52	4.0	25	34
24	3.5	3.1	2.3	7.1	7.7	13	7.1	0.99	8.5	12	19	75
25	3.1	3.2	2.4	7.2	6.8	12	8.1	1.9	3.0	13	5.0	17
26	3.1	3.4	2.3	6.8	6.3	12	9.6	1.0	3.4	8.9	2.6	10
27	3.2	3.3	2.5	6.3	6.8	13	21	0.94	21	3.7	5.1	5.6
28	3.5	3.2	2.5	6.3	6.5	11	9.4	1.2	170	16	28	3.4
29	3.5	3.2	2.8	6.4	9.7	11	7.1	1.7	167	32	26	5.4
30	3.4	2.5	3.2	6.1	---	11	7.4	2.2	24	31	19	3.3
31	3.3	---	3.0	6.3	---	11	---	1.7	---	34	14	---
TOTAL	135.1	95.7	88.6	277.9	184.9	2,194.0	278.7	97.47	645.4	905.0	560.9	312.7
MEAN	4.36	3.19	2.86	8.96	6.38	70.8	9.29	3.14	21.5	29.2	18.1	10.4
MAX	6.1	3.8	3.7	64	9.7	1,390	21	6.9	170	322	38	75
MIN	3.1	2.3	2.0	1.5	5.0	8.0	7.0	0.94	1.3	3.3	1.4	1.6
AC-FT	268	190	176	551	367	4,350	553	193	1,280	1,800	1,110	620

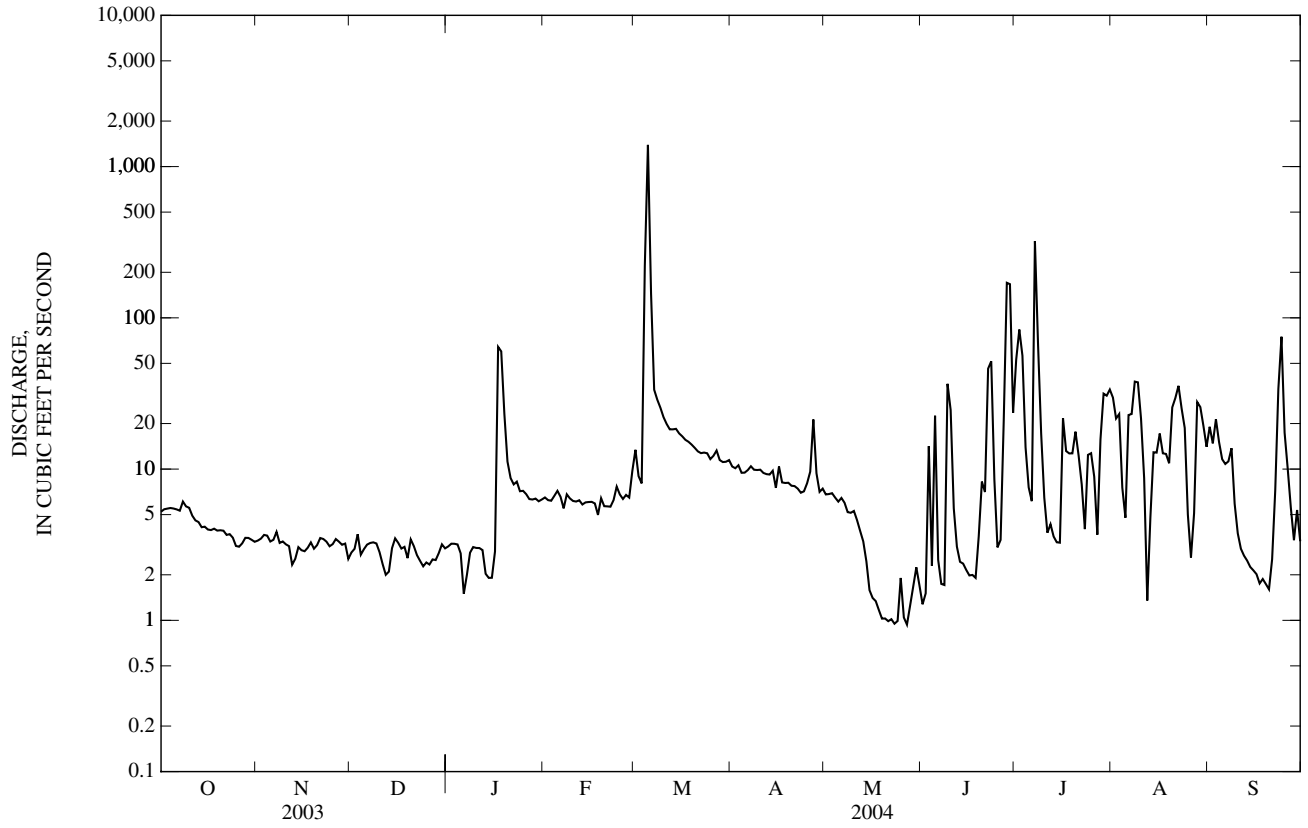
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

MEAN	8.64	8.88	8.42	9.93	13.5	35.9	23.8	55.0	39.8	21.8	27.2	13.7
MAX	17.8	16.1	12.2	14.0	40.6	106	68.7	148	132	31.4	40.4	20.5
(WY)	(2001)	(1999)	(2003)	(2002)	(2001)	(2000)	(2002)	(1999)	(1999)	(2001)	(1999)	(1999)
MIN	4.36	3.19	2.86	3.59	6.38	5.42	7.51	3.14	13.1	4.13	9.30	10.1
(WY)	(2004)	(2004)	(2004)	(2000)	(2004)	(2003)	(2001)	(2004)	(2002)	(2003)	(2002)	(1998)

e Estimated

07300580 BITTER CREEK WEST OF ALTUS, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1998 - 2004	
ANNUAL TOTAL	4,180.62		5,776.37			
ANNUAL MEAN	11.5		15.8		22.9	
HIGHEST ANNUAL MEAN					36.2	1999
LOWEST ANNUAL MEAN					13.5	2003
HIGHEST DAILY MEAN	380	Jun 6	1,390	Mar 5	2,100	May 20, 2001
LOWEST DAILY MEAN	0.35	May 22	0.94	May 27	0.35	May 22, 2003
ANNUAL SEVEN-DAY MINIMUM	1.4	May 17	1.0	May 18	1.0	May 18, 2004
MAXIMUM PEAK FLOW			2,140	Mar 5	2,760	May 20, 2001
MAXIMUM PEAK STAGE			14.17	Mar 5	14.82	May 20, 2001
ANNUAL RUNOFF (AC-FT)	8,290		11,460		16,560	
10 PERCENT EXCEEDS	13		23		31	
50 PERCENT EXCEEDS	4.9		5.9		8.5	
90 PERCENT EXCEEDS	2.7		2.1		3.4	



07301110 SALT FORK RED RIVER NEAR ELMER, OK

LOCATION.--Lat 34°28'44", long 99°22'55", in NW ¼ NE ¼ sec.15, T.1 S., R.21 W., Jackson County, Hydrologic Unit 11120202, on right bank at bridge on paved county road, formerly State Highway 5, 1.7 mi west of Elmer, and at mile 3.5.

DRAINAGE AREA.--1,878 mi^2, of which 209 mi^2 is probably noncontributing.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,258.55 ft above sea level.

REMARKS.--Records fair. Low flows sustained at times by irrigation returns from Lake Altus. U.S. Geological Survey satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	1845	*5,120	*7.51				

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	6.6	7.9	15	41	91	86	79	4.5	75	23	38
2	14	6.9	8.0	15	40	89	82	71	6.2	110	29	36
3	13	6.9	8.4	16	38	118	79	64	57	223	37	36
4	13	6.8	9.1	15	40	661	75	60	19	116	14	32
5	13	6.4	8.9	e13	43	4,090	74	58	170	70	16	27
6	12	6.4	9.0	e10	44	2,360	78	e49	47	53	22	31
7	11	18	9.4	e11	43	725	85	e50	19	854	38	33
8	11	17	9.6	e12	43	433	89	e47	14	334	42	16
9	12	16	9.7	e12	47	325	141	e43	67	99	57	21
10	11	14	9.6	e13	47	255	168	e45	374	59	49	17
11	11	11	e9.0	15	45	219	166	e42	61	45	40	16
12	11	7.2	e8.0	16	43	196	215	e37	41	34	35	15
13	10	6.7	e9.0	17	42	189	183	e36	26	27	17	15
14	9.5	6.7	e11	18	43	179	144	e37	21	21	14	24
15	9.7	7.2	12	19	43	173	123	e34	18	30	17	12
16	9.2	6.9	13	38	43	166	110	e30	16	e29	27	9.9
17	8.5	7.3	e12	386	42	157	100	e26	27	e44	36	9.1
18	8.2	6.9	e11	270	42	147	93	e21	19	e34	39	8.9
19	8.1	6.5	12	158	42	138	85	16	16	e27	38	9.1
20	7.8	6.6	13	110	42	129	80	13	16	e23	80	8.2
21	7.7	6.5	13	93	40	120	74	12	17	e27	58	18
22	7.4	6.9	13	80	38	115	67	10	199	e26	38	11
23	7.4	7.0	13	69	41	114	65	8.6	113	e38	41	16
24	7.0	7.2	13	63	49	109	64	8.3	66	e28	32	230
25	6.6	7.3	13	58	57	106	63	7.2	54	e27	31	94
26	6.3	7.4	14	52	52	102	72	8.1	49	e32	25	34
27	6.4	7.5	14	47	52	106	73	7.6	39	e31	30	21
28	6.3	7.5	14	44	56	98	81	6.8	612	e38	291	20
29	6.3	7.6	14	43	75	94	76	6.3	1,230	55	499	17
30	6.4	7.8	14	e41	---	90	95	5.1	163	36	102	12
31	6.4	---	15	42	---	89	---	4.7	---	39	50	---
TOTAL	296.2	250.7	349.6	1,811	1,313	11,983	2,986	942.7	3,580.7	2,684	1,867	887.2
MEAN	9.55	8.36	11.3	58.4	45.3	387	99.5	30.4	119	86.6	60.2	29.6
MAX	19	18	15	386	75	4,090	215	79	1,230	854	499	230
MIN	6.3	6.4	7.9	10	38	89	63	4.7	4.5	21	14	8.2
AC-FT	588	497	693	3,590	2,600	23,770	5,920	1,870	7,100	5,320	3,700	1,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2004, BY WATER YEAR (WY)

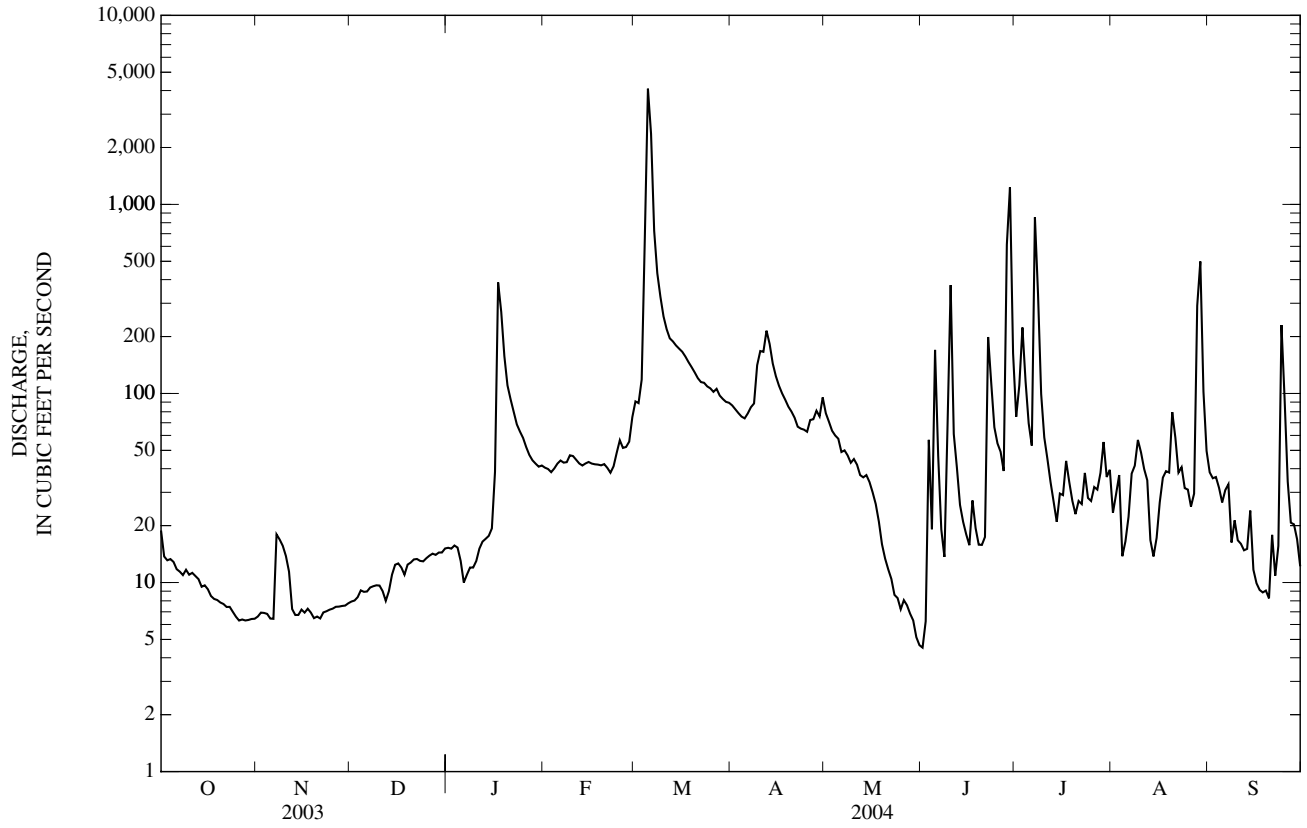
MEAN	216	119	121	117	158	205	253	495	580	171	247	181
MAX	1,828	680	701	362	697	1,100	2,108	2,566	2,836	641	1,681	950
(WY)	(1987)	(1987)	(1992)	(1993)	(1997)	(1998)	(1997)	(1980)	(1995)	(1993)	(1995)	(1986)
MIN	3.79	4.72	11.3	13.3	13.7	21.1	13.9	7.51	35.3	9.25	4.19	7.90
(WY)	(1985)	(1985)	(2004)	(1981)	(1981)	(1982)	(1982)	(1984)	(2002)	(1981)	(1981)	(1981)

e Estimated

07301110 SALT FORK RED RIVER NEAR ELMER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1980 - 2004	
ANNUAL TOTAL	20,921.2		28,951.1			
ANNUAL MEAN	57.3		79.1		239	
HIGHEST ANNUAL MEAN					594	1997
LOWEST ANNUAL MEAN					59.2	2002
HIGHEST DAILY MEAN	1,290	Jun 6	4,090	Mar 5	28,200	Aug 3, 1995
LOWEST DAILY MEAN	4.6	Aug 23	4.5	Jun 1	0.08	Sep 4, 1981
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 19	5.9	May 27	0.12	Aug 30, 1981
MAXIMUM PEAK FLOW			5,120	Mar 5	44,900	Oct 20, 1983
MAXIMUM PEAK STAGE			7.51	Mar 5	a16.06	May 29, 1987
ANNUAL RUNOFF (AC-FT)	41,500		57,420		172,800	
10 PERCENT EXCEEDS	80		139		410	
50 PERCENT EXCEEDS	31		32		76	
90 PERCENT EXCEEDS	7.0		7.4		13	

a From high-water mark.



07301420 SWEETWATER CREEK NEAR SWEETWATER, OK

LOCATION.--Lat 35°25'20", long 99°58'08", in NW ¼ NE ¼ sec.20, T.11 N, R.26 W., Roger Mills-Beckham County line, Hydro- logic Unit 11120302, on right bank downstream bridge piling of State Highway 152, 0.4 mi downstream from Freezeout Creek, 3.3 mi west of Sweetwater, and at mile 16.0.

DRAINAGE AREA.--424 mi^2, of which 20 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,087.76 ft above sea level.

REMARKS.--Records good. U.S. Bureau of Reclamations' satellite telemeter at station.

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	1.1	4.1	10	15	16	47	20	18	3.2	51	4.5	14
2	1.7	4.8	10	15	e16	35	20	18	3.0	43	3.2	10
3	1.8	5.2	11	14	17	39	20	17	3.0	28	e2.8	8.3
4	1.9	5.4	14	14	18	60	19	17	2.9	20	e2.2	7.0
5	2.4	6.0	15	e13	22	128	20	16	3.0	16	e2.0	6.2
6	3.0	6.3	e14	e10	24	120	22	15	3.1	13	e2.5	5.4
7	2.9	6.6	e13	e10	22	72	54	14	2.9	11	2.4	4.9
8	3.2	6.8	12	e11	22	54	45	13	2.6	9.6	19	4.5
9	8.7	7.2	12	e15	21	44	35	13	2.5	8.6	5.2	4.0
10	15	7.5	12	e16	19	39	38	12	3.2	7.7	4.1	3.7
11	8.6	10	e11	17	18	32	36	12	3.8	7.0	40	3.2
12	5.7	11	e12	16	18	28	33	11	2.9	6.2	44	3.0
13	4.4	11	e11	16	e17	28	29	10	2.2	5.5	21	2.7
14	3.9	13	e12	16	17	29	27	10	1.9	5.0	15	2.4
15	3.7	13	e13	16	17	29	26	10	1.8	4.5	26	2.3
16	3.2	11	e13	16	17	27	24	9.9	1.6	3.8	22	2.2
17	3.0	8.3	e12	20	17	26	23	9.7	3.3	3.5	16	2.2
18	3.3	8.1	e13	40	16	24	22	9.3	3.1	3.5	12	2.0
19	3.3	7.8	14	36	16	24	21	8.7	3.2	3.8	9.9	1.9
20	3.3	7.2	15	28	16	24	21	7.9	3.0	3.4	8.9	1.8
21	3.4	7.2	15	26	15	22	20	7.2	3.2	3.3	8.7	2.0
22	3.3	7.6	15	22	16	22	20	6.9	15	2.9	8.4	2.6
23	3.3	8.0	15	20	20	21	19	6.3	25	2.8	7.6	4.6
24	3.1	e8.0	17	20	17	22	20	5.7	12	3.1	6.8	4.0
25	3.1	8.4	16	18	17	22	20	5.1	9.7	3.1	6.2	3.8
26	3.3	8.7	15	17	17	23	22	5.2	8.2	3.4	5.3	3.3
27	3.4	9.0	14	e14	16	23	23	5.2	7.2	3.3	4.4	3.4
28	3.4	9.4	14	e15	17	27	21	5.0	14	3.4	3.8	3.4
29	3.9	9.8	15	17	26	24	20	4.6	26	3.7	3.4	3.4
30	3.5	10	15	e16	---	22	19	3.7	24	10	10	3.4
31	3.8	---	15	16	---	21	---	3.2	---	14	16	---
TOTAL	121.6	246.4	415	555	527	1,158	759	309.6	200.5	307.1	343.3	125.6
MEAN	3.92	8.21	13.4	17.9	18.2	37.4	25.3	9.99	6.68	9.91	11.1	4.19
MAX	15	13	17	40	26	128	54	18	26	51	44	14
MIN	1.1	4.1	10	10	15	21	19	3.2	1.6	2.8	2.0	1.8
AC-FT	241	489	823	1,100	1,050	2,300	1,510	614	398	609	681	249

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)

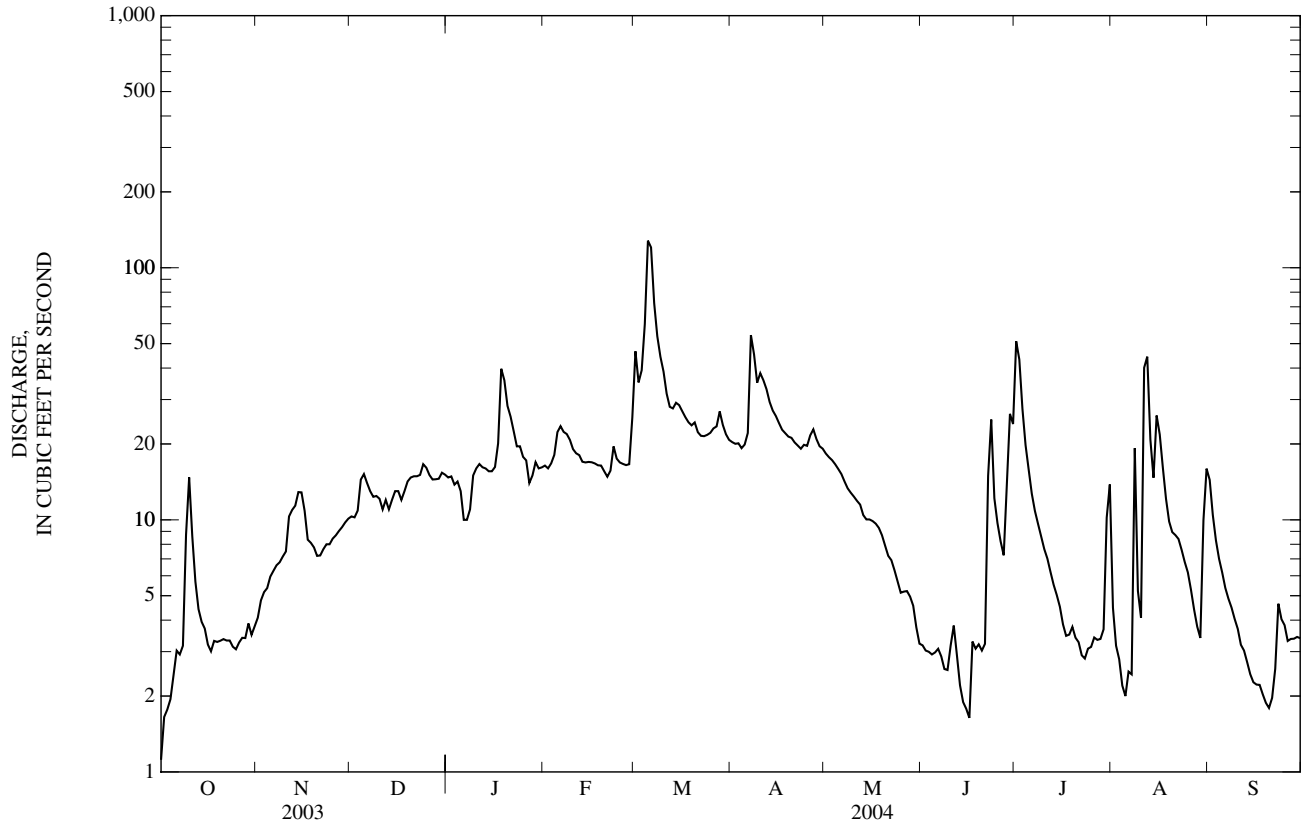
MEAN	17.6	21.8	25.0	28.3	30.5	38.3	37.0	40.7	36.4	12.1	6.85	9.87
MAX	72.2	61.1	51.5	53.7	53.6	85.6	126	150	115	31.6	38.7	51.6
(WY)	(1987)	(1987)	(1998)	(1998)	(2001)	(1998)	(1997)	(1997)	(1995)	(1997)	(1995)	(1988)
MIN	0.20	5.23	6.73	11.2	15.2	17.9	16.2	9.99	6.68	0.97	0.08	0.08
(WY)	(1995)	(1995)	(1995)	(1995)	(1995)	(1991)	(1991)	(2004)	(2004)	(1994)	(1994)	(1994)

e Estimated

07301420 SWEETWATER CREEK NEAR SWEETWATER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004	
ANNUAL TOTAL	6,127.80		5,068.1			
ANNUAL MEAN	16.8		13.8		25.5	
HIGHEST ANNUAL MEAN					53.0	1997
LOWEST ANNUAL MEAN					10.9	1994
HIGHEST DAILY MEAN	129	May 16	128	Mar 5	755	May 25, 1997
LOWEST DAILY MEAN	0.39	Aug 28	1.1	Oct 1	a0.00	Aug 27, 1994
ANNUAL SEVEN-DAY MINIMUM	0.41	Aug 23	2.1	Sep 15	0.00	Sep 28, 1994
MAXIMUM PEAK FLOW			199	Aug 11	1,940	Jun 3, 1995
MAXIMUM PEAK STAGE			10.07	Aug 11	15.89	Jun 3, 1995
INSTANTANEOUS LOW FLOW					0.00	Aug 27, 1994
ANNUAL RUNOFF (AC-FT)	12,150		10,050		18,460	
10 PERCENT EXCEEDS	32		26		48	
50 PERCENT EXCEEDS	14		11		20	
90 PERCENT EXCEEDS	0.93		3.0		2.2	

a No flow at times Aug.-Oct., 1994.



07301500 NORTH FORK RED RIVER NEAR CARTER, OK

LOCATION.--Lat 35°10'05", long 99°30'25", in NW ¼ SE ¼ sec.15, T.8 N., R.22 W., Beckham County, Hydrologic Unit 11120302, on left bank on downstream side of roadway on State Highway 34, 3.0 mi south of Carter, 10.8 mi downstream from Timber Creek, and at mile 110.5.

DRAINAGE AREA.--2,337 mi^2, of which 399 mi^2 is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1944 to September 1962. Annual maximum and occasional low-flow measurements, water years 1963-64. August 1964 to current year.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,673.71 ft above sea level.

REMARKS.--Records good. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 5	0130	*2,560	*6.46				

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	24	e14	26	41	64	105	141	115	11	456	4.1	212
2	23	e14	26	42	63	130	141	106	9.2	451	14	99
3	23	e14	27	43	64	128	139	97	9.0	288	19	63
4	24	e15	28	42	66	839	138	88	7.8	190	7.3	47
5	25	e14	28	42	70	1,390	137	82	7.8	144	4.0	36
6	25	14	28	e39	74	543	142	74	11	119	4.0	65
7	23	14	30	e32	78	378	342	70	8.2	113	4.5	53
8	22	14	31	39	80	283	407	65	6.7	112	5.0	28
9	23	16	33	41	81	235	298	61	12	102	5.1	21
10	22	17	32	42	78	207	292	57	26	86	4.7	15
11	21	17	33	46	79	195	366	54	12	71	8.2	11
12	20	17	34	49	78	187	264	53	8.0	61	13	9.2
13	23	17	34	50	76	190	220	52	6.6	52	49	7.1
14	21	19	34	50	78	189	197	49	5.6	45	61	5.9
15	19	23	34	50	77	189	173	47	4.8	38	62	5.4
16	18	24	35	54	77	182	149	45	4.2	32	88	5.0
17	17	25	36	73	76	176	139	42	14	27	86	4.4
18	17	27	36	73	77	175	132	40	13	24	62	3.7
19	17	25	36	86	77	171	130	37	20	19	49	3.1
20	15	24	36	88	76	169	125	34	16	14	46	2.6
21	e14	23	38	81	74	162	120	30	13	9.7	37	2.8
22	e14	23	39	77	73	154	114	29	25	7.1	32	2.6
23	e14	23	39	72	79	150	109	26	28	15	27	6.7
24	e14	22	39	69	82	149	104	24	280	15	22	5.1
25	e13	23	41	68	85	148	103	23	161	6.3	17	5.3
26	e14	23	42	66	84	147	128	23	113	5.8	12	5.0
27	e15	24	43	63	85	149	141	23	85	5.1	8.4	4.5
28	e14	23	42	62	86	174	134	21	84	8.4	7.9	3.9
29	e14	24	41	61	92	164	123	17	332	7.7	5.4	3.4
30	e14	25	41	61	---	160	123	15	307	6.3	13	3.9
31	e13	---	41	62	---	150	---	12	---	4.9	370	---
TOTAL	575	597	1,083	1,764	2,229	7,768	5,271	1,511	1,640.9	2,535.3	1,147.6	739.6
MEAN	18.5	19.9	34.9	56.9	76.9	251	176	48.7	54.7	81.8	37.0	24.7
MAX	25	27	43	88	92	1,390	407	115	332	456	370	212
MIN	13	14	26	32	63	105	103	12	4.2	4.9	4.0	2.6
AC-FT	1,140	1,180	2,150	3,500	4,420	15,410	10,460	3,000	3,250	5,030	2,280	1,470

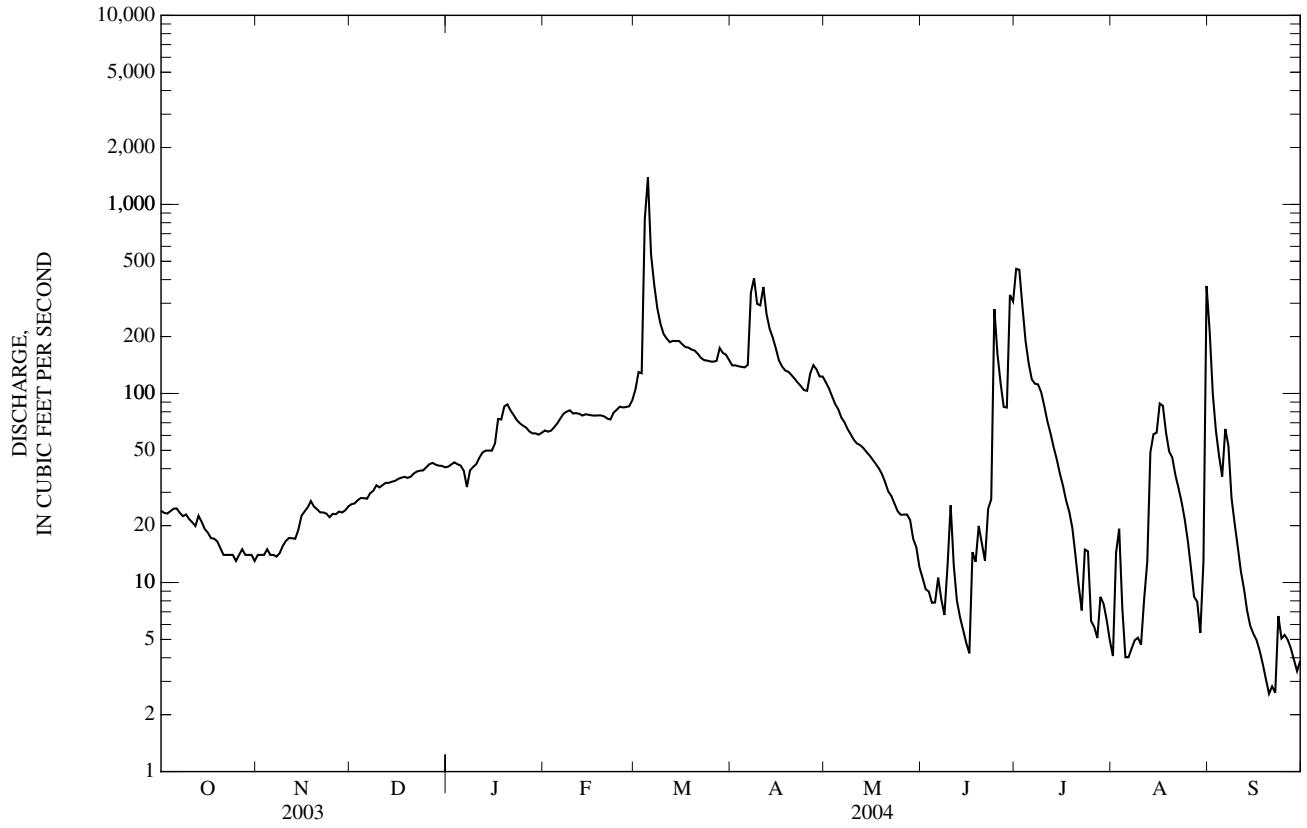
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	90.0	60.5	68.2	80.8	104	118	151	396	276	72.7	45.7	55.5
MAX	1,195	360	333	362	365	466	1,253	2,713	1,560	828	560	432
(WY)	(1987)	(1987)	(1998)	(1998)	(1960)	(1998)	(1997)	(1977)	(1995)	(1950)	(1995)	(1996)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.60	0.00	0.00	0.00
(WY)	(1946)	(1946)	(1953)	(1953)	(1953)	(1955)	(1971)	(1971)	(1966)	(1954)	(1952)	(1945)

e Estimated

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	26,794.70		26,861.4			
ANNUAL MEAN	73.4		73.4		127	
HIGHEST ANNUAL MEAN					356	1987
LOWEST ANNUAL MEAN					12.9	1981
HIGHEST DAILY MEAN	2,510	Sep 11	1,390	Mar 5	20,700	May 26, 1959
LOWEST DAILY MEAN	0.00	at times	2.6	Sep 20,22	0.00	most years
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 31	3.5	Sep 16	0.00	May 24, 1945
MAXIMUM PEAK FLOW			2,560	Mar 5	53,400	May 26, 1959
MAXIMUM PEAK STAGE			6.46	Mar 5	15.08	Jun 4, 1995
ANNUAL RUNOFF (AC-FT)	53,150		53,280		91,900	
10 PERCENT EXCEEDS	130		166		225	
50 PERCENT EXCEEDS	48		39		40	
90 PERCENT EXCEEDS	0.00		7.1		0.00	



07301500 NORTH FORK RED RIVER NEAR CARTER, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-51, 1958-63, 1969-79, 2000-01, 2003 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to September 1976, October 2002 to current year.
WATER TEMPERATURE: July 1968 to September 1976, October 2003 to current year.

INSTRUMENTATION.--Water-quality monitor since October 2002.

REMARKS.--Most interruptions in record were due to extended periods of minimum discharge which inhibited probe operation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,540 microsiemens Jan. 10, 1976; minimum, 309 microsiemens Sept. 11, 2003.
WATER TEMPERATURE: Maximum, 37.8°C July 12, 2003; minimum , -0.5°C Feb. 2, 3, 1972.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,980 microsiemens June 2; minimum, 375 microsiemens Aug. 31.
WATER TEMPERATURE: Maximum, 37.7°C July 15; minimum, -0.4°C Jan. 5.

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	3,490	3,450	3,470	3,440	3,420	3,430	3,250	3,220	3,230	2,820	2,810	2,810
2	3,470	3,450	3,460	3,430	3,410	3,420	3,240	3,160	3,200	2,910	2,800	2,840
3	3,480	3,450	3,470	3,410	3,380	3,400	3,160	3,130	3,140	2,880	2,790	2,830
4	3,460	3,360	3,400	3,400	3,350	3,390	3,140	3,100	3,110	2,810	2,800	2,810
5	3,380	3,350	3,370	3,380	3,360	3,360	3,110	3,090	3,100	2,820	2,790	2,800
6	3,380	3,310	3,360	3,400	3,370	3,390	3,090	3,070	3,080	2,990	2,790	2,900
7	3,350	3,300	3,320	3,410	3,390	3,400	3,080	3,060	3,070	2,950	2,780	2,860
8	3,380	3,330	3,370	3,400	3,320	3,380	3,070	3,030	3,060	2,880	2,800	2,840
9	3,420	3,340	3,380	3,380	3,310	3,330	3,030	2,890	2,950	2,860	2,820	2,840
10	3,450	3,420	3,440	3,380	3,280	3,330	2,920	2,820	2,860	2,940	2,850	2,900
11	3,490	3,450	3,460	3,280	3,230	3,250	2,920	2,810	2,850	2,910	2,790	2,860
12	3,520	3,470	3,500	3,230	3,220	3,230	2,870	2,810	2,850	2,910	2,750	2,820
13	3,590	3,520	3,560	3,230	3,170	3,200	2,920	2,860	2,880	2,830	2,540	2,620
14	3,820	3,570	3,670	3,220	3,180	3,200	2,890	2,840	2,860	2,580	2,540	2,560
15	3,900	3,770	3,860	3,180	3,170	3,170	2,910	2,840	2,870	2,610	2,580	2,590
16	3,770	3,520	3,610	3,240	3,180	3,210	2,980	2,910	2,930	2,580	2,460	2,540
17	3,540	3,500	3,520	3,200	3,030	3,110	3,000	2,870	2,940	2,460	2,270	2,340
18	3,560	3,500	3,520	3,080	3,020	3,050	2,960	2,820	2,880	2,440	2,310	2,360
19	3,540	3,470	3,520	3,080	3,010	3,050	2,870	2,780	2,820	2,530	2,440	2,460
20	3,490	3,400	3,450	3,070	3,050	3,070	2,790	2,760	2,780	2,540	2,390	2,490
21	3,530	3,480	3,500	3,110	3,060	3,080	2,860	2,700	2,780	2,390	2,320	2,340
22	3,540	3,510	3,530	3,150	3,110	3,130	2,810	2,720	2,770	2,360	2,340	2,350
23	3,550	3,520	3,540	3,200	3,150	3,180	2,810	2,760	2,780	2,350	2,320	2,340
24	3,570	3,540	3,550	3,260	3,200	3,230	2,800	2,710	2,760	2,380	2,300	2,350
25	3,590	3,560	3,580	3,280	3,260	3,270	2,800	2,750	2,770	2,400	2,370	2,390
26	3,590	3,550	3,580	3,320	3,270	3,300	2,770	2,730	2,760	2,460	2,400	2,440
27	3,610	3,550	3,580	3,320	3,300	3,310	2,740	2,680	2,720	2,510	2,460	2,490
28	3,650	3,590	3,620	3,320	3,290	3,300	2,710	2,650	2,690	2,540	2,470	2,510
29	3,620	3,550	3,590	3,290	3,250	3,270	2,710	2,650	2,690	2,560	2,520	2,540
30	3,550	3,480	3,520	3,290	3,210	3,230	2,760	2,710	2,740	2,650	2,540	2,590
31	3,480	3,440	3,460	---	---	---	2,810	2,750	2,770	2,690	2,540	2,600
MONTH	3,900	3,300	3,510	3,440	3,010	3,260	3,250	2,650	2,890	2,990	2,270	2,610

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—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	2,590	2,530	2,550	2,360	2,120	2,320	2,650	2,580	2,620	2,870	2,760	2,820
2	2,600	2,500	2,550	2,150	1,970	2,030	2,680	2,650	2,670	2,910	2,840	2,890
3	2,570	2,490	2,530	1,970	1,870	1,930	2,720	2,680	2,700	2,910	2,870	2,890
4	2,560	2,460	2,490	1,870	646	1,370	2,740	2,710	2,730	2,970	2,870	2,920
5	2,570	2,380	2,480	1,670	573	1,040	2,750	2,730	2,740	3,070	2,960	3,020
6	2,460	2,360	2,410	1,900	1,670	1,840	2,740	2,660	2,700	3,130	3,060	3,100
7	2,490	2,330	2,450	---	---	---	2,660	1,310	2,240	3,190	3,130	3,160
8	2,490	2,430	2,460	---	---	---	---	---	---	3,250	3,170	3,210
9	2,480	2,420	2,450	---	---	---	---	---	---	3,300	3,230	3,270
10	2,480	2,420	2,460	---	---	---	2,500	2,330	2,400	3,360	3,270	3,310
11	2,520	2,450	2,490	---	---	---	2,720	2,500	2,640	3,440	3,340	3,380
12	2,490	2,440	2,470	2,310	2,250	2,280	2,720	2,620	2,690	3,490	3,390	3,430
13	2,500	2,450	2,480	2,330	2,290	2,310	2,670	2,620	2,640	3,500	3,440	3,470
14	2,560	2,480	2,520	2,400	2,330	2,360	2,740	2,660	2,700	3,520	3,480	3,500
15	2,570	2,530	2,550	---	---	---	2,770	2,710	2,740	3,520	3,500	3,510
16	2,620	2,530	2,570	2,490	2,460	2,470	2,850	2,770	2,800	3,540	3,520	3,530
17	2,610	2,540	2,570	2,510	2,470	2,490	2,920	2,850	2,890	3,570	3,520	3,550
18	2,600	2,560	2,580	2,520	2,480	2,500	2,930	2,910	2,920	3,620	3,560	3,590
19	2,600	2,560	2,580	2,550	2,510	2,530	2,950	2,920	2,940	3,670	3,610	3,640
20	2,620	2,570	2,600	2,580	2,540	2,560	2,990	2,950	2,970	3,730	3,640	3,690
21	2,650	2,580	2,610	2,610	2,560	2,590	3,020	2,960	2,990	3,800	3,710	3,760
22	2,660	2,620	2,640	2,650	2,600	2,630	3,020	2,970	3,000	3,840	3,760	3,800
23	2,660	2,480	2,540	2,640	2,600	2,630	3,020	2,980	3,010	3,840	3,770	3,810
24	2,500	2,460	2,490	2,660	2,600	2,630	3,020	3,000	3,010	3,860	3,780	3,820
25	2,530	2,500	2,520	2,680	2,640	2,660	3,040	2,920	3,000	3,860	3,750	3,810
26	2,520	2,440	2,470	2,680	2,630	2,670	2,920	2,590	2,800	3,790	3,650	3,690
27	2,520	2,450	2,470	2,660	2,590	2,650	2,880	2,500	2,690	3,700	3,570	3,640
28	2,550	2,520	2,530	2,590	2,330	2,440	2,940	2,650	2,840	3,640	3,540	3,580
29	2,530	2,360	2,480	2,600	2,510	2,570	2,960	2,870	2,930	3,760	3,630	3,700
30	---	---	---	2,650	2,590	2,620	2,920	2,850	2,880	3,860	3,750	3,800
31	---	---	---	2,600	2,550	2,580	---	---	---	3,910	3,820	3,850
MONTH	2,660	2,330	2,520	2,680	573	2,350	3,040	1,310	2,780	3,910	2,760	3,460
		JUNE			JULY			AUGUST			SEPTEMBER	
1	3,960	3,840	3,890	---	---	---	---	---	---	---	---	---
2	3,980	3,840	3,910	---	---	---	---	---	---	---	---	---
3	3,890	3,810	3,840	---	---	---	---	---	---	1,400	1,330	1,340
4	3,900	3,830	3,870	---	---	---	---	---	---	1,780	1,400	1,630
5	3,890	3,360	3,830	---	---	---	---	---	---	1,870	1,780	1,820
6	3,680	3,400	3,610	---	---	---	---	---	---	1,940	865	1,650
7	3,690	3,650	3,670	---	---	---	---	---	---	---	---	---
8	3,740	3,660	3,690	2,550	2,390	2,450	---	---	---	---	---	---
9	3,660	2,710	3,310	---	---	---	---	---	---	2,350	2,030	2,190
10	3,180	1,700	2,390	---	---	---	---	---	---	2,580	2,350	2,480
11	3,120	2,150	2,740	---	---	---	---	---	---	2,720	2,580	2,650
12	3,380	3,120	3,260	---	---	---	3,640	1,940	3,240	2,830	2,720	2,770
13	3,620	3,380	3,500	---	---	---	3,130	1,460	2,550	2,920	2,830	2,860
14	3,780	3,590	3,660	3,180	3,070	3,120	2,940	1,660	2,240	2,980	2,910	2,940
15	3,830	3,730	3,770	3,300	3,180	3,240	1,740	1,470	1,610	3,000	2,960	2,980
16	3,840	3,770	3,800	3,410	3,300	3,360	1,610	1,060	1,200	3,020	2,980	2,990
17	3,830	2,160	2,780	---	---	---	1,210	1,020	1,140	3,100	3,000	3,040
18	3,180	3,000	3,120	---	---	---	1,240	1,120	1,170	3,140	3,020	3,090
19	3,130	2,890	3,040	---	---	---	1,200	1,100	1,140	3,230	3,080	3,150
20	3,110	2,850	3,000	---	---	---	1,330	1,140	1,190	3,280	3,220	3,260
21	3,200	2,850	3,010	3,770	3,660	3,700	1,520	1,330	1,420	3,280	3,130	3,220
22	3,210	2,470	2,780	3,780	3,720	3,740	1,730	1,520	1,630	---	---	---
23	---	---	---	3,770	1,420	3,420	1,920	1,720	1,780	---	---	---
24	---	---	---	3,030	1,420	2,770	2,000	1,920	1,970	3,020	2,770	2,920
25	---	---	---	3,330	3,030	3,200	2,120	1,990	2,040	3,020	2,710	2,880
26	---	---	---	3,420	3,320	3,360	2,230	2,120	2,160	2,710	2,600	2,640
27	---	---	---	3,460	3,400	3,430	2,310	2,200	2,240	2,800	2,620	2,730
28	---	---	---	3,440	3,110	3,250	---	---	---	2,830	2,770	2,800
29	---	---	---	---	---	---	---	---	---	3,020	2,830	2,910
30	---	---	---	---	---	---	---	---	---	3,110	2,790	3,060
31	---	---	---	---	---	---	1,380	375	481	---	---	---
MONTH	3,980	1,700	3,380	3,780	1,420	3,250	3,640	375	1,720	3,280	865	2,670

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—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	18.4	13.4	15.7	14.0	10.4	11.9	10.2	3.9	7.0	12.3	5.8	8.6
2	20.1	14.1	16.5	20.7	12.2	17.2	10.8	7.2	9.0	13.0	6.4	9.5
3	23.8	14.5	18.8	23.0	18.4	19.9	11.0	5.2	8.1	12.3	6.5	9.0
4	20.4	16.5	18.3	21.0	12.3	17.8	10.4	3.2	6.7	7.3	2.5	5.0
5	21.1	15.0	18.1	12.3	7.1	9.2	7.3	2.4	4.7	4.2	-0.4	1.4
6	24.8	17.9	20.6	8.7	5.3	6.4	5.1	-0.3	2.5	0.9	-0.3	-0.1
7	25.7	18.0	21.5	10.8	4.9	7.6	8.7	1.0	4.9	1.4	-0.3	0.1
8	23.6	19.3	21.3	9.7	8.0	8.9	10.5	4.7	7.7	5.9	-0.3	2.3
9	28.4	20.3	23.5	10.7	8.7	9.6	8.7	1.5	5.2	7.3	0.0	3.4
10	26.9	20.0	23.2	13.1	9.7	11.3	6.1	-0.3	2.6	7.4	0.0	3.7
11	22.6	17.7	20.5	17.6	11.8	14.4	6.1	-0.3	2.6	8.5	1.3	5.0
12	22.8	14.0	18.2	15.6	10.7	13.1	2.0	-0.3	0.5	8.6	4.1	6.5
13	25.5	16.3	20.0	10.7	8.3	9.2	4.6	-0.3	1.7	11.2	6.3	8.4
14	21.8	12.9	17.1	9.6	7.6	8.4	5.9	-0.1	2.8	11.4	5.0	8.1
15	21.2	12.3	16.6	14.8	7.3	10.7	7.2	2.1	4.4	8.9	6.0	7.7
16	23.6	14.2	18.4	15.9	7.3	11.8	6.4	0.8	3.4	10.2	8.3	9.3
17	21.0	12.9	16.8	16.9	13.9	15.3	6.3	-0.3	2.8	10.2	6.4	8.8
18	22.9	12.2	17.3	14.3	8.4	11.2	7.6	1.4	4.3	7.9	4.4	5.8
19	24.1	13.6	18.7	14.5	5.9	10.1	7.4	0.7	3.9	7.0	2.3	4.4
20	24.5	14.2	19.2	14.5	7.0	10.7	7.8	0.6	4.3	4.9	1.8	3.5
21	25.1	14.5	19.6	13.6	7.4	10.4	9.6	2.9	6.3	7.5	3.3	4.8
22	24.6	15.6	19.8	12.0	6.6	9.6	7.7	5.0	6.6	8.4	2.5	5.1
23	24.1	14.5	19.1	9.5	2.1	5.1	8.4	2.3	5.2	10.3	2.4	6.1
24	23.5	15.1	18.6	6.3	-0.3	2.6	7.7	1.3	4.6	11.0	6.5	8.7
25	16.2	10.7	12.3	8.0	1.8	4.7	8.9	2.6	5.7	12.6	8.2	10.1
26	17.1	7.3	11.8	10.5	2.1	6.1	12.8	6.1	9.1	8.6	1.9	5.0
27	18.6	8.8	13.5	9.3	4.4	6.3	12.0	6.8	9.6	6.0	-0.3	2.4
28	18.3	12.3	14.6	8.3	1.2	4.7	8.9	3.5	6.0	7.7	-0.2	3.5
29	19.5	9.7	14.3	9.4	1.9	5.4	6.8	0.8	3.7	5.4	1.1	3.6
30	18.6	12.7	15.2	10.6	3.1	6.7	6.7	0.4	3.4	5.8	-0.3	2.1
31	15.4	9.2	12.4	---	---	---	7.8	1.5	4.6	8.1	1.3	4.2
MONTH	28.4	7.3	17.8	23.0	-0.3	9.9	12.8	-0.3	5.0	13.0	-0.4	5.4
		FEBRUARY			MARCH			APRIL			MAY	
1	6.0	1.0	4.1	13.6	6.8	10.1	22.9	12.6	17.4	20.1	10.7	14.8
2	7.1	-0.3	2.7	10.8	7.6	8.9	21.1	13.7	17.4	23.1	12.6	17.6
3	5.6	0.7	3.2	9.5	7.8	8.6	21.6	13.9	17.1	24.1	14.3	19.0
4	3.7	1.4	2.3	9.1	7.3	8.0	20.0	12.2	15.8	26.5	15.8	20.7
5	3.6	2.1	2.7	8.1	6.5	7.4	18.6	14.2	16.3	28.5	17.1	22.3
6	6.4	0.7	3.2	11.1	6.3	8.6	19.1	14.5	16.5	29.7	18.6	23.7
7	7.9	0.4	3.7	12.7	8.3	10.5	17.6	14.8	16.1	28.6	19.6	23.7
8	8.9	1.2	4.9	---	---	---	---	---	---	29.6	19.7	24.0
9	10.0	4.9	6.9	---	---	---	---	---	---	29.1	19.3	23.7
10	9.1	2.6	5.8	---	---	---	18.9	11.8	14.5	29.3	20.0	23.7
11	7.7	4.2	5.7	---	---	---	14.6	10.1	12.2	28.2	20.7	24.0
12	5.9	0.6	3.2	11.8	10.2	11.0	15.6	10.8	12.7	32.2	20.3	25.2
13	2.6	0.4	1.5	10.3	9.3	9.8	17.1	8.5	12.4	24.9	13.9	20.5
14	9.0	1.1	4.2	16.3	10.1	12.6	20.0	11.5	15.4	25.0	11.6	17.4
15	8.6	2.2	4.9	---	---	---	23.3	13.5	18.1	28.0	14.9	20.7
16	7.8	3.8	5.2	17.8	11.2	14.1	25.2	16.6	20.7	27.2	16.9	21.4
17	11.4	2.2	6.4	20.0	11.4	15.5	25.3	18.5	21.7	29.4	18.0	23.2
18	12.7	4.6	8.4	21.2	13.3	17.1	21.0	18.7	19.9	31.9	20.0	25.4
19	14.3	7.5	10.4	23.0	16.3	18.9	23.2	17.9	20.3	32.3	20.8	26.0
20	13.3	7.2	9.9	22.3	15.3	18.9	25.4	18.1	21.6	32.2	20.9	25.7
21	14.6	6.1	9.9	15.3	12.1	13.5	26.5	17.5	21.8	30.7	20.9	24.9
22	14.7	7.2	10.6	16.1	10.0	12.7	25.3	17.1	20.6	32.1	19.9	25.3
23	12.8	10.2	11.4	19.8	10.8	15.0	19.9	14.9	17.0	33.5	20.1	26.2
24	10.2	4.9	6.8	19.6	14.9	16.8	23.3	13.4	17.7	33.4	21.4	26.9
25	8.5	3.5	5.6	24.1	16.3	19.5	23.2	14.8	18.4	25.8	21.6	23.7
26	8.8	3.3	6.2	22.0	18.0	19.6	25.0	15.3	19.7	27.8	20.2	23.2
27	10.2	5.5	7.8	22.4	17.4	19.7	26.0	16.7	21.1	27.7	21.4	24.2
28	9.6	7.9	8.5	22.6	15.0	18.6	24.1	17.3	20.3	33.1	18.9	25.4
29	12.4	8.4	10.0	22.3	14.1	17.9	26.6	16.6	20.5	31.1	20.7	24.5
30	---	---	---	21.7	12.8	17.0	20.6	13.0	16.8	30.9	17.9	23.5
31	---	---	---	21.7	13.0	16.9	---	---	---	31.6	15.7	23.2
MONTH	14.7	-0.3	6.1	24.1	6.3	14.1	26.6	8.5	17.9	33.5	10.7	23.0

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	32.9	18.0	24.6	28.1	23.7	25.7	---	---	---	---	---	---
2	35.2	20.5	24.9	---	---	---	---	---	---	---	---	---
3	31.8	19.0	24.5	---	---	---	---	---	---	29.9	20.3	24.6
4	31.2	20.7	25.4	---	---	---	---	---	---	30.3	20.6	25.2
5	34.7	20.6	26.6	---	---	---	---	---	---	30.9	21.5	25.8
6	34.8	20.8	27.0	---	---	---	---	---	---	27.8	19.6	23.7
7	33.3	22.2	26.6	---	---	---	---	---	---	---	---	---
8	27.8	20.9	24.2	34.3	25.2	29.3	---	---	---	---	---	---
9	25.4	21.9	23.0	---	---	---	---	---	---	30.5	16.1	22.7
10	32.2	21.3	25.6	---	---	---	---	---	---	29.6	16.1	22.5
11	35.3	21.9	27.9	---	---	---	---	---	---	30.8	18.5	24.0
12	34.2	21.6	27.1	---	---	---	34.3	19.6	25.3	32.8	20.4	25.7
13	33.4	20.8	26.5	---	---	---	31.1	20.6	25.2	31.7	20.6	25.2
14	35.9	22.5	28.4	37.0	24.5	30.4	28.1	21.6	24.1	31.5	20.0	24.9
15	33.9	22.8	27.2	37.7	24.9	31.1	29.5	20.1	24.1	31.9	21.9	25.9
16	33.2	21.8	26.8	36.1	24.1	29.2	30.9	21.9	25.7	33.3	21.7	26.6
17	32.8	19.5	25.2	---	---	---	32.1	22.0	26.5	33.4	22.6	27.1
18	34.4	21.9	26.3	---	---	---	31.1	22.3	26.3	31.3	22.2	25.9
19	27.4	22.4	24.5	---	---	---	27.1	22.8	24.5	30.0	21.9	25.3
20	32.5	21.5	25.6	---	---	---	27.3	19.9	23.2	25.6	19.3	22.5
21	34.6	21.2	26.7	35.6	22.5	28.4	30.1	18.9	24.0	27.1	19.8	22.7
22	30.2	19.4	24.3	35.4	22.5	28.5	32.7	20.7	25.8	26.4	20.2	22.9
23	---	---	---	34.8	23.1	27.3	33.8	21.9	27.1	28.3	18.0	22.5
24	---	---	---	29.6	22.3	24.7	34.4	22.7	27.8	29.4	15.8	21.9
25	---	---	---	23.8	18.9	21.4	32.6	23.2	27.0	28.4	17.6	22.3
26	---	---	---	34.0	18.0	25.0	33.2	21.6	26.6	29.1	18.2	23.0
27	---	---	---	28.4	21.6	24.8	36.4	22.8	28.5	29.8	18.8	23.4
28	---	---	---	26.8	21.5	23.5	---	---	---	26.0	18.0	21.4
29	25.8	22.9	24.1	---	---	---	---	---	---	27.7	16.4	21.5
30	27.2	23.1	24.5	---	---	---	---	---	---	23.3	16.2	19.6
31	---	---	---	---	---	---	23.4	17.9	20.6	---	---	---
MONTH	35.9	18.0	25.7	37.7	18.0	26.9	36.4	17.9	25.4	33.4	15.8	23.8

07302500 LAKE ALTUS AT LUGERT, OK

LOCATION.--Lat 34°53'08", long 99°17'43", in SW $^1/_4$ SE $^1/_4$ sec.22, T.5 N., R.20 W., Kiowa County, Hydrologic Unit 11120302, on upstream face of Altus Dam on North Fork Red River, 1.0 mi west of Lugert, 2.6 mi upstream from Elm Fork of North Fork, and at mile 73.5.

DRAINAGE AREA.--2,515 mi^2, of which 399 mi^2 is probably noncontributing.

PERIOD OF RECORD.--December 1943 to September 1950 (monthly records only), October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation). Prior to Nov. 19, 1948, nonrecording or float gage at same site and datum.

REMARKS.--Reservoir is formed by concrete and coursed masonry dam. Storage began in December 1943. Capacity, 134,500 acre- ft at elevation 1,559.0 ft, crest of uncontrolled spillway, and 72,400 acre-ft at elevation 1,547.0 ft, crest of controlled spillway. Dead storage, 1,660 acre-ft below elevation 1,517.5 ft, sill of headgate at irrigation canal. Figures given herein represent total contents. Reservoir is used for flood control, municipal water supply for city of Altus, and irrigation of about 48,000 acres. Revised capacity table used since Jan. 1, 1969. From 1927 to 1943, a dam to form reservoir for municipal water supply was at same site. Elevation of crest was 1,514.31 ft. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 170,600 acre-ft, May 19, 1951, elevation 1,562.10 ft; minimum after initial storage, 4,690 acre-ft, Aug. 25, 1944, elevation, 1,520.2 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 70,020 acre-ft, July 11, elevation 1,546.43 ft; minimum, 21,470 acre-ft, Oct, 3, 29 elevation, 1,530.56 ft.

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

1520	3,844	1540	46,780
1525	10,710	1548	76,580
1529	18,130	1559	134,500
1534	29,620	1563	161,000

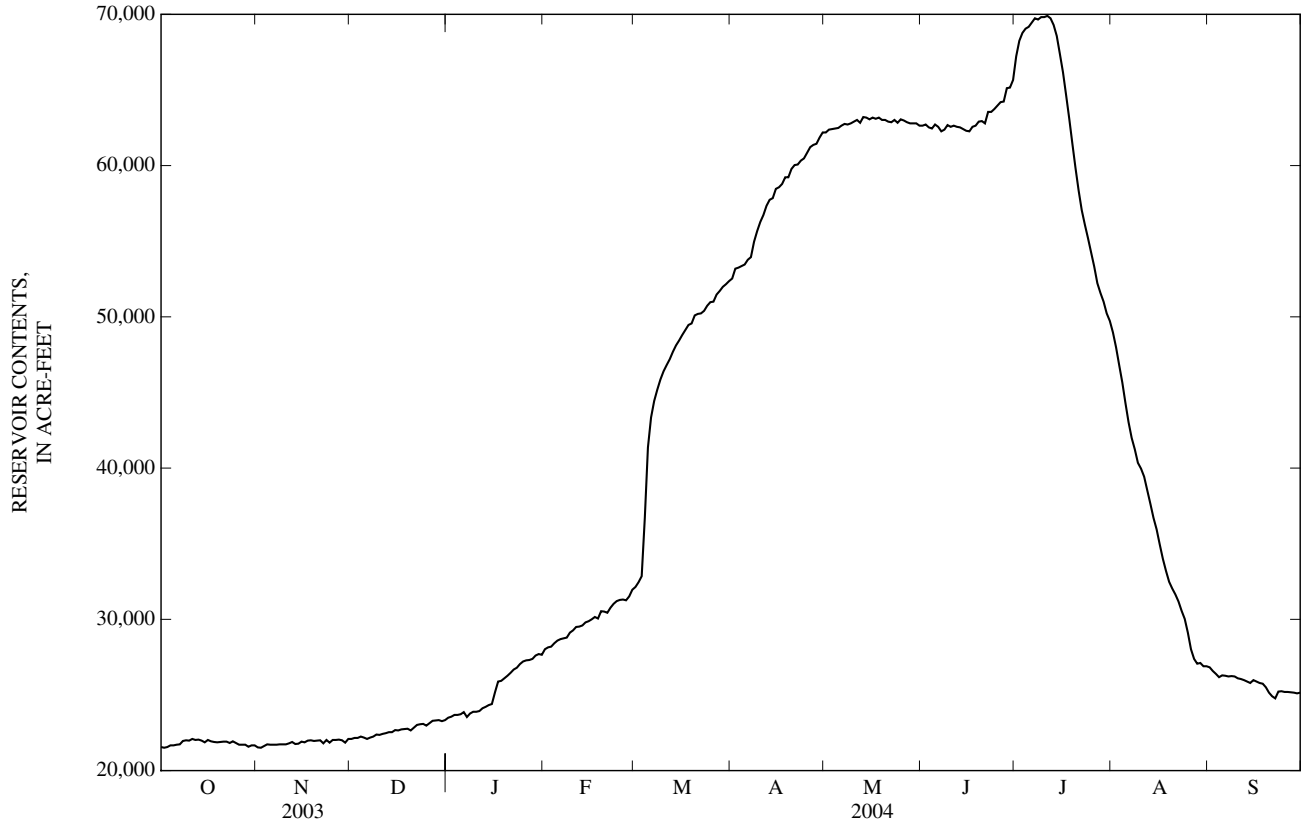
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,560	21,530	22,090	23,500	28,020	32,140	52,530	62,190	62,640	67,220	48,970	26,830
2	21,510	21,510	22,160	23,570	28,150	32,460	53,180	62,380	62,720	68,250	47,980	26,590
3	21,560	21,620	22,160	23,680	28,200	32,850	53,250	62,410	62,530	68,770	46,810	26,390
4	21,670	21,740	22,250	23,680	28,420	36,700	53,360	62,450	62,450	69,050	45,660	26,180
5	21,670	21,710	22,180	23,730	28,590	41,370	53,460	62,490	62,720	69,170	44,310	26,300
6	21,710	21,710	22,090	23,870	28,690	43,340	53,770	62,640	62,560	69,460	43,040	26,270
7	21,740	21,710	22,180	23,540	28,740	44,430	53,950	62,750	62,260	69,740	42,000	26,220
8	21,960	21,740	22,250	23,770	28,790	45,180	54,960	62,720	62,380	69,660	41,240	26,250
9	22,000	21,740	22,380	23,890	29,120	45,850	55,670	62,790	62,680	69,820	40,350	26,220
10	21,980	21,740	22,360	23,890	29,270	46,400	56,270	62,910	62,560	69,820	39,960	26,100
11	22,090	21,800	22,430	23,940	29,500	46,810	56,730	63,020	62,640	69,900	39,430	26,050
12	22,030	21,890	22,470	24,120	29,520	47,200	57,340	62,830	62,560	69,740	38,530	25,980
13	22,050	21,760	22,540	24,220	29,600	47,690	57,740	63,210	62,530	69,290	37,640	25,890
14	21,980	21,780	22,540	24,330	29,800	48,110	57,850	63,170	62,410	68,570	36,700	25,790
15	21,870	21,910	22,680	24,400	29,880	48,440	58,460	63,060	62,300	67,380	35,950	25,980
16	22,030	21,870	22,650	25,180	30,000	48,800	58,570	63,170	62,260	66,160	34,950	25,890
17	21,940	21,980	22,720	25,890	30,160	49,130	58,790	63,090	62,560	64,650	34,000	25,790
18	21,890	22,000	22,750	25,930	30,050	49,460	59,230	63,170	62,640	63,090	33,200	25,740
19	21,870	21,960	22,770	26,100	30,540	49,560	59,230	63,020	62,910	61,440	32,480	25,510
20	21,890	21,980	22,650	26,270	30,510	50,090	59,780	63,020	62,940	59,850	32,040	25,150
21	21,910	22,000	22,840	26,460	30,440	50,190	60,030	62,910	62,790	58,350	31,650	24,920
22	21,910	21,800	23,020	26,680	30,770	50,230	60,070	62,870	63,550	57,050	31,180	24,770
23	21,820	22,030	23,060	26,800	31,020	50,400	60,330	63,020	63,550	56,090	30,560	25,220
24	21,940	21,850	23,090	27,040	31,210	50,730	60,470	62,830	63,740	55,200	30,030	25,250
25	21,820	22,030	22,970	27,210	31,280	50,970	60,850	63,060	63,970	54,260	29,120	25,200
26	21,710	22,030	23,130	27,290	31,310	51,000	61,220	62,980	64,190	53,320	28,020	25,200
27	21,710	22,050	23,290	27,310	31,260	51,470	61,370	62,870	64,230	52,220	27,390	25,180
28	21,710	22,000	23,310	27,390	31,520	51,710	61,440	62,790	65,120	51,580	27,070	25,150
29	21,580	21,850	23,340	27,610	31,960	51,980	61,850	62,790	65,160	51,000	27,120	25,110
30	21,670	22,090	23,270	27,710	---	52,160	62,190	62,790	65,660	50,230	26,900	25,150
31	21,670	---	23,340	27,660	---	52,360	---	62,640	---	49,730	26,900	---
MAX	22,090	22,090	23,340	27,710	31,960	52,360	62,190	63,210	65,660	69,900	48,970	26,830
MIN	21,510	21,510	22,090	23,500	28,020	32,140	52,530	62,190	62,260	49,730	26,900	24,770
(‡)	1530.65	1530.84	1531.39	1533.21	1534.91	1541.68	1544.42	1544.54	1545.33	1540.90	1532.90	1532.17
(‡‡)	+50	+420	+1250	+4320	+4300	+20400	+9830	+450	+3020	-15930	-22830	-1750

CAL YR 2003 MAX 74400 MIN 14530 (‡‡) -16360
WTR YR 2004 MAX 69900 MIN 21510 (‡‡) +3530

(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07302500 LAKE ALTUS AT LUGERT, OK—Continued



07303000 NORTH FORK RED RIVER BELOW ALTUS DAM, NEAR LUGERT, OK

LOCATION.--Lat 34°53'26", long 99°18'22", in SW ¼ sec.22, T.5 N., R.20 W., Greer County, Hydrologic Unit 11120303, on right bank at State Highway 44A bridge, 3,500 ft downstream from Altus Dam, 1.9 mi upstream from Elm Fork of North Fork, 2.0 mi west of Lugert, and at mile 72.8.

DRAINAGE AREA.--2,515 mi^2, of which 399 mi^2 is probably noncontributing.

PERIOD OF RECORD.--March 1930 to December 1932 (published as "at Lugert Dam"), December 1943 to September 1950 (published as spill from Lake Altus), October 1950 to September 1962, August 1964 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1311: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,471.81 ft above sea level. Mar. 19, 1930 to Dec. 21, 1932, nonrecording gage at former Lugert Dam, 0.7 mi upstream at datum 1,504.31 ft National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--No estimated daily discharge. Records poor. Some regulation at low flow by Lugert Lake prior to December 1943, capacity 13,500 acre-ft and completely regulated thereafter by Lake Altus (station 07302500). Diversions at Lake Altus bypass most of streamflow. Seepage from Altus Dam not included for period February 1953 to September 1977. Period of statistical summary includes seepage. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft^3/s, May 18, 1951, gage height, 12.70 ft, maximum gage height, 16.37 ft, May 21, 1977, (backwater from Elm Fork of the North Fork Red River); no flow at times in several years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 16, 1928, reached a stage of 14.5 ft, site and datum in use 1930-32, discharge, 14,300 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19 ft^3/s, June 28, gage height 5.80 ft; minimum daily discharge, no flow at times during year.

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

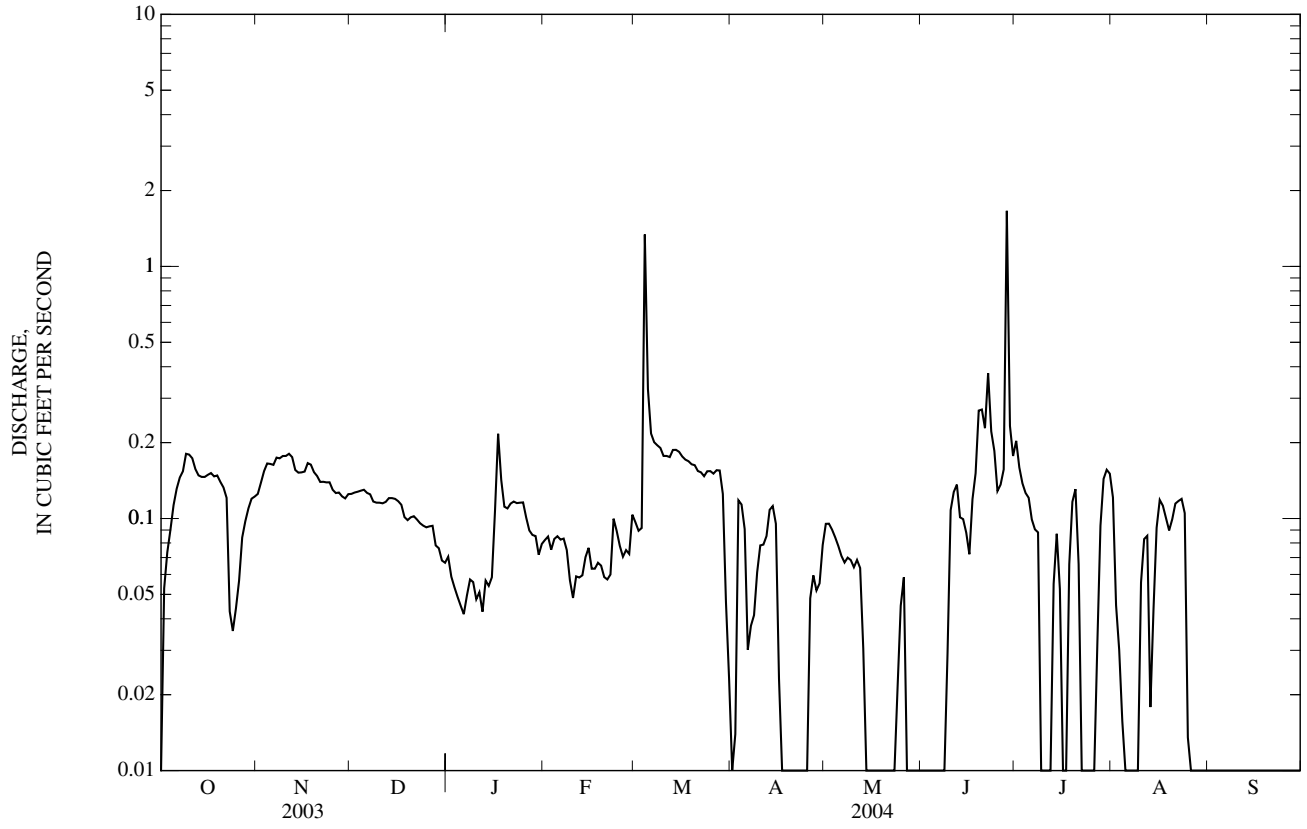
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.13	0.13	0.07	0.08	0.10	0.01	0.10	0.00	0.20	0.12	0.00
2	0.05	0.14	0.13	0.06	0.08	0.09	0.01	0.10	0.00	0.16	0.05	0.00
3	0.07	0.15	0.13	0.05	0.08	0.09	0.12	0.09	0.00	0.14	0.03	0.00
4	0.09	0.17	0.13	0.05	0.08	1.3	0.11	0.08	0.00	0.13	0.02	0.00
5	0.11	0.16	0.13	0.05	0.09	0.33	0.09	0.08	0.00	0.12	0.00	0.00
6	0.13	0.16	0.13	0.04	0.08	0.22	0.03	0.07	0.00	0.10	0.00	0.00
7	0.15	0.17	0.12	0.05	0.08	0.20	0.04	0.07	0.00	0.09	0.00	0.00
8	0.15	0.17	0.12	0.06	0.07	0.20	0.04	0.07	0.00	0.09	0.00	0.00
9	0.18	0.18	0.12	0.06	0.06	0.19	0.06	0.07	0.03	0.01	0.01	0.00
10	0.18	0.18	0.12	0.05	0.05	0.18	0.08	0.06	0.11	0.00	0.06	0.00
11	0.17	0.18	0.11	0.05	0.06	0.18	0.08	0.07	0.13	0.00	0.08	0.00
12	0.16	0.18	0.12	0.04	0.06	0.18	0.09	0.06	0.14	0.00	0.09	0.00
13	0.15	0.16	0.12	0.06	0.06	0.19	0.11	0.03	0.10	0.06	0.02	0.00
14	0.15	0.15	0.12	0.05	0.07	0.19	0.11	0.00	0.10	0.09	0.04	0.00
15	0.15	0.15	0.12	0.06	0.08	0.18	0.10	0.00	0.09	0.05	0.09	0.00
16	0.15	0.15	0.12	0.11	0.06	0.18	0.02	0.00	0.07	0.00	0.12	0.00
17	0.15	0.17	0.11	0.22	0.06	0.17	0.00	0.00	0.12	0.00	0.11	0.00
18	0.15	0.16	0.10	0.14	0.07	0.17	0.00	0.00	0.15	0.07	0.10	0.00
19	0.15	0.15	0.10	0.11	0.07	0.16	0.00	0.00	0.27	0.12	0.09	0.00
20	0.14	0.15	0.10	0.11	0.06	0.16	0.00	0.00	0.27	0.13	0.10	0.00
21	0.13	0.14	0.10	0.11	0.06	0.15	0.00	0.00	0.23	0.07	0.11	0.00
22	0.12	0.14	0.10	0.12	0.06	0.15	0.00	0.00	0.38	0.00	0.12	0.00
23	0.04	0.14	0.10	0.12	0.10	0.15	0.00	0.00	0.22	0.00	0.12	0.00
24	0.04	0.14	0.09	0.12	0.09	0.15	0.00	0.02	0.19	0.00	0.11	0.00
25	0.04	0.13	0.09	0.12	0.08	0.15	0.01	0.05	0.13	0.00	0.01	0.00
26	0.06	0.13	0.09	0.10	0.07	0.15	0.05	0.06	0.14	0.00	0.00	0.00
27	0.08	0.13	0.09	0.09	0.07	0.16	0.06	0.00	0.16	0.03	0.00	0.00
28	0.10	0.12	0.08	0.09	0.07	0.16	0.05	0.00	1.7	0.09	0.00	0.00
29	0.11	0.12	0.08	0.09	0.10	0.13	0.06	0.00	0.23	0.14	0.00	0.00
30	0.12	0.12	0.07	0.07	---	0.05	0.08	0.00	0.18	0.16	0.00	0.00
31	0.12	---	0.07	0.08	---	0.02	---	0.00	---	0.15	0.00	---
TOTAL	3.59	4.52	3.34	2.60	2.10	6.08	1.41	1.08	5.14	2.20	1.60	0.00
MEAN	0.12	0.15	0.11	0.08	0.07	0.20	0.05	0.03	0.17	0.07	0.05	0.00
MAX	0.18	0.18	0.13	0.22	0.10	1.3	0.12	0.10	1.7	0.20	0.12	0.00
MIN	0.00	0.12	0.07	0.04	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	7.1	9.0	6.6	5.2	4.2	12	2.8	2.1	10	4.4	3.2	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

MEAN	5.81	37.5	35.7	36.0	58.5	90.9	114	173	157	10.2	20.9	0.55
MAX	101	698	389	324	477	803	1,828	1,049	1,109	69.7	550	2.58
(WY)	(1987)	(1987)	(1998)	(1998)	(1998)	(1998)	(1997)	(1993)	(1989)	(1987)	(1995)	(1990)
MIN	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1983)	(1982)	(1982)	(1986)	(1984)	(1982)	(1982)	(1982)	(1984)	(1982)	(1982)	(1980)

CAL YR 2003 TOTAL 43.82 MEAN 0.12 MAX 0.28 MIN 0.00 AC-FT 87
WTR YR 2004 TOTAL 33.66 MEAN 0.09 MAX 1.7 MIN 0.00 AC-FT 67

07303000 NORTH FORK RED RIVER BELOW ALTUS DAM, NEAR LUGERT, OK—Continued



07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OK

LOCATION.--Lat 35°00'42", long 99°54'12", in SW ¼ NW ¼ sec.12, T.6 N., R.26 W., Harmon County, Hydrologic Unit 11120304, near left bank on downstream side of pier of bridge on State Highway 30, 4.0 mi northeast of Carl, and at mile 54.0.

DRAINAGE AREA.--416 mi^2.

PERIOD OF RECORD.--October 1959 to September 1979, October 1994 to current year.

REVISED RECORDS.--WSP 1731: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,714.95 ft above sea level, Oklahoma State Highway Department datum.

REMARKS.--Records fair. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug 30	1500	*2,560	*5.25

No other peak greater than base discharge.

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	8.5	7.7	11	9.9	12	19	14	18	4.6	56	25	33
2	8.8	8.1	13	9.9	12	20	14	17	5.3	37	13	20
3	8.8	8.3	11	9.9	12	19	14	17	8.7	28	9.0	17
4	10	8.4	10	9.9	13	96	14	16	7.3	22	7.3	13
5	10	8.3	9.8	9.4	13	129	14	16	6.5	19	6.3	11
6	9.3	8.0	9.2	e8.2	13	64	15	16	6.8	17	7.8	10
7	9.3	8.3	9.2	e8.8	13	41	472	15	5.6	29	7.2	8.8
8	9.6	8.3	9.6	9.6	12	30	125	15	4.7	27	21	6.9
9	9.9	8.6	9.8	9.8	12	25	107	14	8.3	19	14	5.5
10	9.4	9.2	9.3	9.9	12	23	119	14	10	14	13	5.2
11	8.8	9.5	9.4	9.9	12	21	94	13	7.4	12	11	4.3
12	8.3	9.6	10	11	12	20	67	13	6.3	11	8.9	3.7
13	8.3	9.3	10	12	12	20	56	13	5.4	10	8.0	3.3
14	8.3	9.7	10	12	12	20	50	12	4.3	9.4	8.6	2.8
15	8.3	9.9	10	12	12	20	e45	12	3.8	8.8	26	2.8
16	8.1	9.9	9.8	13	12	19	e41	12	3.4	8.3	16	2.3
17	7.7	10	9.6	16	12	19	e39	12	3.6	7.6	9.3	2.1
18	7.9	9.7	9.5	18	12	17	e35	12	3.6	7.3	7.1	2.0
19	7.8	9.0	9.4	19	12	16	e30	11	3.5	7.0	8.2	1.9
20	7.9	8.9	9.7	16	12	16	e26	10	4.1	6.3	10	1.8
21	8.1	8.9	9.5	14	12	15	e23	9.1	3.8	5.6	6.7	2.6
22	8.0	9.1	9.7	13	12	15	e22	8.5	109	5.1	5.4	2.3
23	7.7	8.8	10	13	15	15	e21	8.0	55	5.4	4.5	32
24	7.7	8.5	10	13	14	15	e20	7.4	28	9.1	3.7	16
25	7.6	9.1	9.9	13	15	15	e21	7.1	22	10	3.3	9.8
26	7.1	9.3	9.9	12	14	15	25	7.7	18	9.7	2.4	7.7
27	7.5	9.4	10	12	14	15	24	7.1	16	8.5	2.0	6.4
28	7.7	9.2	9.7	12	13	15	21	6.8	23	10	5.8	5.6
29	7.8	9.4	9.4	12	17	15	19	6.5	81	9.1	3.1	5.5
30	7.9	9.5	9.4	12	---	14	19	5.9	175	7.9	503	5.8
31	7.7	---	9.6	12	---	14	---	4.9	---	7.3	191	---
TOTAL	259.8	269.9	306.4	372.2	370	817	1,606	357.0	644.0	443.4	967.6	251.1
MEAN	8.38	9.00	9.88	12.0	12.8	26.4	53.5	11.5	21.5	14.3	31.2	8.37
MAX	10	10	13	19	17	129	472	18	175	56	503	33
MIN	7.1	7.7	9.2	8.2	12	14	14	4.9	3.4	5.1	2.0	1.8
AC-FT	515	535	608	738	734	1,620	3,190	708	1,280	879	1,920	498

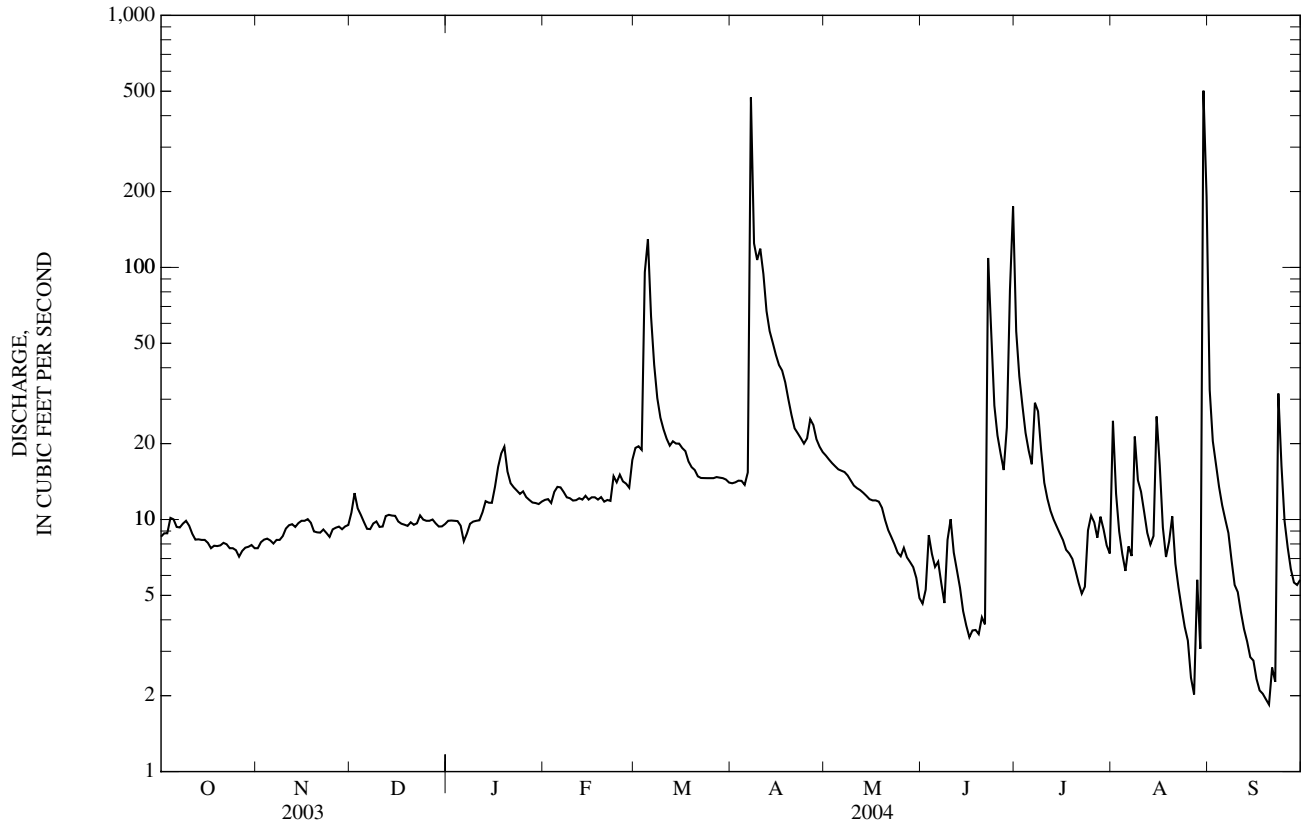
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	35.9	28.3	22.5	21.7	25.0	34.0	60.3	91.7	99.6	26.9	34.5	50.3
MAX	208	91.0	54.9	61.4	64.7	127	351	662	844	133	171	224
(WY)	(1961)	(1975)	(1960)	(1998)	(1998)	(1998)	(1997)	(1977)	(1995)	(1968)	(1995)	(2003)
MIN	2.61	5.97	7.95	10.0	8.97	7.29	5.77	7.17	4.11	0.30	0.48	0.98
(WY)	(1971)	(1971)	(1971)	(1971)	(1972)	(1972)	(1971)	(2003)	(1970)	(1970)	(1976)	(1970)

e Estimated

07303400 ELM FORK OF NORTH FORK RED RIVER NEAR CARL, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	9,979.34		6,664.4			
ANNUAL MEAN	27.3		18.2		44.2	
HIGHEST ANNUAL MEAN					107	1995
LOWEST ANNUAL MEAN					10.6	1970
HIGHEST DAILY MEAN	6,010	Sep 11	503	Aug 30	17,100	Jun 3, 1995
LOWEST DAILY MEAN	0.63	Aug 2	1.8	Sep 20	0.02	Jul 17, 1971
ANNUAL SEVEN-DAY MINIMUM	0.66	Aug 11	2.1	Sep 16	0.02	Jul 16, 1971
MAXIMUM PEAK FLOW			2,560	Aug 30	62,300	Jun 3, 1995
MAXIMUM PEAK STAGE			5.25	Aug 30	18.80	Jun 3, 1995
ANNUAL RUNOFF (AC-FT)	19,790		13,220		32,020	
10 PERCENT EXCEEDS	15		25		61	
50 PERCENT EXCEEDS	9.3		10		17	
90 PERCENT EXCEEDS	0.84		5.5		5.4	



07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK

LOCATION.--Lat 34°38'17", long 99°06'12", in NW ¼ NW ¼ sec.21, T.2 N., R.18 W., Tillman County, Hydrologic Unit 11120303, on downstream side of bridge on U.S. Highway 62, 2.2 mi east of Headrick, 13.3 mi upstream from Otter Creek, and at mile 33.4.

DRAINAGE AREA.--4,244 mi^2, of which 399 mi^2 is probably noncontributing.

PERIOD OF RECORD.--April 1905 to March 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to July 1905, published as near Snyder.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1241: 1905-07.

GAGE.--Water-stage recorder. Datum of gage is 1,294.83 ft above sea level. Prior to July 18, 1905, nonrecording gage at site 0.6 mi downstream at different datum. July 18, 1905, to Mar. 30, 1908, nonrecording gage at Navajo damsite 10.0 mi upstream at different datum. Oct. 1, 1937, to Jan. 29, 1969, water-stage recorder at site .4 mi downstream at datum 5.0 ft higher. Jan. 30, 1969 to Mar. 28, 2002, water-stage recorder at site .4 mi downstream at same datum.

REMARKS.--Records fair. Flow regulated since December 1943 by storage and diversion at Lake Altus, 39.5 mi upstream from station (station 07302500). Diversions for irrigation of about 48,000 acres upstream from station; some return flow may re-enter at Stinking Creek, 16 mi downstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 21.1 ft, present datum, occurred sometime prior to 1927, from information provided by Oklahoma State Highway Department.

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	52	20	21	22	32	44	132	638	34	92	27	118
2	46	18	19	22	36	50	120	163	32	2,890	27	408
3	46	17	22	23	32	50	1,020	107	40	771	25	196
4	46	20	23	24	35	247	483	141	31	311	25	105
5	45	22	23	24	39	8,160	199	97	30	185	26	71
6	43	23	23	e16	39	6,400	151	87	28	125	26	53
7	40	28	22	e17	37	1,910	137	80	26	154	27	43
8	38	27	24	28	31	858	119	77	26	209	28	38
9	42	26	25	26	35	514	438	73	37	161	28	33
10	40	22	25	23	36	383	376	67	33	107	26	28
11	37	23	24	23	35	316	233	64	36	80	28	24
12	35	23	27	23	35	266	211	62	36	68	33	23
13	33	23	28	23	36	250	227	64	32	59	33	21
14	32	22	27	23	37	223	210	67	27	55	31	19
15	30	23	26	24	37	206	178	63	27	49	30	19
16	30	23	26	26	36	197	160	57	24	45	30	19
17	28	23	27	42	34	183	144	55	41	42	27	18
18	27	26	26	379	31	165	135	53	133	40	127	16
19	26	22	26	209	29	143	132	52	56	35	99	15
20	24	19	24	104	32	139	131	50	69	32	73	14
21	23	20	22	82	31	132	128	46	54	31	57	13
22	22	20	24	65	28	122	125	45	61	29	42	13
23	22	21	25	52	34	121	124	46	1,610	28	34	20
24	21	20	25	45	35	113	121	42	313	31	30	130
25	20	18	21	43	40	109	119	45	194	32	27	195
26	20	20	19	40	38	106	149	41	101	42	23	110
27	20	20	22	38	33	115	385	45	70	33	21	66
28	20	20	24	34	31	127	414	43	53	32	42	46
29	19	18	24	33	39	123	206	35	183	32	183	39
30	19	19	21	34	---	123	148	36	199	33	168	32
31	20	---	23	29	---	142	---	35	---	28	89	---
TOTAL	966	646	738	1,596	1,003	22,037	6,855	2,576	3,636	5,861	1,492	1,945
MEAN	31.2	21.5	23.8	51.5	34.6	711	228	83.1	121	189	48.1	64.8
MAX	52	28	28	379	40	8,160	1,020	638	1,610	2,890	183	408
MIN	19	17	19	16	28	44	119	35	24	28	21	13
AC-FT	1,920	1,280	1,460	3,170	1,990	43,710	13,600	5,110	7,210	11,630	2,960	3,860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

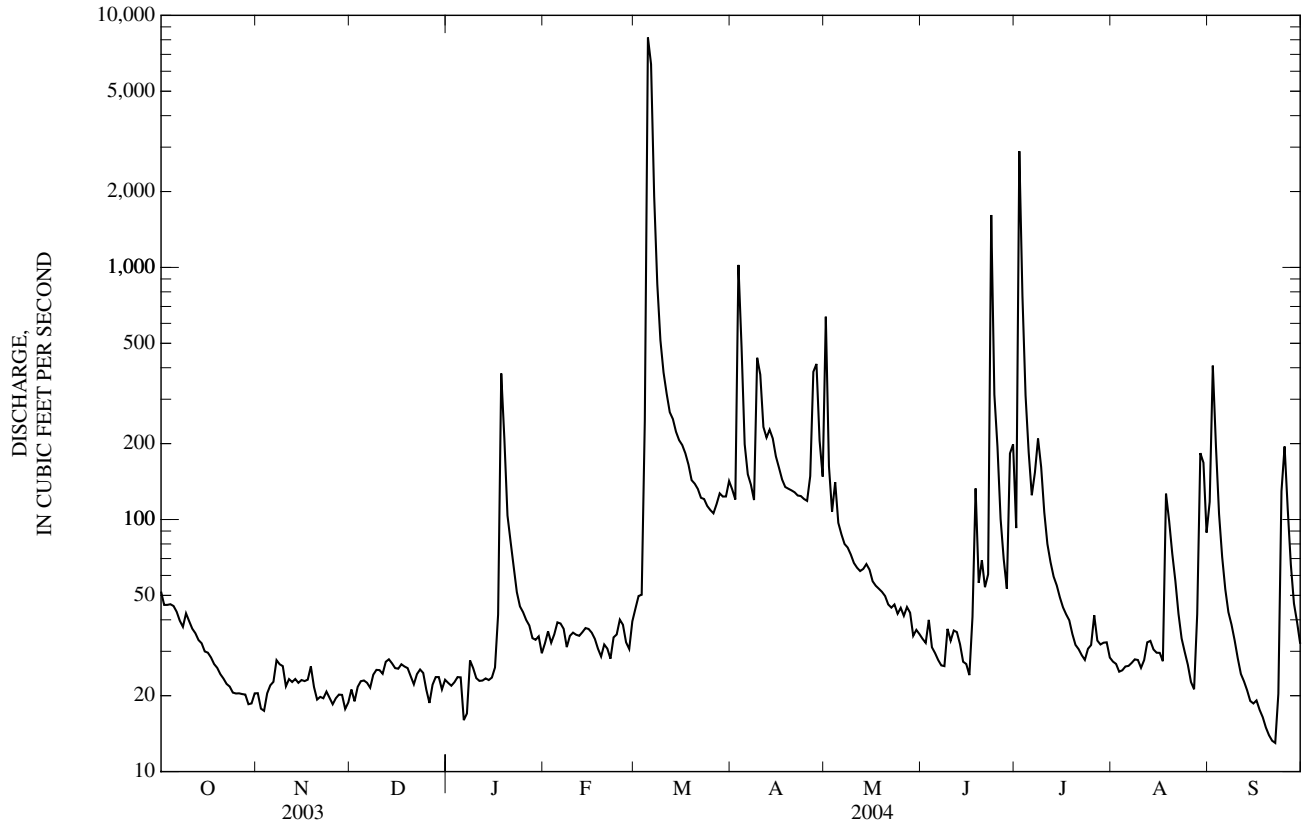
MEAN	343	153	134	116	171	251	335	972	778	234	170	260
MAX	5,608	1,743	984	793	1,375	2,785	5,366	6,104	4,659	2,016	2,522	1,675
(WY)	(1987)	(1987)	(1998)	(1998)	(1997)	(1998)	(1997)	(1977)	(1995)	(1950)	(1995)	(1965)
MIN	0.00	0.00	0.20	0.84	4.06	4.27	0.64	0.31	10.3	0.25	0.00	0.00
(WY)	(1953)	(1953)	(1955)	(1953)	(1953)	(1955)	(1971)	(1953)	(1966)	(1970)	(1952)	(1952)

e Estimated

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	30,307.4		49,351			
ANNUAL MEAN	83.0		135		a327	
HIGHEST ANNUAL MEAN					1,562	1987
LOWEST ANNUAL MEAN					50.0	1970
HIGHEST DAILY MEAN	3,280	Sep 13	8,160	Mar 5	41,600	May 10, 1993
LOWEST DAILY MEAN	1.8	Aug 28	13	Sep 21,22	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	2.3	Aug 22	15	Sep 16	0.00	Aug 2, 1946
MAXIMUM PEAK FLOW			10,700	Mar 5	59,000	Oct 4, 1986
MAXIMUM PEAK STAGE			15.56	Mar 5	19.07	Oct 4, 1986
ANNUAL RUNOFF (AC-FT)	60,110		97,890		236,900	
10 PERCENT EXCEEDS	94		196		567	
50 PERCENT EXCEEDS	40		36		63	
90 PERCENT EXCEEDS	10		21		7.3	

a Prior to regulation water years 1906-07, 1938-43 455 ft^3/s.



07307010 OTTER CREEK NEAR SNYDER, OK

LOCATION.--Lat 34°38'16", long 98°59'54", in NW $^1/_4$ sec.21. T.2 N, R.17 W., Kiowa County, Hydrologic Unit 11120303, on downstream right abutment of bridge on State Highway 62, 1.5 miles downstream from confluence of West and East Otter Creeks, 3.5 miles southwest of Snyder and at mile 18.0.

DRAINAGE AREA.--217 mi^2.

PERIOD OF RECORD.--July 2000 to current year. September 1984 to June 2000 operated as high flow site, records available in district office.

GAGE.--Water-stage recorder. Datum of gage is 1,310.00 ft above sea level.

REMARKS.--No estimated daily discharge. Records poor. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMEMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 5, 1996 reached a stage of 15.22 ft.

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

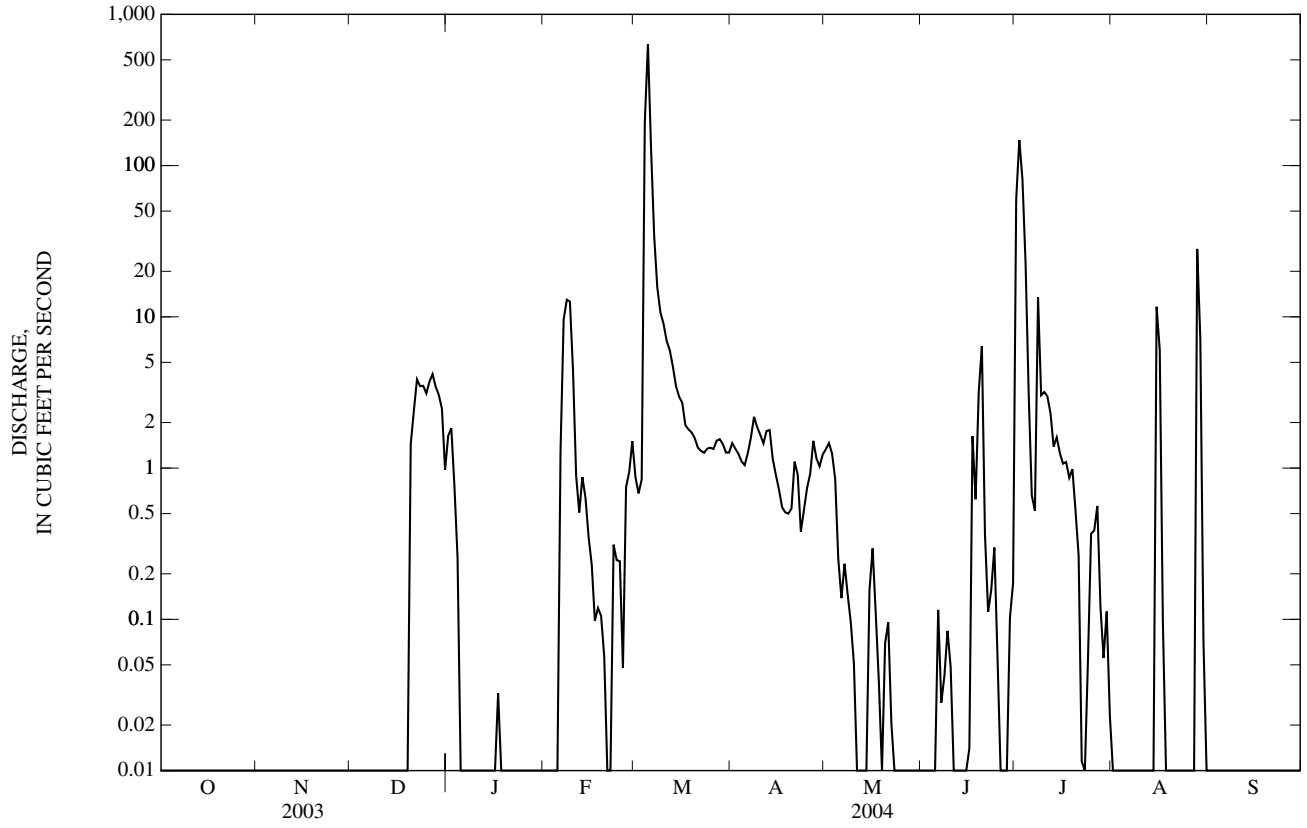
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	1.6	0.00	0.87	1.5	1.3	0.00	60	0.00	0.00
2	0.00	0.00	0.00	1.8	0.00	0.68	1.3	1.5	0.00	148	0.00	0.00
3	0.00	0.00	0.00	0.76	0.00	0.84	1.2	1.2	0.00	81	0.00	0.00
4	0.00	0.00	0.00	0.25	0.00	195	1.1	0.85	0.00	23	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	634	1.0	0.25	0.00	3.1	0.00	0.00
6	0.00	0.00	0.00	0.00	1.3	130	1.3	0.14	0.12	0.66	0.00	0.00
7	0.00	0.00	0.00	0.00	9.6	34	1.6	0.23	0.03	0.52	0.00	0.00
8	0.00	0.00	0.00	0.00	13	16	2.2	0.15	0.04	13	0.00	0.00
9	0.00	0.00	0.00	0.00	13	11	1.9	0.10	0.08	3.0	0.00	0.00
10	0.00	0.00	0.00	0.00	4.4	9.0	1.7	0.05	0.05	3.2	0.00	0.00
11	0.00	0.00	0.00	0.00	0.89	6.9	1.5	0.01	0.00	3.0	0.00	0.00
12	0.00	0.00	0.00	0.00	0.51	6.0	1.8	0.00	0.00	2.3	0.00	0.00
13	0.00	0.00	0.00	0.00	0.87	4.7	1.8	0.00	0.00	1.4	0.00	0.00
14	0.00	0.00	0.00	0.00	0.63	3.5	1.1	0.00	0.00	1.6	0.00	0.00
15	0.00	0.00	0.00	0.00	0.35	3.0	0.90	0.16	0.00	1.3	12	0.00
16	0.00	0.00	0.00	0.00	0.23	2.7	0.72	0.29	0.01	1.1	6.0	0.00
17	0.00	0.00	0.00	0.03	0.10	1.9	0.55	0.11	1.6	1.1	0.10	0.00
18	0.00	0.00	0.00	0.00	0.12	1.8	0.51	0.04	0.62	0.86	0.00	0.00
19	0.00	0.00	0.00	0.00	0.11	1.7	0.50	0.00	3.2	0.98	0.00	0.00
20	0.00	0.00	1.4	0.00	0.06	1.6	0.54	0.07	6.4	0.53	0.00	0.00
21	0.00	0.00	2.4	0.00	0.00	1.4	1.1	0.10	0.36	0.26	0.00	0.00
22	0.00	0.00	3.9	0.00	0.01	1.3	0.91	0.02	0.11	0.01	0.00	0.00
23	0.00	0.00	3.5	0.00	0.31	1.3	0.38	0.00	0.16	0.00	0.00	0.00
24	0.00	0.00	3.5	0.00	0.25	1.3	0.53	0.00	0.30	0.05	0.00	0.00
25	0.00	0.00	3.1	0.00	0.24	1.4	0.74	0.00	0.06	0.37	0.00	0.00
26	0.00	0.00	3.7	0.00	0.05	1.3	0.92	0.00	0.00	0.39	0.00	0.00
27	0.00	0.00	4.2	0.00	0.75	1.5	1.5	0.00	0.00	0.56	0.00	0.00
28	0.00	0.00	3.5	0.00	0.94	1.6	1.2	0.00	0.00	0.12	28	0.00
29	0.00	0.00	3.0	0.00	1.5	1.4	1.0	0.00	0.10	0.06	7.1	0.00
30	0.00	0.00	2.5	0.00	---	1.3	1.2	0.00	0.17	0.11	0.07	0.00
31	0.00	---	0.97	0.00	---	1.3	---	0.00	---	0.02	0.00	---
TOTAL	0.00	0.00	35.67	4.44	49.22	1,080.29	34.20	6.57	13.41	351.60	53.27	0.00
MEAN	0.00	0.00	1.15	0.14	1.70	34.8	1.14	0.21	0.45	11.3	1.72	0.00
MAX	0.00	0.00	4.2	1.8	13	634	2.2	1.5	6.4	148	28	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.68	0.38	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	71	8.8	98	2,140	68	13	27	697	106	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

MEAN	77.4	8.99	6.15	12.0	13.0	15.4	6.46	61.2	29.5	4.41	1.24	1.32
MAX	288	26.3	13.6	44.7	48.2	34.8	15.1	238	79.5	11.3	3.02	5.28
(WY)	(2001)	(2001)	(2001)	(2001)	(2001)	(2004)	(2002)	(2001)	(2003)	(2004)	(2001)	(2001)
MIN	0.00	0.00	1.15	0.14	0.92	0.64	0.41	0.21	0.45	1.61	0.00	0.00
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2003)	(2000)	(2002)

07307010 OTTER CREEK NEAR SNYDER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 2000 - 2004	
ANNUAL TOTAL	2,591.88		1,628.67			
ANNUAL MEAN	7.10		4.45		20.0	
HIGHEST ANNUAL MEAN					61.8	2001
LOWEST ANNUAL MEAN					4.45	2004
HIGHEST DAILY MEAN	423	Jun 12	634	Mar 5	2,740	May 20, 2001
LOWEST DAILY MEAN	0.00	at times	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	May 3	0.00	Oct 1	0.00	Aug 2, 2000
MAXIMUM PEAK FLOW			1,080	Mar 5	4,720	Oct 23, 2000
MAXIMUM PEAK STAGE			13.11	Mar 5	14.70	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	5,140		3,230		14,460	
10 PERCENT EXCEEDS	3.0		3.0		20	
50 PERCENT EXCEEDS	0.02		0.00		1.4	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



07307028 NORTH FORK RED RIVER NEAR TIPTON, OK

LOCATION.--Lat 34°30'25", long 99°12'28", in NW ¼ NE ¼ sec.5. T.1 S, R.19 W., Tillman County, Hydrologic Unit 11120303, near left bank on downstream side of bridge pier on State Highway 5, 3.8 mi west of intersection of State Highways 5 and 5C in Tipton, 4.8 mi downstream from Otter Creek, and at mile 15.3.

DRAINAGE AREA.--4,691 mi^2, of which 399 mi^2 is probably noncontributing.

PERIOD OF RECORD.--June 1983 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,234.45 ft above sea level.

REMARKS.--Records fair. Flow regulated since December 1943 by storage and diversion at Lake Altus 54.2 mi upstream (station 07302500). Diversions for irrigation of about 48,000 acres upstream from station. U.S. Geological Survey satellite telemeter at station.

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	55	22	24	29	43	59	178	318	40	173	45	96
2	53	24	25	29	e44	52	165	406	42	1,500	46	251
3	51	25	24	29	44	61	242	179	91	2,340	51	291
4	49	24	24	26	48	901	1,060	143	55	563	55	163
5	50	23	24	24	50	5,670	319	164	95	308	55	111
6	48	23	24	e17	44	8,360	235	121	49	217	49	84
7	46	38	26	e18	43	2,900	206	109	41	1,870	46	68
8	44	36	26	27	42	1,250	182	101	42	327	52	58
9	50	33	26	30	41	734	208	94	112	278	45	54
10	48	32	27	29	47	501	469	91	229	211	38	48
11	44	32	27	27	48	386	308	87	64	e150	34	43
12	40	30	28	27	45	315	248	83	58	e125	35	40
13	39	27	31	28	40	290	247	80	57	e110	38	36
14	35	29	31	28	41	264	239	76	49	97	47	33
15	34	31	30	28	43	237	207	76	44	86	51	30
16	32	31	29	36	39	223	187	73	39	86	55	28
17	31	32	28	195	38	215	173	71	60	83	52	26
18	31	33	29	139	37	205	163	69	119	79	60	25
19	31	33	29	326	36	196	154	68	143	74	132	23
20	29	28	29	141	34	185	145	64	74	70	167	21
21	29	26	29	106	34	178	137	60	90	71	108	20
22	28	25	27	89	34	174	130	58	496	73	74	21
23	29	24	27	75	43	174	126	55	975	78	60	41
24	27	24	28	66	42	171	130	55	660	69	52	32
25	24	24	27	61	44	167	126	54	261	68	51	136
26	23	24	27	55	43	162	158	51	192	69	46	150
27	24	23	27	51	40	165	218	51	173	68	45	94
28	24	23	27	49	38	166	392	52	322	72	242	63
29	23	24	28	e45	72	161	291	50	676	72	125	48
30	23	23	29	e44	---	154	213	44	267	61	241	42
31	22	---	29	45	---	159	---	41	---	53	154	---
TOTAL	1,116	826	846	1,919	1,237	24,835	7,256	3,044	5,615	9,501	2,351	2,176
MEAN	36.0	27.5	27.3	61.9	42.7	801	242	98.2	187	306	75.8	72.5
MAX	55	38	31	326	72	8,360	1,060	406	975	2,340	242	291
MIN	22	22	24	17	34	52	126	41	39	53	34	20
AC-FT	2,210	1,640	1,680	3,810	2,450	49,260	14,390	6,040	11,140	18,850	4,660	4,320

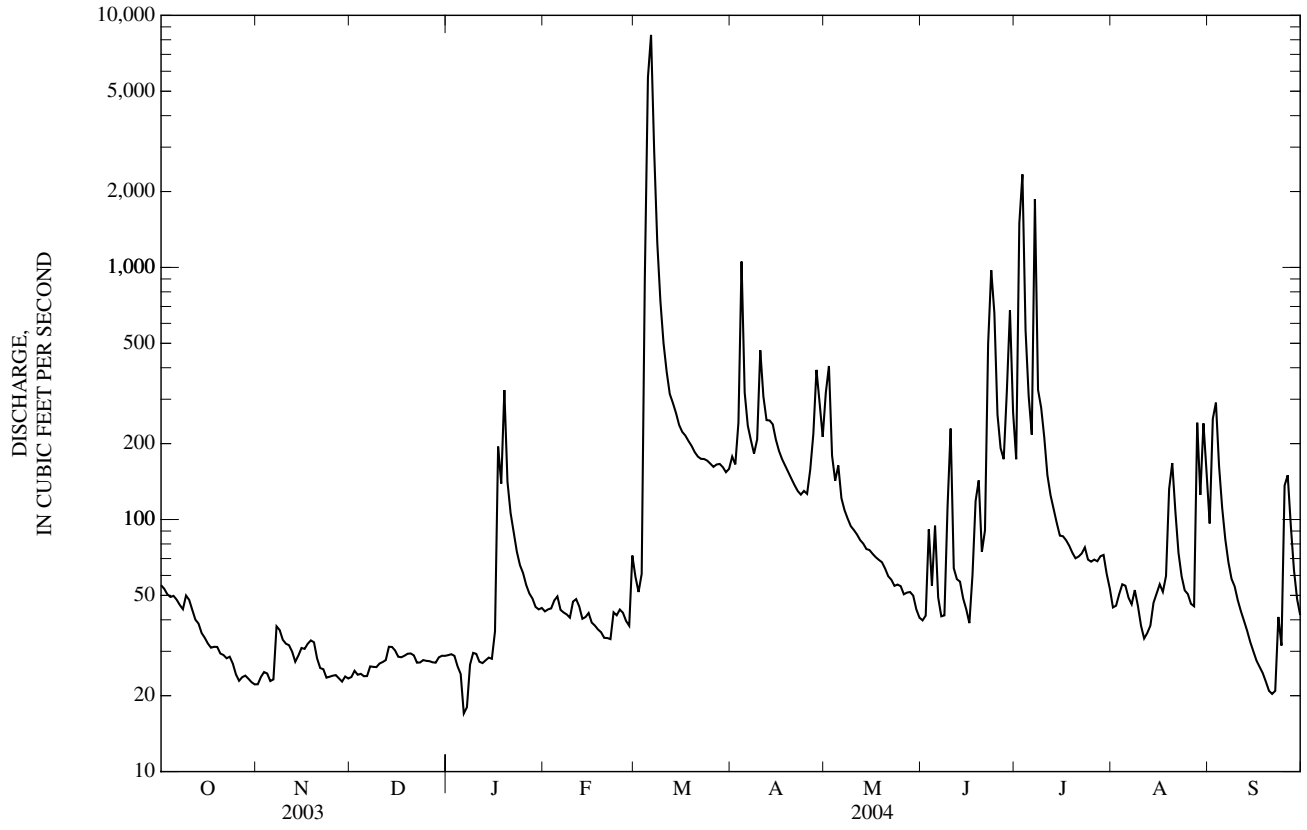
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	635	362	347	266	377	649	617	1,104	1,306	305	437	508
MAX	5,784	2,276	1,287	1,126	1,773	3,268	5,020	5,347	5,560	738	3,932	1,796
(WY)	(1987)	(1987)	(1992)	(1998)	(1998)	(1998)	(1997)	(1993)	(1995)	(1993)	(1995)	(1995)
MIN	15.1	27.5	27.3	61.9	42.7	54.8	49.3	62.6	93.8	49.3	39.5	13.5
(WY)	(1985)	(2004)	(2004)	(2004)	(2004)	(1986)	(1986)	(1984)	(2002)	(1984)	(1985)	(1984)

e Estimated

07307028 NORTH FORK RED RIVER NEAR TIPTON, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	46,120		60,722			
ANNUAL MEAN	126		166		576	
HIGHEST ANNUAL MEAN					1,987	1987
LOWEST ANNUAL MEAN					92.4	2002
HIGHEST DAILY MEAN	3,820	Jun 14	8,360	Mar 6	39,100	May 30, 1987
LOWEST DAILY MEAN	19	Aug 28	17	Jan 6	3.7	Sep 7, 1985
ANNUAL SEVEN-DAY MINIMUM	23	Oct 26	23	Oct 26	4.7	Sep 6, 1985
MAXIMUM PEAK FLOW			11,200	Mar 6	57,200	Oct 5, 1986
MAXIMUM PEAK STAGE			14.10	Mar 6	19.18	May 10, 1993
ANNUAL RUNOFF (AC-FT)	91,480		120,400		417,400	
10 PERCENT EXCEEDS	157		249		1,120	
50 PERCENT EXCEEDS	54		51		151	
90 PERCENT EXCEEDS	26		26		47	



07308500 RED RIVER NEAR BURKBURNETT, TX

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 952.57 ft above NGVD of 1929. July 11, 1924, to Aug. 31, 1925, nonrecording gage at site 1,000 ft downstream at same datum. Dec. 16, 1959, to Jan. 11, 1960, nonrecording gage at present site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. There are many small diversions upstream from station for irrigation. No flow at times.

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

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	76	17	34	34	98	254	e40	1,570	56	4,760	e190	604
2	69	17	31	34	108	232	39	1,340	55	2,230	e160	372
3	66	22	35	33	102	298	51	755	117	2,960	e139	227
4	66	22	38	35	110	830	43	909	172	6,240	e96	163
5	63	20	38	35	122	4,680	37	511	332	5,800	90	369
6	60	24	37	22	123	21,300	663	404	622	2,170	96	292
7	57	e50	33	19	122	25,300	799	384	655	1,630	109	179
8	56	64	36	20	120	7,550	347	381	709	2,110	107	127
9	54	76	33	20	120	3,090	183	346	414	6,810	90	100
10	52	e51	37	20	117	2,180	147	323	326	2,000	83	79
11	47	e92	37	21	128	1,640	181	305	920	1,040	115	59
12	43	e74	39	22	132	1,280	667	305	4,640	600	160	45
13	46	e51	42	22	137	1,040	1,020	305	2,510	446	171	32
14	40	e51	40	22	145	840	562	336	1,100	344	113	23
15	33	e52	38	22	152	696	363	357	597	309	206	17
16	22	48	40	25	157	567	257	274	392	264	342	16
17	27	e47	40	50	159	438	177	235	278	247	286	13
18	25	e48	38	54	155	349	119	210	246	e220	123	12
19	25	e48	38	340	136	280	99	189	237	194	93	8.0
20	31	e49	35	629	119	243	88	175	264	180	136	5.8
21	31	51	33	705	108	191	76	157	397	155	195	4.0
22	31	46	33	417	101	145	62	139	883	131	289	2.9
23	31	45	34	297	143	108	56	118	739	114	702	3.3
24	28	44	33	235	188	84	68	99	1,970	115	455	3.5
25	26	38	32	202	184	77	97	86	2,560	118	263	e10
26	27	40	29	158	176	70	83	78	2,720	140	179	e65
27	24	37	32	136	166	62	182	77	1,110	126	141	90
28	22	37	33	123	169	66	876	75	683	267	393	92
29	26	35	33	106	205	61	379	65	537	326	239	76
30	20	35	31	98	---	57	723	66	3,730	268	291	49
31	18	---	34	96	---	e49	---	61	---	228	1,240	---
TOTAL	1,242	1,331	1,096	4,052	4,002	74,057	8,484	10,635	29,971	42,542	7,292	3,138.5
MEAN	40.1	44.4	35.4	131	138	2,389	283	343	999	1,372	235	105
MAX	76	92	42	705	205	25,300	1,020	1,570	4,640	6,810	1,240	604
MIN	18	17	29	19	98	49	37	61	55	114	83	2.9
AC-FT	2,460	2,640	2,170	8,040	7,940	146,900	16,830	21,090	59,450	84,380	14,460	6,230

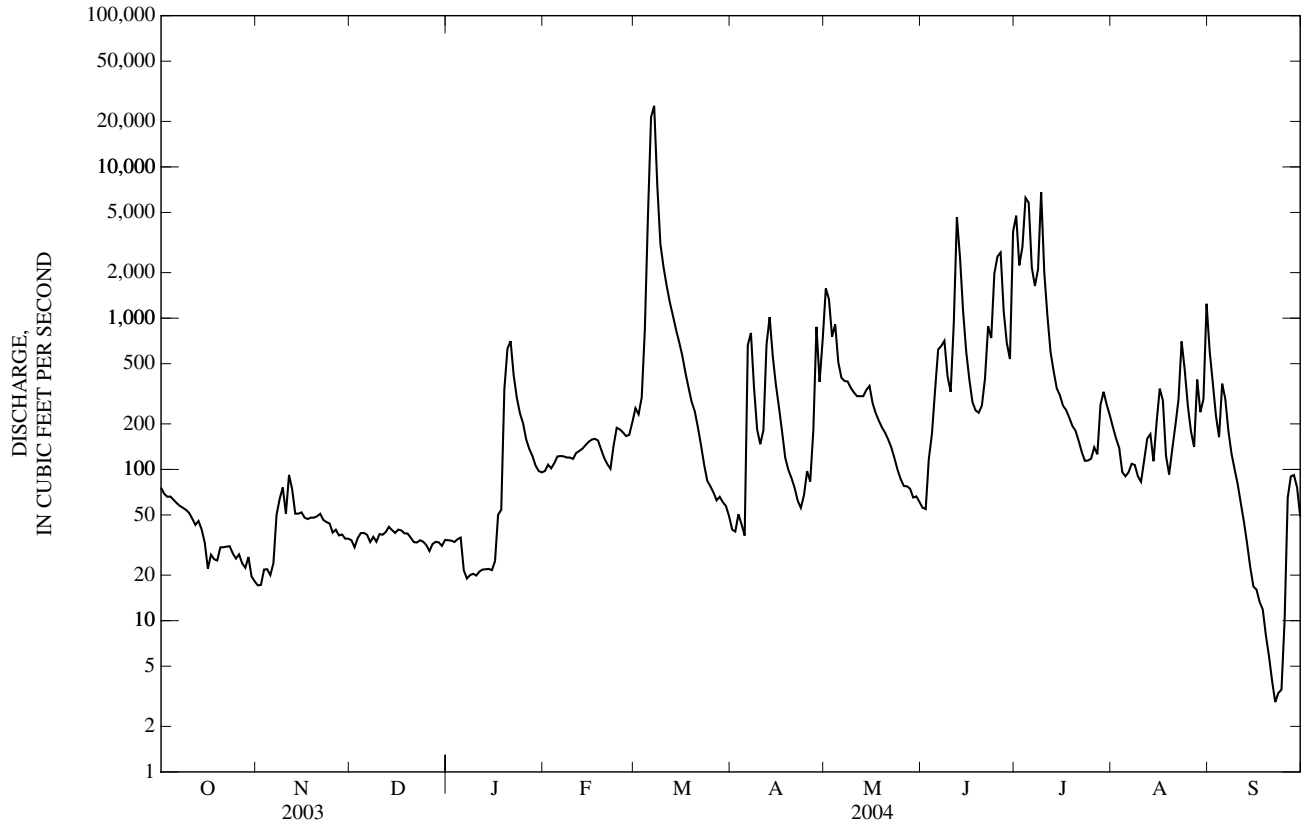
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	1,425	671	558	489	703	985	1,073	2,271	3,256	882	820	1,258
MAX	14,900	4,960	4,435	2,293	4,986	10,050	13,040	12,470	24,780	5,947	10,540	6,381
(WY)	(1987)	(1987)	(1992)	(1998)	(1998)	(1998)	(1997)	(1977)	(1995)	(1975)	(1995)	(1996)
MIN	21.9	0.96	2.98	5.53	8.37	7.97	0.15	11.4	148	0.06	1.29	29.9
(WY)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1970)	(1970)	(1964)	(2002)

e Estimated

07308500 RED RIVER NEAR BURKBURNETT, TX

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	122,481.8		187,842.5			
ANNUAL MEAN	336		513		1,202	
HIGHEST ANNUAL MEAN					4,424	1987
LOWEST ANNUAL MEAN					178	1964
HIGHEST DAILY MEAN	9,980	Jun 7	25,300	Mar 7	144,000	Jun 6, 1995
LOWEST DAILY MEAN	7.1	Aug 25	2.9	Sep 22	0.00	Jul 19, 1964
ANNUAL SEVEN-DAY MINIMUM	8.1	Aug 23	5.4	Sep 19	0.00	Jul 19, 1964
MAXIMUM PEAK FLOW			30,300	Mar 7	174,000	Jun 6, 1995
MAXIMUM PEAK STAGE			8.48	Mar 7	16.90	Oct 21, 1983
ANNUAL RUNOFF (AC-FT)	242,900		372,600		870,800	
10 PERCENT EXCEEDS	823		851		2,400	
50 PERCENT EXCEEDS	114		114		299	
90 PERCENT EXCEEDS	28		26		51	



07308500 RED RIVER NEAR BURKBURNETT, TX

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: May 1968 to current year.
BIOCHEMICAL DATA: Oct. 1974 to Aug. 1994.
PESTICIDE DATA: Oct. 1973 to Sept. 1982, Oct. 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to Sept. 1981, Oct. 1994 to Jan. 2004, and Dec. 2003 to current year.
WATER TEMPERATURE: July 1968 to Sept. 1981, Oct. 1994 to May 2004, and Nov. 2003 to current year.

INSTRUMENTATION.--Water-quality monitor Dec. 1968 to Sept. 1981, Oct. 1994 to May 2003 and Dec. 2003 to current year.

REMARKS.--Records 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 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, 17,400 microsiemens/cm, July 30, 1972; minimum, 440 microsiemens/cm, Apr. 13, 2002.
WATER TEMPERATURE: Maximum, 38.0°C, July 24, 2001; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 15,100 microsiemens/cm, Apr. 13; minimum, 933 microsiemens/cm, July 8.
WATER TEMPERATURE: Maximum, 35.1°C, Aug. 10; minimum, 0.0°C, Feb. 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	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)	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)	Sodium adsorption ratio (00931)
OCT													
23...	1340	32	9.3	111	8.1	10,200	22.5	1,400	1,500	397d	135d	12.7d	19
NOV													
19...	1605	48	10.4	109	8.1	9,570	16.6	1,500	1,600	421d	145d	10.4d	18
DEC													
11...	1125	37	13.4	105	7.9	10,200	3.7	1,600	1,700	441d	152d	11.2d	18
JAN													
13...	1230	21	11.8	114	8.2	9,780	12.7	1,600	1,700	434d	147d	9.79d	16
FEB													
03...	1320	100	13.4	111	8.2	9,810	6.1	1,500	1,600	443d	130d	11.4d	18
MAR													
31...	1015	41	10.2	104	7.9	8,880	15.4	1,500	1,600	420d	135d	11.8d	16
APR													
26...	1115	83	9.1	104	7.9	7,440	18.9	1,200	1,300	332d	105d	8.86d	14
MAY													
07...	1235	374	8.6	107	8.0	7,390	23.9	1,100	1,200	331d	96.3d	11.2d	15
JUN													
23...	1200	657	7.3	94	7.9	12,400	24.5	1,400	1,500	444d	87.2d	14.1d	24
JUL													
13...	1050	423	7.2	96	8.2	6,380	27.1	760	860	242d	62.0d	10.8d	15
AUG													
20...	1110	130	7.8	95	7.9	7,010	22.8	1,000	1,100	278d	97.1d	10.8d	15
SEP													
07...	1005	195	8.2	95	7.9	5,470	20.5	830	920	273d	58.9d	10.2d	11

07308500 RED RIVER NEAR BURKBURNETT, TX

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sodium, water, fltrd, mg/L (00930)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	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)	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													
23...	1680d	111	2790d	.4	7.3	1220d	6,310	19	.60	E.02n	--	<.06	<.008
NOV													
19...	1680d	123	2600d	.4	4.8	1210d	6,140	24	.68	.06	--	.24	E.006n
DEC													
11...	1700d	129	2700d	.5	3.4	1300d	6,380	<10	.52	.08	.37	.38	.015
JAN													
13...	1510d	139	2630d	.4	.6r	1300d	6,110	12	.69	<.04	.32	.34	.017
FEB													
03...	1650d	159	2640d	.5	6.9	1270d	6,250	12	.52	.06	.86	.87	.015
MAR													
31...	1440d	100	2230d	.4	5.6	1260d	5,570	57	.91	<.04	--	<.06	<.008
APR													
26...	1120d	104	1850d	.4	5.2	1010d	4,490	140d	.99	<.04	--	<.06	<.008
MAY													
07...	1210d	107	1990d	.4	6.3	960d	4,670	146d	.94	<.04	--	<.06	<.008
JUN													
23...	2150d	84	3480d	.5	8.3	1290d	7,520	1360dr	3.0	.04	--	.43	E.007n
JUL													
13...	1010d	100	1650d	.4	8.3	724d	3,770	244d	1.1	<.04	--	<.06	<.008
AUG													
20...	1110d	92	1740d	.4	5.2	889d	4,180	123d	1.2	<.04	--	<.06	<.008
SEP													
07...	749d	91	1270d	.4	7.0	815d	3,240	450d	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic nitro-gen, water, unfltrd mg/L (00605)	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, water, unfltrd mg/L (00600)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, fltrd, ug/L (01030)
OCT													
23...	--	--	<.02	<.04	E.03n	--	1.8d	6dc	103d	110d	<.20d	<.20d	<1.6d
NOV													
19...	.62	--	<.02	<.04	E.03n	.92	1.2d	<2	81d	89d	<.16d	<.16d	<.8
DEC													
11...	.44	--	<.02	<.04	E.03n	.90	.3	<2	13	75d	<.04	<.20d	<1.6d
JAN													
13...	--	--	<.02	<.04	E.03n	1.0	1.9d	<2	58d	65d	<.16d	<.16d	<.8
FEB													
03...	.46	.113	.04	.05	.07	1.4	2.8d	3	64d	74d	<.16d	<.16d	<.8
MAR													
31...	--	--	<.02	<.04	.11	--	1.2d	4	99d	110d	<.16d	<.16d	<.8
APR													
26...	--	--	<.02	<.04	.16	--	1.6d	3	91d	119d	<.12d	E.08nd	<.8
MAY													
07...	--	--	<.02	<.04	.18	--	2.1d	3	118d	156d	<.12d	<.12d	<.8
JUN													
23...	3.0	--	<.02	E.02n	1.46	3.4	3.0d	12dr	116d	460d	<.20d	.25d	<1.6d
JUL													
13...	--	--	<.02	<.04	.34	--	5.2d	5	211d	277d	<.12d	<.12d	<.8
AUG													
20...	--	--	<.02	<.04	.20	--	3.1d	5	125d	168d	<.08d	<.12d	<.8
SEP													
07...	--	--	--	--	--	--	3.2d	8	147d	215d	<.12d	E.10nd	<.8

07308500 RED RIVER NEAR BURKBURNETT, TX

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recoverable, ug/L (01067)
OCT													
23...	<1.6d	6.3d	13.2d	<64d	290d	<.40d	E.17nd	18.5d	47d	E.01n	.02	9.08d	14.5d
NOV													
19...	E.6n	6.4d	16.3d	<64d	280	<.32d	.24d	13.1d	41d	<.02	<.02	1.58d	17.3d
DEC													
11...	<1.6d	1.1	18.8d	<32d	120d	<.40d	E.26nd	5.6	36d	<.02	<.02	1.53	20.9d
JAN													
13...	<.8	6.3d	24.4d	<64d	50d	<.32d	<.24d	26.9d	39d	<.02	<.02	10.0d	17.8d
FEB													
03...	<.8	6.0d	12.6d	<64d	260d	E.28nd	E.14nd	14.0d	29d	<.02	<.02	7.47d	11.7d
MAR													
31...	E.6n	6.5d	11.2d	<32d	610	<.32d	.58d	12.9d	46d	<.02	<.02	6.09d	10.7d
APR													
26...	1.7	5.7d	10.3d	<32d	1,620	<.24d	1.75d	15.6d	106d	<.02	<.02	5.69d	16.7d
MAY													
07...	1.9	5.8d	10.3d	<32d	2260d	<.24d	1.97d	3.5d	98d	<.02	<.018	2.81d	11.5d
JUN													
23...	29.7d	12.2d	47.5d	<64d	18400d	.70d	26.9dr	<1.0d	1310d	<.02	.02	11.0d	55.9d
JUL													
13...	5.6	6.4d	14.1d	<32d	3620d	<.24d	3.44d	.6d	167d	<.02	<.02	7.53d	14.1d
AUG													
20...	2.2	4.7d	11.0d	<32d	1,560	E.14nd	1.59d	15.8d	165d	<.02	<.02	6.62d	16.6d
SEP													
07...	10.1	11.0d	25.6d	<19d	7380d	.26d	5.90d	.7d	227d	<.02	<.02	4.76d	21.6d

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Aldrin, water, unfltrd ug/L (39330)	alpha-Endosulfan, water, unfltrd ug/L (34361)	alpha-HCH, water, unfltrd ug/L (39337)	alpha-HCH-d6, surrog, Sch1608 water, unfltrd pct rcv (99778)	Aroclor 1016 + 1242, water, unfltrd ug/L (81648)	Aroclor 1221, water, unfltrd ug/L (39488)	Aroclor 1232, water, unfltrd ug/L (39492)
OCT													
23...	3.8d	2.6d	<1.0d	<.80d	3.3d	E5nd	--	--	--	--	--	--	--
NOV													
19...	4	4	<.8d	<.64d	4.8d	E8nd	--	--	--	--	--	--	--
DEC													
11...	7	5	<.2	<.80d	.8	11d	--	--	--	--	--	--	--
JAN													
13...	6	7	<.8d	<.64d	4.3d	11d	--	--	--	--	--	--	--
FEB													
03...	6	5	E.6nd	<.64d	<2.4d	8d	--	--	--	--	--	--	--
MAR													
31...	5	6	<.8d	<.64d	4.5d	8d	--	--	--	--	--	--	--
APR													
26...	2	3	<.6d	<.48d	3.8d	45d	<.04	<.1	<.03	E69.7	<.1	<1	<.1
MAY													
07...	3	3	<.6d	<.48d	3.2d	10d	--	--	--	--	--	--	--
JUN													
23...	2	4	<1.0d	<.80d	6.6d	88d	<.04	<.1	<.03	E99.2	<.1	<1	<.1
JUL													
13...	2	3	<.6d	<.48d	2.4d	19d	--	--	--	--	--	--	--
AUG													
20...	2	2	<.4d	<.48d	3.2d	9d	--	--	--	--	--	--	--
SEP													
07...	2	3	<.6d	<.48d	8.2d	33d	--	--	--	--	--	--	--

07308500 RED RIVER NEAR BURKBURNETT, TX

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endo-sulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlor-dane, tech-nical, water, unfltrd ug/L (39350)	cis-Chlor-dane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Diel-drin, water, unfltrd ug/L (39380)	Endo-sulfan sulfate water unfltrd ug/L (34351)	Endrin alde-hyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Hepta-chlor epoxide water unfltrd ug/L (39420)
OCT													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
31...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
26...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
MAY													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
23...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Hepta-chlor, water, unfltrd ug/L (39410)	Lindane water, unfltrd ug/L (39340)	p,p-' DDD, water, unfltrd ug/L (39310)	p,p-' DDE, water, unfltrd ug/L (39320)	p,p-' DDT, water, unfltrd ug/L (39300)	PCB 207, surrog, Sch1608 water, unfltrd pct rcv (99781)	Toxa-phene, water, unfltrd ug/L (39400)	trans-Chlor-dane, water, unfltrd ug/L (39065)
OCT								
23...	--	--	--	--	--	--	--	--
NOV								
19...	--	--	--	--	--	--	--	--
DEC								
11...	--	--	--	--	--	--	--	--
JAN								
13...	--	--	--	--	--	--	--	--
FEB								
03...	--	--	--	--	--	--	--	--
MAR								
31...	--	--	--	--	--	--	--	--
APR								
26...	<.03	<.03	<.1	<.04	<.1	E72.8	<2	<.1
MAY								
07...	--	--	--	--	--	--	--	--
JUN								
23...	<.03	<.03	<.1	<.04	<.1	E95.9	<2	<.1
JUL								
13...	--	--	--	--	--	--	--	--
AUG								
20...	--	--	--	--	--	--	--	--
SEP								
07...	--	--	--	--	--	--	--	--

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
n -- Below the LRL and above the LT-MDL
r -- Value verified by rerun, same method

07308500 RED RIVER NEAR BURKBURNETT, TX

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	---	---	---	---	---	---	---	---	---	10,200	9,950	10,100
2	---	---	---	---	---	---	---	---	---	10,000	9,920	9,960
3	---	---	---	---	---	---	---	---	---	10,000	9,720	9,870
4	---	---	---	---	---	---	---	---	---	10,200	9,710	9,940
5	---	---	---	---	---	---	---	---	---	---	---	e10,100
6	---	---	---	---	---	---	---	---	---	---	---	e10,200
7	---	---	---	---	---	---	---	---	---	10,400	10,100	10,300
8	---	---	---	---	---	---	---	---	---	10,100	9,830	9,940
9	---	---	---	---	---	---	---	---	---	10,200	10,000	10,100
10	---	---	---	---	---	---	---	---	---	10,300	9,980	10,100
11	---	---	---	---	---	---	---	---	e10,100	10,100	9,930	10,000
12	---	---	---	---	---	---	---	---	e9,880	10,200	9,720	10,000
13	---	---	---	---	---	---	---	---	e9,780	9,840	9,700	9,760
14	---	---	---	---	---	---	---	---	e9,240	9,820	9,620	9,720
15	---	---	---	---	---	---	---	---	e9,210	9,720	9,520	9,630
16	---	---	---	---	---	---	---	---	e9,490	9,600	8,720	9,330
17	---	---	---	---	---	---	---	---	e9,700	8,760	7,970	8,400
18	---	---	---	---	---	---	---	---	e9,900	8,650	8,070	8,500
19	---	---	---	---	---	---	---	---	e10,200	8,480	6,340	8,060
20	---	---	---	---	---	---	10,500	10,200	10,300	6,340	4,310	5,030
21	---	---	---	---	---	---	10,500	10,300	10,400	10,400	5,860	8,180
22	---	---	---	---	---	---	10,400	10,100	10,300	10,300	9,810	10,000
23	---	---	---	---	---	---	10,500	10,200	10,400	12,800	10,300	11,500
24	---	---	---	---	---	---	10,400	10,200	10,300	13,000	11,900	12,700
25	---	---	---	---	---	---	10,400	10,200	10,300	12,000	10,900	11,500
26	---	---	---	---	---	---	10,400	10,200	10,300	10,900	10,500	10,600
27	---	---	---	---	---	---	10,300	10,100	10,200	10,500	10,300	10,400
28	---	---	---	---	---	---	10,300	10,200	10,200	10,600	10,400	10,500
29	---	---	---	---	---	---	10,300	10,000	10,100	10,800	10,500	10,600
30	---	---	---	---	---	---	10,300	10,100	10,200	10,900	10,800	10,800
31	---	---	---	---	---	---	10,300	10,100	10,200	11,100	10,900	11,000
MONTH	---	---	---	---	---	---	10,500	10,000	10,000	13,000	4,310	9,900
	FEBRUARY			MARCH			APRIL			MAY		
1	11,000	10,300	10,700	11,400	9,540	10,500	---	---	e8,700	5,700	3,930	4,730
2	10,500	10,100	10,300	12,500	11,200	11,900	8,790	8,590	8,740	4,970	4,360	4,630
3	10,200	10,000	10,100	12,600	11,200	12,100	8,800	8,700	8,760	5,410	3,640	4,850
4	10,200	9,450	9,830	11,200	6,320	8,630	8,900	8,700	8,800	---	3,540	e4,160
5	9,520	9,390	9,440	6,320	4,360	5,700	8,910	8,800	8,830	---	---	e5,010
6	9,670	9,480	9,560	4,360	2,960	3,390	8,910	3,410	6,840	---	---	e6,390
7	9,770	9,540	9,660	3,030	2,970	3,000	3,410	2,920	3,110	7,890	---	e7,360
8	9,730	9,610	9,670	2,980	2,960	2,970	4,580	3,210	3,760	7,900	7,480	7,720
9	9,670	9,570	9,620	3,830	2,970	3,070	6,580	4,580	5,570	8,130	7,690	7,880
10	9,600	9,350	9,470	4,400	3,790	3,950	8,410	6,580	7,520	8,130	7,290	7,770
11	9,590	9,500	9,540	4,780	4,370	4,570	9,750	8,410	9,130	7,400	7,290	7,360
12	9,880	9,580	9,750	4,780	4,670	4,720	11,000	9,040	9,980	7,410	7,200	7,290
13	9,910	9,600	9,770	5,070	4,660	4,900	15,100	11,000	13,800	7,320	6,680	7,230
14	9,600	9,240	9,390	4,970	4,660	4,770	14,200	10,600	12,500	7,330	7,220	7,290
15	9,470	9,300	9,380	6,980	4,670	5,550	10,600	8,530	9,380	7,330	7,220	7,280
16	9,330	9,120	9,240	7,570	6,980	7,220	8,530	7,580	7,990	7,230	6,810	7,110
17	9,210	8,960	9,080	8,050	7,570	7,870	7,580	7,480	7,510	6,810	5,960	6,190
18	9,280	9,050	9,210	8,420	8,050	8,210	7,580	7,580	7,580	6,190	5,860	6,020
19	9,900	9,280	9,540	8,700	8,420	8,590	7,690	7,580	7,620	6,300	6,080	6,150
20	10,400	9,900	10,100	8,910	8,690	8,770	7,690	7,580	7,640	6,520	6,300	6,390
21	10,800	10,400	10,700	9,030	8,840	8,920	7,690	7,690	7,690	---	---	e6,530
22	11,000	10,400	10,900	9,070	8,930	9,020	7,690	7,690	7,690	---	---	e7,010
23	10,400	8,900	9,720	9,120	8,920	9,020	7,690	7,690	7,690	---	---	e8,250
24	8,940	7,490	8,250	9,020	8,710	8,870	7,790	7,580	7,680	---	---	e9,230
25	8,140	7,510	7,820	8,770	8,590	8,700	7,790	7,470	7,600	9,900	---	e9,800
26	8,200	7,600	7,890	8,750	8,580	8,680	7,580	7,180	7,430	9,690	9,480	9,590
27	8,660	7,900	8,260	8,620	8,470	8,530	7,620	6,860	7,260	9,570	9,260	9,460
28	9,110	8,560	8,690	8,620	8,520	8,570	8,060	5,450	6,670	9,340	9,150	9,240
29	10,700	9,110	9,780	8,560	8,510	8,530	5,670	4,430	4,920	9,430	9,230	9,340
30	---	---	---	8,670	8,560	8,620	6,240	4,430	5,470	9,520	9,320	9,400
31	---	---	---	---	---	e8,680	---	---	---	9,500	9,300	9,410
MONTH	11,000	7,490	9,500	12,600	2,960	7,310	15,100	2,920	7,800	9,900	3,540	7,290

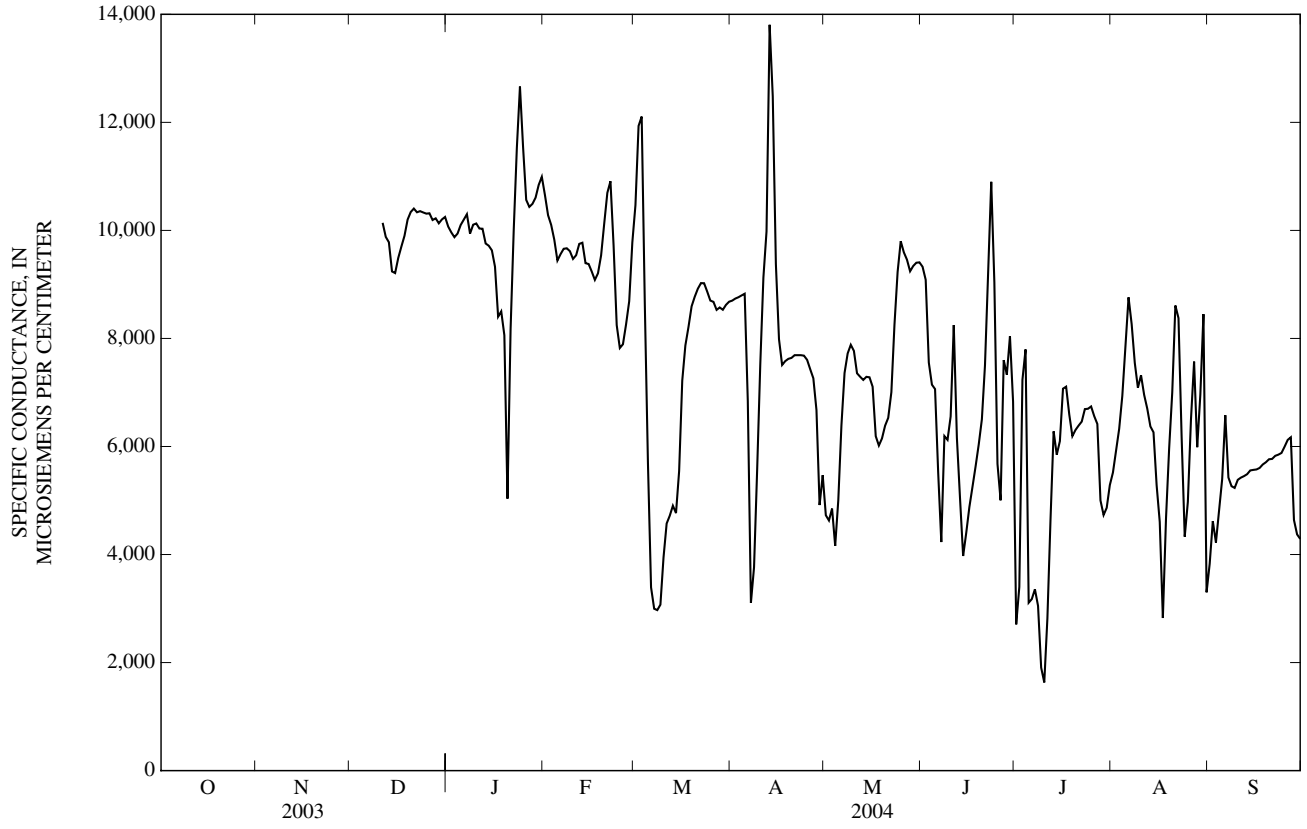
07308500 RED RIVER NEAR BURKBURNETT, TX

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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	9,500	8,980	9,330	3,460	2,480	2,710	---	---	e5,520	4,150	3,480	3,830
2	9,280	7,970	9,090	4,260	2,980	3,400	---	---	e5,920	5,500	3,770	4,620
3	8,160	7,060	7,550	9,520	4,260	7,230	---	---	e6,330	5,100	3,950	4,220
4	7,650	6,550	7,140	9,420	3,780	7,800	---	---	e6,940	5,290	4,240	4,810
5	7,340	6,030	7,060	3,780	2,920	3,110	8,400	7,480	7,850	6,390	5,090	5,400
6	6,330	4,120	5,520	3,220	3,120	3,180	8,950	8,400	8,760	7,500	5,510	6,580
7	6,700	3,610	4,230	3,710	3,040	3,360	8,670	8,020	8,260	5,520	5,390	5,430
8	6,900	5,300	6,190	3,900	933	3,050	8,110	6,340	7,550	5,390	5,090	5,260
9	6,590	5,780	6,120	3,720	934	1,910	7,270	6,980	7,090	5,290	5,190	5,230
10	6,860	6,360	6,560	---	1,240	e1,630	7,440	7,250	7,320	5,490	5,290	5,380
11	11,500	6,860	8,250	---	---	e2,820	7,250	6,580	6,960	5,490	5,390	5,420
12	11,300	4,650	6,160	---	---	e4,650	7,230	6,290	6,700	5,490	5,390	5,450
13	6,430	3,930	5,040	---	---	e6,280	7,040	6,080	6,370	5,590	5,390	5,490
14	4,210	3,720	3,970	---	---	e5,850	6,450	6,170	6,260	5,590	5,490	5,560
15	4,690	4,210	4,400	6,620	5,850	6,100	6,540	4,240	5,280	5,590	5,490	5,570
16	5,070	4,690	4,880	7,200	6,620	7,070	5,380	3,360	4,600	5,590	5,490	5,570
17	5,440	5,070	5,250	---	---	e7,110	3,610	2,390	2,820	5,680	5,580	5,600
18	5,820	5,440	5,630	---	---	e6,590	5,070	3,610	4,670	5,680	5,580	5,670
19	6,200	5,820	6,040	---	5,850	e6,190	6,880	5,070	5,960	5,780	5,680	5,710
20	6,910	6,200	6,500	6,430	6,140	6,310	7,170	6,780	7,000	5,780	5,680	5,760
21	---	6,910	e7,500	6,430	6,140	6,390	9,330	6,980	8,610	5,780	5,680	5,770
22	---	---	e9,200	6,520	6,330	6,460	9,330	7,170	8,380	5,880	5,780	5,830
23	---	---	e10,900	6,720	6,520	6,690	7,860	4,730	6,190	5,880	5,780	5,850
24	10,400	5,600	9,040	6,720	6,520	6,700	4,820	3,880	4,330	---	---	e5,880
25	5,900	4,510	5,680	6,810	6,720	6,740	6,190	3,970	4,970	---	---	e6,000
26	7,860	3,420	5,000	6,720	6,430	6,560	6,780	6,190	6,500	---	---	e6,120
27	8,060	6,980	7,600	6,430	6,330	6,420	8,370	6,780	7,570	6,170	---	e6,170
28	7,570	7,080	7,330	6,330	3,560	5,000	8,460	3,490	5,990	6,270	4,330	4,640
29	8,550	7,180	8,040	5,080	3,940	4,730	9,060	3,960	6,960	4,430	4,330	4,370
30	8,940	3,460	6,830	5,180	4,610	4,860	8,970	7,980	8,450	4,430	2,460	4,290
31	---	---	---	---	---	e5,290	---	---	e3,300	---	---	---
MONTH	11,500	3,420	6,730	9,520	933	5,230	9,330	2,390	6,430	7,500	2,460	5,380
YEAR	15,100	933	7,470									

e Estimated

07308500 RED RIVER NEAR BURKBURNETT, TX



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

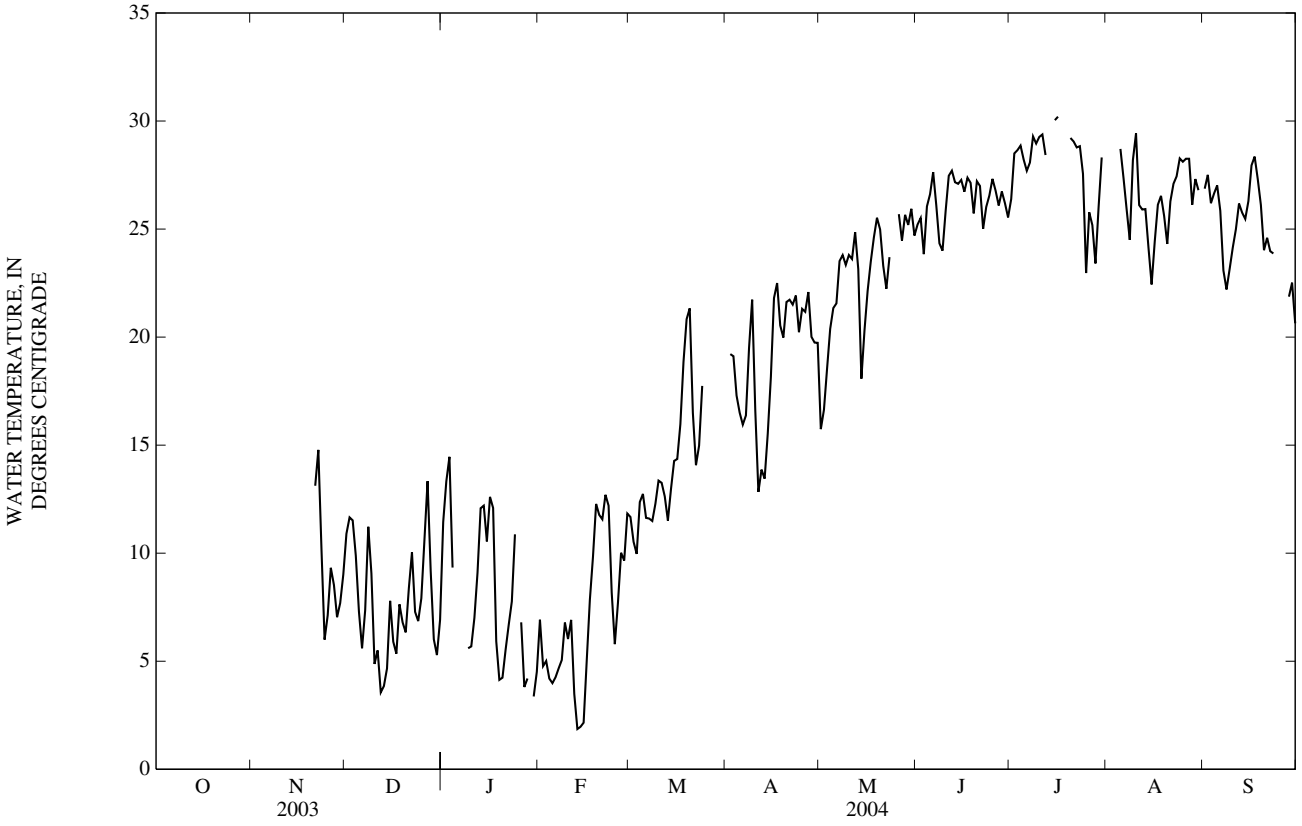
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	13.9	8.1	10.9	15.7	8.2	11.4
2	---	---	---	---	---	---	12.9	10.7	11.7	17.5	9.9	13.3
3	---	---	---	---	---	---	14.0	9.0	11.5	19.0	10.4	14.5
4	---	---	---	---	---	---	13.2	6.8	9.9	14.9	4.2	9.3
5	---	---	---	---	---	---	9.4	5.2	7.3	---	---	---
6	---	---	---	---	---	---	9.0	2.0	5.6	---	---	---
7	---	---	---	---	---	---	11.1	3.8	7.4	---	---	---
8	---	---	---	---	---	---	15.3	7.7	11.2	---	---	---
9	---	---	---	---	---	---	13.1	4.2	9.1	9.5	2.0	5.6
10	---	---	---	---	---	---	8.6	1.4	4.9	9.9	1.9	5.7
11	---	---	---	---	---	---	9.1	1.8	5.5	11.5	3.2	7.0
12	---	---	---	---	---	---	5.3	2.5	3.6	12.1	6.1	9.1
13	---	---	---	---	---	---	7.0	1.0	3.8	14.9	9.8	12.1
14	---	---	---	---	---	---	9.1	0.6	4.7	16.0	9.5	12.2
15	---	---	---	---	---	---	11.8	5.1	7.8	11.7	9.0	10.5
16	---	---	---	---	---	---	9.1	2.9	5.9	13.9	11.1	12.6
17	---	---	---	---	---	---	9.4	1.4	5.3	13.9	7.9	12.1
18	---	---	---	---	---	---	11.3	4.3	7.6	7.9	4.2	5.9
19	---	---	---	---	---	---	9.9	3.8	6.8	6.9	1.5	4.1
20	---	---	---	---	---	---	10.5	2.8	6.3	6.2	2.4	4.2
21	---	---	---	16.6	10.0	13.1	13.1	4.0	8.4	7.9	3.8	5.5
22	---	---	---	18.1	11.8	14.8	13.4	7.7	10.0	9.7	4.2	6.7
23	---	---	---	16.2	6.6	10.2	10.5	4.2	7.3	10.8	5.0	7.8
24	---	---	---	9.5	2.7	6.0	10.6	3.4	6.9	13.0	9.2	10.9
25	---	---	---	10.4	4.3	7.1	11.8	4.5	7.9	---	9.6	---
26	---	---	---	12.8	6.6	9.3	15.3	6.9	10.6	10.2	3.4	6.8
27	---	---	---	10.9	6.7	8.5	15.1	10.7	13.3	7.3	0.9	3.8
28	---	---	---	10.4	3.8	7.0	11.2	6.5	9.2	9.0	1.6	4.2
29	---	---	---	11.3	4.5	7.7	9.8	2.6	6.0	11.1	---	---
30	---	---	---	13.1	5.3	9.0	9.2	1.9	5.3	5.3	1.7	3.4
31	---	---	---	---	---	---	11.4	2.7	6.9	8.5	1.5	4.5
MONTH	---	---	---	18.1	2.7	9.3	15.3	0.6	7.7	19.0	0.9	8.1

07308500 RED RIVER NEAR BURKBURNETT, TX

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	7.8	4.3	6.9	15.8	7.7	11.7	23.8	---	---	18.2	14.4	15.7
2	8.7	1.0	4.8	12.8	8.9	10.5	23.8	14.6	19.2	20.5	13.4	16.6
3	7.3	2.5	5.0	10.5	9.4	10	22.8	16.3	19.1	22.0	15.5	18.5
4	5.1	3.5	4.2	14.3	10.3	12.4	21.6	13.6	17.3	23.9	17.6	20.4
5	5.0	3.4	4.0	15.3	11.2	12.7	18.8	15.0	16.5	24.4	18.5	21.3
6	7.4	1.8	4.3	12.4	10.7	11.6	17.8	13.9	15.9	22.9	20.3	21.6
7	9.0	1.1	4.7	11.9	11.2	11.6	18.8	13.5	16.4	26.2	21.5	23.5
8	8.4	1.8	5.1	11.9	11.0	11.5	23.8	15.9	19.5	27.9	20.5	23.8
9	7.3	6.0	6.8	13.6	11.3	12.3	25.2	18.6	21.7	27.1	19.9	23.3
10	9.2	2.8	6.0	15.2	11.6	13.4	22.5	12.7	16.6	27.8	20.7	23.8
11	7.6	5.8	6.9	15.0	11.5	13.3	15.8	10.1	12.8	26.3	21.5	23.6
12	5.8	1.1	3.5	13.4	12.0	12.6	17.3	11.9	13.9	30.1	21.0	24.9
13	3.2	0.2	1.9	12.0	11.1	11.5	16.7	10.5	13.4	27.1	17.7	23.1
14	4.2	0.0	2.0	15.3	11.6	13.0	19.3	12.2	15.5	23.1	14.4	18.1
15	4.7	0.2	2.2	15.8	13.4	14.3	22.6	14.2	18.2	25.6	16.1	20.3
16	10.9	0.8	5.0	16.8	12.4	14.4	25.7	18.6	21.8	26.2	18.3	22.1
17	12.6	3.8	7.8	19.8	12.4	16.0	25.8	20.0	22.5	28.1	19.6	23.5
18	14.3	6.0	9.8	22.2	15.8	18.8	22.2	19.8	20.5	29.6	21.3	24.6
19	16.4	8.9	12.3	24.0	18.2	20.8	21.2	18.7	20.0	30.8	21.6	25.5
20	15.5	8.6	11.8	24.2	18.5	21.3	25.4	18.7	21.6	29.4	21.6	25.0
21	15.9	7.8	11.6	18.5	14.8	16.5	23.5	19.5	21.7	25.8	21.3	23.3
22	17.0	8.8	12.7	15.7	12.6	14.1	23.4	20.0	21.5	24.1	20.5	22.2
23	14.0	11.2	12.2	18.1	11.7	15.0	23.1	20.4	21.9	29.2	20.9	23.7
24	11.2	5.8	8.2	19.9	16.0	17.7	23.3	17.9	20.2	---	---	---
25	8.6	3.8	5.8	---	---	---	25.9	18.0	21.3	26.6	---	---
26	13.0	3.3	7.7	---	---	---	25.0	17.9	21.2	29.9	22.6	25.7
27	14.9	6.0	10.0	---	---	---	26.1	18.6	22.1	26.5	22.4	24.5
28	10.9	8.6	9.7	---	---	---	22.0	17.9	20.0	31.8	20.6	25.7
29	15.1	9.9	11.8	---	---	---	24.2	16.5	19.7	28.8	22.2	25.2
30	---	---	---	---	---	---	21.5	18.2	19.7	31.3	22.4	25.9
31	---	---	---	---	---	---	---	---	---	30.7	19.6	24.7
MONTH	17.0	0.0	7.1	24.2	7.7	14.0	26.1	10.1	19.0	31.8	13.4	22.8
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.7	20.4	25.2	28.9	24.3	26.4	---	---	---	30.1	23.8	26.9
2	32.2	21.2	25.5	31.5	26.1	28.5	---	---	---	30.7	24.9	27.5
3	29.2	19.9	23.8	31.0	25.8	28.7	---	---	---	29.9	23.1	26.2
4	30.2	22.2	26.0	30.3	27.4	28.9	31.6	---	---	30.9	23.2	26.6
5	31.8	22.7	26.6	30.0	26.8	28.2	33.8	24.9	28.7	30.3	24.2	27.0
6	31.2	25.1	27.6	30.4	24.9	27.7	31.9	24.2	27.4	28.2	23.4	25.8
7	29.1	23.8	26.1	31.0	25.2	28.1	29.6	23.4	25.9	25.9	20.4	23.1
8	26.0	23.3	24.3	32.6	26.6	29.3	27.0	22.6	24.5	26.9	18.1	22.2
9	25.6	22.8	24.0	30.4	27.6	29.0	34.8	23.3	28.2	28.4	18.3	23.2
10	29.5	22.9	25.8	32.1	26.6	29.3	35.1	25.1	29.4	28.9	19.9	24.1
11	31.7	24.0	27.5	30.7	28.8	29.4	28.9	22.9	26.1	30.1	21.0	25.0
12	29.8	26.0	27.7	29.0	27.9	28.4	31.5	21.6	25.9	31.1	22.4	26.2
13	30.0	24.4	27.2	---	28.5	---	30.4	22.6	25.9	30.3	22.3	25.8
14	28.4	25.9	27.1	34.4	---	---	26.8	21.8	24.1	29.5	22.5	25.5
15	28.4	26.5	27.3	34.8	26.4	30.0	25.4	19.9	22.4	31.0	22.7	26.3
16	28.8	25.0	26.7	34.5	26.4	30.2	27.5	21.8	24.4	32.8	24.4	27.9
17	29.1	25.5	27.4	---	---	---	30.8	22.3	26.1	33.1	24.8	28.4
18	28.6	25.5	27.1	---	---	---	31.1	22.6	26.5	30.9	24.5	27.3
19	28.7	24.3	25.7	35.0	---	---	28.1	23.8	25.6	30.0	23.4	26.1
20	31.9	24.0	27.2	33.8	25.4	29.2	25.8	22.6	24.3	28.6	20.5	24.0
21	29.7	25.3	27.0	33.9	25.4	29.1	31.3	22.1	26.3	29.1	21.4	24.6
22	27.0	23.4	25.0	34.0	24.9	28.8	30.8	23.9	27.1	27.8	21.0	24.0
23	29.3	23.0	26.0	33.6	25.4	28.8	30.6	24.5	27.4	27.4	21.5	23.9
24	29.9	23.5	26.6	30.7	25.4	27.6	31.9	25.0	28.3	---	21.9	---
25	29.3	25.3	27.3	26.0	21.3	23.0	30.8	25.9	28.1	---	---	---
26	27.8	25.6	26.8	31.9	21.2	25.8	32.6	24.6	28.3	---	---	---
27	29.3	23.5	26.1	26.8	23.3	25.2	32.7	24.6	28.3	28.7	---	---
28	29.6	24.6	26.7	24.9	21.8	23.4	28.8	23.6	26.1	24.8	20.5	21.9
29	28.5	24.7	26.2	29.5	23.6	26.0	32.2	23.4	27.3	27.2	19.2	22.5
30	27.1	24.1	25.5	34.1	23.6	28.3	29.8	23.7	26.8	23.2	19.5	20.6
31	---	---	---	---	25.0	---	29.2	---	---	---	---	---
MONTH	32.2	19.9	26.3	35.0	21.2	27.9	35.1	19.9	26.5	33.1	18.1	25.1
YEAR	35.1	0.0	18.0									

07308500 RED RIVER NEAR BURKBURNETT, TX



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07308990 LAKE ELLSWORTH NEAR ELGIN, OK

LOCATION.--Lat 34°47'40", long 98°22'07", in NW $^1/_4$ NW $^1/_4$ sec.28, T.4 N., R.11 W., Comanche County, Hydrologic Unit 11130202, near right end of dam on East Cache Creek, 4 miles west of Elgin and at mile 59.9.

DRAINAGE AREA.--249 mi^2.

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 0.47 ft above sea level (City of Lawton benchmark).

REMARKS.--Reservoir is formed by concrete dam. Storage began in 1964. Capacity, 189,200 acre-ft, gage height 1,250.00 ft, top of dam; and 72,490 acre-ft, gage height 1,235.00 ft, top of gates; 25,730 acre-ft, gage height 1,225.00 ft, top of spillway. Reservoir is used for municipal water supply and recreation. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 88,970 acre-ft, Oct. 23, 2000, gage height 1,237.55 ft; minimum contents, 8,630 acre-ft, Sept. 29, 30, 2004, gage height, 1,219.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 21,370 acre-ft, Oct. 1, gage height 1,223.66 ft; minimum, 8,630 acre-ft, Sept. 29, 30, gage height, 1,219.50 ft.

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

1215	1,104	1235	72,490
1220	9,470	1240	104,800
1225	25,730	1245	143,700
1230	46,450	1250	189,200

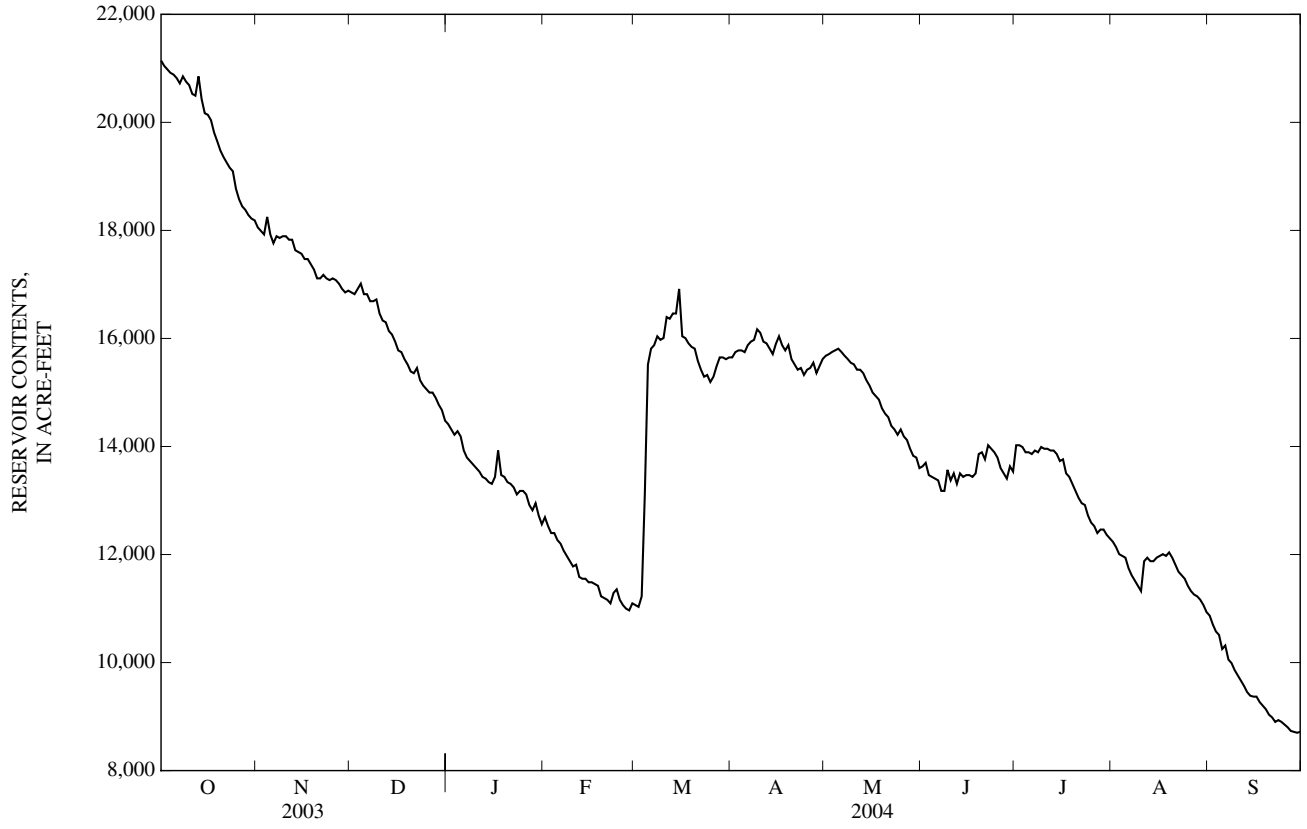
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21,140	18,060	16,850	14,410	12,690	11,060	15,650	e15,680	13,630	14,020	12,230	10,870
2	21,050	17,990	16,820	14,320	12,530	11,030	15,750	e15,710	13,700	14,020	12,140	10,710
3	20,980	17,930	16,920	14,220	12,400	11,230	15,780	e15,750	13,470	13,990	12,010	10,580
4	20,920	18,250	17,010	14,280	12,400	13,110	15,780	e15,780	13,440	13,890	11,970	10,510
5	20,880	17,930	16,820	14,190	12,270	15,520	15,750	15,810	13,400	13,890	11,940	10,250
6	20,820	17,760	16,820	13,930	12,200	15,810	15,880	e15,750	13,370	13,860	11,750	10,320
7	20,720	17,890	16,690	13,800	12,070	15,880	15,940	e15,680	13,180	13,930	11,620	10,060
8	20,850	17,860	16,690	13,730	11,970	16,040	15,970	e15,620	13,180	13,890	11,520	9,990
9	20,750	17,890	16,720	13,670	11,880	15,970	16,170	e15,550	13,570	13,990	11,420	9,860
10	20,690	17,890	16,460	13,600	11,780	16,010	16,100	e15,520	13,370	13,960	11,320	9,760
11	20,530	17,830	16,330	13,540	11,810	16,400	15,940	15,420	13,500	13,960	11,880	9,670
12	20,490	17,830	16,300	13,440	11,580	16,360	15,910	15,420	13,310	13,930	11,940	9,570
13	20,850	17,630	16,140	13,400	11,550	16,460	15,810	15,360	13,500	13,930	11,880	9,450
14	20,430	17,600	16,070	13,340	11,550	16,460	15,710	15,230	13,440	13,860	11,880	9,390
15	20,170	17,570	15,940	13,310	11,490	16,920	e15,900	15,130	13,470	13,730	11,940	9,370
16	20,140	17,470	15,780	13,440	11,490	16,040	16,040	15,000	13,470	13,760	11,970	9,370
17	e20,040	17,470	15,750	13,930	11,450	16,010	15,880	14,930	13,440	13,500	12,010	9,270
18	e19,810	17,370	15,620	13,470	11,420	15,910	15,780	14,870	13,500	13,440	11,970	9,200
19	e19,650	17,270	15,520	13,440	11,230	15,840	15,880	14,710	13,860	13,310	12,040	9,140
20	e19,480	17,110	15,390	13,340	11,190	15,810	15,620	14,610	13,890	13,180	11,940	9,030
21	19,360	17,110	15,360	13,310	11,160	15,580	15,520	14,540	13,760	13,050	11,810	8,980
22	19,260	17,180	15,450	13,240	11,100	15,420	15,420	14,380	14,020	12,950	11,680	8,900
23	19,160	17,110	15,230	13,110	11,290	15,290	15,450	14,320	13,960	12,920	11,620	8,930
24	19,100	17,080	15,130	13,180	11,360	15,320	15,320	14,220	13,890	12,720	11,550	8,900
25	18,770	17,110	15,060	13,180	11,160	15,190	15,420	14,320	13,800	12,590	11,420	8,850
26	18,580	17,080	15,000	13,110	11,060	15,290	15,450	14,190	13,600	12,530	11,320	8,800
27	18,450	17,010	15,000	12,920	11,000	15,490	15,550	14,120	13,500	12,400	11,260	8,730
28	18,380	16,920	14,900	12,820	10,970	15,650	e15,360	13,960	13,400	12,460	11,230	8,720
29	18,280	16,850	14,770	12,950	11,100	15,650	e15,490	13,830	13,630	12,460	11,160	8,700
30	18,220	16,880	14,670	12,720	---	15,620	e15,620	13,800	13,540	12,360	11,060	8,720
31	18,190	---	14,480	12,560	---	15,650	---	13,600	---	12,300	10,930	---
MEAN	19,880	17,500	15,860	13,480	11,630	15,290	15,730	14,930	13,560	13,380	11,690	9,490
MAX	21,140	18,250	17,010	14,410	12,690	16,920	16,170	15,810	14,020	14,020	12,230	10,870
MIN	18,190	16,850	14,480	12,560	10,970	11,030	15,320	13,600	13,180	12,300	10,930	8,700
(‡)	1222.69	1222.28	1221.54	1220.95	1220.50	1221.90	1221.89	1221.27	1221.25	1220.87	1220.45	1219.55
(‡‡)	-3120	-1310	-2400	-1920	-1460	+4550	-30	-2020	-60	-1240	-1370	-2210

CAL YR 2003 MAX 30950 MIN 14480 (‡‡) -12990
WTR YR 2004 MAX 21140 MIN 8700 (‡‡) -12590

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07308990 LAKE ELLSWORTH NEAR ELGIN, OK—Continued



07309500 LAKE LAWTONKA NEAR LAWTON, OK

LOCATION.--Lat 34°44'10", long 98°30'11", in NE ¼ NW ¼ sec.18, T.3 N., R.12 W., Comanche County, Hydrologic Unit 11130202, near left end of dam on Medicine Creek, northwest of Medicine Park and at mile 12.2.

DRAINAGE AREA.--93 mi^2.

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

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

REMARKS.--Reservoir is formed by concrete dam. Storage began in 1905. Capacity, 85,660 acre-ft at elevation 1,355.55 ft, top of dam; and 59,590 acre-ft at elevation 1,345.55 ft, top of gates; 38,980 acre-ft at elevation 1,335.55 ft, top of spillway. Reservoir is used for municipal water supply and recreation. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,600 acre-ft, Mar. 16, 1998, elevation 1,347.27 ft; minimum, 44,310 acre-ft, Oct. 8, 9, 2003, elevation, 1,338.39 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 50,760 acre-ft, Mar. 24, elevation 1,341.56 ft; minimum, 44,310 acre-ft, Dec. 8, 9, elevation, 1,338.39 ft.

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

1300	1,540	1340	47,300
1310	7,190	1345	58,300
1325	22,900	1350	69,800
1335	37,950	1355	83,990

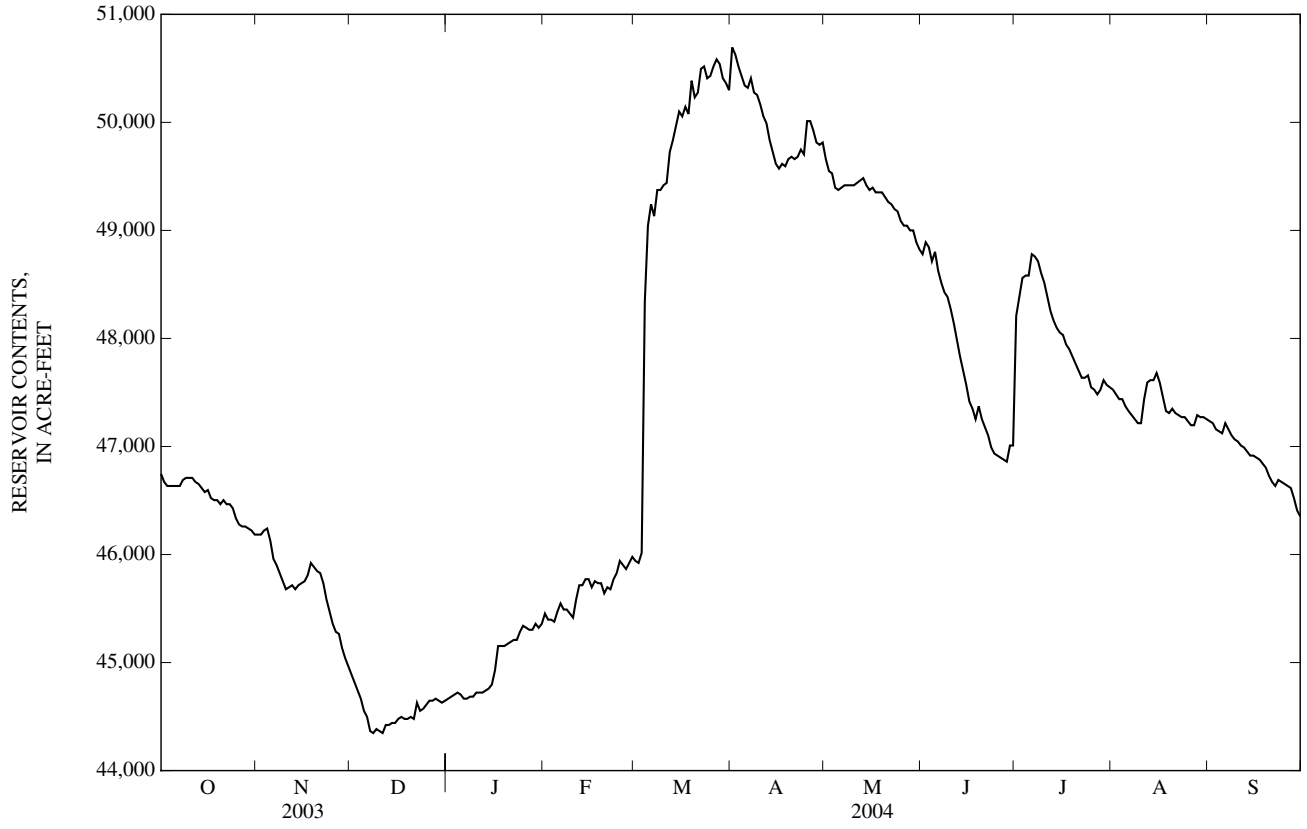
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46,750	46,180	44,890	44,670	45,450	45,940	50,690	49,660	48,780	48,210	47,530	47,230
2	46,670	46,180	44,820	44,680	45,400	45,920	50,630	49,550	48,890	48,380	47,480	47,220
3	46,630	46,220	44,740	44,700	45,400	46,020	50,520	49,530	48,850	48,560	47,440	47,160
4	46,630	46,240	44,670	44,720	45,380	48,340	50,430	49,400	48,710	48,580	47,440	47,140
5	46,630	46,130	44,550	44,700	45,470	49,040	50,340	49,370	48,800	48,580	47,370	47,120
6	46,630	45,960	44,500	44,670	45,550	49,240	50,320	49,400	48,630	48,780	47,330	47,220
7	46,630	45,900	44,370	44,670	45,490	49,130	50,410	49,420	48,520	48,760	47,290	47,160
8	46,690	45,830	44,350	44,680	45,490	49,370	50,280	49,420	48,430	48,710	47,250	47,100
9	46,710	45,750	44,380	44,680	45,450	49,370	50,250	49,420	48,380	48,600	47,220	47,070
10	46,710	45,680	44,370	44,720	45,420	49,420	50,170	49,420	48,270	48,520	47,220	47,050
11	46,710	45,700	44,350	44,720	45,580	49,440	50,060	49,440	48,140	48,380	47,440	47,010
12	46,670	45,720	44,420	44,720	45,720	49,730	49,990	49,460	47,990	48,250	47,590	46,990
13	46,650	45,680	44,420	44,740	45,720	49,840	49,840	49,480	47,830	48,160	47,610	46,950
14	46,620	45,720	44,440	44,760	45,770	49,970	49,730	49,420	47,700	48,100	47,610	46,920
15	46,580	45,730	44,440	44,800	45,770	50,100	49,620	49,370	47,570	48,050	47,680	46,920
16	46,600	45,750	44,480	44,930	45,700	50,060	49,570	49,400	47,420	48,030	47,590	46,900
17	46,520	45,810	44,500	45,150	45,750	50,140	49,620	49,350	47,350	47,940	47,460	46,880
18	46,500	45,920	44,480	45,150	45,730	50,080	49,590	49,350	47,250	47,900	47,330	46,840
19	46,500	45,880	44,480	45,150	45,730	50,390	49,660	49,350	47,370	47,830	47,310	46,800
20	46,470	45,850	44,500	45,170	45,640	50,230	49,680	49,310	47,250	47,770	47,350	46,730
21	46,500	45,830	44,480	45,190	45,700	50,280	49,660	49,260	47,180	47,700	47,310	46,670
22	46,470	45,730	44,630	45,210	45,680	50,500	49,680	49,240	47,100	47,640	47,290	46,630
23	46,470	45,580	44,550	45,210	45,770	50,520	49,750	49,200	46,990	47,640	47,270	46,690
24	46,430	45,470	44,570	45,280	45,830	50,410	49,700	49,180	46,930	47,660	47,270	46,670
25	46,330	45,360	44,610	45,340	45,940	50,430	50,010	49,090	46,920	47,550	47,230	46,650
26	46,280	45,280	44,650	45,320	45,900	50,520	50,010	49,040	46,900	47,530	47,200	46,630
27	46,260	45,270	44,650	45,300	45,870	50,580	49,920	49,040	46,880	47,480	47,200	46,620
28	46,260	45,130	44,670	45,300	45,920	50,540	49,810	49,000	46,860	47,530	47,290	46,520
29	46,240	45,040	44,650	45,360	45,980	50,410	49,790	49,000	47,010	47,610	47,270	46,410
30	46,220	44,970	44,630	45,320	---	50,360	49,810	48,890	47,010	47,570	47,270	46,350
31	46,180	---	44,650	45,360	---	50,300	---	48,820	---	47,550	47,250	---
MEAN	46,520	45,720	44,540	44,980	45,660	49,570	49,980	49,300	47,730	48,050	47,370	46,880
MAX	46,750	46,240	44,890	45,360	45,980	50,580	50,690	49,660	48,890	48,780	47,680	47,230
MIN	46,180	44,970	44,350	44,670	45,380	45,920	49,570	48,820	46,860	47,480	47,200	46,350
(‡)	1339.39	1338.74	1338.57	1338.95	1339.28	1341.35	1341.13	1340.68	1339.83	1340.10	1339.96	1339.48
(‡‡)	-620	-1210	-320	+710	+620	+4320	-490	-990	-1810	+540	-300	-900

CAL YR 2003 MAX 53110 MIN 44350 (‡‡) -5710
WTR YR 2004 MAX 50690 MIN 44350 (‡‡) -450

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07309500 LAKE LAWTONKA NEAR LAWTON, OK—Continued



07311000 EAST CACHE CREEK NEAR WALTERS, OK

LOCATION.--Lat 34°21'44", long 98°16'56", on south line of SE ¼ SE ¼ sec.19, T.2 S., R.10 W., Cotton County, Hydrologic Unit 11130202, at right bank on downstream side of bridge on State Highway 53, 1.8 mi east of Walters, 12.2 mi upstream from West Cache Creek, and at mile 19.7.

DRAINAGE AREA.--675 mi^2.

PERIOD OF RECORD.--May 1938 to December 1963; October 1969 to current year. Prior to October 1969, published as Cache Creek near Walters.

GAGE.--Water-stage recorder. Datum of gage is 938.2 ft above sea level (Oklahoma State Highway Department). Prior to Jan. 8, 1939, nonrecording gage at same site and datum.

REMARKS.--Records poor. Flow partly regulated by Lake Lawtonka, capacity, 42,300 acre-ft on Medicine Creek prior to late 1953, and 63,000 acre-ft thereafter by Lake Thomas, capacity 8,300 acre-ft on Little Medicine Creek; and since March 1961 by Lake Ellsworth, capacity 94,500 acre-ft on East Cache Creek. Low flow sustained by sewage effluent from cities of Lawton and Walters. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1906 reached an approximate stage of 29.7 ft, information from 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	33	23	27	29	36	68	39	77	31	438	21	24
2	27	22	34	34	41	73	39	63	27	1,290	22	23
3	25	23	35	30	68	51	37	50	23	780	24	21
4	26	25	34	29	45	398	36	49	32	925	23	21
5	27	29	34	26	53	1,510	38	49	29	184	24	22
6	27	32	34	25	63	504	38	48	24	88	25	22
7	32	29	34	25	45	182	39	46	26	152	23	30
8	30	54	33	29	40	100	45	44	33	93	19	37
9	31	38	33	35	37	69	37	38	31	53	15	26
10	38	32	26	28	37	59	39	32	33	41	15	24
11	27	35	24	33	37	50	31	41	38	29	18	23
12	21	33	24	40	37	50	27	40	34	25	55	21
13	20	33	24	36	37	48	26	41	28	22	37	21
14	19	33	27	28	30	51	26	40	22	20	63	20
15	19	33	28	33	28	58	26	43	21	20	26	15
16	20	35	26	36	28	49	22	43	23	18	24	13
17	26	37	25	51	29	44	e23	37	27	17	36	13
18	27	36	24	132	28	43	e23	35	21	17	21	13
19	27	36	25	77	28	43	e22	36	23	17	23	13
20	26	35	35	45	29	e41	22	36	30	17	29	12
21	26	34	34	41	33	e39	51	36	54	21	46	11
22	26	34	34	37	39	38	38	36	43	24	51	11
23	27	35	33	36	44	33	33	36	54	23	28	12
24	26	35	32	36	45	30	36	36	49	24	25	14
25	25	35	26	36	48	30	35	35	30	27	23	20
26	27	35	25	46	45	30	238	34	27	28	18	21
27	28	35	25	38	42	30	388	33	24	27	14	21
28	29	36	28	36	38	35	98	33	26	31	15	21
29	30	32	28	35	44	56	53	33	24	57	99	19
30	31	26	27	35	---	46	76	32	44	52	40	14
31	28	---	26	35	---	41	---	31	---	25	23	---
TOTAL	831	990	904	1,212	1,154	3,899	1,681	1,263	931	4,585	925	578
MEAN	26.8	33.0	29.2	39.1	39.8	126	56.0	40.7	31.0	148	29.8	19.3
MAX	38	54	35	132	68	1,510	388	77	54	1,290	99	37
MIN	19	22	24	25	28	30	22	31	21	17	14	11
AC-FT	1,650	1,960	1,790	2,400	2,290	7,730	3,330	2,510	1,850	9,090	1,830	1,150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

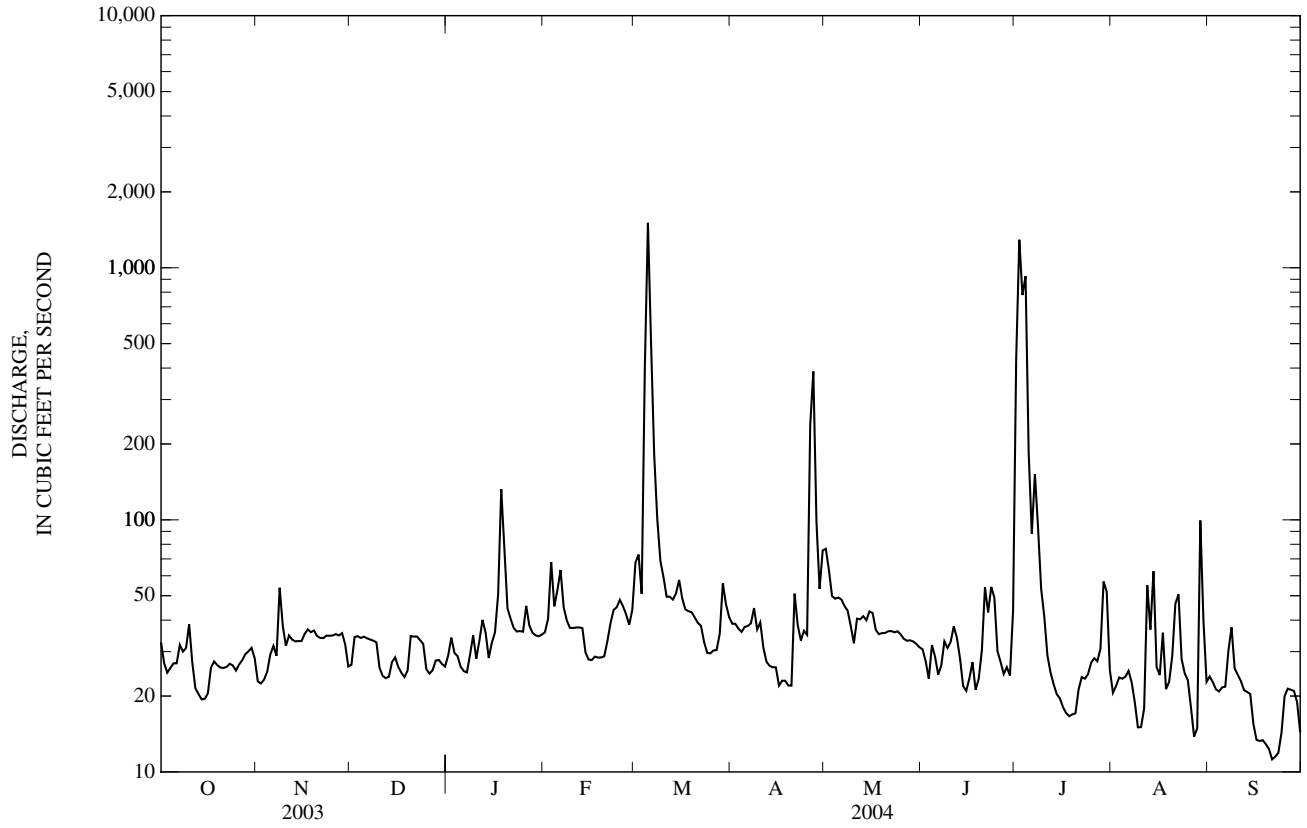
MEAN	246	115	131	109	162	266	242	564	440	99.6	59.5	144
MAX	2,738	1,167	1,796	916	1,356	2,120	1,243	2,654	2,619	483	285	1,637
(WY)	(1984)	(2001)	(1992)	(1998)	(1987)	(1998)	(1990)	(1987)	(1962)	(1975)	(1971)	(1986)
MIN	0.00	0.15	0.15	0.63	2.20	2.09	7.81	5.13	12.6	9.25	3.75	0.00
(WY)	(1940)	(1940)	(1940)	(1940)	(1940)	(1940)	(1939)	(1939)	(1939)	(1954)	(1954)	(1939)

e Estimated

07311000 EAST CACHE CREEK NEAR WALTERS, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	24,960.2		18,953			
ANNUAL MEAN	68.4		51.8		216	
HIGHEST ANNUAL MEAN					911	1987
LOWEST ANNUAL MEAN					12.6	1939
HIGHEST DAILY MEAN	1,970	Jun 27	1,510	Mar 5	34,600	Oct 21, 1983
LOWEST DAILY MEAN	8.0	May 14	11	Sep 21,22	a0.00	Jul 24, 1939
ANNUAL SEVEN-DAY MINIMUM	13	May 11	12	Sep 17	0.00	Aug 1, 1939
MAXIMUM PEAK FLOW			1,680	Mar 5	50,900	Oct 21, 1983
MAXIMUM PEAK STAGE			17.70	Mar 5	30.66	Oct 21, 1983
ANNUAL RUNOFF (AC-FT)	49,510		37,590		156,600	
10 PERCENT EXCEEDS	68		53		418	
50 PERCENT EXCEEDS	35		32		37	
90 PERCENT EXCEEDS	22		21		11	

a No flow at times in 1939-40.



07311500 DEEP RED CREEK NEAR RANDLETT, OK

LOCATION.--Lat 34°13'15", long 98°27'10", in SW ¼ SW ¼ sec.10, T.4 S., R.12 W., Cotton County, Hydrologic Unit 11130203, near right bank on downstream side of pier of bridge on U.S. Highway 277, 2.8 mi north of Randlett, and at mile 4.8.

DRAINAGE AREA.--617 mi^2.

PERIOD OF RECORD.--October 1949 to current year. Prior to October 1993, published as Deep Red Run near Randlett.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1631: 1956. WSP 1920: 1951.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 924.49 ft above sea level (Oklahoma State Highway Depart- ment). Prior to Nov. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records fair. Some regulation by numerous flood-retarding structures. U.S. Geological Survey satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage somewhat exceeding 27 ft, from information provided by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 5	1500	*2,610	*19.02	No other peak greater than base discharge.			

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	1.6	63	2.2	407	0.00	825	8.5	13
2	0.00	0.00	0.00	0.00	2.1	61	2.3	39	0.02	190	4.8	8.3
3	0.00	0.00	0.00	0.00	1.6	35	2.2	14	0.85	128	2.2	5.3
4	0.00	0.00	0.00	0.00	1.9	821	2.1	7.6	0.35	151	1.0	3.5
5	0.00	0.00	0.00	0.00	2.9	2,400	2.3	5.1	0.29	44	0.41	2.5
6	0.00	0.00	0.00	0.00	2.0	1,410	2.6	3.8	0.42	22	0.00	2.0
7	0.00	0.00	0.00	0.00	1.7	179	2.7	3.2	0.64	275	0.00	1.4
8	0.00	0.00	0.00	0.00	1.9	47	22	2.8	0.79	214	3.2	1.3
9	0.00	0.00	0.00	0.00	2.4	21	17	2.5	0.76	34	8.3	2.8
10	0.00	0.00	0.00	0.00	2.9	12	9.4	2.0	0.64	12	1.0	2.8
11	0.00	0.00	0.00	0.00	3.2	8.0	7.4	1.6	0.41	6.4	0.02	2.1
12	0.00	0.00	0.00	0.00	3.1	6.3	5.9	1.4	0.17	3.9	0.00	1.6
13	0.00	0.00	0.00	0.00	2.6	5.4	4.8	1.4	0.07	2.4	1.2	1.3
14	0.00	0.00	0.00	0.00	2.7	4.9	4.1	2.6	0.01	1.5	4.2	1.1
15	0.00	0.00	0.00	0.00	2.9	4.3	3.6	2.3	0.00	0.92	18	1.3
16	0.00	0.00	0.00	0.00	3.0	4.1	3.3	1.5	0.00	0.53	427	1.2
17	0.00	0.00	0.00	1.3	2.6	3.7	3.0	1.1	0.00	0.23	369	1.0
18	0.00	0.00	0.00	0.77	2.3	3.2	2.8	0.96	0.00	0.10	44	0.80
19	0.00	0.00	0.00	8.1	2.3	3.1	2.8	0.85	0.00	0.08	22	0.53
20	0.00	0.00	0.00	11	2.2	3.1	2.6	0.76	0.00	0.02	24	0.07
21	0.00	0.00	0.00	8.6	2.0	2.8	2.1	0.62	0.00	0.00	58	0.00
22	0.00	0.00	0.00	6.3	2.0	2.6	1.8	0.46	2.5	0.00	43	0.00
23	0.00	0.00	0.00	4.3	12	2.5	1.6	0.36	304	0.00	21	0.00
24	0.00	0.00	0.00	3.0	22	2.4	182	0.16	22	0.00	14	0.00
25	0.00	0.00	0.00	2.8	43	2.2	142	0.09	6.7	0.00	9.0	26
26	0.00	0.00	0.00	2.2	26	2.2	264	0.10	3.8	0.00	5.5	44
27	0.00	0.00	0.00	1.6	18	2.2	461	0.11	2.7	0.00	3.5	17
28	0.00	0.00	0.00	1.5	15	2.4	53	0.04	1.9	7.7	85	9.1
29	0.00	0.00	0.00	1.6	27	2.3	17	0.00	73	18	213	4.5
30	0.00	0.00	0.00	1.4	---	2.1	402	0.00	834	3.3	53	2.1
31	0.00	---	0.00	1.4	---	2.1	---	0.00	---	8.4	22	---
TOTAL	0.00	0.00	0.00	55.87	214.9	5,120.9	1,631.6	503.41	1,256.02	1,948.48	1,465.83	156.60
MEAN	0.00	0.00	0.00	1.80	7.41	165	54.4	16.2	41.9	62.9	47.3	5.22
MAX	0.00	0.00	0.00	11	43	2,400	461	407	834	825	427	44
MIN	0.00	0.00	0.00	0.00	1.6	2.1	1.6	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	111	426	10,160	3,240	999	2,490	3,860	2,910	311

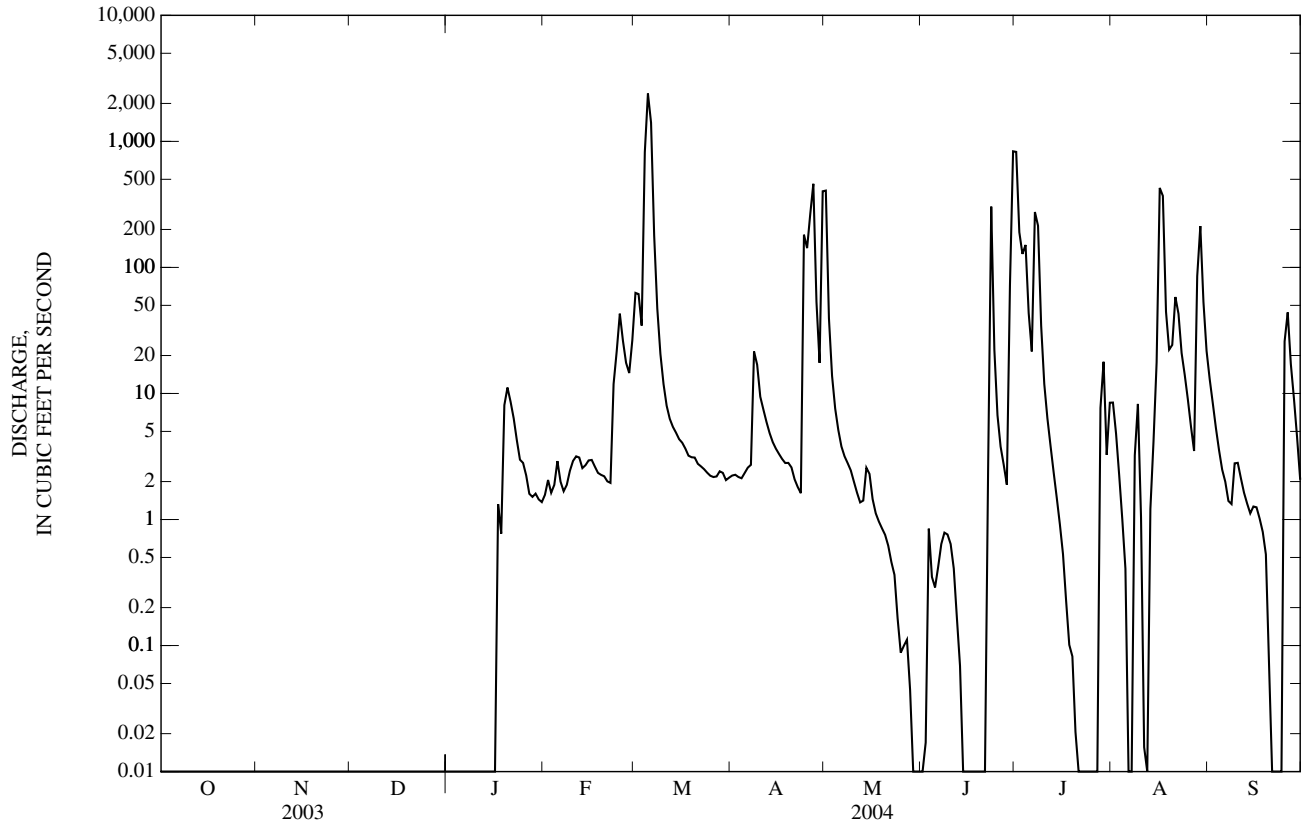
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2004, BY WATER YEAR (WY)

MEAN	258	96.4	69.1	59.9	83.6	138	137	446	415	58.3	64.1	169
MAX	3,345	994	1,493	568	1,020	1,540	1,398	2,800	4,654	795	1,109	1,453
(WY)	(1984)	(1987)	(1992)	(1998)	(1987)	(1998)	(1990)	(1987)	(1995)	(1991)	(1995)	(1969)
MIN	0.00	0.00	0.00	0.00	0.02	0.10	0.00	0.06	0.00	0.00	0.00	0.00
(WY)	(1953)	(1955)	(1955)	(1953)	(1981)	(1980)	(1955)	(1971)	(1966)	(1964)	(1952)	(1952)

07311500 DEEP RED CREEK NEAR RANDLETT, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1950 - 2004	
ANNUAL TOTAL	9,008.52		12,353.61			
ANNUAL MEAN	24.7		33.8		166	
HIGHEST ANNUAL MEAN					904	1987
LOWEST ANNUAL MEAN					15.1	2000
HIGHEST DAILY MEAN	1,620	Jun 27	2,400	Mar 5	46,300	Oct 20, 1983
LOWEST DAILY MEAN	0.00	Jul 25	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 25	0.00	Oct 1	0.00	Oct 3, 1951
MAXIMUM PEAK FLOW			2,610	Mar 5	72,300	Oct 20, 1983
MAXIMUM PEAK STAGE			19.02	Mar 5	a29.58	May 29, 1987
ANNUAL RUNOFF (AC-FT)	17,870		24,500		120,600	
10 PERCENT EXCEEDS	17		34		181	
50 PERCENT EXCEEDS	2.9		1.4		4.6	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a Due to backwater from West Cache Creek.



07315500 RED RIVER NEAR TERRAL, OK

LOCATION.--Lat 33°52'43", long 97°56'03", JEFFERSON County, Hydrologic Unit 11130201, on left bank at downstream side of bridge abutment on U.S. Highway 81, 0.5 mi downstream from Chicago and Rock Island Railroad Co. bridge, 1.2 mi south of Terral, 3.6 mi downstream from Little Wichita River, and at mile 872.

DRAINAGE AREA.--28,723 mi^2 of which 5,936 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Apr. 1938 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 770.31 ft above NGVD of 1929. Prior to Jan. 12, 1939, nonrecording gage at same site and datum. Satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Since installation of gage in Apr. 1938, at least 10% of contributing drainage area has been regulated. There are many small diversions upstream from station for irrigation, oil field operations, and for municipal uses.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 19, 1935, reached a stage of 27.2 ft, although floods in 1891 and on May 1, 1908, are reported to have reached about the same stage.

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

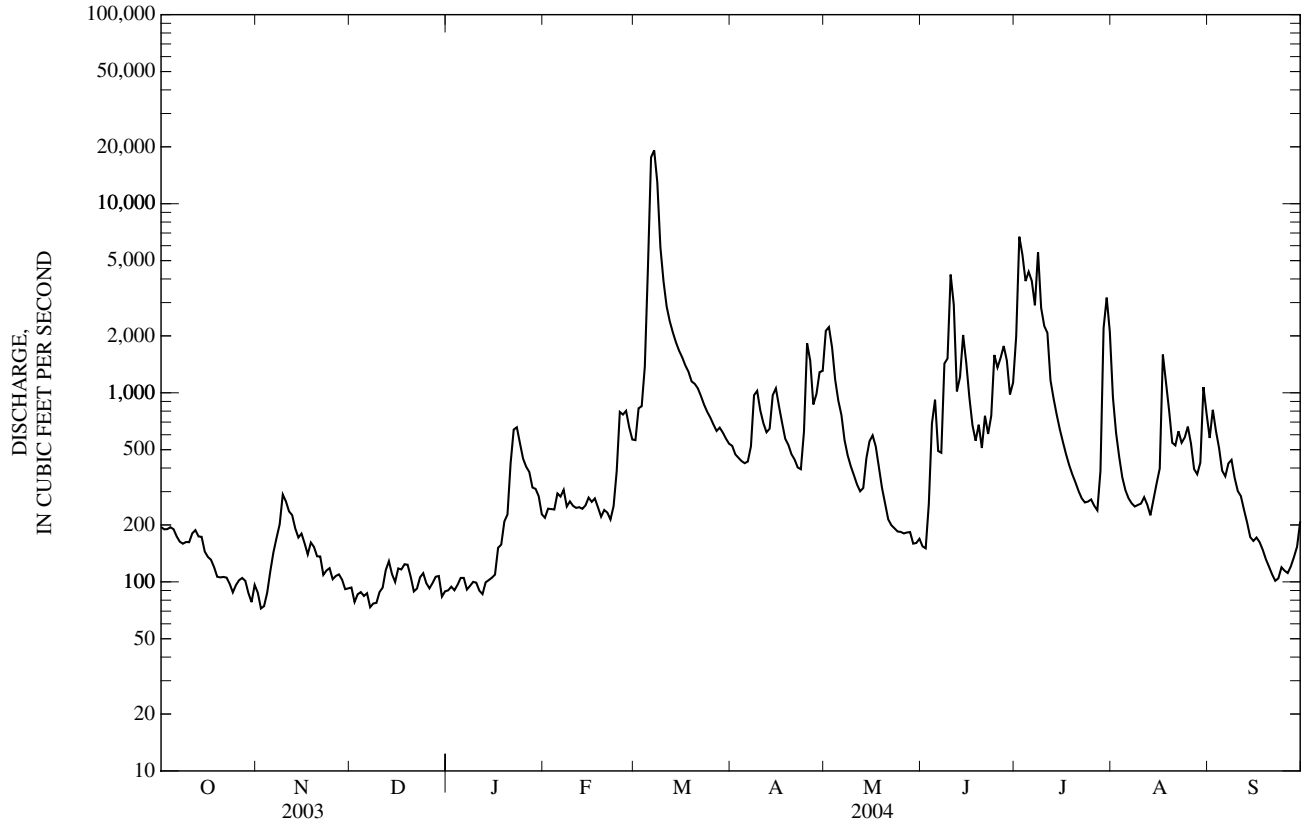
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	195	88	93	90	218	562	524	2,130	154	1,990	944	577
2	190	72	78	94	244	828	473	2,230	150	6,690	614	813
3	190	74	86	90	243	849	453	1,740	258	5,370	458	629
4	195	88	88	96	241	1,370	435	1,170	688	3,900	357	511
5	190	114	84	105	294	4,580	424	909	919	4,370	305	387
6	174	143	87	105	283	17,600	433	763	492	3,900	277	362
7	163	171	73	91	307	19,200	521	562	482	2,900	260	423
8	159	201	77	95	250	13,000	971	467	1,430	5,550	250	442
9	162	290	77	100	266	5,880	1,020	409	1,520	2,810	255	355
10	162	267	88	99	252	3,880	808	367	4,220	2,260	260	302
11	181	236	93	90	246	2,860	690	327	2,920	2,070	280	284
12	188	225	115	86	248	2,390	618	301	1,020	1,160	256	240
13	174	192	129	99	243	2,080	646	314	1,210	930	225	206
14	173	172	110	102	254	1,850	972	451	2,020	763	273	172
15	145	180	100	105	279	1,670	1,060	554	1,440	639	332	165
16	136	160	118	109	265	1,540	849	595	946	547	398	172
17	131	140	116	151	276	1,390	693	521	673	472	1,590	162
18	120	161	124	157	248	1,290	571	405	558	413	1,130	148
19	106	153	123	209	221	1,150	530	314	678	369	804	132
20	106	137	106	227	240	1,120	473	259	511	336	544	120
21	106	136	89	424	232	1,060	443	214	756	302	527	110
22	105	109	92	639	214	961	403	199	606	277	626	101
23	98	115	106	657	252	865	394	192	755	263	544	104
24	88	118	111	541	385	794	621	185	1,590	266	580	119
25	96	103	98	448	792	739	1,830	184	1,360	273	662	115
26	102	107	92	406	767	679	1,480	180	1,530	253	539	111
27	105	110	99	381	803	628	868	182	1,770	239	395	121
28	101	103	106	316	657	654	986	183	1,480	386	371	135
29	87	91	107	310	566	616	1,290	159	980	2,200	427	154
30	78	92	84	284	---	572	1,310	161	1,130	3,190	1,070	209
31	96	---	89	228	---	538	---	169	---	2,100	776	---
TOTAL	4,302	4,348	3,038	6,934	9,786	93,195	22,789	16,796	34,246	57,188	16,329	7,881
MEAN	139	145	98.0	224	337	3,006	760	542	1,142	1,845	527	263
MAX	195	290	129	657	803	19,200	1,830	2,230	4,220	6,690	1,590	813
MIN	78	72	73	86	214	538	394	159	150	239	225	101
AC-FT	8,530	8,620	6,030	13,750	19,410	184,900	45,200	33,310	67,930	113,400	32,390	15,630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2004, BY WATER YEAR (WY)

MEAN	2,885	1,511	1,125	943	1,376	2,039	2,558	6,267	6,007	1,639	1,275	1,913
MAX	23,900	9,713	11,810	5,306	9,320	14,710	18,080	43,580	37,460	8,077	14,730	9,653
(WY)	(1987)	(1987)	(1992)	(1992)	(1987)	(1998)	(1990)	(1957)	(1941)	(1950)	(1995)	(1986)
MIN	108	102	91.2	76.5	136	66.1	142	134	517	158	107	100
(WY)	(1953)	(1940)	(1939)	(1940)	(1953)	(1940)	(1971)	(1971)	(1966)	(1964)	(2003)	(2000)

07315500 RED RIVER NEAR TERRAL, OK--Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1938 - 2004	
ANNUAL TOTAL	212,560		276,832			
ANNUAL MEAN	582		756		2,459	
HIGHEST ANNUAL MEAN					8,925	1987
LOWEST ANNUAL MEAN					523	1953
HIGHEST DAILY MEAN	10,400	Jun 8	19,200	Mar 7	215,000	Jun 7, 1995
LOWEST DAILY MEAN	63	Aug 2	72	Nov 2	46	Mar 20, 1940
ANNUAL SEVEN-DAY MINIMUM	64	Aug 1	82	Dec 3	47	Mar 18, 1940
MAXIMUM PEAK FLOW			21,300	Mar 6	236,000	Jun 7, 1995
MAXIMUM PEAK STAGE			14.37	Mar 6	33.60	Oct 22, 1983
ANNUAL RUNOFF (AC-FT)	421,600		549,100		1,782,000	
10 PERCENT EXCEEDS	1,100		1,530		5,360	
50 PERCENT EXCEEDS	284		284		589	
90 PERCENT EXCEEDS	92		98		174	



07315500 RED RIVER NEAR TERRAL, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: Oct. 1967 to Sept. 1997, Oct. 2002 to current year.
BIOLOGICAL DATA: May 1997 to Sept. 1997, Oct. 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Instantaneous discharge, cfs (00061)	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)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
28...	0940	359	12.3	122	8.4	5,450	14.2	89	103	2	.53	1.8	<.04
MAR													
26...	1030	673	9.6	107	8.1	7,610	19.7	95	112	2	.28	1.1	<.04
MAY													
24...	1055	183	7.3	94	8.1	6,040	25.0	80	94	1	.33	1.1	<.04
AUG													
13...	1205	190	8.3	107	8.2	4,400	25.6	94	111	2	.43	1.3	<.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	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)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)
OCT									
28...	.09	.12	.032	<.02	.018	.24oc	1.9	E37k	E40k
MAR									
26...	--	<.06	<.008	<.02	.012	.19oc	--	E43k	E15k
MAY									
24...	--	<.06	.008	<.02	.015	.149	--	E33k	20
AUG									
13...	--	<.06	<.008	<.02	.018	.172	--	E18k	E13k

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

Value qualifier codes used in this table:
c -- See laboratory comment
k -- Counts outside acceptable range
o -- Result determined by alternate method

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07315700 MUD CREEK NEAR COURTNEY, OK

LOCATION.--Lat 34°00'15", long 97°34'00", in NW ¼ SE ¼ sec.25, T.6 S., R.4 W., Jefferson County, Hydrologic Unit, 11130201, on downstream side of bridge on State Highway 89, 4.0 mi downstream from North Mud Creek, 6.0 mi northwest of Courtney, and at mile 11.5.

DRAINAGE AREA.--572 mi^2.

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

REVISED RECORDS.--WDR OK-78-2: Maximum gage height.

GAGE.--Water-stage recorder and broad-crested weir. Datum of gage is 727.72 ft above sea level. Prior to Oct. 1, 1968, auxiliary water-stage recorder 2.0 mi downstream from base gage.

REMARKS.--No estimated daily discharge. Records good. U.S. Geological Survey satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1957, reached a stage of 30.6 ft.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 1	0900	1,510	21.09	Jul 4	0900	*2,300	*23.08
Jun 10	1700	1,860	22.15				

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

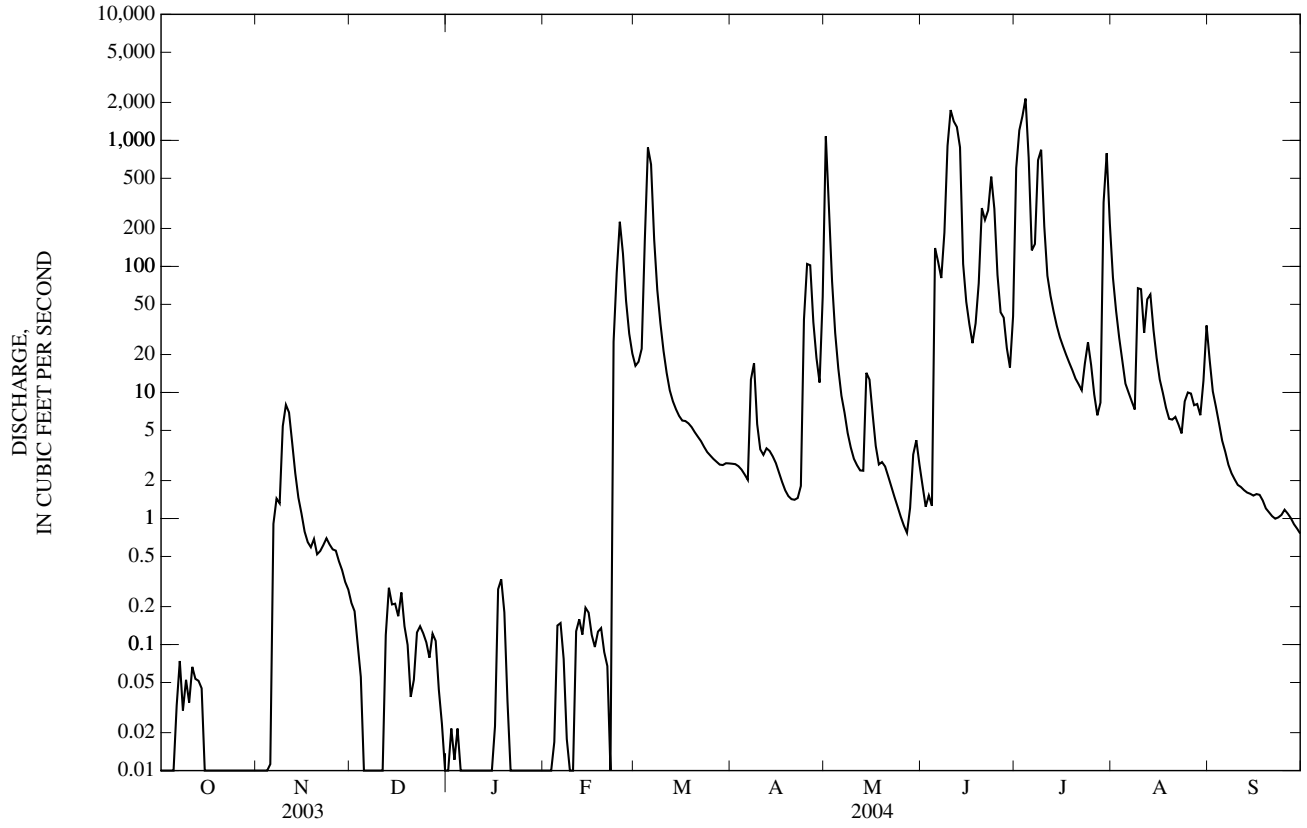
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.21	0.01	0.00	16	2.7	1,080	1.8	603	81	18
2	0.00	0.00	0.18	0.02	0.00	18	2.7	291	1.2	1,200	45	10
3	0.00	0.00	0.10	0.01	0.00	22	2.6	76	1.5	1,560	27	7.7
4	0.00	0.00	0.06	0.02	0.02	161	2.4	30	1.3	2,150	18	5.7
5	0.00	0.01	0.00	0.00	0.14	878	2.2	15	140	727	12	4.1
6	0.03	0.91	0.00	0.00	0.15	645	2.0	9.4	108	134	10	3.4
7	0.07	1.4	0.00	0.00	0.08	164	13	6.9	81	151	8.5	2.7
8	0.03	1.3	0.00	0.00	0.02	65	17	4.8	186	697	7.3	2.3
9	0.05	5.4	0.00	0.00	0.00	35	5.6	3.7	905	843	67	2.0
10	0.03	8.0	0.00	0.00	0.00	21	3.5	3.0	1,740	208	66	1.8
11	0.07	6.9	0.00	0.00	0.13	14	3.2	2.6	1,420	84	30	1.8
12	0.05	4.0	0.12	0.00	0.16	10	3.6	2.4	1,280	58	55	1.7
13	0.05	2.3	0.28	0.00	0.12	8.5	3.4	2.4	882	44	60	1.6
14	0.04	1.5	0.21	0.00	0.20	7.4	3.1	14	105	34	31	1.6
15	0.00	1.1	0.21	0.00	0.18	6.5	2.8	13	52	27	19	1.5
16	0.00	0.79	0.17	0.02	0.12	6.0	2.3	6.8	35	23	13	1.6
17	0.00	0.65	0.26	0.27	0.10	5.9	1.9	3.8	25	20	9.9	1.5
18	0.00	0.59	0.14	0.33	0.13	5.7	1.7	2.7	35	17	7.6	1.4
19	0.00	0.69	0.10	0.18	0.13	5.3	1.5	2.8	74	15	6.2	1.2
20	0.00	0.52	0.04	0.04	0.09	4.8	1.4	2.6	290	13	6.1	1.1
21	0.00	0.55	0.05	0.00	0.07	4.5	1.4	2.2	234	12	6.4	1.0
22	0.00	0.62	0.12	0.00	0.00	4.1	1.5	1.8	278	10	5.6	1.00
23	0.00	0.70	0.14	0.00	25	3.7	1.8	1.5	516	17	4.7	1.0
24	0.00	0.62	0.12	0.00	89	3.4	38	1.2	287	25	8.5	1.1
25	0.00	0.57	0.10	0.00	226	3.2	105	1.0	86	17	10	1.2
26	0.00	0.56	0.08	0.00	127	3.0	102	0.88	43	9.7	9.8	1.1
27	0.00	0.46	0.12	0.00	53	2.8	36	0.77	39	6.6	7.9	1.0
28	0.00	0.39	0.11	0.00	29	2.7	19	1.2	22	8.3	8.1	0.90
29	0.00	0.31	0.04	0.00	20	2.7	12	3.2	16	322	6.6	0.83
30	0.00	0.27	0.02	0.00	---	2.7	57	4.2	40	791	12	0.76
31	0.00	---	0.00	0.00	---	2.7	---	2.7	---	220	34	---
TOTAL	0.42	41.11	2.98	0.90	570.84	2,134.6	452.3	1,593.55	8,924.8	10,046.6	693.2	82.59
MEAN	0.01	1.37	0.10	0.03	19.7	68.9	15.1	51.4	297	324	22.4	2.75
MAX	0.07	8.0	0.28	0.33	226	878	105	1,080	1,740	2,150	81	18
MIN	0.00	0.00	0.00	0.00	0.00	2.7	1.4	0.77	1.2	6.6	4.7	0.76
AC-FT	0.8	82	5.9	1.8	1,130	4,230	897	3,160	17,700	19,930	1,370	164

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

MEAN	102	120	148	99.1	176	275	287	486	342	45.1	22.3	104
MAX	1,216	854	1,766	898	1,251	1,594	3,075	3,670	1,859	324	293	571
(WY)	(1982)	(1974)	(1992)	(1985)	(1997)	(1998)	(1990)	(1982)	(1989)	(2004)	(1964)	(1989)
MIN	0.00	0.00	0.01	0.00	0.06	0.00	0.16	0.10	0.02	0.00	0.00	0.00
(WY)	(1964)	(1978)	(1979)	(1964)	(2000)	(1980)	(1980)	(2000)	(1972)	(1964)	(1980)	(1963)

07315700 MUD CREEK NEAR COURTNEY, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1961 - 2004	
ANNUAL TOTAL	14,728.61		24,543.89			
ANNUAL MEAN	40.4		67.1		184	
HIGHEST ANNUAL MEAN					614	1990
LOWEST ANNUAL MEAN					1.68	2000
HIGHEST DAILY MEAN	2,500	May 27	2,150	Jul 4	37,800	May 3, 1990
LOWEST DAILY MEAN	0.00	Jul 25	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Jul 25	0.00	Oct 15	0.00	Jul 28, 1961
MAXIMUM PEAK FLOW			2,300	Jul 4	49,600	May 3, 1990
MAXIMUM PEAK STAGE			23.08	Jul 4	33.14	May 29, 1987
ANNUAL RUNOFF (AC-FT)	29,210		48,680		133,100	
10 PERCENT EXCEEDS	34		103		243	
50 PERCENT EXCEEDS	2.7		2.2		7.4	
90 PERCENT EXCEEDS	0.00		0.00		0.00	



07316000 RED RIVER NEAR GAINESVILLE, TX

LOCATION.--Lat 33°43'40", long 97°09'35", in SW $^1/_4$ sec.36, T.9 S., R.1 E., Love County, OK, Hydrologic Unit 11130201, on downstream right bank at end of bridge on Interstate 35, 0.2 mi downstream from Gulf, Colorado, and Santa Fe Railway Co. bridge, 5.0 mi downstream from Fish Creek, 4.5 mi southwest of Thackerville, OK, 7.0 mi north of Gainesville, and at mile 791.5.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--30,782 mi^2 of which 5,936 mi^2 probably is noncontributing.

PERIOD OF RECORD.--May 1936 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 627.91 ft above sea level. Prior to Jan. 17, 1939, and Feb. 13, 1965 to Nov. 14, 1966, nonrecording gage at same site and datum.

REMARKS.--Records poor. Flow slightly regulated by Lake Kemp (station 07312000 in Texas), since 1943 by Lake Altus (station 07302500 in Oklahoma), since 1946 by Lake Kickapoo (station 07314000 in Texas), since 1967 by Lake Arrowhead (station 07314800 in Texas) and Moss Lake (station 07315950 in Texas). U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 24,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 8	0500	*20,100	*17.18				

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	299	e180	e152	e133	349	942	e630	4,270	265	8,400	4,880	875
2	284	e170	156	e135	e328	793	e580	7,540	e280	9,540	2,900	1,020
3	267	e160	e140	e120	304	713	e530	4,720	e290	16,200	1,560	754
4	262	e150	e130	e105	294	995	e490	3,270	e275	17,300	1,030	820
5	259	e155	e132	95	319	1,540	450	2,530	e260	11,600	783	810
6	251	e160	e130	e94	325	3,000	e440	1,960	e275	8,170	641	677
7	241	e165	e142	95	311	15,800	e580	1,600	2,170	6,800	542	566
8	235	e170	e120	e104	312	19,800	e750	1,370	1,580	5,940	487	491
9	221	e175	e100	e101	317	14,400	e920	1,180	3,020	6,220	462	453
10	212	e180	91	160	314	8,250	e1,100	1,000	8,580	8,350	443	503
11	208	213	e110	185	319	5,370	e1,000	858	9,730	4,180	438	468
12	215	272	e140	187	324	3,800	e880	792	8,180	3,670	414	409
13	e230	266	e150	190	312	2,930	788	754	5,220	2,810	386	375
14	e240	227	e159	193	298	2,420	709	697	3,500	1,820	397	351
15	e220	206	e155	195	298	2,050	683	652	2,380	1,410	397	333
16	e210	189	e150	225	290	1,800	873	661	2,740	1,140	360	305
17	e194	188	e155	290	283	1,600	1,170	732	2,100	937	384	274
18	e190	193	e158	306	286	1,450	1,010	860	1,960	807	401	255
19	e185	169	e152	277	282	1,330	847	834	4,800	726	1,330	234
20	e180	e164	e150	256	299	e1,410	755	761	4,040	661	1,370	217
21	e178	e160	e145	252	280	e1,310	e683	644	2,490	601	1,100	200
22	e176	e155	e154	278	258	e1,200	606	e480	3,370	555	807	187
23	e170	e150	e154	341	265	e1,100	585	e430	3,800	518	642	177
24	e170	e155	e158	572	403	e1,000	1,070	e400	2,920	485	705	174
25	e178	e159	e154	795	893	e900	3,290	e370	2,240	480	682	170
26	e192	e155	e145	778	743	e840	4,650	e350	2,430	517	662	161
27	204	e160	e140	683	939	e790	3,170	e330	2,190	503	775	158
28	e190	e150	e142	605	1,080	e800	1,940	e310	2,160	480	845	155
29	e184	e147	e145	568	997	e750	1,260	e290	2,330	1,250	637	149
30	e170	e150	e140	493	---	e700	1,390	e280	3,780	3,790	527	148
31	e170	---	e130	377	---	e680	---	e285	---	5,930	474	---
TOTAL	6,585	5,293	4,379	9,188	12,022	100,463	33,829	41,210	89,355	131,790	27,461	11,869
MEAN	212	176	141	296	415	3,241	1,128	1,329	2,978	4,251	886	396
MAX	299	272	159	795	1,080	19,800	4,650	7,540	9,730	17,300	4,880	1,020
MIN	170	147	91	94	258	680	440	280	260	480	360	148
AC-FT	13,060	10,500	8,690	18,220	23,850	199,300	67,100	81,740	177,200	261,400	54,470	23,540

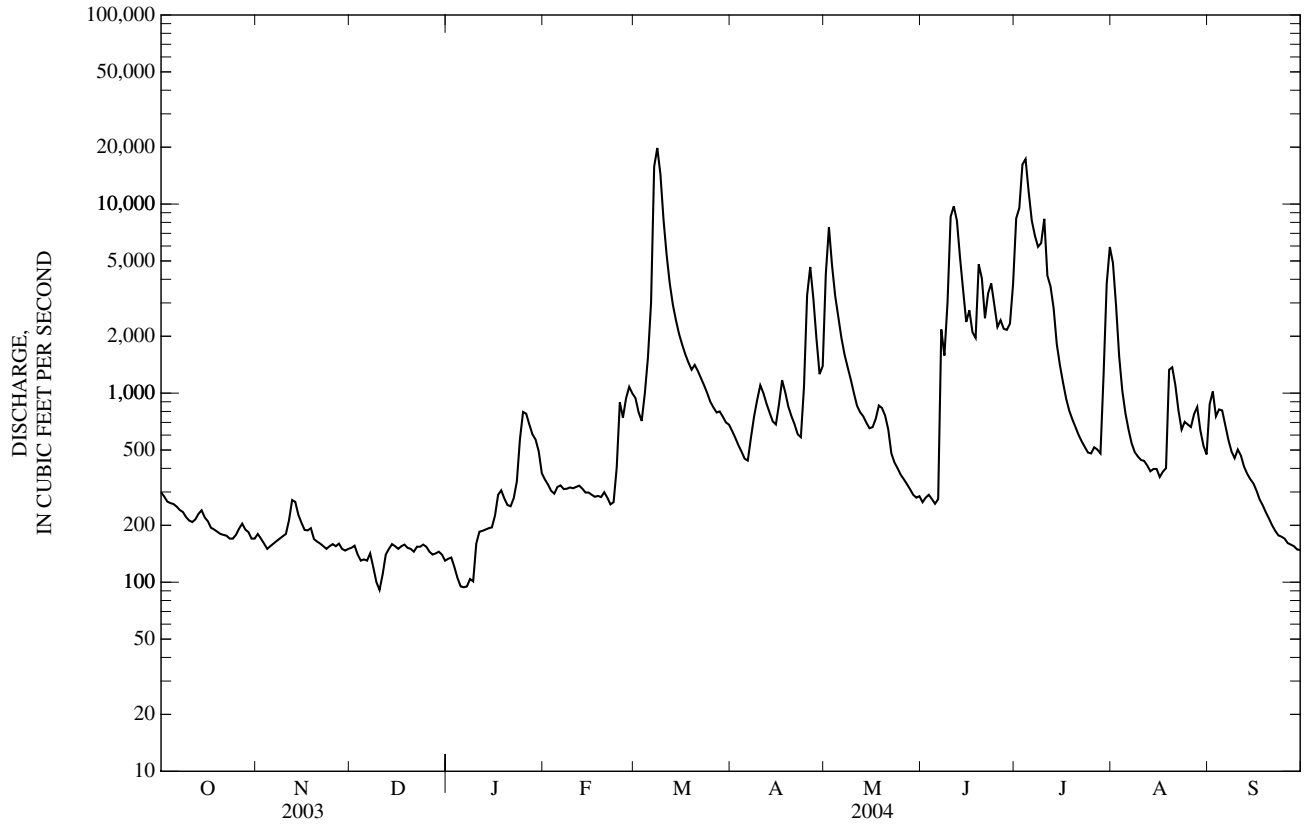
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2004, BY WATER YEAR (WY)

MEAN	3,619	2,013	1,589	1,265	1,917	2,886	3,502	7,715	7,993	2,175	1,540	2,372
MAX	31,080	14,020	14,990	7,258	10,920	19,590	27,400	47,780	43,510	9,857	20,730	12,880
(WY)	(1942)	(1942)	(1992)	(1998)	(2001)	(1998)	(1990)	(1957)	(1941)	(1950)	(1995)	(1986)
MIN	119	137	125	82.4	151	90.5	153	204	640	166	163	108
(WY)	(1953)	(1955)	(1940)	(1940)	(1953)	(1940)	(1971)	(1971)	(1966)	(1964)	(1970)	(1956)

e Estimated

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1937 - 2004	
ANNUAL TOTAL	341,201		473,444			
ANNUAL MEAN	935		1,294		3,217	
HIGHEST ANNUAL MEAN					11,890	1987
LOWEST ANNUAL MEAN					651	1953
HIGHEST DAILY MEAN	11,100	May 28	19,800	Mar 8	232,000	May 31, 1987
LOWEST DAILY MEAN	91	Dec 10	91	Dec 10	48	Jan 18, 1940
ANNUAL SEVEN-DAY MINIMUM	118	Dec 5	102	Jan 3	48	Jan 18, 1940
MAXIMUM PEAK FLOW			20,100	Mar 8	265,000	May 31, 1987
MAXIMUM PEAK STAGE			17.18	Mar 8	40.08	May 31, 1987
ANNUAL RUNOFF (AC-FT)	676,800		939,100		2,331,000	
10 PERCENT EXCEEDS	2,190		3,280		7,150	
50 PERCENT EXCEEDS	432		442		840	
90 PERCENT EXCEEDS	156		151		215	



07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1994 to current year.
WATER TEMPERATURE: October 1994 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1994.

REMARKS.--Samples were collected monthly, and specific conductance, pH, water temperature, alkalinity and dissolved oxygen were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 12,600 microsiemens Apr. 19, 2004; minimum, 402 microsiemens Nov. 14, 1994.
WATER TEMPERATURE: Maximum, 36.5°C July 15, 1998; minimum , -0.5°C Jan. 4, 5, 1999.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 12,600 microsiemens Apr. 19; minimum, 780 microsiemens July 1.
WATER TEMPERATURE: Maximum, 34.0°C July 15; minimum, 1.2°C Jan. 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth at sample location, feet (81903)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	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)	Location in X-sect. looking dwnstrm ft from l bank (00009)
OCT												
08...	1342	1028	1028	1.94	8.32	234	725	7.7	8.3	5,200	24.8	14.0
08...	1343	1028	1028	2.00	8.32	234	725	7.6	8.2	5,210	24.4	28.0
08...	1344	1028	1028	2.30	8.32	234	725	7.5	8.2	5,230	24.1	42.0
08...	1345	1028	1028	2.60	8.32	234	725	7.3	8.2	5,230	23.9	56.0
08...	1346	1028	1028	3.00	8.32	234	725	7.2	8.2	5,240	23.9	70.0
08...	1347	1028	1028	2.77	8.32	234	725	7.2	8.2	5,250	23.9	84.0
08...	1348	1028	1028	2.42	8.32	234	725	7.1	8.2	5,250	23.9	98.0
08...	1349	1028	1028	1.70	8.32	234	725	7.2	8.2	5,250	23.9	112
08...	1350	1028	1028	1.26	8.32	234	725	7.2	8.2	5,250	24.0	126
08...	1351	1028	1028	.75	8.32	234	725	7.2	8.2	5,240	24.1	140
AUG												
05...	0835	1028	1028	1.76	9.72	838	744	6.8	8.1	1,690	29.4	25.0
05...	0836	1028	1028	1.52	9.72	838	744	6.7	8.1	1,700	29.5	50.0
05...	0837	1028	1028	1.43	9.72	838	744	6.7	8.1	1,700	29.5	75.0
05...	0838	1028	1028	1.88	9.72	838	744	6.7	8.1	1,700	29.5	100
05...	0839	1028	1028	2.70	9.72	838	744	6.7	8.1	1,700	29.5	125
05...	0840	1028	1028	2.40	9.72	838	744	6.7	8.1	1,700	29.5	150
05...	0841	1028	1028	2.42	9.72	838	744	6.7	8.1	1,700	29.5	175
05...	0842	1028	1028	2.82	9.72	838	744	6.7	8.1	1,700	29.5	200
05...	0843	1028	1028	2.32	9.72	838	744	6.7	8.1	1,700	29.5	225
05...	0844	1028	1028	1.53	9.72	838	744	6.7	8.1	1,710	29.5	250

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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)
OCT													
08...	1400	1028	80020	8.32	234	725	8.5	105	8.0	5,260	25.3	22.5	770
NOV													
12...	1015	1028	80020	8.42	295	754	10.9	119	8.3	4,010	23.1	18.3	540
DEC													
10...	0850	1028	80020	7.93	155	760	--	--	8.4	4,300	3.0	3.6	600
JAN													
05...	1340	1028	80020	7.95	95	765	11.5	93	7.5	4,670	1.2	5.6	650
FEB													
10...	1055	1028	80020	8.62	337	762	11.1	89	8.2	6,210	2.5	5.1	710
MAR													
01...	0850	1028	80020	9.63	1,670	752	8.8	81	8.3	3,510	9.4	10.6	450
APR													
05...	1500	1028	80020	9.23	476	750	15.2	173	8.2	6,570	23.2	20.0	1,000
19...	1155	1028	80020	9.76	819	--	--	--	--	12,600	--	19.8	--
MAY													
11...	0925	1028	80020	9.40	840	747	5.6	67	8.0	3,570	23.4	22.5	520
JUN													
09...	0750	1028	80020	10.78	2,350	750	8.1	96	7.7	1,100	22.5	22.5	120
JUL													
12...	0900	1028	80020	11.78	3,450	748	5.7	75	7.2	1,460	26.2	28.5	150
AUG													
05...	0900	1028	80020	9.72	838	744	6.7	91	8.1	1,700	26.5	29.5	200
SEP													
01...	1300	1028	80020	9.72	903	752	6.3	82	8.1	3,580	28.2	27.1	500

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	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)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
08...	880	235	70.6	9.41	11	757	65	109	133	2	1,320	.4	7.1
NOV													
12...	660	165	59.8	8.20	10	568	65	118	140	2	974	.5	2.7
DEC													
10...	770	192	70.0	28.6	10	639	63	169	200	3	1,080	.5	4.1
JAN													
05...	810	202	74.8	8.43	10	656	63	165	198	1	1,190	.5	2.2
FEB													
10...	860	223	73.2	8.20	13	875	69	148	169	5	1,550	.4	.5
MAR													
01...	580	153	48.9	7.38	9	497	65	136	E160	E3	834	.4	1.8
APR													
05...	1,100	291	97.5	10.6	13	1,030	66	102	E120	E2	1,690	.4	5.9
19...	1,600	436	117	13.3	23	2,070	74	--	--	--	3,530	.5	3.5
MAY													
11...	630	162	55.1	7.79	10	555	65	110	130	2	797	.4	4.8
JUN													
09...	210	60.6	15.3	6.17	3	115	53	91	110	.0	182	.2	10.2
JUL													
12...	230	66.0	15.8	7.21	5	187	63	81	97	.0	297	.3	10.8
AUG													
05...	290	76.5	24.2	7.21	5	211	60	94	112	1	337	.3	6.7
SEP													
01...	620	166	50.0	8.78	10	560	66	124	148	2	880	.4	5.8

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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)
OCT													
08...	662	3,130	4.26	1,980	32	.88	.07	.056	--	--	<.016	--	<.002
NOV													
12...	467	2,320	3.15	1,840	23	.94	.02	.013	--	--	E.009	--	E.001
DEC													
10...	493	2,610	3.54	1,090	15	.96	.02	.018	--	--	<.016	.010	.003
JAN													
05...	536	2,770	3.76	710	10	.84	--	E.018	--	--	<.016	--	E.001
FEB													
10...	701	3,520	4.79	3,200	15	1.1	.04	.030	--	--	<.016	--	<.002
MAR													
01...	400	2,030	2.76	9,140	130	1.6	.02	.012	2.11	.48	.490	.046	.014
APR													
05...	859	4,050	5.50	5,200	26	.95	.06	.043	--	--	<.016	--	<.002
19...	1,300	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	441	2,090	2.84	4,740	118	.95	--	E.005	--	--	<.016	--	<.002
JUN													
09...	88.5	534	.73	3,390	397	1.6	.05	.041	1.05	.24	.251	.046	.014
JUL													
12...	148	784	1.07	7,300	157	1.4	.02	.015	2.80	.63	.639	.020	.006
AUG													
05...	178	898	1.22	2,030	68	1.1	--	E.007	--	--	<.016	--	<.002
SEP													
01...	458	2,200	3.00	5,370	132	1.0	.01	.010	--	--	<.016	--	<.002

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic nitrogen, water, unfltrd mg/L (00605)	Ortho-phosphate, water, fltrd, mg/L (00660)	Ortho-phosphate, 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)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)
OCT													
08...	.82	--	<.006	.011	.129	--	2.8	2	149	161	<.12	<.12	<.8
NOV													
12...	.93	--	<.006	.012	.129	--	2.0	2	126	129	<.08	<.08	<.8
DEC													
10...	.94	--	<.006	.009	.106	--	1.8	<2	121	132	<.08	E.05	<.8
JAN													
05...	--	--	E.003	.018	.117	--	2.1	3	127	120	E.04	E.04	<.8
FEB													
10...	1.1	--	<.006	.017	.123	--	1.7	E2	88	84	<.12	<.12	<.8
MAR													
01...	1.6	.159	.052	.079	.35	2.1	2.1	3	90	114	<.08	<.08	<.8
APR													
05...	.90	--	<.006	.010	.184	--	1.9	6	134	159	E.06	<.12	<.8
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	--	--	<.006	.012	.18	--	3.0	4	121	122	<.08	<.08	<.8
JUN													
09...	1.5	.123	.040	.059	.40	1.8	2.2	4	60	120	E.02	.09	<.8
JUL													
12...	1.4	.484	.158	.172	.46	2.1	4.0	5	102	210	<.04	.10	<.8
AUG													
05...	--	.350	.114	.134	.23	--	4.3	4	117	134	<.04	.05	<.8
SEP													
01...	.99	.080	.026	.041	.18	--	4.3	5	153	158	E.04	<.08	<.8

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recoverable, ug/L (01067)
OCT													
08...	<.8	3.1	8.6	<19	320	<.24	.55	7.4	113	<.02	<.02	3.41	10.3
NOV													
12...	<.8	2.7	6.5	35	250	<.16	.50	10.4	56	<.02	<.02	3.24	7.05
DEC													
10...	<.8	2.6	7.9	<6	230	<.16	.35	20.6	44	<.02	<.02	4.49	10.3
JAN													
05...	<.8	6.8	7.4	26	140	E.08	.20	48.6	66	<.02	<.02	7.69	9.18
FEB													
10...	<.8	3.1	5.6	<19	180	E.19	.18	27.2	41	<.02	<.02	3.82	10.1
MAR													
01...	1.7	2.9	6.1	19	3,280	.16	2.33	3.4	116	<.02	<.02	4.25	9.27
APR													
05...	E.4	6.0	6.8	<32	390	.29	.51	14.6	63	<.02	<.02	4.76	7.38
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	1.3	4.4	5.9	<19	1,130	<.16	1.21	5.5	95	<.02	<.02	1.47	6.28
JUN													
09...	5.5	2.3	8.5	26	4,590	E.07	6.27	9.9	297	<.02	E.01	2.32	10.4
JUL													
12...	6.8	3.3	21.1	E6	5,740	<.08	7.74	.4	277	<.02	E.01	2.63	13.5
AUG													
05...	1.6	3.1	4.7	E4	980	<.08	1.26	1.2	70	<.02	<.02	3.15	4.76
SEP													
01...	1.6	3.1	8.5	<19	1,180	.32	1.31	8.1	130	<.02	<.02	4.78	11.4

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Aldrin, water, unfltrd ug/L (39330)	alpha-Endosulfan, water, unfltrd ug/L (34361)	alpha-HCH, water, unfltrd ug/L (39337)	alpha-HCH-d6, surrog, Sch1608 water, unfltrd pct rcv (99778)	Aroclor 1016 + 1242, water, unfltrd ug/L (81648)	Aroclor 1221, water, unfltrd ug/L (39488)	Aroclor 1232, water, unfltrd ug/L (39492)
OCT													
08...	<1.2	2.4	<.6	<.48	2.9	6	--	--	--	--	--	--	--
NOV													
12...	<1	--	<.4	<.32	5.2	9	<.04	<.1	<.03	69.3	<.1	<1	<.1
DEC													
10...	--	2.5	<.4	<.32	2.1	5	--	--	--	--	--	--	--
JAN													
05...	--	1.4	<.4	<.32	3.5	5	--	--	--	--	--	--	--
FEB													
10...	4	4	<.6	<.48	3.3	<6	--	--	--	--	--	--	--
MAR													
01...	1	2	<.4	<.32	3.2	10	--	--	--	--	--	--	--
APR													
05...	<1	3	<.6	<.48	6.2	E4	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	1	3	<.4	<.32	1.9	6	<.04	<.1	<.03	E15.3	<.1	<1	<.1
JUN													
09...	<1	<1	<.2	<.16	1.7	25	--	--	--	--	--	--	--
JUL													
12...	<1	<1	<.2	<.16	2.3	23	--	--	--	--	--	--	--
AUG													
05...	<1	<1	<.2	<.16	1.3	5	--	--	--	--	--	--	--
SEP													
01...	1	1	<.4	<.32	2.4	10	--	--	--	--	--	--	--

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endo-sulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlor-dane, tech-nical, water, unfltrd ug/L (39350)	cis-Chlor-dane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Diel-drin, water, unfltrd ug/L (39380)	Endo-sulfan sulfate water unfltrd ug/L (34351)	Endrin alde-hyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Hepta-chlor epoxide water unfltrd ug/L (39420)
OCT													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
12...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
DEC													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUN													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Hepta-chlor, water, unfltrd ug/L (39410)	Isodrin surrog, Sch1608 wat unf percent recovry (90570)	Lindane water, unfltrd ug/L (39340)	p,p'-DDD, water, unfltrd ug/L (39310)	p,p'-DDE, water, unfltrd ug/L (39320)	p,p'-DDT, water, unfltrd ug/L (39300)	PCB 207, surrog, Sch1608 water, unfltrd pct rcv (99781)	Toxa-phene, water, unfltrd ug/L (39400)	trans-Chlor-dane, water, unfltrd ug/L (39065)
OCT									
08...	--	--	--	--	--	--	--	--	--
NOV									
12...	<.03	79.7	<.03	<.1	<.04	<.1	74.7	<2	<.1
DEC									
10...	--	--	--	--	--	--	--	--	--
JAN									
05...	--	--	--	--	--	--	--	--	--
FEB									
10...	--	--	--	--	--	--	--	--	--
MAR									
01...	--	--	--	--	--	--	--	--	--
APR									
05...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
MAY									
11...	<.03	E14.1	<.03	<.1	<.04	<.1	E9.4	<2	<.1
JUN									
09...	--	--	--	--	--	--	--	--	--
JUL									
12...	--	--	--	--	--	--	--	--	--
AUG									
05...	--	--	--	--	--	--	--	--	--
SEP									
01...	--	--	--	--	--	--	--	--	--

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

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	5,050	4,910	4,970	4,990	4,840	4,940	4,420	4,340	4,400	4,880	4,710	4,820
2	5,100	4,960	5,060	4,940	4,880	4,910	4,680	4,380	4,560	4,750	4,680	4,720
3	5,050	4,880	4,970	4,920	4,810	4,860	4,710	4,470	4,590	4,710	4,640	4,680
4	4,910	4,800	4,870	4,820	4,690	4,750	4,470	4,370	4,420	4,670	4,620	4,640
5	5,050	4,820	4,920	4,710	4,120	4,580	4,500	4,380	4,440	4,780	4,620	4,670
6	5,160	5,000	5,060	4,360	4,120	4,270	4,520	4,460	4,490	4,880	4,730	4,830
7	5,260	5,100	5,190	4,390	4,130	4,260	4,490	4,410	4,430	4,950	4,880	4,910
8	6,490	5,220	5,520	4,330	4,050	4,210	4,440	4,330	4,390	5,000	4,910	4,960
9	6,510	6,270	6,390	4,050	3,840	3,920	4,350	4,290	4,320	5,020	4,980	5,010
10	6,270	6,020	6,130	3,990	3,850	3,900	4,340	4,240	4,310	5,010	3,230	3,680
11	6,020	5,860	5,910	4,010	3,950	3,980	4,330	4,230	4,280	3,260	3,180	3,220
12	5,860	5,660	5,750	4,200	3,960	4,060	4,340	4,080	4,260	3,290	3,210	3,250
13	5,730	5,630	5,670	4,290	4,200	4,230	4,350	4,120	4,250	3,400	3,290	3,350
14	5,780	5,700	5,740	4,540	4,290	4,420	4,380	4,290	4,350	3,360	3,290	3,320
15	5,920	5,760	5,850	4,490	4,130	4,290	4,290	4,130	4,200	3,340	3,280	3,310
16	6,010	5,900	5,960	4,130	3,730	3,920	4,290	4,240	4,270	3,330	3,110	3,260
17	6,080	6,000	6,040	3,730	3,570	3,650	4,320	4,260	4,280	3,610	3,110	3,310
18	6,020	5,700	5,850	3,580	3,410	3,480	4,350	4,240	4,300	3,620	3,430	3,570
19	5,720	5,450	5,560	3,540	3,410	3,460	4,250	4,110	4,190	3,450	3,310	3,390
20	5,450	5,260	5,360	4,150	3,540	3,860	4,260	4,150	4,200	3,430	3,360	3,400
21	5,260	5,020	5,140	4,410	4,150	4,300	4,360	4,260	4,300	3,600	3,420	3,520
22	5,020	4,910	4,970	4,560	4,410	4,490	4,450	4,320	4,380	3,860	3,600	3,700
23	5,040	4,930	4,980	4,610	4,490	4,560	4,700	4,440	4,580	4,200	3,850	3,930
24	5,110	5,010	5,050	4,640	4,570	4,600	4,770	4,540	4,710	5,070	4,200	4,790
25	5,250	5,060	5,140	4,600	4,330	4,490	4,800	4,750	4,780	5,890	4,530	5,290
26	5,290	5,180	5,240	4,350	4,260	4,290	4,800	4,730	4,760	5,520	4,190	4,540
27	5,240	5,140	5,200	4,420	4,290	4,360	4,770	3,790	4,630	5,770	4,570	5,130
28	5,220	5,130	5,170	4,450	4,380	4,420	4,520	3,850	4,350	6,370	5,770	6,140
29	5,150	5,070	5,120	4,400	4,300	4,350	4,740	4,490	4,610	6,570	6,350	6,430
30	5,150	5,060	5,100	4,410	4,320	4,360	4,860	4,730	4,780	7,800	6,520	6,800
31	5,060	4,950	5,010	---	---	---	4,900	4,830	4,870	8,290	7,800	8,180
MONTH	6,510	4,800	5,380	4,990	3,410	4,270	4,900	3,790	4,440	8,290	3,110	4,480
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	e8,050	3,550	2,630	e3,400	---	---	e5,070	3,810	1,450	2,590
2	---	---	e8,000	3,300	2,630	3,030	---	---	e5,180	2,010	1,450	1,710
3	---	---	e7,500	3,460	3,180	3,310	---	---	e5,590	1,910	1,330	1,570
4	7,030	6,340	6,700	3,710	3,230	3,440	---	---	e5,790	2,820	1,460	2,210
5	6,400	6,320	6,350	3,730	2,120	3,240	---	---	e6,050	3,400	2,820	3,230
6	6,420	6,240	6,330	3,420	975	2,030	---	---	e6,680	3,500	3,160	3,280
7	6,450	6,240	6,370	3,000	975	2,440	---	---	e5,890	3,740	3,500	3,660
8	6,420	6,340	6,380	3,000	2,290	2,690	---	---	e5,380	3,820	3,600	3,690
9	6,380	6,240	6,310	2,330	2,240	2,280	---	---	e5,090	3,980	3,600	3,840
10	6,240	6,070	6,150	2,440	2,260	2,320	---	---	e4,730	3,600	3,500	3,540
11	6,120	5,520	5,810	---	---	e2,320	---	---	e4,400	3,620	3,120	3,440
12	5,600	5,460	5,550	---	---	e2,440	---	---	e4,250	3,390	3,110	3,190
13	5,460	5,300	5,350	---	---	e2,540	4,820	3,900	4,130	3,830	3,390	3,600
14	5,330	5,010	5,170	---	---	e2,630	4,020	3,860	3,950	4,630	3,830	4,260
15	5,160	5,010	5,080	---	---	e2,740	4,480	3,980	4,200	5,000	4,630	4,880
16	5,210	5,110	5,170	---	---	e2,990	6,710	4,480	5,560	5,000	4,930	4,980
17	5,230	5,080	5,130	---	---	e3,250	9,400	6,710	8,210	5,030	4,810	4,910
18	5,300	5,220	5,250	---	---	e3,700	11,300	9,380	10,000	5,120	4,570	4,900
19	5,300	5,160	5,240	---	---	e3,970	12,600	11,300	12,300	4,880	4,410	4,730
20	5,280	5,110	5,220	---	---	e4,230	---	---	e11,500	4,410	3,960	4,070
21	5,300	5,100	5,220	---	---	e4,300	---	---	e9,500	4,300	4,000	4,120
22	5,350	5,000	5,220	---	---	e4,370	---	---	e8,100	4,440	4,300	4,370
23	5,180	4,820	5,030	---	---	e4,460	7,600	7,100	7,480	4,480	4,440	4,460
24	---	---	e4,860	---	---	e4,480	7,100	4,050	5,690	4,670	4,440	4,530
25	---	---	e4,700	---	---	e4,570	5,960	1,840	4,650	4,940	4,660	4,780
26	---	---	e4,400	---	---	e4,620	1,840	1,580	1,640	5,140	4,940	5,070
27	---	---	e4,100	---	---	e4,660	2,060	1,720	1,930	5,330	5,090	5,210
28	---	---	e3,800	---	---	e4,710	2,230	1,700	1,890	5,090	4,760	4,970
29	---	---	e3,600	---	---	e4,770	3,510	2,230	2,820	5,260	4,970	5,120
30	---	---	---	---	---	e4,890	4,570	3,510	4,060	5,370	5,080	5,210
31	---	---	---	---	---	e4,960	---	---	---	5,610	5,350	5,430
MONTH	7,030	4,820	5,590	3,730	975	3,540	12,600	1,580	5,720	5,610	1,330	4,050

07316000 RED RIVER NEAR GAINESVILLE, 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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	e5,520	2,320	780	1,370	1,400	934	1,080	4,100	3,540	3,720
2	---	---	e4,500	3,230	1,240	1,970	1,420	1,070	1,170	4,070	2,880	3,510
3	---	---	e4,000	1,870	849	1,200	1,260	1,080	1,140	2,900	2,580	2,820
4	---	---	e3,500	---	---	e1,600	1,550	1,260	1,400	2,710	2,300	2,430
5	---	---	e3,000	---	---	e1,100	2,050	1,550	1,780	5,680	2,760	4,240
6	---	---	e2,500	1,560	828	1,040	2,470	2,050	2,290	5,640	3,420	4,350
7	---	---	e2,000	3,560	1,560	2,410	2,680	2,470	2,580	3,550	3,410	3,470
8	---	---	e1,500	4,690	3,160	4,060	2,970	2,680	2,840	3,570	3,470	3,520
9	---	---	e1,100	---	---	e2,200	3,150	2,960	3,050	3,700	3,460	3,570
10	1,550	963	1,280	---	---	e2,000	3,250	3,150	3,220	4,030	3,700	3,920
11	1,320	980	1,100	---	---	e1,800	3,330	3,250	3,300	4,020	3,770	3,850
12	1,100	824	991	---	---	e1,600	3,310	2,880	3,150	4,560	4,020	4,410
13	866	821	851	2,950	2,260	2,650	3,260	2,880	3,040	4,960	4,560	4,720
14	1,020	859	919	2,260	1,690	1,900	3,810	3,260	3,530	4,990	4,610	4,910
15	2,490	1,020	1,420	1,710	1,660	1,680	4,090	3,680	3,940	4,670	4,590	4,630
16	7,760	2,330	5,240	1,960	1,710	1,820	4,050	3,940	3,970	4,610	4,310	4,490
17	6,200	5,390	5,680	2,540	1,960	2,210	---	---	e4,200	4,310	4,140	4,220
18	5,770	3,660	5,190	3,540	2,540	3,000	---	---	e4,280	4,220	4,140	4,190
19	---	---	e2,750	4,020	3,540	3,830	---	---	e4,350	4,410	4,210	4,310
20	---	---	e2,200	4,100	4,020	4,070	3,180	1,890	2,200	4,480	4,410	4,460
21	---	---	e1,750	4,110	4,030	4,080	1,920	1,840	1,880	4,490	4,460	4,470
22	2,190	825	1,620	4,040	3,940	4,000	2,130	1,860	2,040	4,500	4,460	4,480
23	2,050	985	1,450	4,000	3,920	3,960	2,000	1,920	1,950	4,540	4,500	4,520
24	2,520	1,500	2,070	4,090	3,960	4,040	2,510	2,000	2,170	4,570	4,500	4,550
25	1,720	1,430	1,520	4,380	4,090	4,220	2,840	2,510	2,730	4,550	4,500	4,530
26	3,990	1,720	2,890	4,380	4,250	4,320	2,920	2,580	2,740	4,560	4,430	4,510
27	4,100	3,090	3,550	---	---	e4,280	3,730	2,920	3,190	4,740	4,490	4,640
28	5,740	3,370	4,540	---	---	e4,180	4,520	3,350	4,010	4,900	4,740	4,830
29	6,900	5,460	6,330	3,800	1,520	3,000	4,940	4,520	4,770	5,000	4,880	4,940
30	5,460	1,130	4,090	2,120	1,430	1,650	4,830	4,010	4,400	5,000	4,950	4,970
31	---	---	---	2,010	1,030	1,480	4,030	3,640	3,850	---	---	---
MONTH	7,760	821	2,840	4,690	780	2,670	4,940	934	2,910	5,680	2,300	4,210

e Estimated

07316000 RED RIVER NEAR GAINESVILLE, 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	22.0	19.3	20.5	23.3	18.7	20.7	12.8	8.3	10.5	13.7	10.4	12.1
2	19.5	17.6	18.5	23.7	19.3	21.4	11.5	9.7	10.5	18.3	12.6	15.2
3	21.1	16.7	18.7	23.3	20.8	21.8	13.1	9.9	11.0	18.5	15.3	16.9
4	22.7	17.6	20.1	24.5	20.3	22.0	12.5	7.5	9.9	17.2	8.1	13.8
5	21.9	20.3	21.1	20.9	13.7	17.2	9.8	6.0	7.8	8.1	4.2	5.9
6	23.5	20.7	21.7	13.7	11.5	12.3	9.1	3.7	6.3	5.1	1.2	3.2
7	25.5	20.5	22.7	11.5	10.2	10.8	9.7	4.7	7.1	3.9	1.3	2.5
8	25.2	20.9	23.1	12.2	10.9	11.6	12.8	6.8	9.8	9.7	2.8	6.1
9	26.1	22.8	24.1	12.9	11.7	12.2	12.7	6.4	10.8	9.0	4.4	6.7
10	26.5	22.8	24.2	15.4	12.4	13.8	8.4	3.6	5.8	9.4	4.4	6.7
11	24.9	21.2	23.2	20.1	14.8	17.2	8.2	3.0	5.5	10.3	5.3	7.6
12	23.4	20.9	22.0	20.2	17.0	18.7	5.9	4.3	5.3	11.2	7.2	8.9
13	25.4	20.1	22.4	17.0	12.5	14.4	6.0	4.1	5.5	13.3	9.2	10.8
14	23.0	18.6	20.8	12.5	11.4	11.7	7.7	2.4	5.1	13.9	9.9	11.5
15	21.0	16.0	18.5	16.7	11.6	13.9	12.1	5.7	8.5	12.0	10.2	11.2
16	22.8	16.5	19.5	17.7	12.5	15.2	9.2	5.6	7.4	12.0	11.1	11.5
17	21.4	17.8	19.7	18.9	16.4	17.7	8.7	3.1	5.9	12.9	11.4	12.1
18	22.1	15.4	18.7	17.3	13.2	15.6	9.3	4.3	6.5	11.4	6.5	8.9
19	23.1	16.6	19.7	15.9	11.3	13.5	9.2	3.8	6.4	8.4	4.6	6.4
20	24.1	17.6	20.8	16.1	11.3	13.5	9.4	3.9	6.5	8.2	4.7	6.3
21	25.3	18.7	21.9	16.5	11.3	13.9	12.2	5.7	8.9	8.7	5.2	6.8
22	25.1	18.8	21.9	18.8	14.1	16.4	14.3	10.5	12.1	10.1	5.7	7.7
23	24.7	17.9	21.3	17.9	9.2	13.5	11.4	8.1	9.6	10.6	6.3	8.4
24	24.4	18.5	21.3	10.7	6.7	8.5	10.2	5.5	7.8	11.5	10.1	10.8
25	21.3	14.6	18.5	9.9	6.0	7.9	10.4	6.1	8.1	14.0	10.9	12.2
26	14.7	12.0	13.3	13.3	8.0	10.6	11.4	7.8	9.3	12.4	6.3	9.9
27	18.0	10.6	14.1	11.8	8.3	10.4	14.9	11.4	13.5	7.2	3.8	5.5
28	18.8	13.3	15.9	10.2	6.0	8.0	13.8	10.1	12.6	7.9	3.9	5.8
29	19.4	13.0	16.2	10.6	5.6	7.9	11.0	7.1	9.0	8.7	6.1	7.3
30	22.0	15.3	18.5	12.0	5.9	8.9	9.8	5.3	7.5	7.4	5.1	6.3
31	24.3	19.7	21.4	---	---	---	10.4	5.5	8.0	6.2	4.3	5.2
MONTH	26.5	10.6	20.1	24.5	5.6	14.0	14.9	2.4	8.3	18.5	1.2	8.7
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	14.7	10.6	13.4	---	---	---	21.9	16.9	18.6
2	---	---	---	14.0	11.5	12.9	---	---	---	18.2	15.4	16.8
3	---	---	---	14.8	13.2	13.9	---	---	---	20.5	17.3	18.7
4	6.6	5.0	5.7	16.8	14.3	15.5	---	---	---	22.2	18.6	20.3
5	6.2	4.8	5.4	17.1	11.6	15.2	---	---	---	24.0	19.5	21.7
6	6.9	4.4	5.5	16.4	12.5	15.0	---	---	---	25.2	21.3	23.2
7	8.2	3.0	5.4	15.1	11.8	14.1	---	---	---	26.0	22.6	24.0
8	6.4	4.0	5.3	13.6	12.7	13.2	---	---	---	26.9	23.1	24.8
9	6.9	5.7	6.4	14.0	11.6	13.1	---	---	---	25.4	22.9	24.1
10	8.8	5.4	7.1	13.9	12.3	13.2	---	---	---	25.2	22.2	23.6
11	7.8	6.8	7.3	---	---	---	---	---	---	26.2	22.5	24.2
12	8.1	4.7	6.4	---	---	---	---	---	---	27.0	23.1	24.8
13	6.4	3.5	5.1	---	---	---	16.3	11.9	14.1	26.0	22.4	24.7
14	5.4	3.7	4.8	---	---	---	18.3	12.6	15.3	22.4	19.1	20.6
15	8.1	3.7	5.6	---	---	---	21.1	14.9	17.8	23.8	18.5	20.8
16	10.2	4.5	7.2	---	---	---	23.2	18.0	20.3	25.8	20.6	23.1
17	12.5	7.1	9.5	---	---	---	23.8	20.1	21.8	26.5	22.4	24.3
18	12.8	7.9	10.2	---	---	---	22.5	20.3	21.0	27.9	23.7	25.7
19	15.4	9.7	12.4	---	---	---	20.6	19.3	20.0	29.4	24.9	26.9
20	15.9	11.9	13.8	---	---	---	---	---	---	29.8	25.4	27.5
21	15.7	10.3	12.9	---	---	---	---	---	---	28.5	25.3	27.0
22	16.2	10.9	13.5	---	---	---	---	---	---	27.4	24.2	25.8
23	14.3	12.7	13.6	---	---	---	24.3	22.3	23.3	29.1	23.5	26.0
24	---	---	---	---	---	---	22.9	20.3	21.1	28.0	24.7	26.3
25	---	---	---	---	---	---	22.1	19.1	20.7	26.7	24.0	24.8
26	---	---	---	---	---	---	22.6	20.1	21.3	28.4	23.3	25.6
27	---	---	---	---	---	---	24.1	20.2	22.1	27.1	24.6	25.9
28	---	---	---	---	---	---	23.2	21.0	22.0	31.0	23.8	27.1
29	---	---	---	---	---	---	22.9	19.7	21.2	28.8	26.2	27.1
30	---	---	---	---	---	---	24.5	21.3	22.5	30.6	24.6	27.3
31	---	---	---	---	---	---	---	---	---	30.1	25.0	27.6
MONTH	16.2	3.0	8.2	17.1	10.6	13.9	24.5	11.9	20.3	31.0	15.4	24.2

07316000 RED RIVER NEAR GAINESVILLE, 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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	30.7	24.8	27.6	26.9	24.2	25.4	31.0	27.8	29.2	29.1	25.6	27.5
2	30.5	25.8	27.7	27.9	26.3	27.0	32.9	29.1	30.9	29.5	25.8	27.6
3	28.6	23.8	26.1	28.5	26.9	27.7	33.9	29.7	31.8	28.5	24.6	26.7
4	29.8	24.5	27.1	29.6	28.0	28.7	33.4	30.1	31.7	28.8	25.7	27.2
5	27.7	25.6	26.6	29.7	26.9	28.7	33.3	29.5	31.4	30.1	26.1	28.0
6	28.5	24.5	26.2	29.3	28.0	28.6	31.7	28.6	30.1	29.4	26.2	27.8
7	26.0	24.0	25.0	29.2	27.7	28.4	30.7	27.3	29.1	27.3	23.5	25.3
8	25.4	23.7	24.2	30.3	27.8	29.0	29.1	26.7	27.5	26.9	21.6	24.2
9	23.7	21.9	22.7	30.7	28.8	29.7	32.0	25.8	28.6	27.5	21.4	24.4
10	24.2	21.4	23.0	---	---	---	33.6	27.5	30.4	28.1	22.3	25.1
11	26.0	23.7	24.7	---	---	---	31.4	27.2	28.9	28.9	23.5	26.1
12	27.3	24.9	26.1	---	---	---	30.5	24.1	27.1	29.7	24.5	27.0
13	28.2	25.9	27.0	32.9	29.2	31.0	29.9	25.6	27.5	29.2	24.6	27.0
14	29.8	26.1	27.9	33.6	29.5	31.6	27.9	25.2	26.3	28.6	25.6	26.9
15	28.9	27.0	27.9	34.0	29.8	31.9	26.7	24.1	25.5	29.5	24.9	26.9
16	30.3	25.8	28.2	33.9	31.0	32.4	28.5	23.9	26.0	32.1	26.3	28.9
17	31.1	27.0	28.9	33.0	30.4	31.7	---	---	---	32.3	27.4	29.7
18	29.8	26.4	28.3	32.4	28.2	30.3	---	---	---	30.8	27.3	29.1
19	---	---	24.9	33.5	27.7	30.5	---	---	---	29.2	26.2	27.6
20	---	---	---	33.6	28.9	31.2	27.3	24.8	25.8	27.9	23.7	25.8
21	---	---	---	32.8	29.0	31.0	27.5	24.2	25.9	27.8	23.5	25.5
22	25.7	23.5	24.8	32.9	28.4	30.6	29.1	25.0	26.8	27.8	23.5	25.4
23	28.3	24.0	25.9	33.2	28.7	31.0	30.2	26.0	28.0	27.0	23.6	25.3
24	30.5	25.8	27.9	32.2	29.0	30.4	31.2	26.6	28.8	27.4	23.8	25.5
25	29.4	27.7	28.7	29.0	25.0	26.6	30.8	27.0	28.9	28.3	23.5	25.9
26	28.4	26.7	27.4	29.4	23.5	26.1	31.3	27.0	29.0	28.2	23.2	25.7
27	27.6	25.4	26.5	---	---	---	30.7	26.8	28.6	27.8	22.5	25.2
28	28.9	25.7	27.0	---	---	---	29.0	26.0	27.5	25.7	21.9	23.7
29	27.8	26.2	26.9	27.1	23.6	24.9	30.7	25.6	27.9	26.5	20.0	23.1
30	26.9	24.5	25.7	28.0	24.4	26.1	30.2	25.4	27.8	23.7	20.2	22.1
31	---	---	---	29.1	26.2	27.5	30.6	25.1	27.8	---	---	---
MONTH	31.1	21.4	26.5	34.0	23.5	29.2	33.9	23.9	28.4	32.3	20.0	26.2

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07316500 WASHITA RIVER NEAR CHEYENNE, OK

LOCATION.--Lat 35°37'35", long 99°40'05", in SE $^1/_4$ sec.5, T.13 N., R.23 W., Roger Mills County, Hydrologic Unit 11130301, on left bank on downstream side of bridge on U.S. Highway 283, 0.5 mi downstream from Sergeant Major Creek, 1.0 mi north of Cheyenne, 5.2 mi upstream from Dead Indian Creek, and at mile 543.9.

DRAINAGE AREA.--794 mi^2.

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

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,900.98 ft above sea level. May 1, 1938, to Nov. 16, 1946, and Oct. 1, 1947, to Jan. 11, 1948, nonrecording gage at site 50 ft upstream and datum 5.00 ft higher. Jan. 12, 1948 to Dec. 31, 1976, at site 50 ft upstream and datum 5.00 ft higher. Jan. 1, 1977, to Dec. 20, 1979, at site 50 ft upstream at present datum.

REMARKS.--Records good except for estimated periods, which are poor. Flow regulated since 1961 by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at site.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 3, 1934, reached a stage of 1.7 ft lower than that in 1954, at site on upstream side of highway fill (at old bridge 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	7.2	8.5	16	21	28	42	35	31	2.6	186	1.2	15
2	7.9	8.8	16	21	28	42	33	29	2.4	74	1.0	15
3	7.1	9.7	17	21	28	44	31	27	2.2	50	0.81	13
4	7.6	11	17	21	29	90	31	26	2.0	35	0.64	12
5	7.7	11	17	e18	31	139	30	24	2.0	28	0.55	10
6	7.5	11	17	e16	32	122	31	23	2.5	25	1.2	8.6
7	7.5	11	18	e17	32	96	49	22	2.0	22	1.1	7.6
8	13	11	18	23	31	80	56	21	1.5	20	1.3	7.1
9	28	11	19	e20	30	70	56	20	2.3	17	1.5	6.5
10	16	12	20	e20	30	64	56	20	3.1	16	2.3	6.0
11	13	12	20	23	29	60	53	17	2.4	14	3.4	5.3
12	11	13	20	23	28	56	50	15	1.6	13	3.1	4.6
13	10	13	20	23	28	54	48	14	1.2	12	3.0	3.9
14	9.2	15	21	23	28	52	45	12	0.96	10	14	3.3
15	9.0	16	21	23	28	51	43	11	0.80	8.0	134	2.9
16	8.7	16	21	24	29	49	38	11	0.67	5.7	63	2.5
17	8.3	16	20	37	29	48	34	11	1.1	4.6	36	2.2
18	8.3	16	21	46	29	46	35	9.1	0.74	3.5	27	1.9
19	8.2	15	21	50	30	46	36	7.3	1.2	2.6	23	1.7
20	8.1	14	21	42	29	44	36	7.0	1.8	2.0	22	1.5
21	7.8	14	21	37	27	43	33	6.1	3.5	1.7	20	1.7
22	7.6	15	22	34	26	41	31	5.6	14	1.4	18	2.1
23	8.0	15	23	33	28	40	31	4.9	13	1.3	16	7.5
24	7.7	15	22	31	27	40	33	3.5	14	1.4	15	3.7
25	7.3	15	22	31	27	41	32	3.2	7.4	1.7	14	2.6
26	7.8	16	22	30	27	40	32	4.3	4.3	1.7	13	2.4
27	8.0	15	22	28	26	41	34	4.1	2.2	1.3	11	2.4
28	7.8	15	22	29	26	43	31	3.3	6.0	2.0	9.2	2.2
29	8.2	16	21	28	39	40	30	3.6	8.2	2.3	8.2	2.2
30	8.0	16	21	28	---	37	32	3.2	11	1.8	13	2.2
31	8.2	---	21	28	---	36	---	2.8	---	1.5	18	---
TOTAL	289.7	403.0	620	849	839	1,737	1,145	402.0	118.67	566.5	495.50	159.6
MEAN	9.35	13.4	20.0	27.4	28.9	56.0	38.2	13.0	3.96	18.3	16.0	5.32
MAX	28	16	23	50	39	139	56	31	14	186	134	15
MIN	7.1	8.5	16	16	26	36	30	2.8	0.67	1.3	0.55	1.5
AC-FT	575	799	1,230	1,680	1,660	3,450	2,270	797	235	1,120	983	317

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

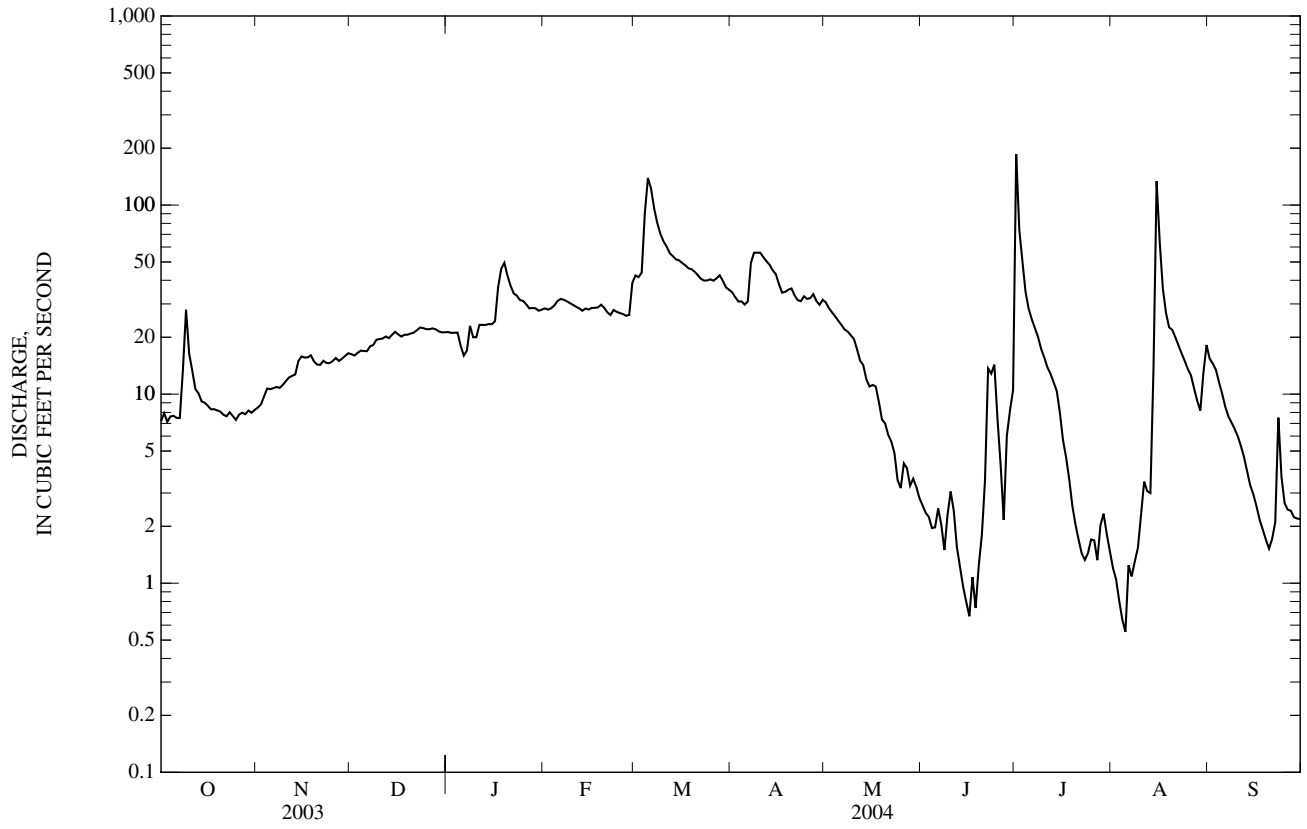
MEAN	10.5	11.1	13.2	16.7	21.1	28.5	33.5	48.9	40.4	9.16	5.40	5.73
MAX	82.5	64.3	67.7	80.7	71.0	138	146	348	203	61.7	32.8	44.7
(WY)	(2003)	(1987)	(1998)	(1998)	(2001)	(1998)	(1997)	(1977)	(1982)	(1982)	(1995)	(1997)
MIN	0.00	0.00	0.00	0.03	1.50	2.22	1.08	0.00	0.01	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1973)	(1973)	(1967)	(1971)	(1971)	(1970)	(1964)	(1963)	(1964)

e Estimated

07316500 WASHITA RIVER NEAR CHEYENNE, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	11,434.82		7,624.97			
ANNUAL MEAN	31.3		20.8		a20.3	
HIGHEST ANNUAL MEAN					64.0	1997
LOWEST ANNUAL MEAN					2.60	1972
HIGHEST DAILY MEAN	808	Aug 30	186	Jul 1	1,560	Apr 23, 1990
LOWEST DAILY MEAN	0.04	Aug 28	0.55	Aug 5	0.00	most years
ANNUAL SEVEN-DAY MINIMUM	0.26	Aug 23	0.93	Aug 1	0.00	Oct 1, 1961
MAXIMUM PEAK FLOW			412	Aug 15	b7,250	Apr 22, 1990
MAXIMUM PEAK STAGE			11.51	Aug 15	c16.60	Apr 22, 1990
ANNUAL RUNOFF (AC-FT)	22,680		15,120		14,730	
10 PERCENT EXCEEDS	49		42		46	
50 PERCENT EXCEEDS	22		16		8.3	
90 PERCENT EXCEEDS	6.0		2.0		0.00	

a Prior to regulation, water years 1938-60, 41.7 ft^3/s,
b Maximum discharge for period of record 69,800 ft^3/s, Apr. 29, 1954, from rating curve extended above 27,000 ft^3/s on basis of contracted opening.
c Maximum gage-height for period of record, 20.24 ft, Apr. 29, 1954, present datum.



07324200 WASHITA RIVER NEAR HAMMON, OK

LOCATION.--Lat 35°39'23", long 99°18'21", on west line of sec.26, T.14 N., R.20 W., Custer County, Hydrologic Unit 11130301, on right bank near county road bridge, 2.2 mi downstream from Quartermaster Creek, 4.7 mi northeast of Hammon, and at mile 494.5.

DRAINAGE AREA.--1,387 mi^2.

PERIOD OF RECORD.--October 1969 to September 1987, October 1989 to current year.

REVISED RECORD.--OK-92-2: 1987.

GAGE.--Water-stage recorder. Datum of gage is 1,643.22 ft above sea level.

REMARKS.--Records good. Flow regulated since 1961 by numerous flood-retarding structures. U.S. Geological Survey satellite telemeter at station.

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	14	22	29	43	60	54	48	7.2	384	5.3	30
2	14	15	22	29	41	64	51	48	6.6	256	4.7	24
3	13	16	22	29	42	64	49	45	6.5	117	3.4	21
4	13	16	22	29	44	169	48	43	6.3	80	2.8	20
5	14	16	23	28	46	512	47	41	6.1	61	2.6	18
6	14	16	23	e20	47	248	46	38	7.0	52	2.4	16
7	14	16	23	e22	47	200	66	37	6.2	45	2.3	15
8	14	16	24	e22	47	160	78	35	5.1	41	2.4	13
9	101	17	25	e26	47	133	77	34	5.1	37	3.5	12
10	41	18	25	e27	46	116	88	33	5.6	33	3.2	11
11	29	19	25	31	45	102	83	31	5.4	30	2.4	10
12	26	19	e23	32	44	94	78	30	4.8	27	2.1	9.1
13	24	19	e24	32	43	89	75	28	3.9	23	2.5	8.1
14	22	20	28	32	43	86	72	27	3.3	22	3.0	6.7
15	21	21	27	32	43	81	66	26	2.4	20	99	6.1
16	20	22	27	33	43	79	62	25	1.9	18	193	6.1
17	19	22	27	49	43	76	57	24	2.1	15	81	5.7
18	18	21	27	65	43	73	54	22	2.2	13	51	4.4
19	17	21	27	64	43	70	52	20	5.3	12	41	3.4
20	17	21	27	64	43	67	51	17	2.4	10	39	2.9
21	16	21	27	58	43	65	51	15	4.0	8.6	36	3.0
22	15	21	28	53	42	64	49	14	72	7.7	32	3.4
23	15	21	28	49	42	61	48	13	36	7.9	28	75
24	15	20	29	48	43	60	49	12	19	9.1	26	43
25	14	20	30	47	43	59	48	11	16	7.6	23	18
26	14	21	30	45	42	59	48	9.7	16	7.0	21	12
27	14	21	30	43	42	61	48	9.7	13	6.5	19	9.5
28	15	21	29	42	41	71	47	9.3	12	6.5	17	8.2
29	15	21	29	42	47	67	46	9.1	18	7.1	15	7.4
30	15	21	29	e40	---	63	45	8.3	41	6.4	18	7.2
31	15	---	29	42	---	58	---	8.1	---	6.1	49	---
TOTAL	628	573	811	1,204	1,268	3,231	1,733	771.2	342.4	1,376.5	830.6	429.2
MEAN	20.3	19.1	26.2	38.8	43.7	104	57.8	24.9	11.4	44.4	26.8	14.3
MAX	101	22	30	65	47	512	88	48	72	384	193	75
MIN	13	14	22	20	41	58	45	8.1	1.9	6.1	2.1	2.9
AC-FT	1,250	1,140	1,610	2,390	2,520	6,410	3,440	1,530	679	2,730	1,650	851

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

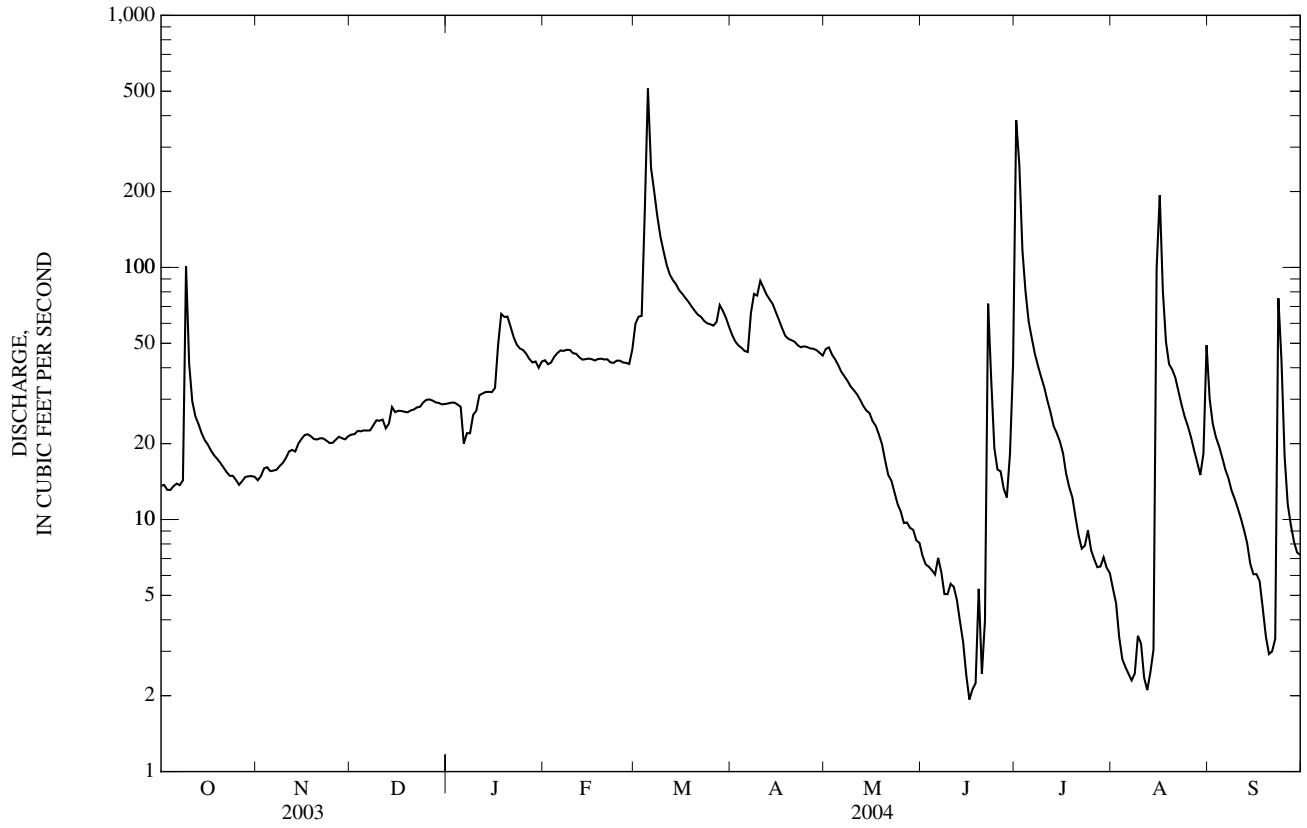
MEAN	38.6	42.2	37.1	45.1	53.2	78.2	94.5	155	128	37.3	28.0	34.4
MAX	384	253	258	342	299	548	528	755	502	158	170	450
(WY)	(1987)	(1987)	(1998)	(1998)	(1998)	(1998)	(1997)	(1982)	(1997)	(1997)	(1997)	(1997)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00
(WY)	(1973)	(1972)	(1973)	(1973)	(1972)	(1972)	(1972)	(1971)	(1972)	(1970)	(1972)	(1976)

e Estimated

07324200 WASHITA RIVER NEAR HAMMON, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	19,979.9		13,197.9			
ANNUAL MEAN	54.7		36.1		64.3	
HIGHEST ANNUAL MEAN					262	1997
LOWEST ANNUAL MEAN					0.49	1972
HIGHEST DAILY MEAN	828	Jun 15	512	Mar 5	4,340	May 17, 1982
LOWEST DAILY MEAN	2.1	Aug 29	1.9	Jun 16	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 23	2.6	Aug 6	0.00	Jul 13, 1970
MAXIMUM PEAK FLOW			714	Jul 1	a6,000	May 17, 1982
MAXIMUM PEAK STAGE			12.72	Jul 1	23.44	May 17, 1982
ANNUAL RUNOFF (AC-FT)	39,630		26,180		46,600	
10 PERCENT EXCEEDS	83		66		146	
50 PERCENT EXCEEDS	37		26		23	
90 PERCENT EXCEEDS	12		6.1		0.15	

a From rating curve extended above 2,500 ft^3/s on basis of slope-area measurement.



07324300 FOSS RESERVOIR NEAR FOSS, OK

LOCATION.--Lat 35°32'20", long 99°11'09", in S ½ sec.2, T.12 N., R.19 W., Custer County, Hydrologic Unit 11130301, near right end of dam on Washita River, 0.5 mi upstream from Oak Creek, 3.5 mi west of Stafford, 6.0 mi north of Foss, and at mile 474.4.

DRAINAGE AREA.--1,496 mi^2.

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to October, 1961, nonrecording gage at same site and datum.

REMARKS.--Reservoir is formed by earth dam. Outlet consists of four 6- by 7-foot, 6-inch high pressure gates and one uncontrolled spillway. Storage began Feb. 13, 1961. Capacity, 436,500 acre-ft, at elevation 1,668.6 ft, crest of drop inlet and 177,900 acre-ft, at elevation 1,642.0 ft, conservation pool. Dead storage, 12,420 acre-ft below elevation 1,597.2 ft, sill of gated outlet. Figures given herein represent total contents. Reservoir is designed for flood control, municipal water supply, and irrigation release. Revised capacity table used after Sept. 30, 1964. U.S. Army Corps of Engineers' telemeter at station.

COOPERATION.--Elevations and data on diversions provided by Foss Reservoir Master Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 226,200 acre-ft, June 16, 1997, elevation, 1,648.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 176,400 acre-ft, Mar. 19, 20, elevation, 1,641.77 ft; minimum, 164,000 acre-ft, Sept. 30, elevation, 1,639.88 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1640.56	168,400	--	--
Oct. 31	1640.36	167,100	-1,300	228
Nov. 30	1640.16	165,800	-1,300	177
Dec. 31	1640.17	165,800	0	203
CAL YR 03	--	--	-11,600	2,459
Jan. 31	1640.49	167,900	+2,100	231
Feb. 29	1640.73	169,500	+1,600	223
Mar. 31	1641.69	175,800	+6,300	214
Apr. 30	1640.99	171,200	-4,600	162
May 31	1640.70	169,300	-1,900	289
June 30	1640.73	169,500	+200	294
July 31	1640.57	168,400	-1,100	247
Aug. 31	1640.34	166,900	-1,500	235
Sept. 30	1639.87	163,900	-3,000	179
WTR YR 04	-	-	-4,500	2,682

*Elevation at 0800 on the following day.

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07324400 WASHITA RIVER NEAR FOSS, OK

LOCATION.--Lat 35°32'20", long 99°10'10", in SW ¼ SW ¼ sec.1, T.12 N., R.19 W., Custer County, Hydrologic Unit 11130302, on right bank at downstream side county road bridge, 0.4 mi downstream from Oak Creek, 0.9 mi downstream from Foss Dam, 2.5 mi west of Stafford, 6.0 mi north of Foss, and at mile 473.5.

DRAINAGE AREA.--1,551 mi^2.

PERIOD OF RECORD.--March 1956 to April 1957, February to December 1958, July 1961 to September 1987, October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,560 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharge. Records fair. Flow completely regulated since 1961 by Foss Reservoir (station 07324300), except for 55 mi^2 intervening area. U.S. Geological Survay satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1959 reached a stage of 23.4 ft, from floodmark.

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	5.3	2.2	6.0	3.2	6.9	7.9	182	8.8	8.1	105	7.8	12
2	5.3	2.3	5.9	3.2	6.1	8.4	183	8.4	8.2	13	7.8	11
3	4.6	2.4	5.8	3.1	6.9	8.1	184	8.5	8.0	11	7.9	9.6
4	4.1	2.5	6.1	3.1	7.0	90	183	8.1	8.1	8.9	8.0	9.0
5	4.1	3.3	6.3	3.8	7.0	38	183	8.5	8.2	8.4	8.0	9.0
6	4.0	3.3	6.2	2.5	6.6	13	184	8.2	8.4	8.4	7.8	8.7
7	4.1	3.3	6.4	3.9	6.7	9.9	184	8.4	8.4	8.0	7.8	8.3
8	4.0	3.2	6.3	4.2	6.7	9.4	183	8.3	8.7	8.1	7.3	6.9
9	4.5	2.7	6.0	4.4	6.6	8.5	184	8.5	8.9	8.1	7.4	6.6
10	4.2	2.6	3.6	4.8	6.8	8.8	186	8.3	8.7	8.5	7.6	7.2
11	4.3	2.8	4.9	4.8	7.2	8.4	186	8.1	8.4	8.3	7.1	6.6
12	4.3	2.7	5.8	4.6	6.9	8.2	185	8.3	8.4	8.7	6.7	6.9
13	4.4	2.7	6.2	5.3	6.5	7.7	186	8.4	8.4	8.7	6.8	7.0
14	4.4	2.7	5.8	5.5	7.0	7.9	186	8.4	8.0	8.3	6.7	6.9
15	4.3	3.0	5.9	5.8	6.7	7.7	185	8.4	8.1	8.1	97	6.9
16	4.3	4.2	5.6	6.1	6.8	7.8	185	8.5	7.8	8.4	76	6.3
17	4.3	4.1	5.9	7.3	6.3	7.3	186	8.4	8.4	8.3	38	5.8
18	4.3	4.0	5.8	6.1	6.9	78	186	8.6	8.2	9.3	19	5.8
19	4.3	3.7	5.9	5.9	6.7	138	186	8.6	8.0	10	15	6.1
20	4.3	3.9	6.4	6.0	7.4	142	185	8.0	7.8	8.9	12	6.2
21	4.6	4.2	6.1	6.1	7.3	145	57	8.4	9.3	8.8	10	6.3
22	3.9	4.4	5.9	5.9	7.4	147	9.1	8.3	348	8.5	9.4	6.0
23	3.5	5.0	5.7	6.5	7.4	151	9.1	7.9	28	8.2	9.2	6.2
24	5.1	5.1	5.8	6.6	7.2	152	8.9	10	23	8.7	9.0	5.5
25	5.3	5.2	5.9	6.0	7.6	98	9.1	11	20	9.0	8.7	5.2
26	5.0	5.2	5.7	6.2	6.7	8.6	8.9	8.2	17	9.9	8.0	5.8
27	5.1	5.4	6.0	6.3	7.7	9.5	8.8	8.4	14	9.5	7.6	5.6
28	5.1	5.6	5.9	6.2	8.2	9.4	8.8	8.5	60	9.2	7.3	5.9
29	5.1	5.8	6.3	6.5	8.8	8.4	8.2	8.5	12	9.0	7.2	6.1
30	5.0	6.0	6.1	6.4	---	103	8.6	8.2	10	8.1	7.1	6.0
31	3.3	---	4.9	6.4	---	181	---	8.2	---	8.0	14	---
TOTAL	138.4	113.5	181.1	162.7	204.0	1,627.9	3,828.5	263.3	706.5	371.3	459.2	211.4
MEAN	4.46	3.78	5.84	5.25	7.03	52.5	128	8.49	23.6	12.0	14.8	7.05
MAX	5.3	6.0	6.4	7.3	8.8	181	186	11	348	105	97	12
MIN	3.3	2.2	3.6	2.5	6.1	7.3	8.2	7.9	7.8	8.0	6.7	5.2
AC-FT	275	225	359	323	405	3,230	7,590	522	1,400	736	911	419

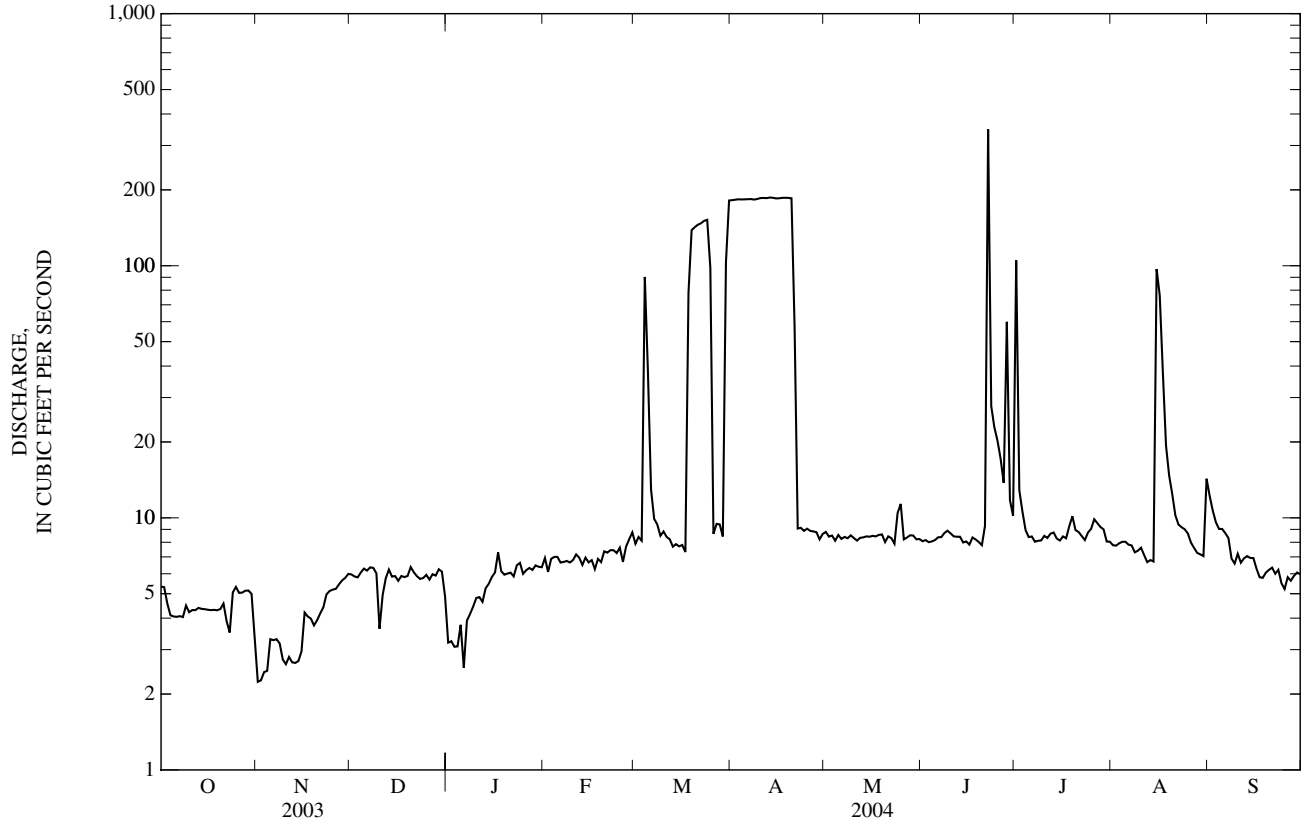
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	50.0	26.2	25.9	43.9	42.5	51.0	73.6	102	139	54.7	49.7	29.5
MAX	598	278	298	633	342	297	607	622	763	385	579	444
(WY)	(1998)	(1999)	(1997)	(1998)	(1998)	(2000)	(1998)	(1997)	(1982)	(1997)	(1997)	(1996)
MIN	0.15	0.28	0.36	0.56	0.60	0.57	1.62	1.08	1.28	2.27	3.12	0.46
(WY)	(1968)	(1968)	(1968)	(1968)	(1968)	(1968)	(1967)	(1967)	(1966)	(1967)	(1973)	(1966)

07324400 WASHITA RIVER NEAR FOSS, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	17,286.2		8,267.8			
ANNUAL MEAN	47.4		22.6		57.3	
HIGHEST ANNUAL MEAN					373	1997
LOWEST ANNUAL MEAN					3.87	1963
HIGHEST DAILY MEAN	353	Jul 3	348	Jun 22	1,370	Sep 15, 1996
LOWEST DAILY MEAN	2.2	Nov 1	2.2	Nov 1	a0.06	Oct 2, 1967
ANNUAL SEVEN-DAY MINIMUM	2.7	Nov 9	2.7	Nov 9	0.08	Sep 28, 1967
MAXIMUM PEAK FLOW			1,530	Jun 22	b3,010	Aug 26, 1969
MAXIMUM PEAK STAGE			17.85	Jun 22	21.56	Oct 3, 1986
ANNUAL RUNOFF (AC-FT)	34,290		16,400		41,530	
10 PERCENT EXCEEDS	178		58		186	
50 PERCENT EXCEEDS	5.9		7.6		7.0	
90 PERCENT EXCEEDS	4.1		4.2		2.3	

a Minimum daily discharge for period of record, no flow at times in 1956.
b Maximum discharge for period of record 14,000 ft^3/s, Apr. 19, 1957, from rating curve extended above 3,600 ft^3/s, on basis of velocity-area study.



07325000 WASHITA RIVER NEAR CLINTON, OK

LOCATION.--Lat 35°31'51", long 98°58'00", in SW ¼ NE ¼ sec.11, T.12 N., R.17 W., Custer County, Hydrologic Unit 11130302, on downstream side of bridge on U.S. Highway 183, 0.5 mi north of Clinton, 0.8 mi upstream from Beaver Creek, 4.8 mi downstream from Barnitz Creek, and at mile 447.4.

DRAINAGE AREA.--1,977 mi^2.

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1221: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,467.44 ft above sea level. See WSP 1920 for history of changes prior to Mar. 19, 1941.

REMARKS.--Records fair. Flow regulated since February 1961 by Foss Reservoir (station 07324300) and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 3-4, 1934, reached a stage of 33.9 ft, from floodmarks.

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	10	9.1	9.5	13	20	26	157	33	14	1,820	21	37
2	11	8.6	9.1	14	19	28	159	32	14	714	19	36
3	11	8.3	8.5	14	21	26	160	31	13	329	18	26
4	12	8.4	9.0	14	20	322	161	26	14	174	17	22
5	12	8.8	e9.6	14	21	532	161	24	13	115	16	20
6	12	8.6	e9.8	e11	21	192	162	23	14	108	16	19
7	11	9.0	e10	e11	20	103	162	23	13	94	17	17
8	11	9.2	10	e14	19	77	175	22	12	77	18	16
9	41	9.9	11	e12	18	63	182	22	13	67	18	15
10	66	9.8	12	e13	19	43	187	21	14	61	17	15
11	24	9.9	13	15	19	37	195	21	13	56	17	14
12	16	9.5	13	15	18	34	183	20	11	51	16	15
13	14	9.2	13	15	18	33	176	19	11	47	16	14
14	13	9.8	14	15	18	31	177	19	10	43	16	13
15	12	10	14	14	18	29	176	19	9.9	41	48	13
16	11	10	13	15	18	30	173	18	9.5	38	364	13
17	11	9.8	13	40	18	33	170	18	10	36	189	13
18	12	10	13	42	17	34	171	18	33	35	105	12
19	11	10	13	35	17	88	169	17	92	33	75	11
20	11	9.7	13	26	17	124	169	17	20	32	62	10
21	11	9.7	12	22	17	127	165	16	15	26	63	9.9
22	11	9.8	13	21	17	127	64	16	619	24	46	11
23	11	10	14	20	18	128	43	16	170	24	35	13
24	10	9.8	14	19	18	129	43	16	70	24	30	47
25	8.9	9.1	14	20	18	130	41	30	45	24	27	24
26	8.5	9.4	14	20	18	83	37	25	35	25	24	15
27	8.6	9.4	14	19	18	44	36	17	37	23	22	13
28	8.9	9.4	14	19	17	144	34	16	373	23	22	12
29	9.0	9.5	14	19	22	77	33	15	188	24	20	11
30	8.6	9.4	13	e14	---	51	35	14	144	23	21	11
31	8.8	---	13	20	---	120	---	14	---	23	23	---
TOTAL	436.3	283.1	379.5	575	539	3,045	3,956	638	2,049.4	4,234	1,418	517.9
MEAN	14.1	9.44	12.2	18.5	18.6	98.2	132	20.6	68.3	137	45.7	17.3
MAX	66	10	14	42	22	532	195	33	619	1,820	364	47
MIN	8.5	8.3	8.5	11	17	26	33	14	9.5	23	16	9.9
AC-FT	865	562	753	1,140	1,070	6,040	7,850	1,270	4,060	8,400	2,810	1,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

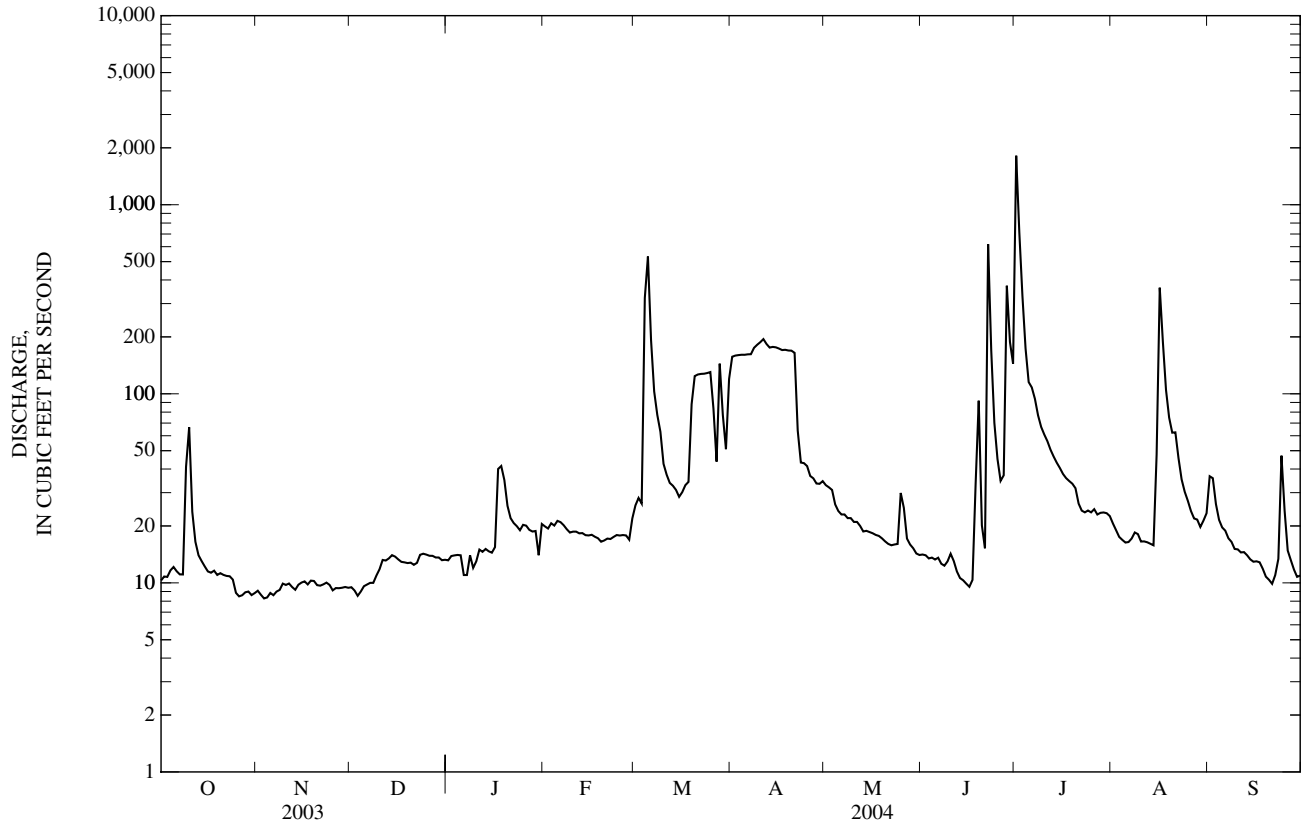
MEAN	111	76.0	63.0	78.1	90.1	112	140	226	256	111	106	115
MAX	1,477	494	504	742	574	654	1,112	1,256	1,190	705	1,061	1,519
(WY)	(1987)	(1987)	(1997)	(1998)	(1997)	(1998)	(1997)	(1997)	(1997)	(1989)	(1995)	(1996)
MIN	3.30	4.23	5.68	4.78	7.00	6.24	9.64	4.10	4.44	6.42	6.01	5.87
(WY)	(1967)	(1964)	(1964)	(1971)	(1967)	(1968)	(1971)	(1967)	(1966)	(1966)	(1965)	(1964)

e Estimated

07325000 WASHITA RIVER NEAR CLINTON, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	23,720.9		18,071.2			
ANNUAL MEAN	65.0		49.4		a124	
HIGHEST ANNUAL MEAN					696	1997
LOWEST ANNUAL MEAN					13.8	1967
HIGHEST DAILY MEAN	842	Jun 15	1,820	Jul 1	7,710	Oct 3, 1986
LOWEST DAILY MEAN	8.3	Nov 3	8.3	Nov 3	b0.00	Jul 26, 1964
ANNUAL SEVEN-DAY MINIMUM	8.7	Oct 30	8.7	Oct 30	0.04	Jul 23, 1964
MAXIMUM PEAK FLOW			2,910	Jul 1	c10,800	Sep 15, 1996
MAXIMUM PEAK STAGE			20.11	Jul 1	d26.24	Sep 15, 1996
ANNUAL RUNOFF (AC-FT)	47,050		35,840		89,590	
10 PERCENT EXCEEDS	184		134		360	
50 PERCENT EXCEEDS	27		18		31	
90 PERCENT EXCEEDS	9.4		9.8		8.6	

a Prior to regulation, water years 1936-60, 146 ft^3/s.
b Also occurred at times in 1952-56, 1964, 1966.
c Maximum discharge for period of record, 66,800 ft^3/s, May 16, 1951, from rating curve extended above 22,800 ft^3/s, by contracted-opening measurement of peak flow.
d Maximum gage height for period of record, 31.09 ft, May 16, 1951.



07325500 WASHITA RIVER AT CARNEGIE, OK

LOCATION.--Lat 35°07'02", long 98°33'49", in NW ¼ NW ¼ sec.3, T.7 N., R.13 W., Caddo County, Hydrologic Unit 11130302, on downstream side of left abutment of bridge on State Highway 9, 1,300 ft upstream from Running Creek, 2.7 mi east of Carnegie, and at mile 353.9. Records include flow of Running Creek.

DRAINAGE AREA.--3,129 mi^2, includes that of Running Creek.

PERIOD OF RECORD.--October 1937 to current year.

REVISED RECORDS.--WSP 1087: 1938. WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,244.23 ft above sea level. Prior to October 1942, water-stage recorder at site 8.0 mi upstream at datum 24.57 ft higher. Prior to Aug. 7, 1985, datum 5.00 ft higher.

REMARKS.--No estimated daily discharge. Records good. Some diversion for irrigation upstream from station. October 1942 to May 1949, occasional fluctuation caused by powerplant at Carnegie, 7.5 mi upstream from station. Flow regulated by Foss Reservoir since February 1961 (station 07324300), and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at site.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 23, 1903, reached a stage of about 29 ft, at former site and datum, from information provided by local resident; flood of May 18, 1949, reached a stage of 20.9 ft, from floodmark, at that 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	25	30	47	60	69	70	234	1,150	69	1,230	103	138
2	31	33	48	62	77	73	207	812	68	4,290	97	114
3	36	34	50	62	77	80	287	639	66	4,200	88	98
4	36	35	51	61	79	1,310	293	414	62	1,990	79	90
5	38	36	51	59	77	5,860	290	342	60	1,410	70	88
6	39	36	52	58	76	6,420	288	291	60	1,250	67	76
7	45	39	52	48	77	2,580	289	255	58	1,830	64	66
8	50	40	51	43	75	1,500	291	230	56	1,050	61	59
9	58	40	56	59	72	1,090	293	206	64	692	60	53
10	59	40	62	68	70	846	298	180	65	488	59	51
11	63	42	59	70	68	654	307	158	46	395	92	48
12	62	42	62	67	66	526	306	144	52	332	168	46
13	114	44	64	70	65	440	310	135	54	286	176	42
14	73	46	66	73	64	395	305	130	55	243	189	40
15	55	47	69	74	63	351	297	128	54	216	124	37
16	46	48	68	75	64	295	291	122	52	194	111	35
17	40	56	67	91	64	256	288	117	50	175	119	35
18	38	64	64	379	64	227	284	113	47	161	206	32
19	36	59	63	291	64	207	276	108	52	149	265	30
20	35	53	64	171	62	188	275	102	48	140	195	28
21	34	46	60	132	61	172	272	97	162	131	153	26
22	33	45	63	113	60	256	268	90	1,470	123	135	25
23	33	44	62	99	60	270	266	83	1,470	114	120	36
24	32	44	62	88	60	270	253	78	1,340	114	110	37
25	31	44	62	84	61	313	180	77	675	106	93	43
26	32	46	61	80	60	285	142	144	489	108	79	55
27	32	47	64	77	60	276	151	105	415	108	69	48
28	31	47	64	73	60	284	134	91	389	110	106	59
29	31	49	62	71	68	371	113	95	438	112	1,070	46
30	29	49	62	71	---	510	542	81	651	112	344	38
31	28	---	59	67	---	332	---	71	---	107	188	---
TOTAL	1,325	1,325	1,847	2,896	1,943	26,707	8,030	6,788	8,637	21,966	4,860	1,619
MEAN	42.7	44.2	59.6	93.4	67.0	862	268	219	288	709	157	54.0
MAX	114	64	69	379	79	6,420	542	1,150	1,470	4,290	1,070	138
MIN	25	30	47	43	60	70	113	71	46	106	59	25
AC-FT	2,630	2,630	3,660	5,740	3,850	52,970	15,930	13,460	17,130	43,570	9,640	3,210

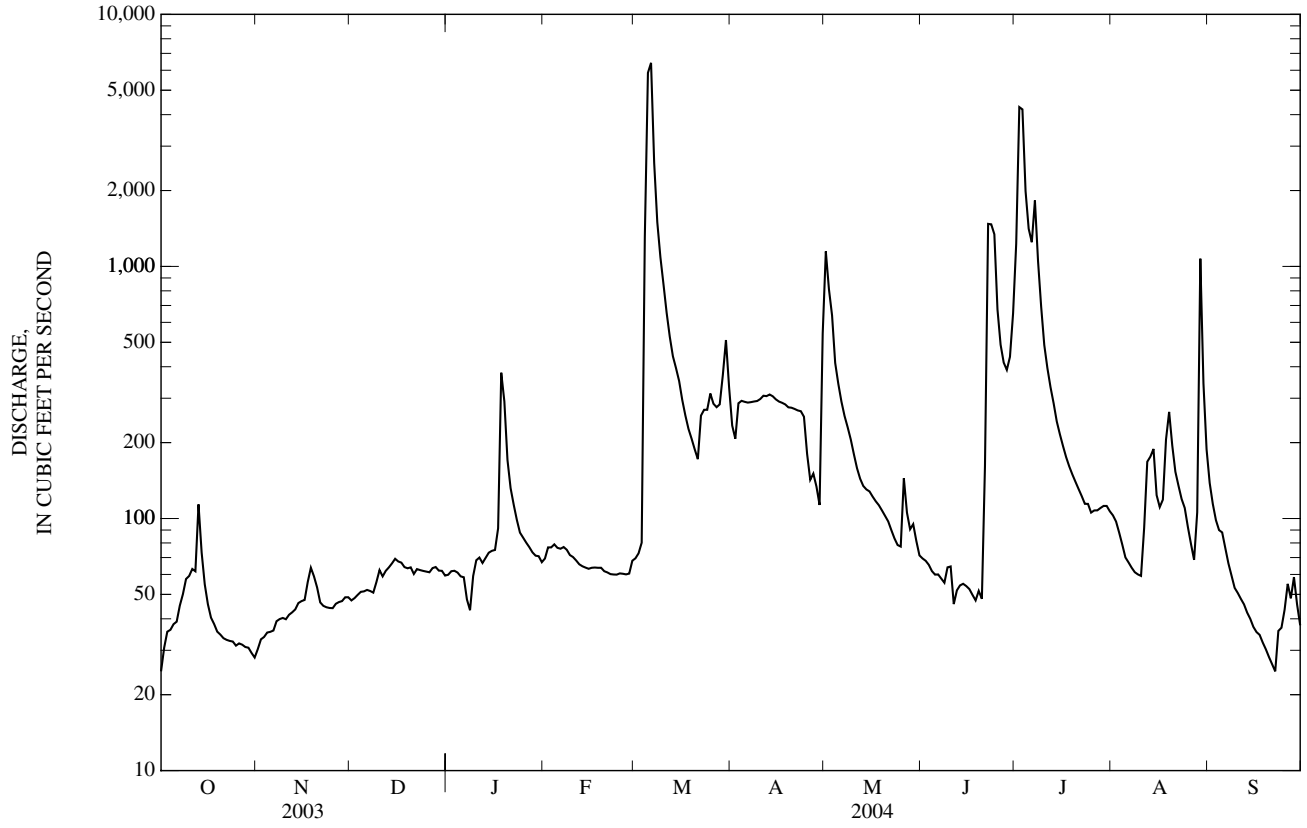
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	409	283	223	215	243	398	398	811	828	289	248	347
MAX	5,311	1,471	1,032	1,100	1,127	2,255	2,832	5,356	4,994	1,150	1,760	2,468
(WY)	(1987)	(1987)	(1993)	(1998)	(1997)	(1998)	(1997)	(1993)	(1995)	(1975)	(1995)	(1996)
MIN	21.8	27.3	33.6	36.0	36.6	34.2	11.1	10.0	94.0	7.10	14.6	15.6
(WY)	(1973)	(1971)	(1964)	(1971)	(1971)	(1971)	(1971)	(1971)	(1984)	(1964)	(1972)	(1984)

07325500 WASHITA RIVER AT CARNEGIE, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	69,112		87,943			
ANNUAL MEAN	189		240		a391	
HIGHEST ANNUAL MEAN					1,432	1987
LOWEST ANNUAL MEAN					72.8	1967
HIGHEST DAILY MEAN	2,760	Jun 16	6,420	Mar 6	28,500	Jun 5, 1995
LOWEST DAILY MEAN	22	Sep 29	25	Oct 1,Sep 22	b0.00	Jul 20, 1964
ANNUAL SEVEN-DAY MINIMUM	25	Sep 25	30	Sep 16	0.00	Jul 20, 1964
MAXIMUM PEAK FLOW			7,040	Mar 6	c40,600	Oct 20, 1983
MAXIMUM PEAK STAGE			19.23	Mar 6	31.70	Oct 20, 1983
ANNUAL RUNOFF (AC-FT)	137,100		174,400		283,500	
10 PERCENT EXCEEDS	304		395		866	
50 PERCENT EXCEEDS	120		73		136	
90 PERCENT EXCEEDS	36		39		38	

a Prior to regulation, water years 1938-60, 314 ft^3/s.
b Also occurred at times 1956 and 1964.
c Maximum discharge for period of record, 50,000 ft^3/s, May 18, 1949, from rating curve extended above 35,000 ft^3/s on basis of contracted-opening measurement.



07325800 COBB CREEK NEAR EAKLY, OK

LOCATION.--Lat 35°17'26", long 98°35'38", in NW ¼ NE ¼ sec.5, T.9 N., R.13 W., Caddo County, Hydrologic Unit 11130302, near left downstream abutment of bridge, on State Highway 152, 0.5 mi downstream from Fivemile Creek, 2.4 mi southwest of Eakly, 3.0 mi upstream from Fort Cobb Reservoir, and at mile 22.9.

DRAINAGE AREA.--132 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,369.70 ft above sea level. Oct. 29, 1980, to Aug. 11, 1982, gage at site 0.5 mi down- stream at same datum.

REMARKS.--Records fair. Flow regulated since 1957 by numerous floodwater-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at station.

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	10	10	12	13	20	21	26	22	11	168	8.1	16
2	11	10	12	14	23	20	24	20	10	45	7.5	13
3	10	10	12	14	22	22	23	19	10	25	6.8	11
4	11	10	13	14	22	1,610	22	18	10	18	6.6	10
5	12	11	13	14	24	673	22	e17	10	14	6.5	9.5
6	11	11	13	14	23	286	22	e17	10	34	7.0	9.4
7	11	11	13	14	22	247	22	e17	10	24	7.7	8.5
8	11	11	13	14	21	215	22	e16	9.7	17	7.6	8.1
9	22	11	13	14	20	101	23	e16	13	14	7.9	7.9
10	12	11	15	14	20	59	23	16	13	13	7.2	7.6
11	11	11	13	14	20	45	22	16	12	11	11	7.3
12	11	12	13	14	20	37	21	15	10	10	9.6	7.0
13	10	12	15	17	20	36	22	15	9.6	9.8	9.4	6.6
14	9.8	12	15	16	20	36	21	17	9.2	9.6	8.5	6.4
15	10	12	15	16	20	33	20	15	8.9	9.2	10	6.5
16	10	12	14	17	20	31	20	15	8.9	8.9	11	6.9
17	9.8	13	14	86	19	31	20	14	8.7	8.7	9.1	6.7
18	9.7	15	14	66	20	28	19	14	11	8.8	8.3	6.3
19	9.8	14	13	39	19	28	20	14	11	8.6	8.4	6.0
20	9.6	13	14	30	19	26	20	13	12	8.2	15	5.9
21	9.7	12	14	25	19	25	19	13	12	7.9	11	6.1
22	9.8	12	14	23	18	24	19	13	22	7.8	9.7	6.2
23	9.5	12	14	22	19	23	22	13	17	7.7	9.2	10
24	9.6	13	14	21	19	23	64	38	13	8.3	8.5	8.8
25	9.1	12	15	21	20	24	26	73	11	8.7	8.0	7.8
26	9.8	12	14	21	19	24	25	16	11	9.0	7.4	7.6
27	9.9	12	14	20	19	25	23	14	30	8.4	7.0	7.8
28	9.8	12	15	19	18	112	21	13	12	9.3	113	7.7
29	9.9	12	14	19	21	44	20	12	12	10	97	7.6
30	9.6	12	15	19	---	32	21	12	14	9.8	36	7.7
31	9.8	---	14	19	---	28	---	11	---	8.9	22	---
TOTAL	328.2	353	426	683	586	3,969	694	554	362.0	560.6	502.0	243.9
MEAN	10.6	11.8	13.7	22.0	20.2	128	23.1	17.9	12.1	18.1	16.2	8.13
MAX	22	15	15	86	24	1,610	64	73	30	168	113	16
MIN	9.1	10	12	13	18	20	19	11	8.7	7.7	6.5	5.9
AC-FT	651	700	845	1,350	1,160	7,870	1,380	1,100	718	1,110	996	484

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004, BY WATER YEAR (WY)

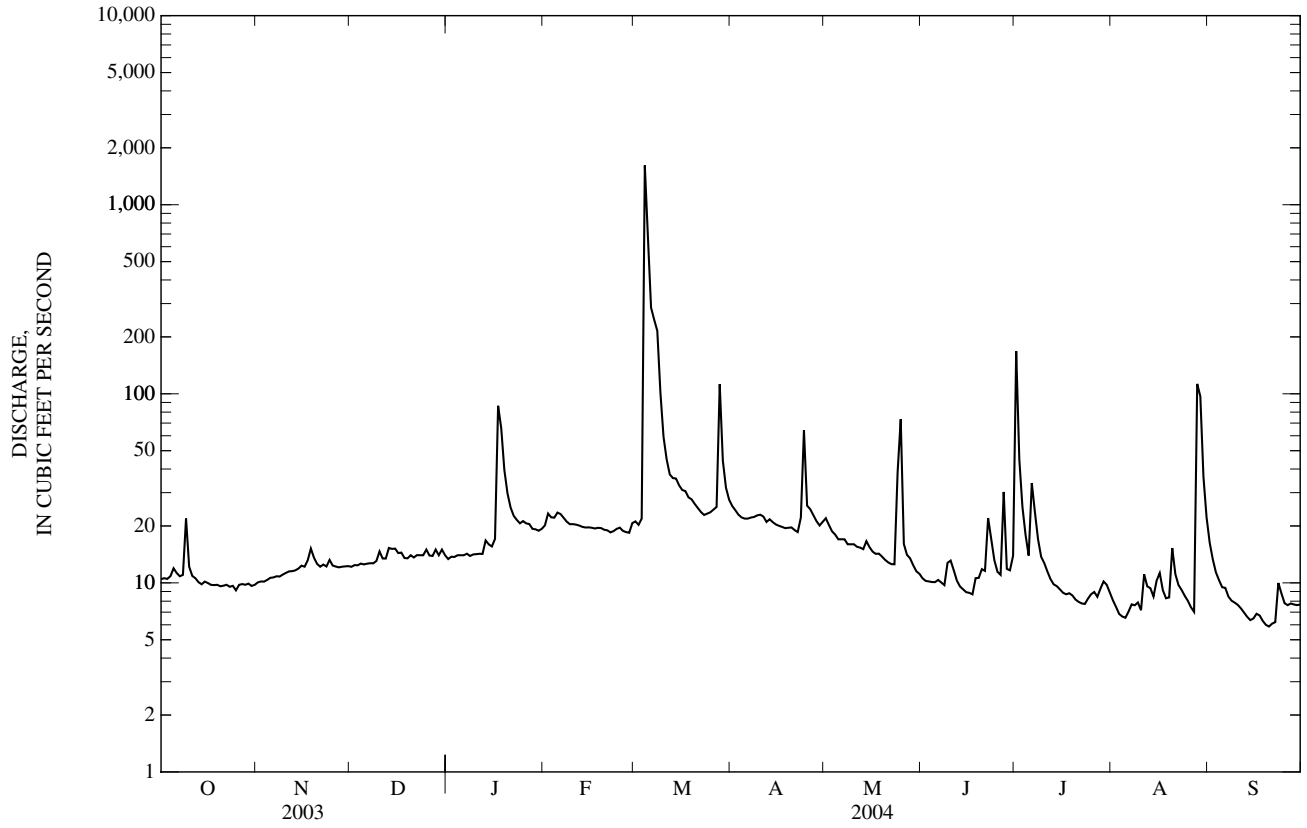
MEAN	28.5	26.6	24.6	20.9	21.6	34.8	28.8	59.2	51.0	15.7	17.5	20.0
MAX	317	104	84.9	50.2	55.1	138	140	303	291	85.1	86.0	161
(WY)	(1987)	(1993)	(1993)	(1993)	(1997)	(1998)	(1997)	(1993)	(1995)	(1975)	(1974)	(1986)
MIN	4.34	6.11	4.88	8.78	8.99	8.38	5.27	2.79	7.84	1.01	0.90	2.15
(WY)	(1973)	(1979)	(1979)	(1981)	(1981)	(1971)	(1971)	(1971)	(1984)	(1974)	(1972)	(1972)

e Estimated

07325800 COBB CREEK NEAR EAKLY, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1969 - 2004	
ANNUAL TOTAL	6,002.2		9,261.7			
ANNUAL MEAN	16.4		25.3		29.1	
HIGHEST ANNUAL MEAN					91.0	1987
LOWEST ANNUAL MEAN					10.1	1979
HIGHEST DAILY MEAN	196	Jun 15	1,610	Mar 4	3,750	Sep 29, 1986
LOWEST DAILY MEAN	6.5	Aug 26	5.9	Sep 20	a0.00	Aug 18, 1970
ANNUAL SEVEN-DAY MINIMUM	6.7	Aug 21	6.3	Sep 16	0.04	May 24, 1971
MAXIMUM PEAK FLOW			4,080	Mar 4	12,000	Jun 4, 1995
MAXIMUM PEAK STAGE			20.70	Mar 4	24.38	Sep 29, 1986
ANNUAL RUNOFF (AC-FT)	11,910		18,370		21,090	
10 PERCENT EXCEEDS	21		26		37	
50 PERCENT EXCEEDS	14		14		15	
90 PERCENT EXCEEDS	7.7		8.1		5.0	

a No flow Aug. 18-19, 1970, and May 26-30, 1971.



07325800 COBB CREEK NEAR EAKLY, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1987-1990, June 2003 to current year.

REMARKS.--Samples were collected periodically and specific conductance, pH, water temperature, and dissolved oxygen were determined in the field. Additional data is available in the ditstrict office for analyses performed by other laboratories.

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	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)	Location in X-sect. looking dwnstrm ft from l bank (00009)
JUL 2003											
15...	1003	1028	1028	4.32	7.0	731	8.5	7.6	773	25.2	3.00
15...	1004	1028	1028	4.32	7.0	731	8.4	7.6	773	25.2	6.00
15...	1005	1028	1028	4.32	7.0	731	8.5	7.6	772	25.2	9.00
15...	1006	1028	1028	4.32	7.0	731	8.7	7.6	772	25.1	12.0
15...	1007	1028	1028	4.32	7.0	731	8.6	7.6	769	25.2	15.0
15...	1008	1028	1028	4.32	7.0	731	8.6	7.6	768	25.2	18.0
15...	1009	1028	1028	4.32	7.0	731	8.8	7.6	767	25.1	21.0
15...	1010	1028	1028	4.32	7.0	731	5.6	7.6	765	25.1	24.0
AUG 2004											
15...	1618	1028	1028	3.80	11	--	8.4	8.2	726	22.0	2.00
15...	1620	1028	1028	3.80	11	--	8.7	8.2	727	22.0	4.00
15...	1622	1028	1028	3.80	11	--	8.5	8.2	727	22.0	6.00
15...	1624	1028	1028	3.80	11	--	8.5	8.2	727	22.0	8.00
15...	1626	1028	1028	3.80	11	--	8.5	8.2	728	22.0	10.0
15...	1628	1028	1028	3.80	11	--	8.6	8.2	729	22.0	12.0
28...	1647	1028	1028	6.84	202	726	6.0	7.7	950	25.5	2.00
28...	1648	1028	1028	6.84	202	726	5.9	7.6	949	25.5	4.00
28...	1649	1028	1028	6.84	202	726	5.9	7.6	948	25.5	6.00
28...	1650	1028	1028	6.84	202	726	5.9	7.6	948	25.5	8.00
28...	1651	1028	1028	6.84	202	726	5.9	7.6	947	25.5	10.0
28...	1652	1028	1028	6.84	202	726	5.8	7.6	946	25.5	12.0
28...	1653	1028	1028	6.84	202	726	5.8	7.6	946	25.5	14.0
28...	1654	1028	1028	6.84	202	726	5.8	7.6	946	25.5	16.0
28...	1655	1028	1028	6.84	202	726	5.8	7.6	945	25.5	18.0
28...	1656	1028	1028	6.84	202	726	5.8	7.6	947	25.5	20.0
28...	1657	1028	1028	6.84	202	726	5.8	7.6	948	25.5	22.0
28...	1658	1028	1028	6.84	202	726	5.8	7.6	947	25.5	24.0
28...	1659	1028	1028	6.84	202	726	5.8	7.6	947	25.5	26.0
28...	1701	1028	1028	6.84	202	726	5.8	7.6	947	25.5	28.0

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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)	2,4,5-T surrog, water, fltrd, percent recovry (99958)
JUL 2003													
15...	1030	1028	80020	4.32	7.0	731	8.6	109	7.6	770	--	25.0	--
30...	1200	1028	80020	4.59	14	730	6.6	84	7.7	524	--	25.6	--
DEC													
03...	1015	1028	80020	4.58	13	728	11.9	103	8.1	842	9.6	7.2	--
AUG 2004													
15...	1630	1028	80020	3.80	11	--	8.5	--	8.2	727	25.0	22.0	88.4
28...	1700	1028	80020	6.84	202	726	5.8	75	7.6	947	--	25.5	92.5

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 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-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)
JUL 2003													
15...	--	--	--	<.006	E.007	--	--	--	--	<.006	--	<.004	--
30...	--	--	--	<.006	E.009	--	--	--	--	<.006	--	<.004	--
DEC													
03...	--	--	--	<.006	<.006	--	--	--	--	<.006	--	<.005	--
AUG 2004													
15...	<.009	<.02	<.02	<.006	E.006	<.01	<.008	<.006	<.014	<.006	<.007	<.005	<.02
28...	<.009	.04	<.02	<.006	<.006	<.01	E.025	<.006	<.0280	<.006	<.007	<.005	<.02

07325800 COBB CREEK NEAR EAKLY, OK—Continued

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 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)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	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)
JUL 2003													
15...	--	--	<.005	99.2	E.006	<.050	--	--	<.010	--	--	--	--
30...	--	--	<.005	104	.010	<.050	--	--	<.010	--	--	--	--
DEC													
03...	--	--	<.005	85.4	.009	<.050	--	--	<.010	--	--	--	--
AUG 2004													
15...	<.008	<.04	<.005	91.6	.018	<.050	E35.5	<.03	<.010	<.004	<.02	<.01	<.03
28...	<.008	<.04	<.005	96.0	.013	<.050	88.7	<.03	<.010	<.004	<.02	E.01	<.03

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C, surrog, wat flt percent recovry (99959)	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)
JUL 2003													
15...	--	<.002	--	--	--	<.041	--	<.020	--	--	--	--	<.005
30...	--	<.002	--	--	--	<.041	--	<.020	--	--	--	--	<.005
DEC													
03...	--	<.004	--	--	--	<.041	--	<.020	--	--	--	--	<.005
AUG 2004													
15...	<.02	<.004	<.0096	E103	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.04	<.005
28...	<.02	<.004	.0198	104	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.04	<.005

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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 mono-acid, 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)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	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)
JUL 2003													
15...	<.006	--	<.018	--	--	<.003	<.004	<.005	118	--	--	<.005	--
30...	<.006	--	<.018	--	--	<.003	<.004	<.005	126	--	--	<.005	--
DEC													
03...	<.006	--	<.018	--	--	<.003	<.012	<.005	122	--	--	<.009	--
AUG 2004													
15...	<.006	<.01	<.018	<.01	<.01	<.003	<.012	<.005	114	<.01	<.01	<.009	<.01
28...	<.006	<.01	<.018	<.01	<.01	<.003	<.012	<.005	99.7	<.01	<.01	<.009	<.01

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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)	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)
JUL 2003													
15...	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005	<.007	--	--
30...	--	<.02	--	<.004	<.009	<.005	--	<.009	<.005	<.005	<.007	--	--
DEC													
03...	--	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--
AUG 2004													
15...	<.03	<.02	<.01	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01	<.03
28...	<.03	<.02	<.04	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01	<.03

07325800 COBB CREEK NEAR EAKLY, OK—Continued

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.003	--	--	--	<.004	--	<.035	<.027	--	--	--	--	--
30...	<.003	--	--	--	<.004	--	<.035	<.027	--	--	--	--	--
DEC													
03...	<.003	--	--	--	<.004	--	<.035	<.027	--	--	--	--	--
AUG 2004													
15...	<.003	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
28...	<.003	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.006	E.004	<.006	--	<.002	--	<.007	--	--	--	--	--	<.003
30...	<.006	E.006	<.006	--	<.002	--	<.007	--	--	--	--	--	<.003
DEC													
03...	<.015	E.008	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003
AUG 2004													
15...	<.015	E.006	<.006	<.03	<.003	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003
28...	<.015	<.013	<.006	<.03	<.003	<.02	<.007	<.01	<.01	<.02	<.02	<.01	<.003

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011	<.02	--	--	--
30...	<.010	<.004	.040	<.011	--	<.01	<.004	<.010	<.011	<.02	--	--	--
DEC													
03...	<.010	<.004	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--
AUG 2004													
15...	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008
28...	<.010	<.004	<.022	<.011	<.02	<.01	<.004	<.025	<.011	<.02	<.010	<.02	<.008

WATER-QUALITY DATA, WATER YEAR 2003 TO WATER YEAR 2004—CONTINUED

Date	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)	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)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
JUL 2003											
15...	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002	--	<.009
30...	--	<.005	--	<.02	<.034	--	<.02	<.005	<.002	--	E.008
DEC											
03...	--	<.005	--	<.02	<.034	--	<.02	<.010	<.002	--	<.009
AUG 2004											
15...	<.02	<.005	<.009	M	<.034	<.010	<.02	<.010	<.002	E.25	<.009
28...	<.02	<.005	<.009	<.02	<.034	<.010	<.02	<.010	<.002	<.02	<.009

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

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07325900 FORT COBB RESERVOIR NEAR FORT COBB, OK

LOCATION.--Lat 35°09'58", long 98°27'23", in SE $^1/_4$ NW $^1/_4$ sec.22, T.8 N., R.12 W., Caddo County, Hydrologic Unit 11130302, in control house at right center of dam on Cobb Creek, 4.0 mi northwest of Fort Cobb, and at mile 7.5.

DRAINAGE AREA.--304 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is sea level (levels by U.S. Bureau of Reclamation). Prior to October, 1961, nonrecording gage at same datum.

REMARKS.--Reservoir is formed by earth dam. Outlet consists of two sets of controlled 5- by 5-foot steel gates and an uncontrolled concrete spillway. Storage began Mar. 30, 1959. Conservation pool was first filled in June 1962. Capacity, 143,700 acre-ft at elevation 1,354.8 ft, crest of drop inlet, 80,010 acre-ft at elevation 1,342.0 ft, conservation pool, and 1,664 acre-ft at elevation 1,300.0 ft, crest of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, for municipal and industrial water supply, and for irrigation releases. Revised capacity table used since May 1993. U.S. Army Corps of Engineers' satellite telemeter at station.

COOPERATION.--Elevations and data on diversions provided by Fort Cobb Reservoir Master Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 121,400 acre-ft, June 13, 1995, elevation, 1,352.25 ft; minimum since conservation pool was first filled, 54,650 acre-ft, Oct. 19, 1972, elevation 1,335.06 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 80,290 acre-ft, Mar. 9, elevation, 1,343.63 ft; minimum, 66,430 acre-ft, Dec. 10, Jan. 7, elevation 1,339.96 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1340.47	68,230	--	--
Oct. 31	1340.16	67,130	-1,,100	1,158
Nov. 30	1340.04	66,710	-420	1,002
Dec. 31	1340.00	66,570	-140	1,063
CAL YR 03	--	--	-8,200	12,449
Jan. 31	1340.31	67,670	+1,100	958
Feb. 29	1340.58	68,620	+950	818
Mar. 31	1342.48	75,700	+7,080	609
Apr. 30	1342.36	75,230	-470	818
May 31	1341.91	73,500	-1,730	1,151
June 30	1341.70	72,720	-780	1,116
July 31	1341.50	71,970	-750	1,215
Aug. 31	1341.09	70,450	-1,520	1,117
Sept. 30	1340.45	68,160	-2,290	948
WTR YR 04	-	-	-70	11,973

*Elevation at 2400

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07326000 COBB CREEK NEAR FORT COBB, OK

LOCATION.--Lat 35°08'37", long 98°26'33", in NE ¼ NE ¼ sec.27, T.8 N., R.12 W., Caddo County, Hydrologic Unit 11130302, on left bank 10 ft upstream from county road bridge, 0.3 mi upstream from Punjo Creek, 1.2 mi downstream from Fort Cobb Dam, 3.0 mi north of Fort Cobb, and at mile 5.8.

DRAINAGE AREA.--307 mi^2. Area at site used prior to Oct. 1, 1969, 319 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1960, published as Pond Creek near Fort Cobb.

REVISED RECORDS.--WSP 1087: 1938. WDR OK-94-2: 1993 (M) drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,254.49 ft above sea level (levels by U.S. Bureau of Reclamation). Oct.1, 1939, to Aug. 29, 1940, nonrecording gage and Aug. 30, 1940, to Sept. 30, 1969, water-stage recorder at site 0.8 mi downstream at datum 1.92 ft lower. Oct. 16, 1969, to Sept. 30, 1982, gage at same site and datum 5.00 ft higher.

REMARKS.--Records fair. Flow regulated since March 1959, by Fort Cobb Reservoir (station 07325900). U.S. Geological Survey satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 15, 1937, reached a stage of 19.3 ft, site and datum used in 1939, 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	2.7	3.9	4.5	2.6	e2.8	2.9	3.7	2.8	3.4	3.3	3.5	3.5
2	2.7	3.8	4.4	2.6	e2.8	2.9	3.7	2.6	3.5	2.6	3.4	3.1
3	2.7	4.0	4.2	2.6	2.8	2.9	3.7	2.6	3.6	2.5	3.5	3.1
4	2.7	4.1	4.2	2.6	2.9	e3.2	3.8	2.8	3.6	2.5	3.4	3.1
5	2.6	4.0	4.3	2.5	2.8	e3.1	3.7	2.7	3.7	2.5	3.5	3.3
6	2.6	3.9	4.0	2.5	2.7	e3.0	3.8	2.7	3.7	2.8	3.6	3.5
7	2.5	4.1	3.9	2.5	2.7	e2.9	3.9	2.7	3.6	3.2	3.7	3.2
8	2.5	4.1	4.0	2.5	2.7	e100	52	2.9	3.6	2.4	3.6	3.2
9	3.0	4.1	3.9	2.5	2.7	315	177	2.8	3.9	2.4	3.6	3.2
10	2.7	4.2	3.9	2.6	2.7	412	178	2.9	3.8	2.4	3.5	3.2
11	2.8	4.2	3.8	2.6	2.8	406	90	3.0	3.7	2.5	4.6	3.2
12	2.9	4.2	4.0	2.6	2.8	405	3.2	3.1	3.7	2.5	3.8	3.2
13	3.1	4.6	3.6	2.7	2.7	407	3.0	3.3	3.7	3.2	3.9	3.2
14	3.1	4.8	3.3	2.6	2.7	406	2.8	3.4	4.1	3.6	3.8	3.3
15	3.3	4.6	3.1	2.7	2.7	406	2.8	3.3	3.6	3.5	4.0	3.4
16	3.3	4.6	3.1	2.8	2.8	305	2.8	3.2	3.7	3.4	3.6	3.6
17	3.4	5.0	3.1	3.0	2.8	230	2.8	3.3	3.5	3.6	3.5	3.4
18	3.6	4.9	3.0	2.7	2.9	230	2.9	3.3	3.7	3.6	3.3	3.3
19	3.7	4.6	3.1	2.6	2.8	117	2.9	3.2	4.4	3.6	3.3	3.3
20	3.8	4.7	2.9	2.6	2.8	4.9	2.9	3.6	3.6	3.5	3.6	3.2
21	3.8	4.7	2.9	2.7	2.8	4.3	2.8	e3.7	e3.6	3.4	e3.6	3.2
22	3.8	4.6	2.9	2.7	2.8	4.1	2.7	e3.7	e3.6	3.4	e3.6	3.3
23	3.8	4.6	2.9	2.7	2.9	4.0	2.7	e3.8	3.5	3.5	e3.7	4.4
24	3.6	4.6	2.9	2.7	2.9	3.9	2.7	3.9	2.4	3.7	3.7	3.5
25	3.5	4.6	2.7	e2.7	2.8	3.6	2.7	3.7	2.4	3.1	3.1	3.5
26	3.8	4.5	2.7	e2.7	2.8	3.6	2.8	3.7	2.4	3.2	3.1	3.5
27	3.8	4.4	2.8	e2.7	2.8	3.6	2.7	3.6	2.4	3.3	3.1	3.5
28	3.7	4.4	2.8	e2.8	2.9	3.9	2.9	3.7	2.5	3.6	3.7	3.5
29	3.8	4.5	2.7	e2.8	3.1	3.6	e2.9	3.6	2.6	4.0	3.4	3.5
30	3.8	4.6	2.7	2.8	---	3.6	e2.8	3.4	2.6	3.5	3.6	3.5
31	3.8	---	2.6	e2.8	---	3.7	---	3.6	---	3.7	3.5	---
TOTAL	100.9	131.9	104.9	82.5	81.2	3,806.7	577.1	100.6	102.1	98.0	110.8	100.9
MEAN	3.25	4.40	3.38	2.66	2.80	123	19.2	3.25	3.40	3.16	3.57	3.36
MAX	3.8	5.0	4.5	3.0	3.1	412	178	3.9	4.4	4.0	4.6	4.4
MIN	2.5	3.8	2.6	2.5	2.7	2.9	2.7	2.6	2.4	2.4	3.1	3.1
AC-FT	200	262	208	164	161	7,550	1,140	200	203	194	220	200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

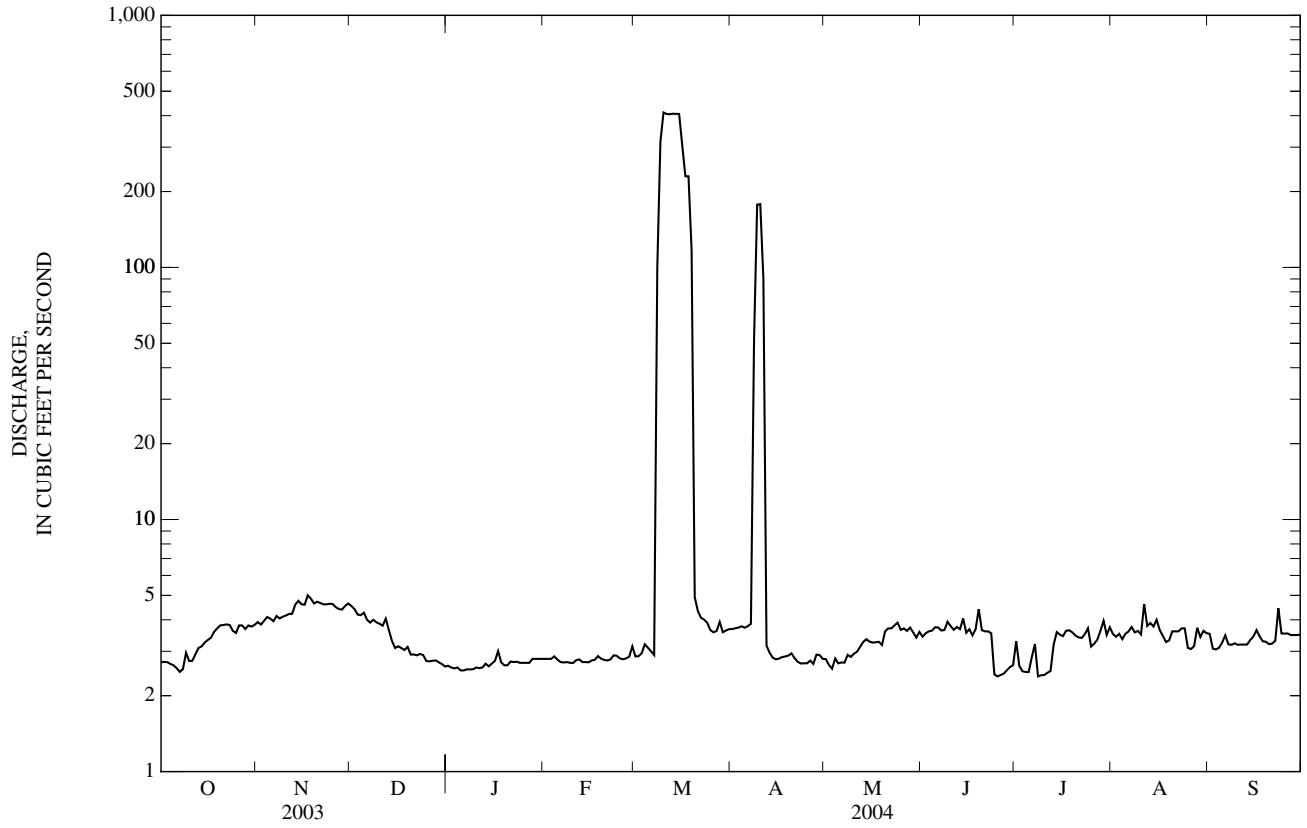
MEAN	22.4	27.6	20.9	25.0	24.5	41.7	35.6	51.8	122	31.4	18.4	18.9
MAX	345	538	194	139	131	312	237	429	779	262	211	157
(WY)	(1987)	(1987)	(1993)	(1969)	(1975)	(1990)	(1998)	(1993)	(1987)	(1995)	(1975)	(1965)
MIN	1.41	1.62	1.57	1.99	2.14	2.12	2.01	1.50	1.90	0.78	1.48	1.60
(WY)	(1985)	(1973)	(1973)	(1977)	(1981)	(1977)	(1985)	(1985)	(1972)	(1985)	(1981)	(1978)

e Estimated

07326000 COBB CREEK NEAR FORT COBB, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1963 - 2004	
ANNUAL TOTAL	3,616.9		5,397.6			
ANNUAL MEAN	9.91		14.7		a36.6	
HIGHEST ANNUAL MEAN					176	1987
LOWEST ANNUAL MEAN					2.34	1981
HIGHEST DAILY MEAN	186	Jun 20	412	Mar 10	1,270	Jun 23, 1987
LOWEST DAILY MEAN	2.5	Oct 7	2.4	at times	b0.20	Jul 20, 1981
ANNUAL SEVEN-DAY MINIMUM	2.6	Oct 2	2.5	Jun 24	0.20	Jul 20, 1981
MAXIMUM PEAK FLOW			419	Mar 9	c1,280	Jun 23, 1987
MAXIMUM PEAK STAGE			9.51	Mar 9	d20.50	Jun 4, 1995
ANNUAL RUNOFF (AC-FT)	7,170		10,710		26,500	
10 PERCENT EXCEEDS	4.8		4.4		88	
50 PERCENT EXCEEDS	3.3		3.3		3.0	
90 PERCENT EXCEEDS	2.8		2.6		2.0	

a Prior to regulation by Fort Cobb Reservoir, water years 1940-58, 50.2 ft^3/s.
b Also occurred Sept. 20, 24-28, 1956, July 20-27, 1981.
c Maximum discharge for period of record, 35,000 ft^3/s, May 17, 1949, from rating curve extended above 4,300 ft^3/s on basis of contracted opening measurement.
d Occurred during backwater from Punjo Creek.



07326000 COBB CREEK NEAR FORT COBB, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1943-1948, 1950-1951, 1959-1960, 1962-1963, 1986-1990, June 2003 to October 2004 (discontinued).

REMARKS.--Samples were collected periodically and specific conductance, pH, water temperature, and dissolved oxygen were determined in the field. Additional data is available in the district office for analyses performed by other laboratories.

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth at sample location, feet (81903)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	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)	Location in X-sect. looking dwnstrm ft from l bank (00009)
JUL 2003												
15...	1354	1028	1028	<1.00	3.82	4.7	731	8.3	7.6	546	29.1	1.00
15...	1356	1028	1028	<1.00	3.82	4.7	731	8.5	7.5	546	29.2	2.00
15...	1358	1028	1028	<1.00	3.82	4.7	731	8.3	7.5	546	29.0	3.00
15...	1400	1028	1028	<1.00	3.82	4.7	731	8.4	7.6	546	29.0	4.00
15...	1402	1028	1028	<1.00	3.82	4.7	731	8.4	7.5	546	29.1	5.00
15...	1403	1028	1028	<1.00	3.82	4.7	731	8.4	7.5	546	29.0	6.00
15...	1404	1028	1028	<1.00	3.82	4.7	731	8.4	7.5	546	29.1	7.00
AUG 2004												
15...	1908	1028	1028	--	3.91	4.3	--	8.5	8.0	515	22.5	5.00
15...	1910	1028	1028	--	3.91	4.3	--	8.6	8.0	515	22.5	3.00
15...	1912	1028	1028	--	3.91	4.3	--	8.6	8.0	514	22.5	1.00
30...	1230	1028	1028	--	3.89	3.8	734	7.0	7.8	523	22.0	1.00
30...	1231	1028	1028	--	3.89	3.8	734	7.0	7.8	523	22.0	2.00
30...	1232	1028	1028	--	3.89	3.8	734	6.9	7.8	523	22.0	3.00
30...	1233	1028	1028	--	3.89	3.8	734	6.9	7.8	522	22.0	4.00
30...	1234	1028	1028	--	3.89	3.8	734	6.9	7.8	522	22.0	5.00
OCT												
12...	1215	1028	1028	--	3.89	3.4	792	8.6	7.9	526	16.2	1.00
12...	1216	1028	1028	--	3.89	3.4	792	8.5	7.9	526	--	2.00
12...	1217	1028	1028	--	3.89	3.4	792	8.5	7.9	526	16.2	3.00
12...	1218	1028	1028	--	3.89	3.4	792	8.5	7.9	526	16.2	4.00

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

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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)	2,4,5-T surrog, water, fltrd, percent recovry (99958)
JUL 2003													
15...	1430	1028	80020	3.82	4.7	731	8.4	115	7.5	546	35.5	29.1	--
DEC													
03...	1400	1028	80020	4.00	4.2	728	10.8	100	7.9	580	16.8	9.8	--
AUG 2004													
15...	1930	1028	80020	3.91	4.3	--	8.6	--	8.0	515	22.0	22.5	87.7
30...	1300	1028	80020	3.89	3.8	734	6.9	82	7.8	523	22.5	22.0	119
OCT													
12...	1230	1028	80020	3.89	3.5	792	8.5	83	7.9	526	20.0	16.2	77.5

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—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-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)
JUL 2003													
15...	--	--	--	<.006	E.017	--	--	--	--	<.006	--	<.004	--
DEC													
03...	--	--	--	<.006	<.006	--	--	--	--	<.006	--	<.005	--
AUG 2004													
15...	<.009	E.04	<.02	<.006	E.012	<.01	E.031	<.006	<.014	<.006	<.007	<.005	<.02
30...	<.009	<.02	<.02	<.006	E.012	<.01	E.037	<.006	<.014	<.006	<.007	<.009	<.02
OCT													
12...	<.016	<.04	<.02	<.006	E.012	E.01	E.028	<.008	<.02	<.006	<.028	<.005	<.02

07326000 COBB CREEK NEAR FORT COBB, OK—Continued

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—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)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atrazine, water, fltrd, ug/L (39632)	Azinphos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	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)
JUL 2003													
15...	--	--	<.005	97.6	.043	<.050	--	--	<.010	--	--	--	--
DEC													
03...	--	--	<.005	83.3	.029	<.050	--	--	<.010	--	--	--	--
AUG 2004													
15...	<.008	<.04	<.005	93.1	.038	<.050	105	<.03	<.010	<.004	<.02	<.01	<.03
30...	<.008	<.04	<.005	89.6	.034	<.050	98.0	<.03	<.010	<.004	<.02	<.01	<.03
OCT													
12...	<.022	<.04	<.005	97.5	.028	<.050	81.1	<.02	<.010	<.022	<.02	<.01	<.02

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	Bromoxynil, water, fltrd 0.7u GF ug/L (49311)	Butylate, water, fltrd, ug/L (04028)	Caffeine, water, fltrd, ug/L (50305)	Caffeine-13C, surrog, wat flt percent recovry (99959)	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)
JUL 2003													
15...	--	<.002	--	--	--	<.041	--	<.020	--	--	--	--	<.005
DEC													
03...	--	<.004	--	--	--	<.041	--	<.020	--	--	--	--	<.005
AUG 2004													
15...	<.02	<.004	.0372	101	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.04	<.005
30...	<.02	<.004	.0304	103	<.03	<.041	<.006	<.020	<.02	<.010	<.04	<.04	<.005
OCT													
12...	<.03	<.004	<.0277	99.1	<.02	<.041	<.016	<.020	<.02	<.032	<.04	<.04	<.005

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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 mono-acid, 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)	Diazinon-d10 surrog. wat flt 0.7u GF percent recovry (91063)	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)
JUL 2003													
15...	<.006	--	<.018	--	--	<.003	<.004	<.005	115	--	--	<.005	--
DEC													
03...	<.006	--	<.018	--	--	<.003	<.012	<.005	97.3	--	--	<.009	--
AUG 2004													
15...	<.006	<.01	<.018	<.01	<.01	<.003	<.012	<.005	116	<.01	<.01	<.009	<.01
30...	<.006	<.01	<.018	<.01	<.01	<.003	<.012	<.005	110	<.01	<.01	<.009	<.01
OCT													
12...	<.006	<.02	<.018	<.01	<.03	<.003	<.012	<.005	94.8	<.04	<.03	<.009	<.04

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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)	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)
JUL 2003													
15...	--	<.02	--	<.002	<.009	<.005	--	<.009	<.005	<.005	<.007	--	--
DEC													
03...	--	<.02	--	<.004	<.009	<.005	--	<.029	<.013	<.024	<.016	--	--
AUG 2004													
15...	<.03	<.02	<.01	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01	<.03
30...	<.03	<.02	<.01	<.004	<.009	<.005	<.03	<.029	<.013	<.024	<.016	<.01	<.03
OCT													
12...	<.01	<.02	<.01	<.004	<.009	<.005	<.02	<.029	<.013	<.024	<.016	<.04	<.02

07326000 COBB CREEK NEAR FORT COBB, OK—Continued

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.003	--	--	--	<.004	--	<.035	<.027	--	--	--	--	--
DEC													
03...	<.003	--	--	--	<.004	--	<.035	<.027	--	--	--	--	--
AUG 2004													
15...	<.003	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
30...	<.003	<.02	<.02	<.007	<.004	<.01	<.035	<.027	<.02	<.01	<.02	<.008	<.004
OCT													
12...	<.003	<.04	<.04	<.020	<.004	<.01	<.035	<.027	<.03	<.01	<.01	<.010	<.020

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.006	<.013	<.006	--	<.002	--	<.007	--	--	--	--	--	<.003
DEC													
03...	<.015	<.013	<.006	--	<.003	--	<.007	--	--	--	--	--	<.003
AUG 2004													
15...	<.015	E.004	<.006	<.03	<.003	<.02	<.007	<.01	<.01	<.02	.04	<.01	<.003
30...	<.015	<.013	<.006	<.03	<.003	<.02	<.007	<.01	<.01	<.02	.13	<.01	<.003
OCT													
12...	<.015	<.006	<.006	<.03	<.003	<.04	<.007	<.01	<.04	<.02	.13	<.03	<.003

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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)	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)
JUL 2003													
15...	<.010	<.004	<.022	<.011	--	<.01	<.004	<.010	<.011	<.02	--	--	--
DEC													
03...	<.010	<.004	<.022	<.011	--	<.01	<.004	<.025	<.011	<.02	--	--	--
AUG 2004													
15...	<.010	<.004	<.022	<.011	<.02	M	<.004	<.025	<.011	<.02	<.010	<.02	<.008
30...	<.010	<.004	<.022	<.011	<.02	<.01	<.005	<.025	<.011	<.02	<.010	<.02	<.008
OCT													
12...	<.010	<.004	<.022	<.011	<.03	<.01	<.004	<.025	<.011	<.02	<.030	<.01	<.008

WATER-QUALITY DATA, JULY 2003 TO OCTOBER 2005—CONTINUED

Date	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)	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)	Triclopyr, water, fltrd 0.7u GF ug/L (49235)	Trifluralin, water, fltrd 0.7u GF ug/L (82661)
JUL 2003											
15...	--	.007	--	E.01	<.034	--	<.02	<.005	<.002	--	<.009
DEC											
03...	--	E.003	--	<.02	<.034	--	<.02	<.010	<.002	--	<.009
AUG 2004											
15...	<.02	.008	<.009	E.01	<.034	<.010	<.02	<.010	<.002	<.02	<.009
30...	<.02	<.007	<.009	<.02	<.034	<.010	<.02	<.010	<.002	<.02	<.009
OCT											
12...	<.02	<.010	<.038	<.02	<.034	<.016	<.02	<.010	<.006	<.03	<.009

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

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07326500 WASHITA RIVER AT ANADARKO, OK

LOCATION.--Lat 35°05'03", long 98°14'35", in NW $^1/_4$ sec.15, T.7 N., R.10 W., Caddo County, Hydrologic Unit 11130302 on right downstream bank at bridge on U.S. Highway 281 at north edge of Anadarko, 8.1 mi upstream from Sugar Creek, and at mile 305.2.

DRAINAGE AREA.--3,656 mi^2.

PERIOD OF RECORD.--October 1902 to September 1908; June 1924 to June 1925, published as "near Anadarko", October 1935 to February 1938; October 1963 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1311: 1903, 1907-08, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,150.00 ft above sea level. October 26, 1902, to June 30, 1908, nonrecording gage at former bridge 125 ft downstream at datum estimated to be 2.8 ft higher. May 25, 1924, to June 30, 1925, nonrecording gage at county road bridge 14 mi downstream at different datum. Jan. 10, 1936, to Mar. 7, 1938, non-recording gage on upstream side of bridge on U.S. Highway 281 at datum 1.88 ft higher. October 1963 to March 1989 gage located 100 ft upstream at same datum.

REMARKS.--Records poor. Flow regulated by low-water dams upstream and since March 1959, by Fort Cobb Reservoir (station 07325900), since February 1961, by Foss Reservoir (station 07324300), and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1949, reached an elevation of 1,176.7 ft, from floodmark, at right bank on downstream side of bridge on U.S. Highway 281.

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	58	59	67	74	89	94	421	548	90	675	e122	172
2	59	60	67	75	90	94	304	1,130	87	1,910	e115	130
3	59	60	67	75	89	96	242	810	87	4,590	e103	110
4	61	62	67	74	91	194	303	e473	86	3,510	92	99
5	64	61	67	73	94	3,080	329	369	85	e1,950	89	90
6	65	61	68	74	93	6,080	328	335	83	e1,520	88	86
7	65	63	68	74	91	5,260	347	272	83	e1,610	90	82
8	64	63	69	73	91	2,490	338	235	83	e1,900	90	75
9	69	64	69	69	92	1,690	387	207	83	e1,110	90	72
10	75	64	68	66	90	1,550	553	185	87	e755	86	67
11	71	65	69	71	87	1,360	520	169	86	e570	89	65
12	71	64	73	73	85	1,170	e452	155	81	e460	121	63
13	71	64	75	75	84	1,030	e420	145	75	e330	139	62
14	77	65	76	75	83	934	e400	136	76	283	150	61
15	88	67	75	75	83	866	e380	132	78	222	144	60
16	72	68	74	79	83	818	e360	131	79	187	128	60
17	68	69	74	91	82	642	e340	128	79	171	109	60
18	64	68	74	95	83	548	321	126	78	156	104	59
19	62	71	75	249	84	556	301	122	80	146	118	58
20	61	73	74	379	82	448	298	119	80	138	183	57
21	61	71	74	216	82	261	295	116	82	132	157	55
22	60	70	73	154	81	233	294	111	116	126	134	54
23	60	68	73	129	85	276	292	108	1,320	121	120	58
24	59	67	73	116	85	321	297	103	1,430	125	111	61
25	57	67	73	109	84	325	292	99	e1,250	123	103	64
26	58	67	74	99	83	367	237	97	e740	118	96	63
27	59	67	75	95	83	352	196	103	484	114	90	67
28	60	68	74	92	83	357	187	127	412	119	92	71
29	60	66	74	90	90	345	183	100	395	119	91	68
30	60	67	75	88	---	395	194	97	416	113	827	72
31	59	---	74	86	---	569	---	95	---	e118	371	---
TOTAL	1,997	1,969	2,228	3,263	2,502	32,801	9,811	7,083	8,291	23,521	4,442	2,221
MEAN	64.4	65.6	71.9	105	86.3	1,058	327	228	276	759	143	74.0
MAX	88	73	76	379	94	6,080	553	1,130	1,430	4,590	827	172
MIN	57	59	67	66	81	94	183	95	75	113	86	54
AC-FT	3,960	3,910	4,420	6,470	4,960	65,060	19,460	14,050	16,450	46,650	8,810	4,410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

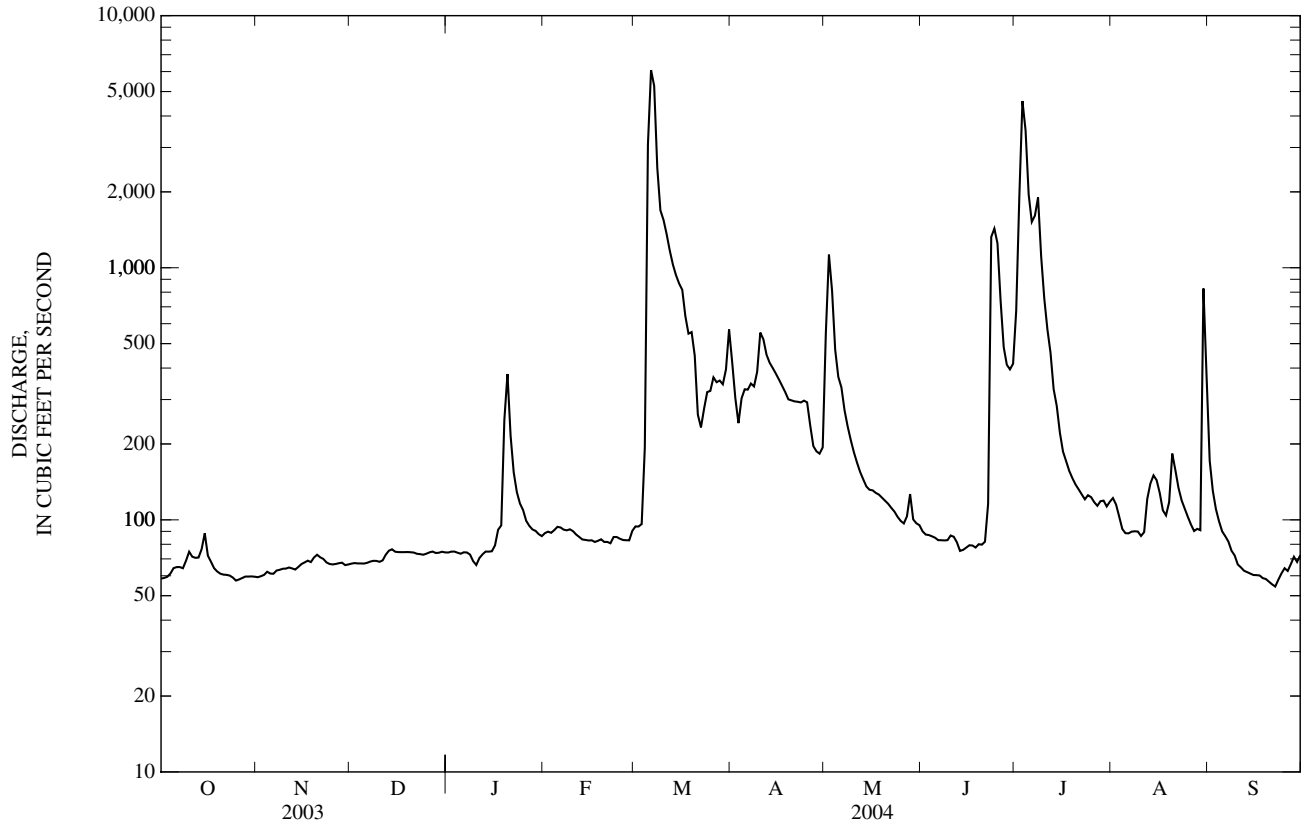
MEAN	475	348	286	278	310	499	491	920	1,060	391	307	386
MAX	5,480	2,205	1,352	1,213	1,269	2,981	3,003	5,601	5,843	1,459	2,223	2,654
(WY)	(1987)	(1987)	(1993)	(1998)	(1997)	(1998)	(1997)	(1993)	(1995)	(1989)	(1995)	(1996)
MIN	21.2	37.0	41.6	52.0	55.4	50.6	16.7	9.57	85.7	12.6	19.7	32.2
(WY)	(1973)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1967)	(1964)	(1972)	(1984)

e Estimated

07326500 WASHITA RIVER AT ANADARKO, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	76,407		100,129			
ANNUAL MEAN	209		274		a479	
HIGHEST ANNUAL MEAN					1,788	1987
LOWEST ANNUAL MEAN					72.7	1971
HIGHEST DAILY MEAN	2,440	Jun 16	6,080	Mar 6	37,700	Oct 21, 1983
LOWEST DAILY MEAN	53	Sep 28	54	Sep 22	0.00	Aug 1, 1964
ANNUAL SEVEN-DAY MINIMUM	57	Sep 23	57	Sep 17	0.77	Jul 19, 1964
MAXIMUM PEAK FLOW			6,650	Mar 7	52,800	Jun 6, 1995
MAXIMUM PEAK STAGE			17.48	Mar 7	25.37	Jun 6, 1995
ANNUAL RUNOFF (AC-FT)	151,600		198,600		347,300	
10 PERCENT EXCEEDS	298		528		1,120	
50 PERCENT EXCEEDS	158		90		182	
90 PERCENT EXCEEDS	60		63		55	

a Prior to regulations, water years 1903-08, 1936-37, 595 ft^3/s.



073274406 LITTLE WASHITA RIVER ABOVE SCS POND NO. 26 NEAR CYRIL, OK

LOCATION.-- Lat 34°54'53", long 98°15'02", in SW ¼ SW ¼ sec. 10, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on right downstream bank of county road, 3 mi west of Cyril, and at mile 29.6.

DRAINAGE AREA.--3.44 mi^2.

PERIOD OF RECORD.-- February 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,329.98 ft above sea level.

REMARKS.--Records poor. U.S. Geological Survey's satellite telemeter at station.

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	e0.00	0.06	0.03	0.11	0.31	0.23	0.20	0.30	0.00	0.38	0.02	0.00
2	e0.00	0.08	0.04	0.11	0.25	0.23	0.20	0.23	0.00	0.14	0.01	0.01
3	e0.00	0.06	0.03	0.11	0.20	0.35	0.22	0.21	0.01	0.30	0.01	0.00
4	e0.00	0.04	0.03	0.08	0.27	3.8	0.21	0.20	0.00	0.04	0.01	0.00
5	e0.00	0.04	0.02	0.07	0.22	0.70	0.22	0.16	0.00	0.01	0.01	0.00
6	e0.12	0.06	0.03	0.06	0.17	0.45	0.23	0.14	0.00	0.59	0.02	0.00
7	0.06	0.06	0.04	0.07	0.17	0.34	0.27	0.13	0.00	0.08	0.02	0.00
8	0.05	0.06	0.04	0.09	0.19	0.29	0.22	0.11	0.00	0.07	0.02	0.00
9	0.05	0.08	0.04	0.10	0.21	0.26	0.24	0.08	0.14	0.08	0.02	0.00
10	0.04	0.06	0.04	0.10	0.19	0.25	0.29	0.06	0.09	0.07	0.01	0.00
11	0.04	0.04	0.05	0.10	0.21	0.23	0.23	0.06	0.00	0.06	0.34	0.00
12	0.04	0.06	0.09	0.11	0.19	0.21	0.23	0.07	0.00	0.05	0.04	0.00
13	0.04	0.06	0.10	0.16	0.19	0.22	0.22	0.07	0.00	0.05	0.00	0.00
14	0.04	0.04	0.09	0.16	0.21	0.20	0.22	0.06	0.00	0.04	0.01	0.00
15	0.04	0.04	0.09	0.14	0.19	0.19	0.22	0.04	0.00	0.04	0.01	0.00
16	0.04	0.06	0.06	0.23	0.17	0.18	0.22	0.04	0.00	0.02	0.01	0.00
17	0.04	0.18	0.06	0.39	0.18	0.18	0.21	0.03	0.00	0.03	0.01	0.00
18	0.05	0.06	0.06	0.24	0.19	0.18	0.22	0.02	0.00	0.04	0.00	0.00
19	0.04	0.06	0.07	0.12	0.19	0.18	0.21	0.02	0.05	0.01	0.01	0.00
20	0.04	0.03	0.08	0.11	0.18	0.18	0.21	0.01	0.04	0.02	0.02	0.00
21	0.04	0.02	0.08	0.10	0.19	0.16	0.18	0.02	0.13	0.00	0.01	0.00
22	0.04	0.04	0.09	0.11	0.22	0.17	0.16	0.01	0.13	0.01	0.00	0.00
23	0.05	0.02	0.07	0.12	0.38	0.18	0.18	0.04	0.03	0.01	0.01	0.04
24	0.05	0.03	0.08	0.16	0.28	0.20	0.19	0.00	0.00	0.01	0.00	0.00
25	0.06	0.05	0.08	0.19	0.25	0.20	0.16	0.00	0.00	0.04	0.00	0.00
26	0.08	0.05	0.11	0.14	0.25	0.20	0.27	0.00	0.00	0.05	0.00	0.00
27	0.06	0.03	0.13	0.12	0.26	0.25	0.13	0.00	0.00	0.05	0.00	0.00
28	0.06	0.03	0.09	0.15	0.26	0.24	0.13	0.00	0.00	0.11	0.18	0.00
29	0.08	0.05	0.10	0.15	0.43	0.18	0.11	0.00	0.12	0.08	0.02	0.00
30	0.08	0.04	0.09	0.13	---	0.18	0.54	0.00	0.15	0.05	0.00	0.00
31	0.06	---	0.09	0.17	---	0.20	---	0.00	---	0.05	0.00	---
TOTAL	1.39	1.59	2.10	4.20	6.60	11.01	6.54	2.11	0.89	2.58	0.82	0.05
MEAN	0.04	0.05	0.07	0.14	0.23	0.36	0.22	0.07	0.03	0.08	0.03	0.00
MAX	0.12	0.18	0.13	0.39	0.43	3.8	0.54	0.30	0.15	0.59	0.34	0.04
MIN	0.00	0.02	0.02	0.06	0.17	0.16	0.11	0.00	0.00	0.00	0.00	0.00
AC-FT	2.8	3.2	4.2	8.3	13	22	13	4.2	1.8	5.1	1.6	0.1

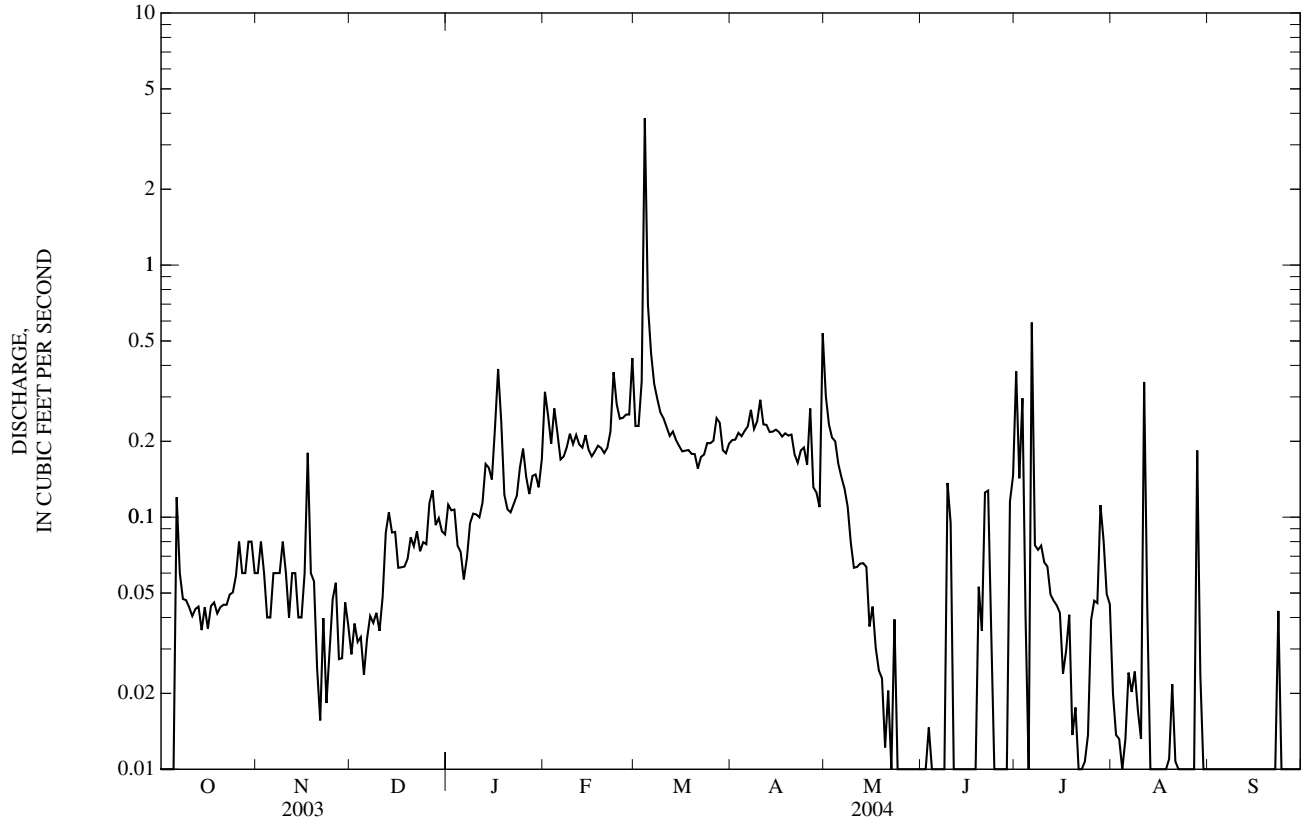
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	3.28	1.25	1.09	1.51	1.64	2.73	1.89	2.27	3.33	1.30	0.98	0.53
MAX	19.9	3.34	2.62	7.18	4.39	11.9	3.73	10.9	21.6	4.81	3.74	1.91
(WY)	(2001)	(1999)	(2001)	(1998)	(1998)	(1998)	(1995)	(1995)	(1995)	(1997)	(1995)	(1996)
MIN	0.04	0.05	0.07	0.14	0.23	0.36	0.22	0.07	0.03	0.08	0.03	0.00
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

e Estimated

073274406 LITTLE WASHITA RIVER ABOVE SCS POND NO. 26 NEAR CYRIL, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	169.76		39.88			
ANNUAL MEAN	0.47		0.11		1.51	
HIGHEST ANNUAL MEAN					3.39	1998
LOWEST ANNUAL MEAN					0.11	2004
HIGHEST DAILY MEAN	21	Jun 13	3.8	Mar 4	471	Oct 23, 2000
LOWEST DAILY MEAN	0.00	Sep 28	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 28	0.00	May 24	0.00	Sep 28, 2003
MAXIMUM PEAK FLOW			30	Mar 4	2,280	Oct 23, 2000
MAXIMUM PEAK STAGE			5.07	Mar 4	14.26	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	337		79		1,090	
10 PERCENT EXCEEDS	0.97		0.23		2.3	
50 PERCENT EXCEEDS	0.28		0.06		0.61	
90 PERCENT EXCEEDS	0.04		0.00		0.08	



073274408 LITTLE WASHITA RIVER TRIBUTARY NEAR CYRIL, OK

LOCATION.-- Lat 34°55'33", long 98°14'00", in SE ¼ NE ¼ NE ¼ sec. 10, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on right bank of county road, 1.7 mi west of Cyril, 6.8 mi east of Apache, and at mile 1.6.

DRAINAGE AREA.--1.10 mi^2.

PERIOD OF RECORD.-- February 1995 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,372.05 ft above sea level.

REMARKS.--Records poor. U.S. Geological Survey's satellite telemeter at station.

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	e0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.95	0.00	0.00	0.00	e0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	e0.00	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	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	e0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	e0.00	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	0.95	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00
MAX	0.00	0.00	0.00	0.00	0.00	0.95	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	1.9	0.00	0.00	0.00	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	1.23	0.26	0.25	0.29	0.29	0.56	0.49	0.29	0.42	0.24	0.09	0.09
MAX	8.23	0.74	0.72	1.54	0.96	2.84	1.04	0.71	2.59	1.47	0.42	0.27
(WY)	(2001)	(1997)	(2000)	(1998)	(1998)	(1998)	(1999)	(2001)	(1995)	(1997)	(1995)	(1995)
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)	(2000)	(2000)	(2002)	(2000)	(2002)	(2002)	(2004)	(2004)	(2004)	(1998)	(1999)	(1998)

e Estimated

073274408 LITTLE WASHITA RIVER TRIBUTARY NEAR CYRIL, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	17.54		0.95			
ANNUAL MEAN	0.05		0.00		0.35	
HIGHEST ANNUAL MEAN					0.99	2001
LOWEST ANNUAL MEAN					0.00	2004
HIGHEST DAILY MEAN	7.9	Jun 13	0.95	Mar 4	229	Oct 23, 2000
LOWEST DAILY MEAN	0.00	Jan 2	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 10	0.00	Oct 1	0.00	May 19, 1996
MAXIMUM PEAK FLOW			15	Mar 4	a1,920	Oct 23, 2000
MAXIMUM PEAK STAGE			6.64	Mar 4	b13.50	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	35		1.9		254	
10 PERCENT EXCEEDS	0.00		0.00		0.49	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a From theoretical rating.
b From high-water mark.

07327441 SCS POND NO. 26 NEAR CYRIL, OK

LOCATION.--Lat 34°54'09", long 98°14'22", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.15, T.5 N., R.10 W., Caddo County, Hydrologic Unit 11130302, on north face of dam, on Little Washita River, 2.2 mi west of Cyril, and at mile 28.4.

DRAINAGE AREA.--6.64 mi^2 (Agricultural Research Service).

PERIOD OF RECORD.--November 1993 to current year.

REVISED RECORDS.--WDR OK-96-2: 1994, 1995.

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

REMARKS.--Reservoir is formed by earthen dam, construction completed November 1976. Emergency spillway elevation is 1,352.55 ft, contents 1,520 acre-ft; principal spillway elevation is 1,328.95 ft, contents 142 acre-ft; drain value elevation 1,295.25 ft. Figures herein represent total contents. Reservoir is used for flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,225 acre-ft, Oct. 23, 2000, elevation 1,348.38 ft (from HWM); minimum after initial storage, 159 acre-ft, Sept. 30, 2004, elevation 1,319.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 185 acre-ft, Mar. 4, elevation 1,321.74 ft; minimum, 159 acre-ft, Sept. 30, elevation 1,319.98 ft.

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

1318	133.0	1338	582.0
1320	159.0	1344	909.0
1326	246.0	1350	1370.0
1332	376.0		

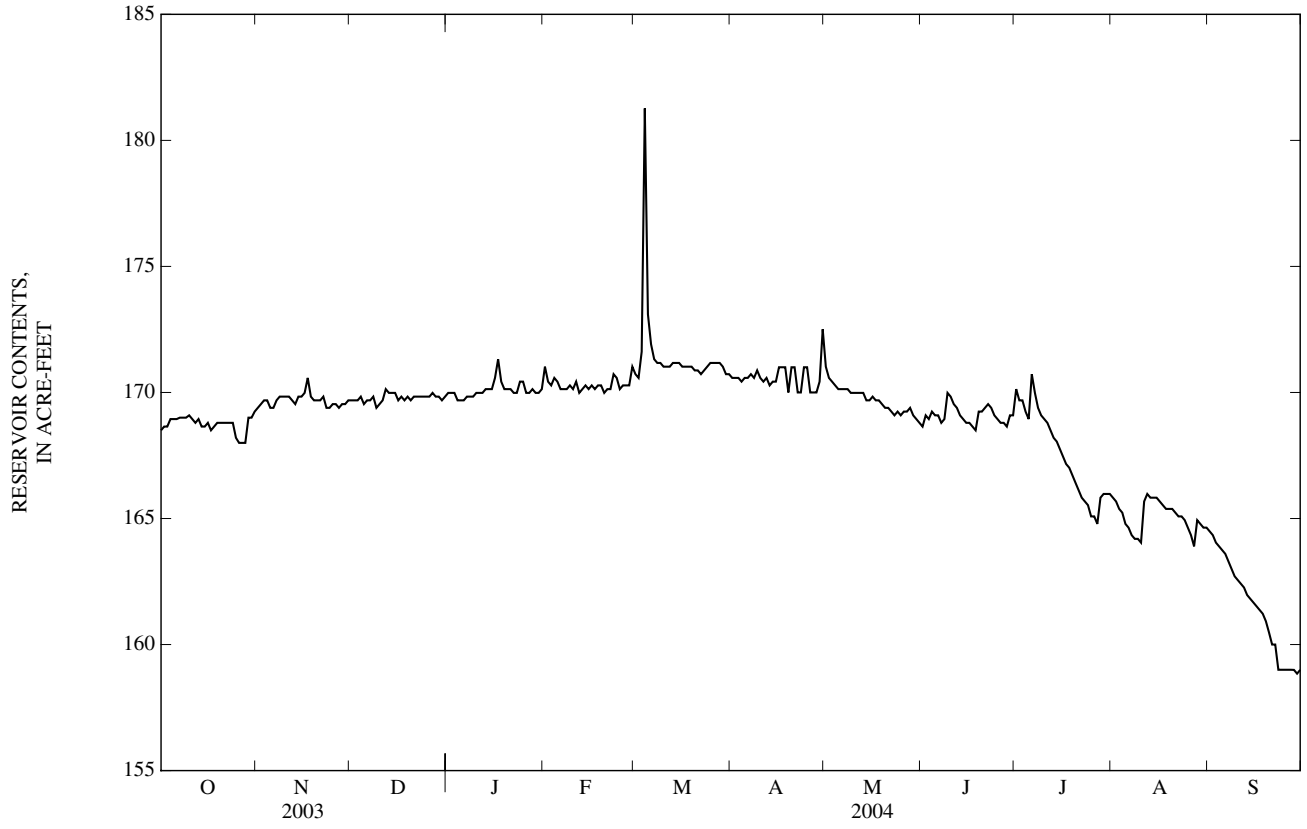
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	169	170	170	171	171	171	171	169	170	166	164
2	169	170	170	170	170	171	171	171	169	170	166	164
3	169	170	170	170	170	172	171	170	169	170	165	164
4	169	170	170	170	171	181	170	170	169	169	165	164
5	169	169	170	170	170	173	171	170	169	169	165	164
6	169	169	170	170	170	172	171	170	169	171	165	164
7	169	170	170	170	170	171	171	170	169	170	164	163
8	e169	170	170	170	170	171	171	170	169	169	164	163
9	169	170	169	170	170	171	171	170	170	169	164	163
10	169	170	170	170	170	171	171	170	170	169	164	163
11	169	170	170	170	170	171	170	170	170	169	166	162
12	169	170	170	170	170	171	171	170	169	168	166	162
13	169	170	170	170	170	171	170	170	169	168	166	162
14	169	170	170	170	170	171	170	170	169	168	166	162
15	169	170	170	170	170	171	170	170	169	168	166	162
16	169	170	170	171	170	171	171	170	169	167	166	162
17	168	171	170	171	170	171	e171	170	169	167	166	161
18	169	170	170	170	170	171	e171	170	168	167	165	161
19	169	170	170	170	170	171	e170	170	169	167	165	161
20	169	170	170	170	170	171	e171	169	169	166	165	160
21	169	170	170	170	170	171	e171	169	169	166	165	e160
22	169	170	170	170	170	171	e170	169	170	166	165	e160
23	169	169	170	170	171	171	e170	169	169	166	165	e159
24	169	169	170	170	171	171	e171	169	169	166	165	e159
25	168	170	170	170	170	171	e171	169	169	165	165	e159
26	168	170	170	170	170	171	e170	169	169	165	164	e159
27	e168	169	170	170	170	171	e170	169	169	165	164	e159
28	e168	170	170	170	170	171	170	169	169	166	165	159
29	e169	170	170	170	171	171	170	169	169	166	165	159
30	169	170	170	170	---	171	173	169	169	166	165	159
31	169	---	170	170	---	171	---	169	---	166	165	---
MAX	169	171	170	171	171	181	173	171	170	171	166	164
MIN	168	169	169	170	170	171	170	169	168	165	164	159
(‡)	1320.69	1320.72	1320.73	1320.75	1320.81	1320.79	1320.91	1320.66	1320.68	1320.47	1320.38	1320.00
(‡‡)	0	+1	0	0	+1	0	+2	-4	0	-3	-1	-6

CAL YR 2003 MAX 184 MIN 167 (‡‡) -1
WTR YR 2004 MAX 181 MIN 159 (‡‡) -10

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07327441 SCS POND NO. 26 NEAR CYRIL, OK—Continued



07327442 LITTLE WASHITA RIVER NEAR CYRIL, OK

LOCATION.-- Lat 34°53'32", long 98°13'58", in SW ¼ NW ¼ sec. 23, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on left bank 300 ft downstream from county road, 1.7 mi west of Cyril, 6.8 mi east of Apache, and at mile 28.0.

DRAINAGE AREA.--11.6 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 1,259.29 ft above sea level.

REMARKS.--Records poor. Flow affected by numerous flood retention reservoirs. U.S. Geological Survey's satellite telemeter at station.

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	0.27	0.29	0.40	0.48	0.88	0.71	0.95	1.8	0.28	0.69	e0.04	e0.03
2	0.21	0.32	0.40	0.53	0.95	0.55	0.94	1.1	0.26	0.60	e0.05	e0.03
3	0.24	0.41	0.44	0.54	0.71	0.94	0.96	0.88	0.33	0.55	e0.04	e0.03
4	0.25	0.48	0.39	0.56	0.78	9.6	0.89	0.81	0.25	0.45	e0.04	e0.03
5	0.30	0.42	0.44	0.45	0.76	5.9	0.89	0.73	0.37	0.37	e0.04	e0.02
6	0.29	0.40	0.37	0.41	0.64	2.4	0.93	0.72	0.40	0.71	e0.03	e0.03
7	0.28	0.48	0.41	0.69	0.54	1.8	1.2	0.67	0.32	0.75	e0.04	e0.02
8	0.38	0.47	0.43	0.49	0.53	1.5	1.1	0.66	0.37	0.52	e0.03	e0.02
9	0.62	0.48	0.54	0.49	0.56	1.4	1.1	0.60	0.51	0.39	e0.04	e0.02
10	0.39	0.49	0.47	0.50	0.54	1.3	1.3	0.61	0.72	0.29	e0.04	e0.02
11	0.34	0.54	0.40	0.51	0.58	1.2	1.1	0.58	0.69	e0.24	e0.05	e0.02
12	0.32	0.54	0.51	0.51	0.61	1.2	0.97	0.60	0.63	e0.22	0.03	e0.03
13	0.27	0.44	0.65	0.57	0.45	1.4	0.95	0.62	0.54	e0.20	e0.03	e0.02
14	0.31	0.50	0.56	0.56	0.51	1.3	0.94	0.72	0.44	e0.18	e0.04	e0.02
15	0.20	0.58	0.57	0.56	0.52	1.3	0.93	0.67	0.38	e0.17	e0.03	e0.02
16	0.20	0.47	0.51	0.69	0.51	1.2	0.98	0.61	0.35	e0.15	e0.03	e0.02
17	0.26	0.60	0.42	1.3	0.51	1.2	1.0	0.63	0.34	e0.13	e0.03	e0.03
18	0.24	0.83	0.46	1.1	0.51	1.2	0.94	0.50	0.32	e0.12	e0.03	e0.02
19	0.24	0.47	0.44	0.73	0.52	1.2	0.90	0.45	0.45	e0.11	e0.04	e0.02
20	0.26	0.49	0.45	0.64	0.51	1.2	1.0	0.41	0.44	e0.10	e0.03	e0.02
21	0.26	0.49	0.46	0.61	0.44	1.1	0.91	0.39	0.40	e0.09	e0.03	e0.02
22	0.24	0.48	0.51	0.58	0.47	1.1	0.87	0.34	0.60	e0.08	e0.03	e0.02
23	0.26	0.56	0.49	0.59	0.78	1.1	1.0	0.35	0.63	e0.07	e0.02	e0.02
24	0.30	0.41	0.44	0.62	0.70	1.2	1.3	0.30	0.54	e0.07	e0.02	e0.02
25	0.39	0.36	0.45	0.76	0.57	1.2	0.99	0.24	0.45	e0.06	e0.02	e0.02
26	0.27	0.39	0.46	0.70	0.46	1.1	1.5	0.27	0.39	e0.06	e0.03	e0.02
27	0.28	0.45	0.56	0.52	0.48	1.1	0.97	0.28	e0.27	e0.05	e0.04	0.02
28	0.31	0.36	0.51	0.54	0.49	1.3	0.80	0.37	e0.22	e0.07	e0.06	0.02
29	0.32	0.37	0.46	0.58	0.91	1.1	0.71	0.29	0.29	e0.05	e0.05	0.04
30	0.29	0.38	0.46	0.54	---	1.0	1.6	0.32	0.41	e0.05	e0.04	0.05
31	0.29	---	0.44	0.57	---	0.96	---	0.30	---	e0.04	e0.04	---
TOTAL	9.08	13.95	14.50	18.92	17.42	50.76	30.62	17.82	12.59	7.63	1.11	0.72
MEAN	0.29	0.47	0.47	0.61	0.60	1.64	1.02	0.57	0.42	0.25	0.04	0.02
MAX	0.62	0.83	0.65	1.3	0.95	9.6	1.6	1.8	0.72	0.75	0.06	0.05
MIN	0.20	0.29	0.37	0.41	0.44	0.55	0.71	0.24	0.22	0.04	0.02	0.02
AC-FT	18	28	29	38	35	101	61	35	25	15	2.2	1.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2004, BY WATER YEAR (WY)

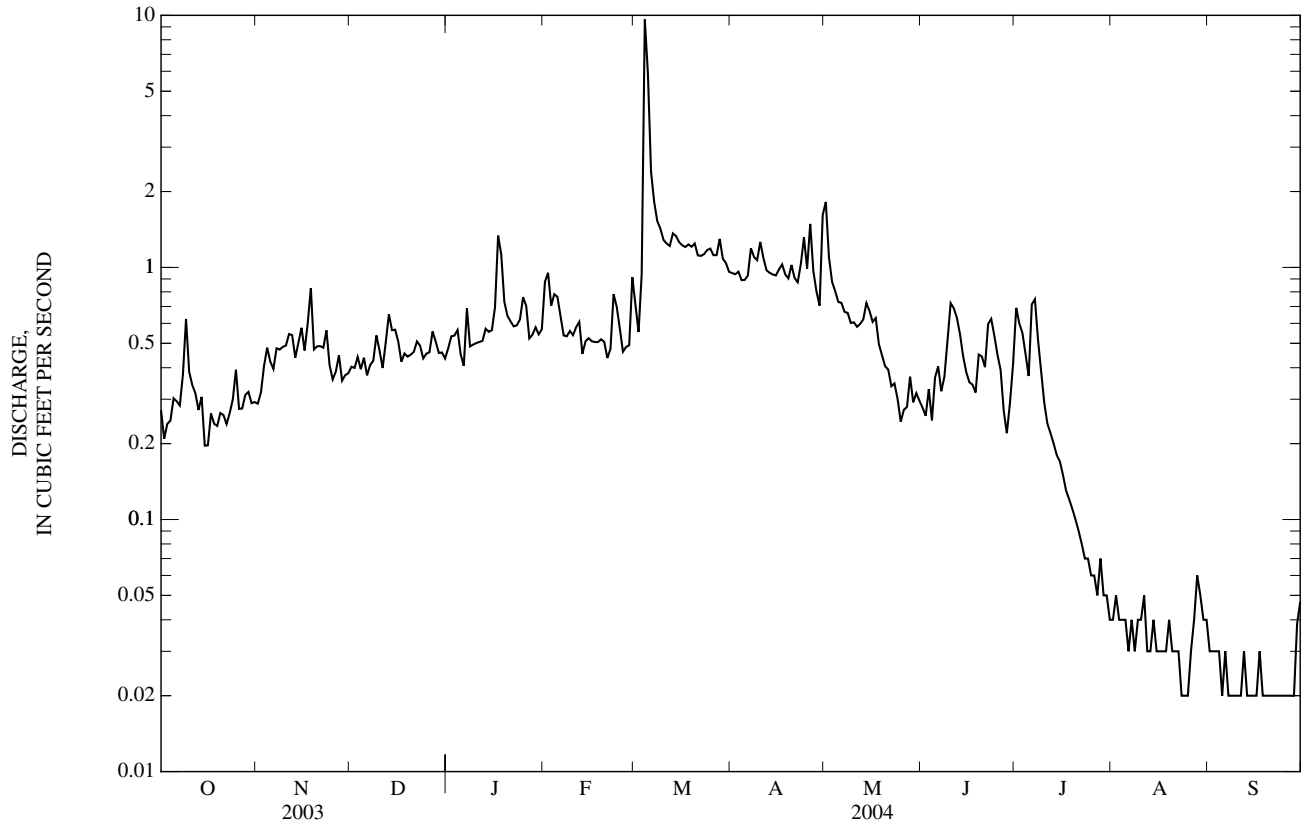
MEAN	4.89	4.15	4.97	5.03	5.52	7.04	6.62	6.51	7.25	3.09	2.05	1.78
MAX	25.7	11.6	19.5	16.7	15.4	22.8	17.3	26.2	35.8	9.55	7.34	7.13
(WY)	(2001)	(1993)	(1993)	(1998)	(1993)	(1998)	(1993)	(1993)	(1995)	(1997)	(1995)	(1996)
MIN	0.29	0.46	0.47	0.61	0.60	1.60	1.02	0.57	0.42	0.25	0.04	0.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)

e Estimated

07327442 LITTLE WASHITA RIVER NEAR CYRIL, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1993 - 2004	
ANNUAL TOTAL	401.77		195.20			
ANNUAL MEAN	1.10		0.53		4.90	
HIGHEST ANNUAL MEAN					13.2	1993
LOWEST ANNUAL MEAN					0.53	2004
HIGHEST DAILY MEAN	13	Aug 31	9.6	Mar 4	416	Oct 23, 2000
LOWEST DAILY MEAN	0.08	Aug 11	0.02	at times	0.00	Aug 21, 2002
ANNUAL SEVEN-DAY MINIMUM	0.17	Aug 5	0.02	Sep 18	0.00	Aug 20, 2002
MAXIMUM PEAK FLOW			27	Mar 4	b1,930	Oct 23, 2000
MAXIMUM PEAK STAGE			8.26	Mar 4	18.09	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	797		387		3,550	
10 PERCENT EXCEEDS	2.0		1.1		11	
50 PERCENT EXCEEDS	0.61		0.45		2.9	
90 PERCENT EXCEEDS	0.29		0.03		0.46	

a From theoretical rating.



073274458 LITTLE WASHITA RIVER TRIBUTARY NEAR CEMENT, OK

LOCATION.-- Lat 34°51'58", long 98°08'30", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T.5N., R.9W., Caddo County, Hydrologic Unit 11130302, on left bank 30 ft downstream from I-44 bridge near mile marker 64, 4 mi south of Cement, and at mile 2.1.

DRAINAGE AREA.--6.5 mi^2.

PERIOD OF RECORD.-- June 1995 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1,237.18 ft above sea level.

REMARKS.--Records poor. U.S. Geological Survey's satellite telemeter at station.

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	0.64	0.61	0.83	0.94	1.1	1.1	1.1	3.1	1.1	1.7	e0.83	0.95
2	0.65	0.66	0.87	0.96	1.1	1.0	1.1	1.9	1.1	0.97	e0.81	0.93
3	0.62	0.66	0.88	1.0	1.0	1.2	1.1	1.6	1.2	0.94	e0.81	0.92
4	0.64	0.65	0.88	0.96	1.1	6.4	1.1	1.4	1.2	0.91	e0.80	0.91
5	0.66	0.67	0.90	0.96	1.1	2.3	1.2	1.4	1.1	0.92	e0.80	0.91
6	0.65	0.68	0.91	0.97	1.0	1.6	1.2	1.4	1.1	1.0	e0.80	0.99
7	0.66	0.75	0.94	1.00	1.0	1.3	1.2	1.4	1.1	0.94	e0.80	0.95
8	0.67	0.74	0.99	1.0	1.00	1.3	1.2	1.4	1.1	e0.89	e0.80	0.91
9	0.59	0.70	0.95	1.00	1.0	1.2	1.2	1.4	1.4	e0.85	e0.81	0.91
10	0.50	0.67	0.94	0.96	1.00	1.2	1.2	1.4	1.3	e0.82	0.91	0.90
11	0.47	0.70	0.96	0.96	1.0	1.2	1.2	1.3	1.2	e0.81	1.2	0.91
12	0.47	0.68	1.0	0.92	0.98	1.2	1.2	1.3	e1.1	e0.81	0.91	0.93
13	0.48	0.70	1.0	0.97	0.98	1.3	1.2	1.7	e1.0	e0.81	e0.85	0.91
14	0.52	0.77	1.0	1.0	1.0	1.3	1.1	1.5	e1.0	e0.80	e0.83	0.89
15	0.54	0.71	1.00	0.95	0.97	1.2	1.1	1.4	e0.97	e0.80	e0.83	0.90
16	0.55	0.72	0.96	1.9	0.97	1.2	1.1	1.4	e0.95	e0.80	e0.81	0.90
17	0.54	0.74	0.99	1.4	0.97	1.2	1.1	1.4	e0.92	e0.80	e0.81	0.89
18	0.56	0.72	1.0	1.1	0.97	1.2	1.1	1.3	1.1	e0.80	e0.81	0.88
19	0.54	0.72	0.98	1.1	0.99	1.2	1.1	1.3	1.4	e0.80	e0.80	0.87
20	0.55	0.74	1.0	1.0	0.98	1.2	1.2	1.3	1.1	e0.80	e0.80	0.87
21	0.49	0.76	1.1	0.99	0.98	1.1	1.2	1.3	1.1	e0.80	e0.79	0.87
22	0.48	0.79	1.0	0.98	0.96	1.1	1.2	1.3	1.2	e0.83	e0.79	0.90
23	0.51	0.86	0.97	0.99	1.1	1.1	1.2	1.3	e1.0	e0.90	e0.79	1.1
24	0.49	0.83	0.98	0.99	1.0	1.2	1.3	1.3	e0.98	0.99	e0.78	0.96
25	0.51	0.81	0.98	1.0	0.99	1.2	1.3	1.3	e0.92	e0.89	0.78	0.94
26	0.63	0.82	0.98	0.99	0.99	1.2	1.6	1.3	e0.89	e0.82	0.75	0.93
27	0.65	0.81	0.96	0.96	0.97	1.2	1.3	1.2	e0.89	e0.89	0.72	0.92
28	0.59	0.80	0.94	0.97	0.96	1.3	1.2	1.3	e0.87	1.3	1.1	0.92
29	0.63	0.80	0.94	0.97	1.2	1.2	1.2	1.2	e0.84	1.2	1.00	0.93
30	0.56	0.83	0.94	0.95	---	1.1	3.4	1.1	e1.0	0.97	0.97	0.95
31	0.59	---	0.94	0.97	---	1.1	---	1.1	---	e0.86	0.95	---
TOTAL	17.63	22.10	29.71	31.81	29.36	43.6	37.9	44.0	32.13	28.42	26.24	27.65
MEAN	0.57	0.74	0.96	1.03	1.01	1.41	1.26	1.42	1.07	0.92	0.85	0.92
MAX	0.67	0.86	1.1	1.9	1.2	6.4	3.4	3.1	1.4	1.7	1.2	1.1
MIN	0.47	0.61	0.83	0.92	0.96	1.0	1.1	1.1	0.84	0.80	0.72	0.87
AC-FT	35	44	59	63	58	86	75	87	64	56	52	55

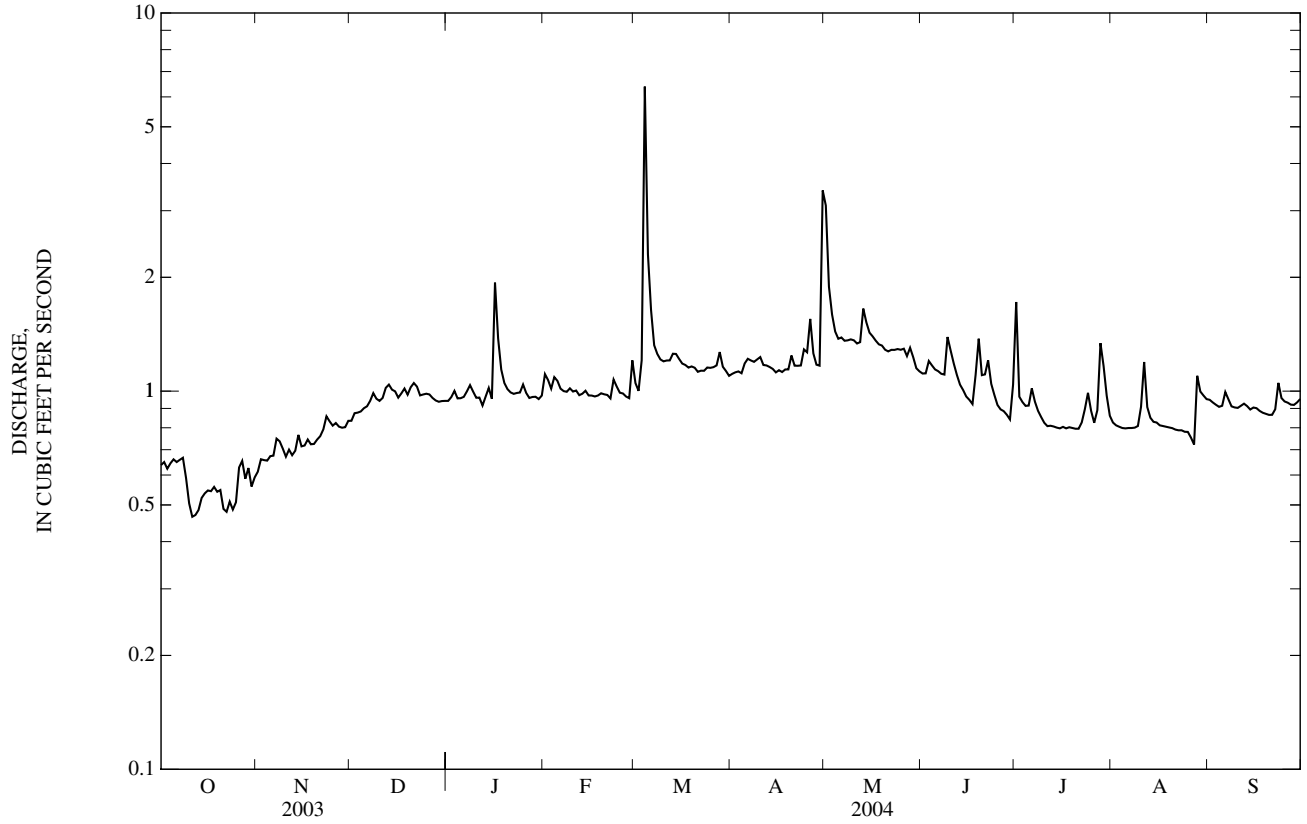
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

MEAN	3.30	1.97	1.98	2.37	2.17	2.53	2.83	2.34	2.14	1.09	1.24	1.16
MAX	15.1	4.01	2.82	7.55	3.19	6.90	5.45	4.61	3.01	1.73	2.72	1.99
(WY)	(2001)	(1999)	(1999)	(1998)	(2001)	(1998)	(1999)	(1997)	(1999)	(1997)	(1995)	(1996)
MIN	0.57	0.74	0.96	1.03	1.01	1.30	1.26	1.16	1.07	0.25	0.29	0.53
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(1996)	(2004)	(1996)	(2004)	(2003)	(2003)	(2003)

e Estimated

073274458 LITTLE WASHITA RIVER TRIBUTARY NEAR CEMENT, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	424.12		370.55			
ANNUAL MEAN	1.16		1.01		2.07	
HIGHEST ANNUAL MEAN					3.20	1998
LOWEST ANNUAL MEAN					1.01	2004
HIGHEST DAILY MEAN	19	Jun 13	6.4	Mar 4	319	Oct 23, 2000
LOWEST DAILY MEAN	0.05	Aug 2	0.47	Oct 11	0.05	Aug 2, 2003
ANNUAL SEVEN-DAY MINIMUM	0.07	Aug 2	0.50	Oct 10	0.07	Aug 2, 2003
MAXIMUM PEAK FLOW			29	Jan 16	1,630	Oct 23, 2000
MAXIMUM PEAK STAGE			5.99	Jan 16	12.58	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	841		735		1,500	
10 PERCENT EXCEEDS	1.7		1.3		2.7	
50 PERCENT EXCEEDS	0.96		0.97		1.6	
90 PERCENT EXCEEDS	0.17		0.67		0.80	



07327446 SCS POND NO. 31 NEAR CEMENT, OK

LOCATION.--Lat 34°51'07", long 98°08'27", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.3, T.4 N., R.9 W., Comanche County, Hydrologic Unit 11130302, on north edge of pond, on Little Washita River Tributary, 4.6 mi south of Cement, and at mile 2.1.

DRAINAGE AREA.--7.62 mi^2 (Agricultural Research Service).

PERIOD OF RECORD.--April 1995 to September 2004 (discontinued).

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

REMARKS.--Reservoir is formed by earthen dam. Emergency spillway elevation is 1,253.2 ft, contents 1,680 acre-ft; principal spillway elevation is 1,237.3 ft, contents 347 acre-ft; drain value elevation 1,220.8 ft. Figures herein represent total contents. Reservoir is used for flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 628 acre-ft, Oct. 23, 2000, elevation 1,242.53 ft; minimum after initial storage, 311 acre-ft, Mar. 24, 2004, elevation 1,236.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 374 acre-ft, Mar. 4, elevation 1,237.98 ft; minimum, 311 acre-ft, Mar. 24, elevation 1,236.41 ft.

Capacity table (elevation in feet, and capacity in acre-feet)

1234	225.0	1240	475.0
1236	295.0	1245	792.5
1238	375.0	1250	1260.0

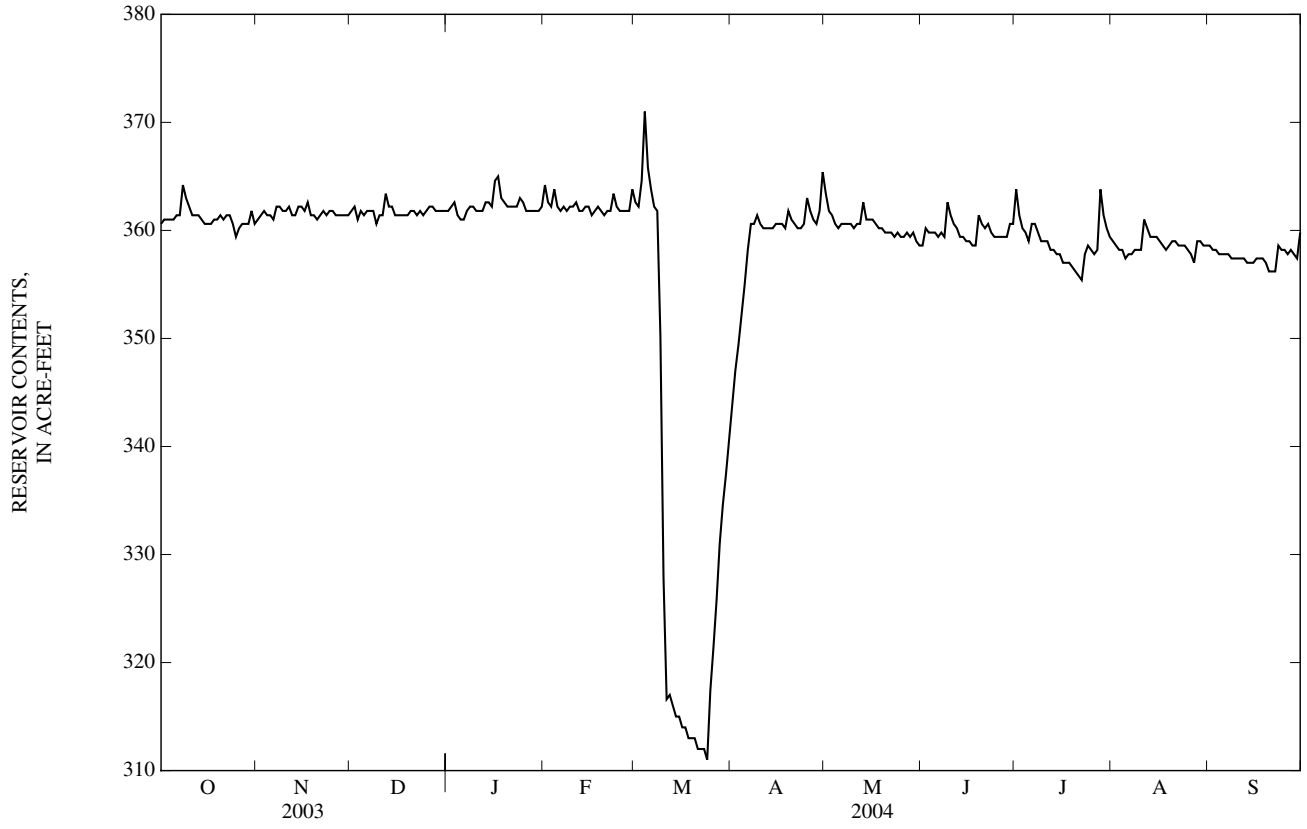
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	361	361	362	362	364	363	344	363	359	364	359	359
2	361	361	362	362	363	362	347	362	360	361	359	358
3	361	362	361	363	362	365	349	361	360	360	358	358
4	361	361	362	361	364	371	352	361	360	360	358	358
5	361	361	361	361	362	366	355	360	360	359	357	358
6	361	361	362	361	362	364	358	361	359	361	358	358
7	361	362	362	362	362	362	361	361	360	361	358	358
8	364	362	362	362	362	362	361	361	359	360	358	357
9	363	362	361	362	362	350	361	361	363	359	358	357
10	362	362	361	362	362	328	361	360	361	359	358	357
11	361	362	361	362	363	317	360	361	361	359	361	357
12	361	361	363	362	362	317	360	361	360	358	360	357
13	361	361	362	363	362	e316	360	363	359	358	359	357
14	361	362	362	363	362	e315	360	361	359	358	359	357
15	361	362	361	362	362	e315	361	361	359	358	359	357
16	361	362	361	365	361	e314	361	361	359	357	359	357
17	361	363	361	365	362	e314	361	361	359	357	359	357
18	361	361	361	363	362	e313	360	360	359	357	358	357
19	361	361	361	363	362	e313	362	360	361	357	359	357
20	361	361	362	362	361	e313	361	360	361	356	359	356
21	361	361	362	362	362	e312	361	360	360	356	359	356
22	361	362	361	362	362	e312	360	360	361	355	359	356
23	361	361	362	362	363	e312	360	359	360	358	359	359
24	361	362	361	363	362	e311	361	360	359	359	359	358
25	359	362	362	363	362	317	363	359	359	358	358	358
26	360	361	362	362	362	321	362	359	359	358	358	358
27	361	361	362	362	362	326	361	360	359	358	357	358
28	361	361	362	362	362	331	361	359	359	364	359	358
29	361	361	362	362	364	335	362	360	361	361	359	357
30	362	361	362	362	---	337	365	359	361	360	359	360
31	361	---	362	362	---	341	---	359	---	359	359	---
MAX	364	363	363	365	364	371	365	363	363	364	361	360
MIN	359	361	361	361	361	311	344	359	359	355	357	356
(‡)	1237.64	1237.66	1237.67	1237.68	1237.72	1237.14	1237.76	1237.59	1237.64	1237.61	1237.59	1237.62
(‡‡)	+1	0	+1	0	+2	-23	+24	-6	+2	-2	0	+1

CAL YR 2003 MAX 377 MIN 357 (‡‡) 0
WTR YR 2004 MAX 371 MIN 311 (‡‡) 0

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07327446 SCS POND NO. 31 NEAR CEMENT, OK—Continued



07327447 LITTLE WASHITA RIVER NEAR CEMENT, OK

LOCATION.--Lat 34°50'16", long 98°07'27", in NW ¼ NW ¼ sec.11, T.4 N., R.9 W., Comanche County, Hydrologic Unit 11130302, on left bank near downstream side of county road bridge, 5 mi south of Cement, 7 mi east northeast of Fletcher, 8 mi northeast of Sterling, and at mile 23.7

DRAINAGE AREA.--61.9 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 1,183.72 ft above sea level.

REMARKS.--Records fair. Flow affected by numerous flood retention reservoirs. U.S. Geological Survey's satellite telemeter at station.

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	1.4	4.6	e4.9	e3.9	e2.3	e9.8	6.5	35	2.6	9.5	2.5	e4.1
2	1.7	5.3	e5.0	e3.8	e4.0	e7.8	6.7	14	2.5	6.6	2.0	e3.6
3	1.9	5.7	e4.7	e3.8	e3.2	7.5	6.7	8.7	4.0	4.6	1.6	e3.2
4	2.2	6.0	e4.5	e3.9	e2.6	68	6.8	6.8	4.0	3.5	1.4	e3.4
5	2.9	e6.4	e4.4	e5.1	e4.9	57	7.0	6.2	4.3	2.9	1.5	e3.4
6	3.3	e6.7	e4.5	e6.3	e3.8	19	7.4	5.9	3.8	3.5	1.2	e3.9
7	3.7	e5.6	e4.6	e9.8	e2.6	13	8.4	5.7	3.5	6.6	1.2	e3.5
8	4.4	e5.3	e4.9	e3.4	e2.8	9.7	9.2	5.4	3.1	4.4	1.1	e3.4
9	6.7	e6.3	e4.7	e3.1	e2.6	14	8.8	5.2	6.0	3.0	1.4	e3.6
10	5.9	e5.7	e4.6	e4.3	e3.2	18	10	5.1	9.9	2.6	1.3	e3.8
11	5.1	e5.6	e4.6	e4.3	e3.7	18	8.7	5.1	7.0	2.2	6.4	e3.8
12	4.5	e5.5	e6.0	e3.3	e3.4	19	7.1	5.0	4.9	1.7	4.1	e3.3
13	4.0	e5.4	e5.5	e3.7	e3.4	16	6.8	5.9	3.8	1.4	3.1	e2.9
14	3.8	e5.3	e5.1	e4.6	e3.2	9.0	6.7	6.2	3.0	1.1	2.4	e2.6
15	3.6	e5.2	e4.9	e4.1	e3.4	8.4	6.9	5.7	2.8	1.0	2.3	e2.8
16	3.0	e5.4	6.0	e7.2	e3.7	8.1	7.2	5.0	2.6	0.83	2.4	e2.9
17	2.9	e5.6	8.1	e9.7	e3.2	8.0	7.1	4.8	2.4	0.84	2.0	e2.9
18	3.0	e6.4	e5.8	e7.3	e3.4	8.6	6.7	4.7	2.0	0.56	1.6	e2.8
19	3.1	e7.8	e5.8	e5.4	e3.7	9.1	6.4	4.4	4.8	0.57	1.4	e2.7
20	3.1	e6.4	e6.4	e4.1	4.5	9.5	7.7	4.2	5.5	0.51	1.9	e2.6
21	3.2	e5.5	e7.4	e3.3	4.0	9.1	6.9	3.8	4.4	0.46	1.9	e2.6
22	3.1	e5.4	e6.0	e3.1	3.8	8.6	6.3	3.7	8.2	0.47	1.6	e2.8
23	3.1	e5.3	e5.4	e3.0	6.5	8.9	6.7	3.7	5.0	0.47	1.5	e3.0
24	3.3	e5.5	e5.0	e4.7	6.4	9.1	11	3.3	3.6	1.8	1.3	e3.0
25	3.4	e5.4	e4.7	e4.6	4.7	9.3	8.3	3.5	2.9	1.5	1.1	e3.0
26	3.7	e5.3	e5.5	e3.6	e4.1	8.9	14	4.0	2.5	1.4	e1.5	e3.0
27	3.9	e5.2	e6.3	e2.6	e3.0	8.8	9.3	4.2	2.2	1.4	e2.6	e3.0
28	4.1	e5.1	e5.2	e2.2	e3.2	9.7	6.5	4.8	2.3	4.8	e4.8	e3.1
29	4.3	e5.7	e4.8	e2.0	e5.2	8.0	6.0	4.4	2.8	6.4	e3.9	e3.1
30	4.7	e5.0	e4.3	e1.8	---	6.8	12	3.9	3.7	4.3	e3.3	e3.2
31	4.7	---	e4.1	e1.9	---	6.5	---	3.0	---	3.0	e3.4	---
TOTAL	111.7	169.6	163.7	133.9	108.5	431.2	235.8	191.3	120.1	83.91	69.7	95.0
MEAN	3.60	5.65	5.28	4.32	3.74	13.9	7.86	6.17	4.00	2.71	2.25	3.17
MAX	6.7	7.8	8.1	9.8	6.5	68	14	35	9.9	9.5	6.4	4.1
MIN	1.4	4.6	4.1	1.8	2.3	6.5	6.0	3.0	2.0	0.46	1.1	2.6
AC-FT	222	336	325	266	215	855	468	379	238	166	138	188

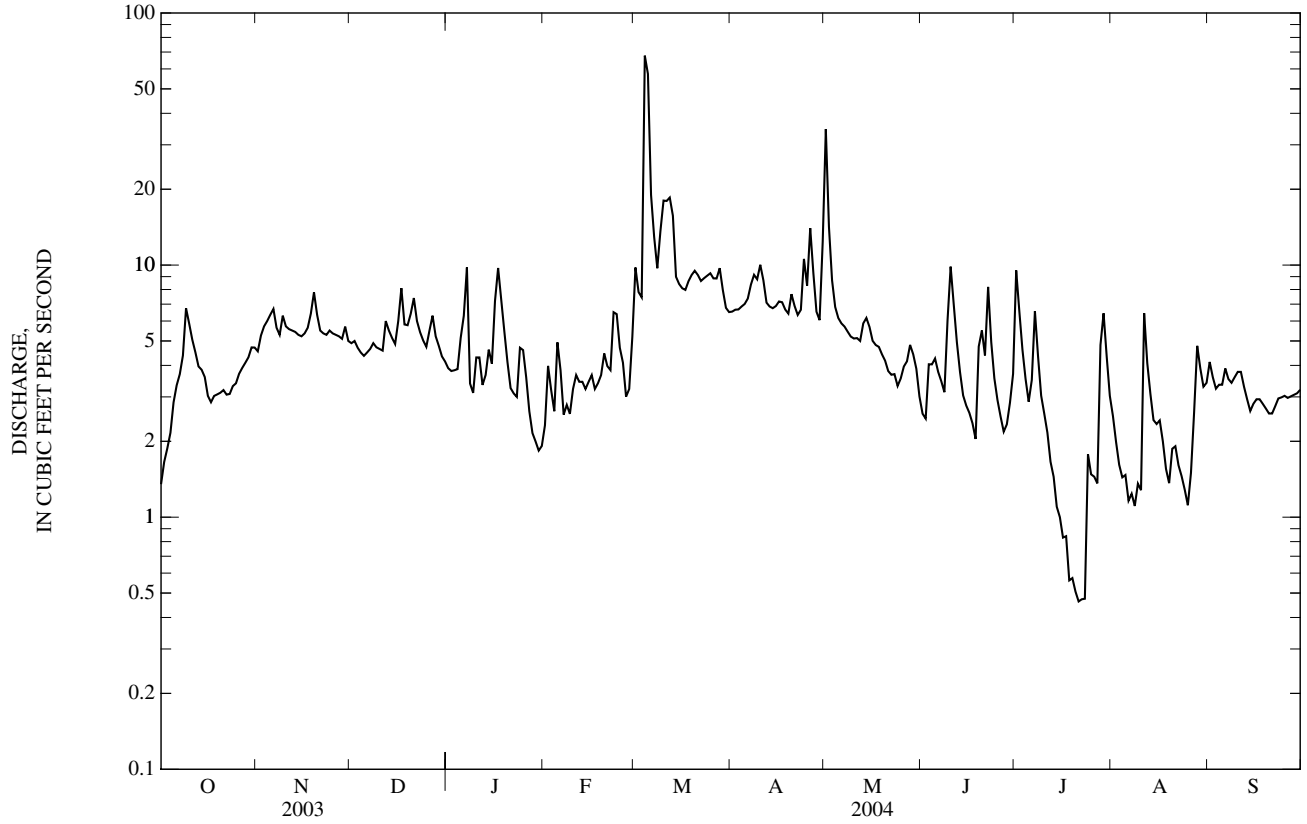
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	23.1	16.7	21.2	22.2	25.2	31.9	34.7	36.0	34.0	17.0	11.0	9.46
MAX	118	37.4	77.1	73.3	62.2	97.6	69.9	124	90.8	57.5	38.7	31.9
(WY)	(2001)	(1993)	(1993)	(1998)	(1993)	(1998)	(1998)	(1993)	(1995)	(1992)	(1992)	(1992)
MIN	3.60	5.65	5.28	4.32	3.74	8.49	5.81	4.63	4.00	2.22	1.28	1.34
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2003)	(2000)	(2000)

e Estimated

07327447 LITTLE WASHITA RIVER NEAR CEMENT, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	2,588.44		1,914.41			
ANNUAL MEAN	7.09		5.23		22.3	
HIGHEST ANNUAL MEAN					51.6	1993
LOWEST ANNUAL MEAN					5.23	2004
HIGHEST DAILY MEAN	226	Jun 12	68	Mar 4	1,020	Oct 23, 2000
LOWEST DAILY MEAN	0.65	Aug 8	0.46	Jul 21	0.46	Jul 21, 2004
ANNUAL SEVEN-DAY MINIMUM	0.71	Aug 23	0.55	Jul 17	0.55	Jul 17, 2004
MAXIMUM PEAK FLOW			139	Mar 4	2,020	Oct 23, 2000
MAXIMUM PEAK STAGE			5.21	Mar 4	17.66	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	5,130		3,800		16,150	
10 PERCENT EXCEEDS	10		8.6		43	
50 PERCENT EXCEEDS	5.1		4.3		13	
90 PERCENT EXCEEDS	1.0		1.9		3.3	



07327483 BOGGY CREEK NEAR NINNEKAH, OK

LOCATION.--Lat 34°53'03", long 97°59'43", in SE ¼ SW ¼ sec.24, T.5 N., R.8 W., Grady County, Hydrologic Unit 11130302, on the right side of culvert, 7.5 mi north and 2.6 mi west of Rush Springs, 3.3 mi south and 4.1 mi west of Ninnekah and at mile 1.2.

DRAINAGE AREA.--1.66 mi^2.

PERIOD OF RECORD.--April 1996 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 1142.36 ft above sea level.

REMARKS.--Records poor. U.S. Geological Survey satellite telemeter at station.

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	0.10	e0.23	e0.20	e0.26	e0.30	e0.26	e0.21	0.12	0.00	0.03	0.00	0.00
2	0.13	e0.26	e0.22	e0.24	e0.34	e0.18	e0.21	0.14	0.00	0.03	0.00	0.00
3	0.12	e0.28	e0.21	e0.27	e0.20	0.96	e0.22	0.13	0.01	0.02	0.00	0.00
4	0.11	e0.33	e0.20	e0.34	e0.19	4.5	e0.18	0.11	0.01	0.01	0.00	0.00
5	0.10	e0.32	e0.19	e0.23	e0.22	e0.97	e0.18	0.09	0.01	0.00	0.00	0.00
6	0.10	e0.32	e0.20	e0.19	e0.18	e0.43	e0.18	0.09	0.01	0.01	0.00	0.00
7	0.09	e0.31	e0.20	e0.23	e0.17	e0.37	e0.27	0.09	0.01	0.01	0.00	0.00
8	0.11	e0.33	e0.22	e0.38	e0.19	e0.35	e0.21	0.14	0.01	0.00	0.00	0.00
9	0.17	e0.36	e0.24	e0.22	e0.17	e0.35	e0.19	0.14	0.02	0.00	0.00	0.00
10	0.13	e0.34	e0.24	e0.22	e0.16	e0.34	e0.29	0.14	0.03	0.00	0.00	0.00
11	0.17	e0.35	e0.25	e0.22	e0.17	e0.32	e0.19	0.15	0.02	0.00	0.00	0.00
12	0.14	e0.33	e0.29	e0.22	e0.19	e0.30	e0.19	0.15	0.01	0.00	0.00	0.00
13	0.18	e0.32	e0.31	e0.26	e0.14	e0.37	e0.19	0.26	0.00	0.00	0.00	0.00
14	0.21	e0.30	e0.36	e0.22	e0.14	e0.31	e0.20	0.21	0.00	0.00	0.00	0.00
15	0.21	e0.29	e0.32	e0.22	e0.15	e0.26	e0.20	0.16	0.00	0.00	0.00	0.00
16	0.18	e0.29	e0.28	e0.33	e0.23	e0.26	e0.22	0.15	0.00	0.00	0.00	0.00
17	0.19	e0.29	e0.26	e0.55	e0.18	e0.26	e0.24	0.10	0.00	0.00	0.00	0.01
18	0.20	e0.28	e0.26	e0.32	e0.20	e0.26	e0.21	0.10	0.00	0.00	0.00	0.01
19	0.19	e0.28	e0.25	e0.26	e0.31	e0.25	e0.19	0.09	0.02	0.00	0.00	0.01
20	0.18	e0.27	e0.26	e0.25	e0.20	e0.30	e0.24	0.08	0.02	0.00	0.00	0.01
21	0.18	e0.27	e0.28	e0.29	e0.17	e0.25	0.17	0.08	0.02	0.00	0.00	0.01
22	0.18	e0.27	e0.28	e0.27	e0.29	e0.25	0.15	0.06	0.02	0.00	0.00	0.01
23	0.17	e0.23	e0.25	e0.30	e0.40	e0.25	0.14	0.06	0.01	0.00	0.00	0.01
24	0.17	e0.20	e0.25	e0.33	e0.23	e0.24	0.15	0.06	0.01	0.00	0.00	0.01
25	0.17	e0.20	e0.22	e0.30	e0.18	e0.24	0.14	0.06	0.00	0.00	0.00	0.01
26	0.18	e0.21	e0.28	e0.26	e0.19	e0.24	0.15	0.06	0.00	0.00	0.00	0.01
27	0.20	e0.21	e0.28	e0.21	e0.26	e0.24	0.09	0.06	0.00	0.00	0.00	0.01
28	0.22	e0.19	e0.24	e0.26	e0.19	e0.33	0.07	0.03	0.00	0.00	0.00	0.01
29	e0.23	e0.20	e0.23	e0.21	e0.19	e0.25	0.06	0.02	0.00	0.00	0.00	0.01
30	e0.22	e0.22	e0.23	e0.20	---	e0.24	0.11	0.02	0.01	0.00	0.00	0.01
31	e0.24	---	e0.25	e0.18	---	e0.23	---	0.01	---	0.00	0.00	---
TOTAL	5.17	8.28	7.75	8.24	6.13	14.36	5.44	3.16	0.25	0.11	0.00	0.14
MEAN	0.17	0.28	0.25	0.27	0.21	0.46	0.18	0.10	0.01	0.00	0.00	0.00
MAX	0.24	0.36	0.36	0.55	0.40	4.5	0.29	0.26	0.03	0.03	0.00	0.01
MIN	0.09	0.19	0.19	0.18	0.14	0.18	0.06	0.01	0.00	0.00	0.00	0.00
AC-FT	10	16	15	16	12	28	11	6.3	0.5	0.2	0.00	0.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

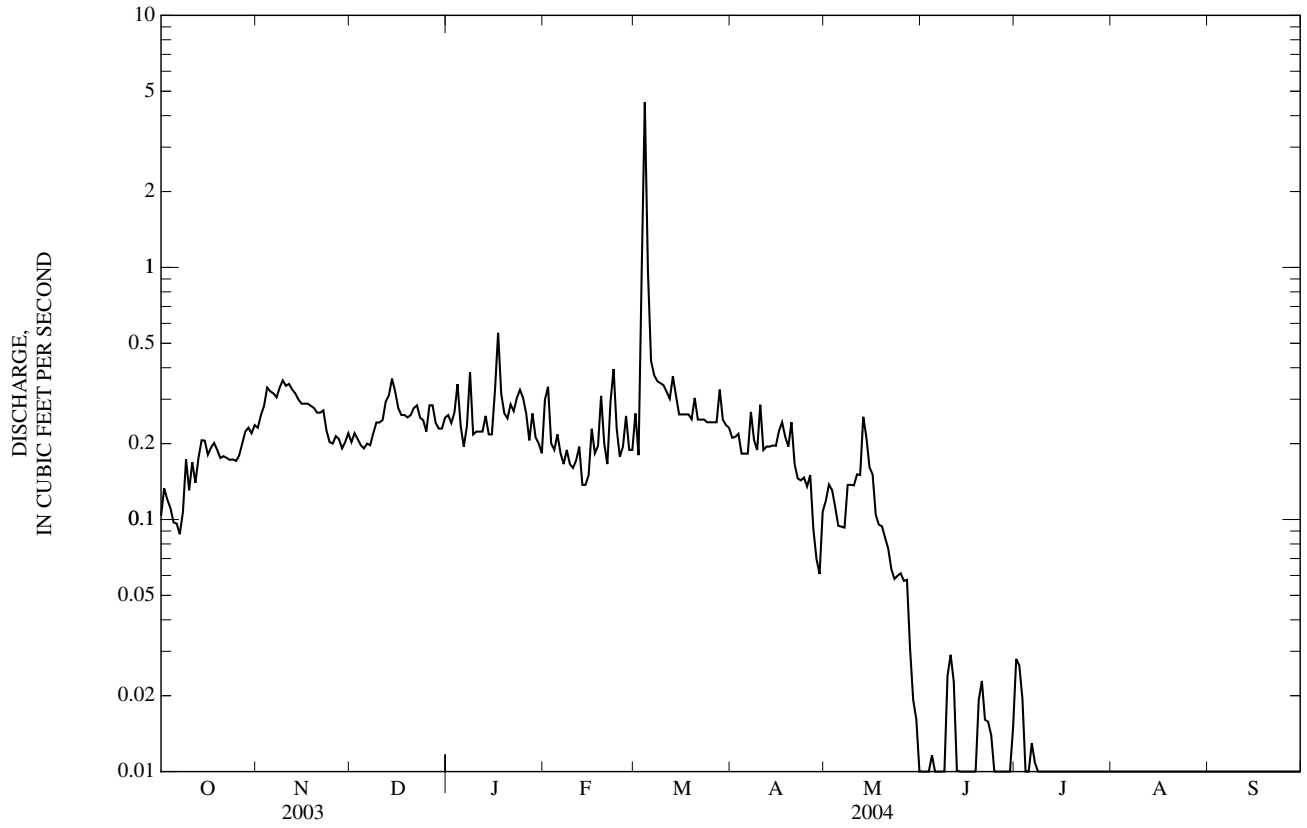
MEAN	0.31	0.38	0.52	0.60	0.58	0.68	0.66	0.44	0.40	0.14	0.11	0.16
MAX	1.06	0.95	0.99	1.44	1.28	1.42	1.56	1.79	1.54	0.76	0.63	1.01
(WY)	(1997)	(1997)	(1997)	(1998)	(1997)	(1998)	(1997)	(1997)	(1997)	(1997)	(1996)	(1996)
MIN	0.10	0.12	0.18	0.21	0.21	0.24	0.18	0.09	0.01	0.00	0.00	0.00
(WY)	(2002)	(2002)	(2002)	(2002)	(2004)	(2002)	(2004)	(2000)	(2004)	(2004)	(2004)	(2000)

e Estimated

07327483 BOGGY CREEK NEAR NINNEKAH, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1996 - 2004	
ANNUAL TOTAL	99.03		59.03			
ANNUAL MEAN	0.27		0.16		0.40	
HIGHEST ANNUAL MEAN					1.02	1997
LOWEST ANNUAL MEAN					0.16	2004
HIGHEST DAILY MEAN	1.0	Jun 12	4.5	Mar 4	17	May 30, 1997
LOWEST DAILY MEAN	0.00	Aug 6	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 6	0.00	Jul 8	0.00	Aug 11, 2000
MAXIMUM PEAK FLOW			36	Mar 4	a64	May 30, 1997
MAXIMUM PEAK STAGE			11.08	Mar 4	11.94	May 30, 1997
ANNUAL RUNOFF (AC-FT)	196		117		293	
10 PERCENT EXCEEDS	0.58		0.30		0.94	
50 PERCENT EXCEEDS	0.24		0.17		0.23	
90 PERCENT EXCEEDS	0.06		0.00		0.01	

a From rating based on step-backwater analysis.



07327484 SCS POND NO. 11 NEAR NINNEKAH, OK

LOCATION.--Lat 34°53'41", long 97°59'48", in SW $^1/_4$ NE $^1/_4$ sec.24, T.5 N., R.8 W., Grady County, Hydrologic Unit 11130302, near west end of pond, on Boggy Creek, 4.5 mi southwest of Ninnekah.

DRAINAGE AREA.--2.07 mi^2 (Agricultural Research Service).

PERIOD OF RECORD.--April 1996 to September 2004 (discontinued).

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

REMARKS.--Reservoir is formed by earthen dam. Emergency spillway elevation is 1,163.3 ft, contents 492 acre-ft; principal spillway elevation is 1,147.6 ft, contents 80 acre-ft; drain value elevation 1,136.4 ft. Figures herein represent total contents. Reservoir is used for flood control.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128 acre-ft, May 30, 1997, elevation 1,151.16 ft; minimum daily, 42 acre-ft, Dec. 16-18, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily contents, 89 acre-ft, Mar. 4, May 19, 20, elevation 1,148.30 ft; minimum daily, 42 acre-ft, Dec. 16-18.

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

1144	46.0	1150	110.0
1146	64.0	1152	141.0
1148	84.0	1154	179.0

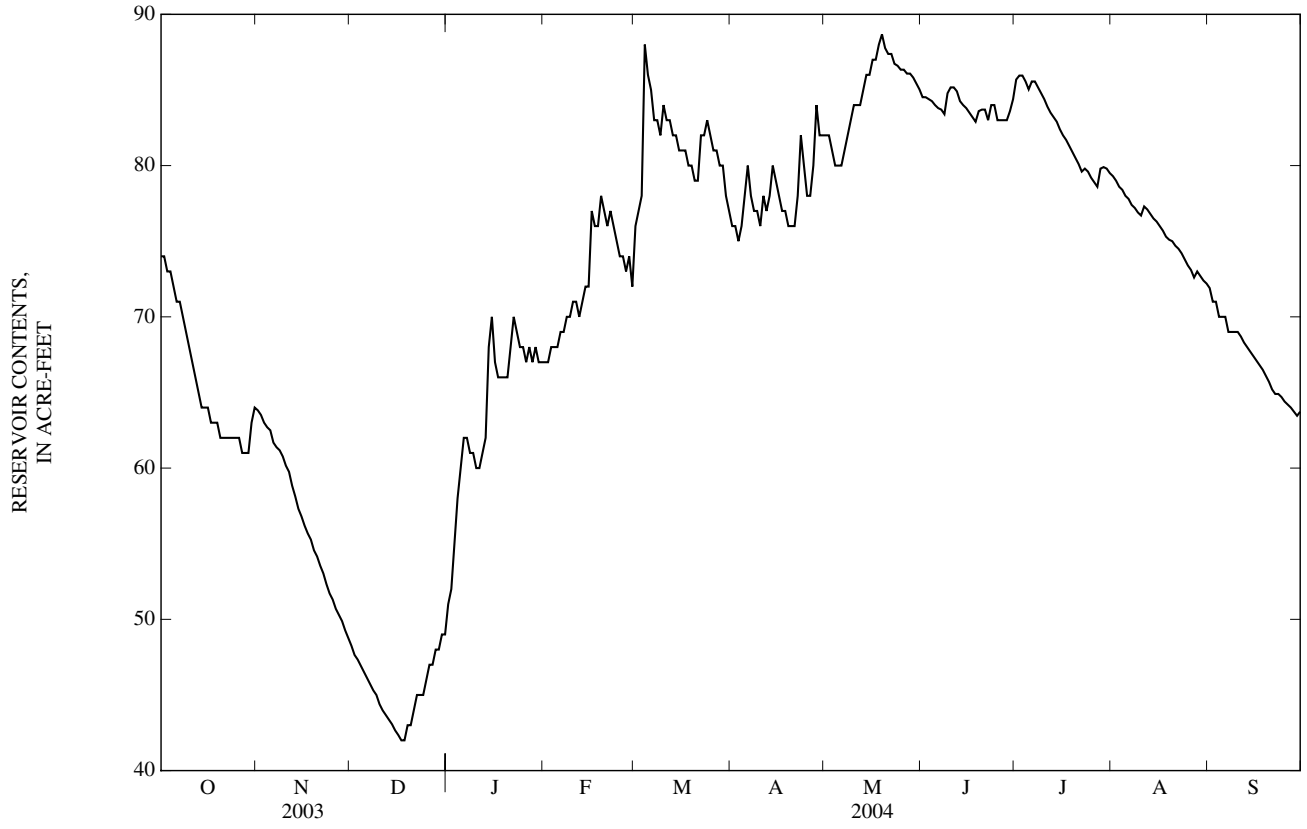
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e74	e64	e48	e51	e67	e76	e76	e82	85	86	79	72
2	e74	e64	e48	e52	e67	e77	e76	e82	85	86	79	e71
3	e73	e63	e47	e55	e68	e78	e75	e81	84	86	79	e71
4	e73	e63	e47	e58	e68	e88	e76	e80	84	86	78	e70
5	e72	e62	e47	e60	e68	e86	e78	e80	84	85	78	e70
6	e71	e62	e46	e62	e69	e85	e80	e80	84	86	78	e70
7	e71	e61	e46	e62	e69	e83	e78	e81	84	86	77	e69
8	e70	e61	e45	e61	e70	e83	e77	e82	83	85	77	e69
9	e69	e61	e45	e61	e70	e82	e77	e83	85	85	77	e69
10	e68	e60	e44	e60	e71	e84	e76	e84	85	84	77	69
11	e67	e60	e44	e60	e71	e83	e78	e84	85	84	77	69
12	e66	e59	e44	e61	e70	e83	e77	e84	85	83	77	68
13	e65	e58	e43	e62	e71	e82	e78	e85	84	83	77	68
14	64	e57	e43	e68	e72	e82	e80	e86	84	83	76	68
15	e64	e57	e43	e70	e72	e81	e79	e86	84	82	76	67
16	e64	e56	e42	e67	e77	e81	e78	e87	83	82	76	67
17	e63	e56	42	e66	e76	e81	e77	e87	83	82	76	67
18	e63	e55	e42	e66	e76	e80	e77	e88	83	81	75	66
19	e63	e55	e43	e66	e78	e80	e76	89	84	81	75	66
20	e62	e54	e43	e66	e77	e79	e76	88	84	81	75	66
21	e62	e54	e44	e68	e76	e79	e76	87	84	80	75	65
22	e62	e53	e45	e70	e77	e82	e78	87	e83	80	75	65
23	e62	e52	e45	e69	e76	e82	e82	87	e84	80	74	65
24	e62	e52	e45	e68	e75	e83	e80	87	e84	80	74	65
25	e62	e51	e46	e68	e74	e82	e78	86	e83	79	73	64
26	e62	e51	e47	e67	e74	e81	e78	86	e83	79	73	64
27	e61	e50	e47	e68	e73	e81	e80	86	e83	79	73	64
28	e61	e50	e48	e67	e74	e80	e84	86	e83	80	73	64
29	e61	e49	e48	e68	e72	e80	e82	86	84	80	73	63
30	e63	e49	e49	e67	---	e78	e82	85	84	80	72	64
31	e64	---	e49	e67	---	e77	---	85	---	80	72	---
MAX	74	64	49	70	78	88	84	89	85	86	79	72
MIN	61	49	42	51	67	76	75	80	83	79	72	63
(‡)	--	--	--	--	--	--	--	1148.08	1148.03	1147.55	1146.82	1145.92
(‡‡)	-11	-15	0	+18	+5	+5	+5	+3	-1	-4	-8	-8

CAL YR 2003 MAX 97 MIN 42 (‡‡) -42
WTR YR 2004 MAX 89 MIN 42 (‡‡) -11

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07327484 SCS POND NO. 11 NEAR NINNEKAH, OK—Continued



07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK

LOCATION.--Lat 34°57'48", long 97°53'57", in NW $^1/_4$ SW $^1/_4$ sec.25, T.6 N., R.7 W., Grady County, Hydrologic Unit 11130302, on downstream right bank at bridge on county road 1.5 mi northeast of Ninnekah.

DRAINAGE AREA.--236 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 1,041.16 ft.

REMARKS.--Records poor. Flow regulated by numerous flood retarding structures. U.S. Geological Survey satellite telemeter at station.

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	e1.6	12	11	8.6	4.3	19	e39	e67	6.2	30	5.8	8.1
2	e1.8	12	11	9.4	8.5	13	e27	e49	5.4	33	3.3	8.7
3	e2.0	13	11	10	7.9	17	e28	e34	8.0	21	2.4	7.2
4	e2.1	13	11	10	6.9	441	e30	e28	9.1	14	1.7	6.6
5	e2.6	13	10	9.7	9.9	e226	e28	e24	8.2	9.1	1.6	5.8
6	e3.3	14	9.6	5.8	8.2	e100	e28	e21	7.9	23	1.2	5.3
7	e4.3	15	9.9	8.0	6.0	e58	e29	e20	7.3	e12	1.2	7.4
8	e5.4	15	9.3	11	5.3	e48	e35	e19	8.5	e7.2	1.7	7.8
9	e6.3	13	10	9.3	6.1	e47	e34	e19	17	e5.5	1.8	6.1
10	e5.8	14	10	10	6.5	e51	e34	e19	25	e4.7	1.7	4.9
11	e5.5	14	9.2	10	6.5	e47	e34	e20	21	e4.0	5.9	5.7
12	e4.9	13	9.5	10	6.5	e46	e31	e19	15	e3.5	13	6.4
13	e4.7	13	13	11	6.6	e46	e30	e23	11	e3.0	7.5	7.0
14	4.9	13	13	12	6.2	e42	e31	e31	8.0	e2.5	4.8	5.3
15	4.5	13	11	12	6.3	e39	e30	e24	8.2	e2.1	4.2	5.1
16	4.1	13	10	15	6.6	e41	e30	e22	8.5	e1.9	5.5	6.2
17	3.5	14	10	22	6.4	e38	e29	e20	6.0	e1.6	4.6	8.2
18	3.5	16	9.1	19	6.4	e37	e29	e17	5.7	e1.4	3.3	8.0
19	3.6	17	8.7	11	6.7	e38	e30	16	12	e1.3	3.1	7.8
20	3.9	15	8.9	6.8	6.1	e38	e28	15	18	e1.2	4.1	7.7
21	4.5	12	9.2	5.5	5.8	e34	e29	13	13	e1.0	7.1	6.3
22	4.7	12	9.6	5.0	6.3	e35	e25	12	16	e1.3	5.7	6.0
23	4.5	12	9.0	4.5	9.0	e34	e22	12	20	e1.6	3.9	8.2
24	e4.9	12	8.7	4.7	14	e33	e24	11	12	e4.7	2.5	13
25	e5.1	12	8.2	6.0	11	e34	e29	10	7.8	e3.4	2.4	15
26	e5.4	11	8.4	6.0	8.7	e30	e33	11	5.9	e2.5	2.2	14
27	e6.0	11	9.5	4.7	7.5	e31	e35	11	4.5	e3.3	1.4	13
28	e6.2	11	9.5	3.9	7.0	e34	e28	12	3.9	7.4	7.3	14
29	e6.6	11	9.4	3.6	11	e40	e25	12	4.6	19	13	14
30	e7.7	11	8.8	3.3	---	e34	e44	10	16	16	9.3	14
31	11	---	8.2	3.6	---	e31	---	8.0	---	9.5	7.8	---
TOTAL	144.9	390	303.7	271.4	214.2	1,802	908	629.0	319.7	251.7	141.0	252.8
MEAN	4.67	13.0	9.80	8.75	7.39	58.1	30.3	20.3	10.7	8.12	4.55	8.43
MAX	11	17	13	22	14	441	44	67	25	33	13	15
MIN	1.6	11	8.2	3.3	4.3	13	22	8.0	3.9	1.0	1.2	4.9
AC-FT	287	774	602	538	425	3,570	1,800	1,250	634	499	280	501

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

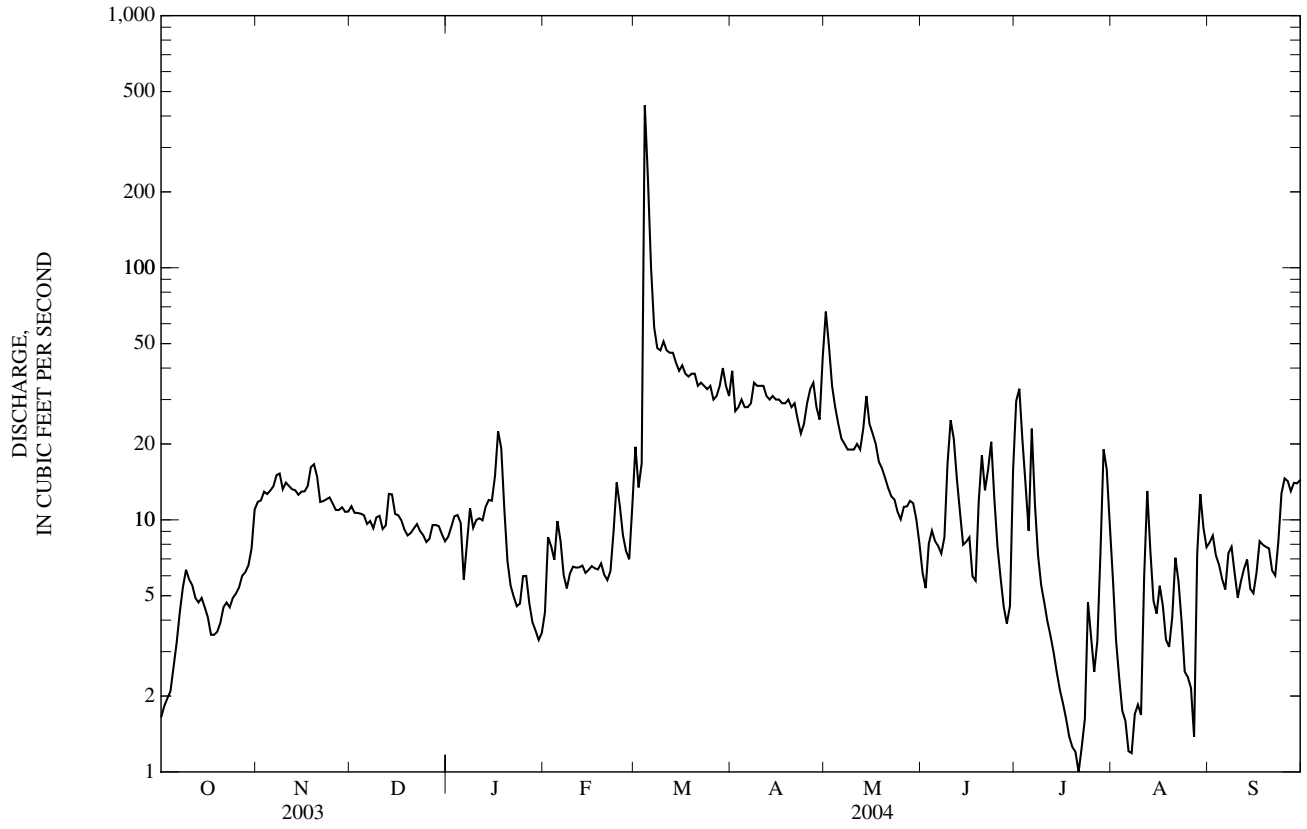
MEAN	45.1	46.6	57.6	64.5	73.2	86.7	90.4	105	99.8	39.3	27.3	27.9
MAX	164	105	185	264	196	320	181	325	352	126	92.7	85.4
(WY)	(2001)	(1993)	(1993)	(1998)	(1993)	(1998)	(1998)	(1993)	(1995)	(1992)	(1992)	(1992)
MIN	4.67	13.0	9.80	8.75	7.39	23.9	22.8	18.1	10.7	4.37	2.77	4.81
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2003)	(1996)	(2004)	(2003)	(2000)	(2003)

e Estimated

07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	7,501.2		5,628.4			
ANNUAL MEAN	20.6		15.4		60.8	
HIGHEST ANNUAL MEAN					137	1993
LOWEST ANNUAL MEAN					15.4	2004
HIGHEST DAILY MEAN	376	Jun 5	441	Mar 4	3,570	May 30, 1997
LOWEST DAILY MEAN	1.1	Aug 27	1.0	Jul 21	1.0	Jul 21, 2004
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 21	1.3	Jul 17	1.3	Jul 17, 2004
MAXIMUM PEAK FLOW			1,080	Mar 4	a9,920	May 9, 1993
MAXIMUM PEAK STAGE			11.50	Mar 4	b20.70	May 9, 1993
ANNUAL RUNOFF (AC-FT)	14,880		11,160		44,020	
10 PERCENT EXCEEDS	31		33		119	
50 PERCENT EXCEEDS	13		9.6		36	
90 PERCENT EXCEEDS	1.9		3.5		7.7	

a From rating extended above 2,300 ft^3/s.
b From high-water mark on crest-stage gage.



07328100 WASHITA RIVER AT ALEX, OK

LOCATION.--Lat 34°55'33", long 97°46'25", in NW $\frac{1}{4}$ sec.7, T.5 N., R.5 W., Grady County, Hydrologic Unit 11130303, near right bank on downstream side of county road bridge, 1.0 mi north of Alex, 3.8 mi downstream from Winter Creek, and at mile 226.5.

DRAINAGE AREA.--4,787 mi^2.

PERIOD OF RECORD.--October 1964 to September 1986, October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 990.00 ft above sea level. Oct. 1, 1988 to Sept. 30, 2000, datum 5.00 ft higher. Prior to Oct. 1, 1988, datum 10.00 ft higher.

REMARKS.--Records fair. Some regulation since March 1959 by Fort Cobb Reservoir (station 07325900), since February 1961 by Foss Reservoir (07324300), and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telementer at station.

COOPERATION.--Records furnished by Agricultural Research Service prior to January 1978.

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	72	68	87	103	165	192	530	e419	e95	487	185	704
2	74	70	87	105	184	178	552	e556	e93	933	176	388
3	80	71	88	104	177	240	436	e1,080	e92	1,760	160	261
4	79	74	86	102	181	1,700	373	e1,010	e90	3,820	151	205
5	88	71	86	101	190	1,510	346	e838	e89	3,560	147	163
6	83	70	87	98	182	3,590	377	527	e88	2,580	133	150
7	85	78	89	95	179	6,230	386	385	e88	2,370	133	127
8	86	81	90	107	177	5,950	389	321	e85	2,180	132	125
9	95	83	88	106	171	3,290	397	280	e87	2,220	140	110
10	98	89	87	107	169	2,350	396	242	e112	1,590	133	98
11	98	89	89	108	168	2,030	467	214	e90	1,220	170	99
12	106	86	94	99	163	1,800	565	198	e84	889	232	90
13	102	86	101	104	161	1,620	554	183	e84	695	147	83
14	e96	87	100	108	158	1,440	434	189	e85	569	151	73
15	e93	88	111	114	157	1,300	e370	160	e85	481	205	73
16	91	89	106	128	156	1,180	e365	148	e85	411	213	72
17	99	95	108	158	155	1,110	e350	140	e83	358	206	75
18	103	97	104	193	154	943	e345	132	e84	322	181	71
19	94	95	102	188	154	751	e330	125	e85	297	145	65
20	84	99	103	198	149	680	e320	e124	e87	266	133	64
21	79	99	103	290	147	627	310	e121	e87	243	138	59
22	73	102	102	362	145	480	e300	e118	e88	224	230	57
23	75	95	100	282	154	414	467	e114	184	209	212	59
24	74	96	101	236	163	384	e430	e109	913	215	169	58
25	71	93	101	222	161	417	e307	e104	1,530	211	139	64
26	71	88	101	203	157	426	e347	e100	1,450	212	134	68
27	68	86	104	192	154	425	e311	e97	920	191	134	69
28	69	85	105	179	151	467	e268	e100	594	207	135	69
29	67	85	105	170	163	465	e292	e127	490	243	138	66
30	69	87	103	161	---	477	e320	e109	450	214	133	68
31	67	---	102	159	---	445	---	e100	---	193	292	---
TOTAL	2,589	2,582	3,020	4,882	4,745	43,111	11,634	8,470	8,477	29,370	5,127	3,733
MEAN	83.5	86.1	97.4	157	164	1,391	388	273	283	947	165	124
MAX	106	102	111	362	190	6,230	565	1,080	1,530	3,820	292	704
MIN	67	68	86	95	145	178	268	97	83	191	132	57
AC-FT	5,140	5,120	5,990	9,680	9,410	85,510	23,080	16,800	16,810	58,260	10,170	7,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

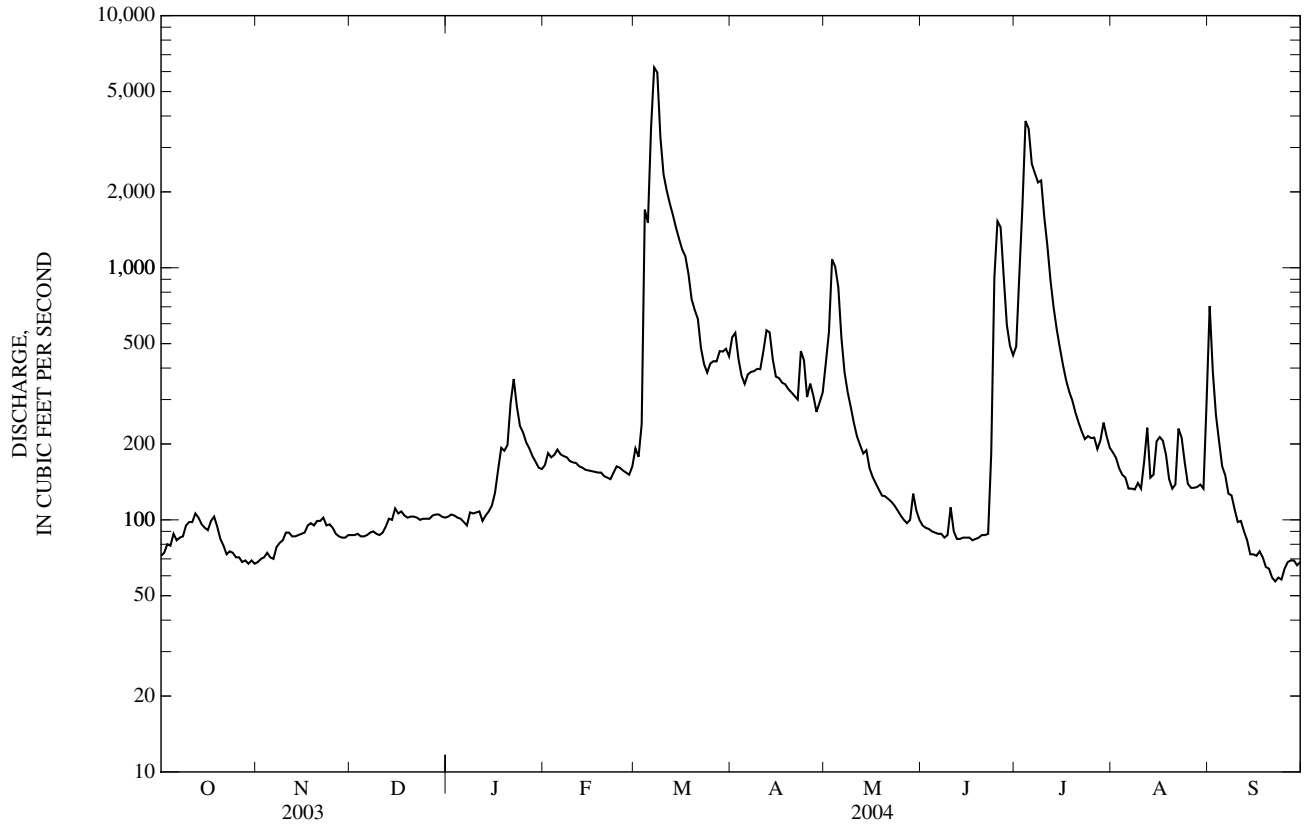
MEAN	560	475	458	423	474	741	764	1,283	1,423	525	381	504
MAX	4,441	1,672	2,615	2,057	1,829	4,446	3,598	6,916	6,865	1,678	2,325	3,345
(WY)	(1984)	(1993)	(1993)	(1998)	(1998)	(1998)	(1997)	(1993)	(1995)	(1975)	(1995)	(1996)
MIN	61.1	52.9	64.5	77.3	86.1	73.8	23.9	22.9	96.9	13.9	3.88	40.0
(WY)	(1979)	(1971)	(1968)	(1971)	(1967)	(1971)	(1971)	(1971)	(1967)	(1970)	(1972)	(1972)

e Estimated

07328100 WASHITA RIVER AT ALEX, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	106,958		127,740			
ANNUAL MEAN	293		349		667	
HIGHEST ANNUAL MEAN					1,902	1993
LOWEST ANNUAL MEAN					120	1971
HIGHEST DAILY MEAN	2,500	Jun 18	6,230	Mar 7	22,500	Oct 21, 1983
LOWEST DAILY MEAN	46	Aug 29	57	Sep 22	0.00	aAug 13, 1970
ANNUAL SEVEN-DAY MINIMUM	52	Aug 23	61	Sep 19	0.01	Aug 12, 1970
MAXIMUM PEAK FLOW			6,790	Mar 8	25,000	Jun 8, 1995
MAXIMUM PEAK STAGE			12.17	Mar 8	b33.78	Oct 21, 1983
ANNUAL RUNOFF (AC-FT)	212,200		253,400		482,900	
10 PERCENT EXCEEDS	522		684		1,550	
50 PERCENT EXCEEDS	251		145		301	
90 PERCENT EXCEEDS	72		79		77	

a No flow Aug. 13, 18, 1970, Aug. 30 to Sept. 1, 1971.
b Present datum.



07328180 NORTH CRINER CREEK NEAR CRINER, OK

LOCATION.--Lat 34°58'17", long 97°35'04", in SE $^1/_4$ SE $^1/_4$ sec.23, T.6 N., R.4 W., McClain County, Hydrologic Unit 11130303, near left bank on downstream side of county road bridge, 1.2 mi west of Criner, and at mile .83.

DRAINAGE AREA.--7.33 mi^2

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

GAGE.--Water-stage recorder. Datum of gage is 1023.66 ft above sea level.

REMARKS.--Records good. U.S. Geological Survey's satellite telemeter at station. Flow partially regulated by retention ponds 1.5 mi northwest of gage.

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	0.24	0.30	0.24	0.22	0.36	0.28	0.00	0.95	0.00	8.7	1.4	0.01
2	0.28	0.30	0.27	0.22	0.29	0.26	0.00	0.54	0.22	6.9	1.2	0.01
3	0.24	0.29	0.27	0.22	0.23	2.3	0.00	0.35	0.01	5.2	0.85	0.01
4	0.24	0.24	0.23	0.22	0.29	1.7	0.00	0.11	0.00	3.7	0.71	0.00
5	0.27	0.21	0.20	0.21	0.27	0.48	0.04	0.00	0.00	2.7	0.51	0.00
6	0.23	0.24	0.21	0.18	0.22	0.39	0.02	0.00	0.00	2.4	0.34	0.00
7	0.20	0.31	0.23	0.17	0.23	0.35	0.21	0.00	0.00	2.7	0.18	0.00
8	0.19	0.28	0.24	0.19	0.24	0.34	0.10	0.00	0.00	3.6	0.17	0.00
9	0.28	0.29	0.27	0.18	0.26	0.33	0.19	0.00	3.1	3.3	0.13	0.00
10	0.21	0.27	0.22	0.18	0.27	0.32	0.55	0.00	1.5	2.8	0.04	0.00
11	0.14	0.27	0.24	0.17	0.27	0.33	0.67	0.00	2.2	2.3	1.1	0.00
12	0.08	0.22	0.36	0.17	0.26	0.32	0.50	0.00	1.8	1.9	0.78	0.00
13	0.07	0.20	0.37	0.25	0.25	0.33	0.44	0.01	1.4	1.5	1.2	0.00
14	0.05	0.28	0.29	0.21	0.28	0.30	0.25	0.00	0.98	1.2	1.0	0.00
15	0.09	0.24	0.20	0.22	0.28	0.29	0.20	0.00	0.59	1.00	1.2	0.00
16	0.13	0.21	0.17	0.29	0.31	0.27	0.18	0.00	0.20	0.74	1.1	0.00
17	0.13	0.29	0.19	0.46	0.34	0.27	0.15	0.00	0.00	0.54	0.66	0.00
18	0.17	0.20	0.20	0.30	0.35	0.24	0.08	0.00	0.00	0.39	0.35	0.00
19	0.12	0.19	0.20	0.23	0.37	0.16	0.06	0.00	0.17	0.17	0.62	0.00
20	0.08	0.20	0.20	0.22	0.34	0.09	0.36	0.00	0.01	0.07	0.91	0.00
21	0.07	0.22	0.21	0.22	0.33	0.05	0.22	0.00	0.45	0.44	0.47	0.00
22	0.07	0.25	0.22	0.22	0.35	0.03	0.37	0.00	1.2	0.39	0.26	0.00
23	0.09	0.23	0.23	0.25	0.50	0.02	0.07	0.00	1.1	0.50	0.16	0.00
24	0.10	0.21	0.23	0.28	0.35	0.02	0.02	0.00	0.80	1.1	0.10	0.00
25	0.09	0.21	0.25	0.35	0.31	0.03	0.04	0.00	0.53	0.93	0.05	0.00
26	e0.10	0.23	0.20	0.24	0.30	0.01	0.15	0.00	0.18	0.81	0.02	0.00
27	e0.16	0.22	0.22	0.22	0.32	0.00	0.15	0.00	0.00	0.70	0.00	0.00
28	0.19	0.23	0.19	0.24	0.30	0.07	0.11	0.00	0.01	2.1	0.30	0.00
29	0.19	0.24	0.19	0.24	0.45	0.02	0.00	0.00	2.4	1.9	0.05	0.00
30	0.20	0.25	0.19	0.22	---	0.02	0.65	0.00	4.2	1.8	0.02	0.00
31	0.20	---	0.19	0.25	---	0.04	---	0.00	---	1.6	0.01	---
TOTAL	4.90	7.32	7.12	7.24	8.92	9.66	5.78	1.96	23.05	64.08	15.89	0.03
MEAN	0.16	0.24	0.23	0.23	0.31	0.31	0.19	0.06	0.77	2.07	0.51	0.00
MAX	0.28	0.31	0.37	0.46	0.50	2.3	0.67	0.95	4.2	8.7	1.4	0.01
MIN	0.05	0.19	0.17	0.17	0.22	0.00	0.00	0.00	0.00	0.07	0.00	0.00
AC-FT	9.7	15	14	14	18	19	11	3.9	46	127	32	0.06

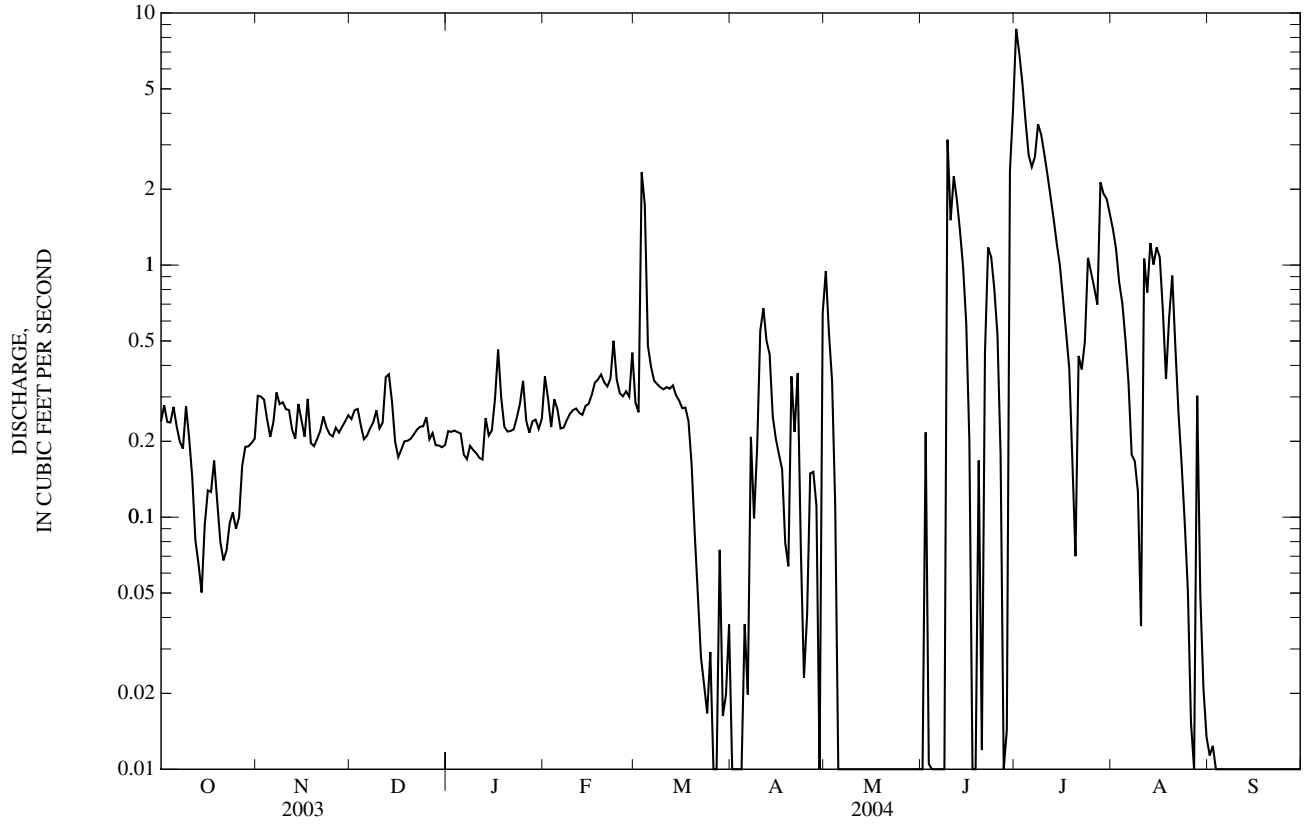
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	1.18	1.80	2.27	2.12	2.92	3.82	4.27	5.17	2.96	1.53	1.51	1.25
MAX	3.68	7.23	9.59	7.37	9.67	12.5	14.7	23.1	9.93	5.98	11.0	5.91
(WY)	(1997)	(1997)	(1993)	(1993)	(1993)	(1998)	(1990)	(1993)	(1992)	(1992)	(1996)	(1996)
MIN	0.12	0.24	0.23	0.16	0.31	0.31	0.19	0.06	0.42	0.01	0.01	0.00
(WY)	(2000)	(2004)	(2004)	(2000)	(2004)	(2004)	(2004)	(2004)	(1994)	(2003)	(2000)	(2004)

e Estimated

07328180 NORTH CRINER CREEK NEAR CRINER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	160.49		155.95			
ANNUAL MEAN	0.44		0.43		2.56	
HIGHEST ANNUAL MEAN					6.65	1993
LOWEST ANNUAL MEAN					0.43	2004
HIGHEST DAILY MEAN	5.3	Sep 11	8.7	Jul 1	151	May 2, 1990
LOWEST DAILY MEAN	0.00	May 1	0.00	Mar 27	0.00	Jun 18, 1994
ANNUAL SEVEN-DAY MINIMUM	0.00	May 1	0.00	at times	0.00	at times
MAXIMUM PEAK FLOW			18	Jul 1	605	May 23, 1993
MAXIMUM PEAK STAGE			3.86	Jul 1	11.24	May 23, 1993
ANNUAL RUNOFF (AC-FT)	318		309		1,860	
10 PERCENT EXCEEDS	0.98		1.0		6.0	
50 PERCENT EXCEEDS	0.25		0.22		1.1	
90 PERCENT EXCEEDS	0.00		0.00		0.10	



07328500 WASHITA RIVER NEAR PAULS VALLEY, OK

LOCATION.--Lat 34°45'17", long 97°15'04", in NE ¼, SE ¼ sec.1. T.3 N., R.1 W., Garvin County, Hydrologic Unit 11130303, on downstream right bank near end of bridge on U.S. Highway 77, 2.0 mi northwest of Pauls Valley, 6.0 mi downstream from Owl Creek, 7.0 mi upstream from Washington Creek, and at mile 146.5.

DRAINAGE AREA.--5,330 mi^2.

PERIOD OF RECORD.--May to December 1899 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Pauls Valley, Indian Territory" in 1899.

GAGE.--Water-stage recorder. Datum of gage is 854.61 ft above sea level. During 1899, nonrecording gage at site 9 mi downstream, at different datum. Mar. 29, 1938, to Jan. 25, 1939, nonrecording gage and Jan. 26, 1939, to Oct. 6, 1948, water-stage recorder at site 0.7 mi upstream, at datum 1.53 ft higher. Mar. 11, 1975, to Jan. 26, 1981, water-stage recorder at site 200 ft upstream, and at same datum.

REMARKS.--Records fair. Some diversion for irrigation upstream from station. Some regulation since March 1959, by Fort Cobb Reservoir (station 07325900); since February 1961, by Foss Reservoir (station 07324300); and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at station.

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	108	79	109	e142	224	228	641	446	137	1,090	200	103
2	114	85	109	e140	247	246	648	448	113	1,950	179	430
3	110	88	111	e142	255	523	808	475	236	1,420	166	496
4	109	87	111	e145	265	2,370	689	1,100	196	2,700	156	343
5	119	84	114	e140	270	2,790	565	1,110	115	4,000	148	255
6	120	91	110	e143	272	2,040	496	934	98	3,120	136	207
7	132	113	112	e150	264	4,490	518	762	2,440	2,220	130	168
8	123	118	114	e152	251	6,410	565	587	888	2,080	124	156
9	131	121	113	e155	250	5,150	554	483	1,090	1,910	114	143
10	132	120	113	e160	243	3,190	570	418	1,850	1,760	118	132
11	139	121	e109	e150	235	2,690	596	370	745	1,160	157	127
12	142	126	e116	223	235	2,370	601	332	422	914	185	112
13	137	120	e118	171	229	1,990	766	302	274	766	201	103
14	146	125	e135	162	225	1,750	813	282	202	633	199	93
15	141	125	e145	164	222	1,590	711	278	155	532	149	89
16	131	126	158	177	216	1,470	585	264	127	472	160	85
17	127	133	147	240	214	1,340	553	234	105	422	195	80
18	120	136	142	251	210	1,310	532	216	93	368	195	76
19	129	135	142	274	205	1,200	519	203	97	327	192	74
20	137	129	139	281	206	1,040	518	190	110	301	184	71
21	126	125	135	275	202	955	518	177	956	272	224	66
22	113	123	136	276	198	885	512	168	1,280	238	155	65
23	100	129	140	e360	217	725	552	156	768	211	147	63
24	93	127	138	e375	246	618	527	149	474	196	215	62
25	92	123	137	e320	241	570	480	139	1,140	193	192	62
26	86	122	139	e300	237	575	472	134	1,540	202	150	62
27	87	124	150	287	226	603	491	131	1,300	193	122	66
28	89	116	e167	262	216	603	488	130	887	206	151	72
29	86	110	e160	248	218	625	435	129	822	258	172	73
30	83	107	e153	235	---	657	437	123	993	279	126	75
31	82	---	e145	223	---	664	---	116	---	238	121	---
TOTAL	3,584	3,468	4,067	6,723	6,739	51,667	17,160	10,986	19,653	30,631	5,063	4,009
MEAN	116	116	131	217	232	1,667	572	354	655	988	163	134
MAX	146	136	167	375	272	6,410	813	1,110	2,440	4,000	224	496
MIN	82	79	109	140	198	228	435	116	93	193	114	62
AC-FT	7,110	6,880	8,070	13,340	13,370	102,500	34,040	21,790	38,980	60,760	10,040	7,950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

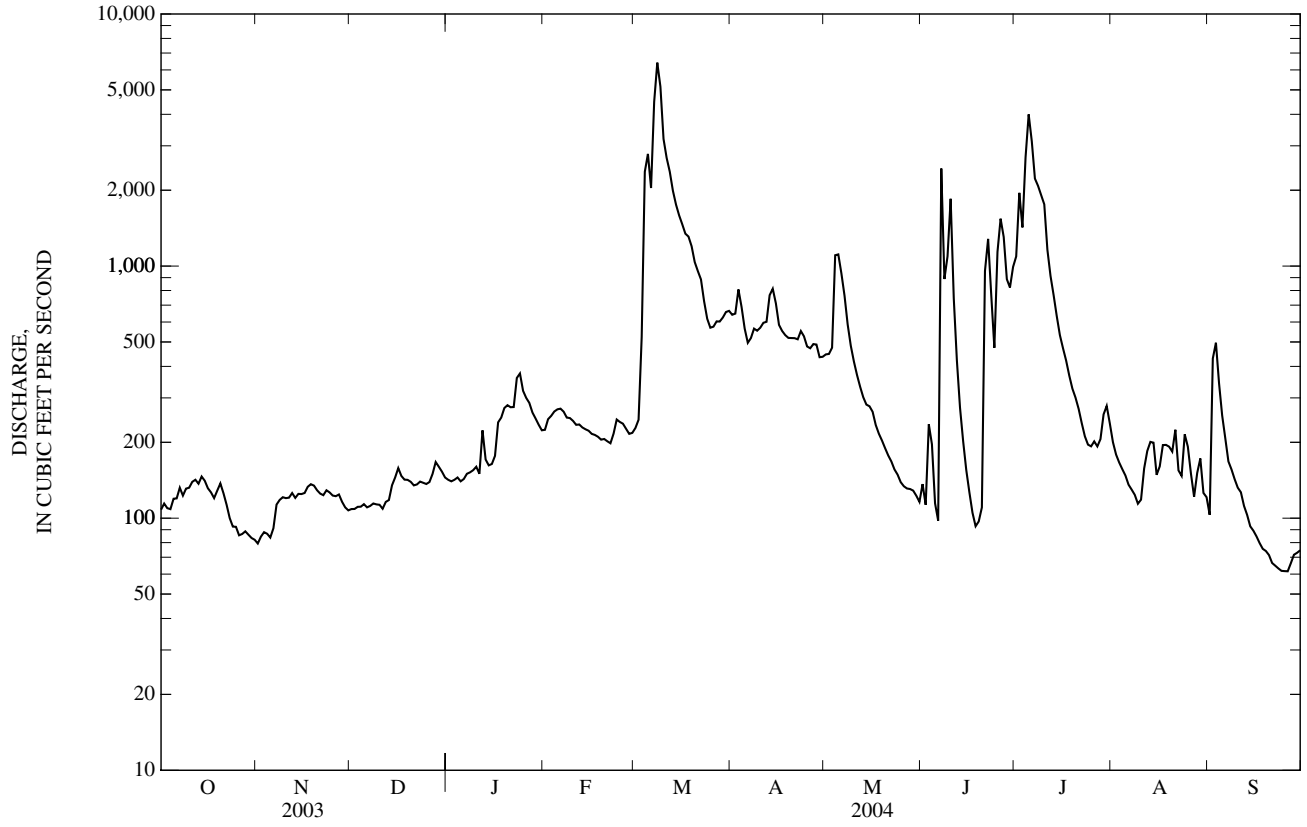
MEAN	874	746	626	610	727	1,068	1,059	1,817	1,932	681	446	616
MAX	7,934	3,608	3,347	2,868	3,149	5,573	4,311	10,690	9,788	3,174	2,961	4,086
(WY)	(1987)	(1987)	(1992)	(1998)	(1987)	(1998)	(1997)	(1993)	(1995)	(1987)	(1995)	(1996)
MIN	35.2	61.7	69.6	91.3	87.8	78.9	58.9	38.1	151	16.3	0.28	23.6
(WY)	(1964)	(1968)	(1968)	(1967)	(1967)	(1967)	(1982)	(1971)	(1966)	(1964)	(1972)	(1972)

e Estimated

07328500 WASHITA RIVER NEAR PAULS VALLEY, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	152,036		163,750			
ANNUAL MEAN	417		447		a933	
HIGHEST ANNUAL MEAN					3,661	1987
LOWEST ANNUAL MEAN					181	1967
HIGHEST DAILY MEAN	2,620	Jun 18	6,410	Mar 8	41,700	May 29, 1987
LOWEST DAILY MEAN	60	Aug 29	62	Sep 24-26	b0.00	Jul 21, 1964
ANNUAL SEVEN-DAY MINIMUM	67	Aug 23	64	Sep 21	0.00	Jul 21, 1964
MAXIMUM PEAK FLOW			6,710	Mar 8	43,600	May 29, 1987
MAXIMUM PEAK STAGE			8.97	Mar 8	c28.72	May 29, 1987
ANNUAL RUNOFF (AC-FT)	301,600		324,800		676,100	
10 PERCENT EXCEEDS	913		1,060		2,110	
50 PERCENT EXCEEDS	382		196		417	
90 PERCENT EXCEEDS	95		103		93	

a Prior to regulation, water years 1938-50, 829 ft^3/s.
b No flow in 1956, 1964, 1966, 1967, 1970, 1972.
c Maximum gage height for period of record, 29.08 ft, May 11, 1950.



07329849 ANTELOPE SPRING AT SULPHUR, OK

LOCATION.--Lat 34°30'16", long 96°56'28", in NW $^1/_4$ NE $^1/_4$ sec.1, T.1 S., R.3 E., Murray County, Hydrologic Unit 11130303, 10 ft downstream from spring in the Chickasaw National Park, 1.1 mi up the self-guiding nature trail from the nature center, at Sulphur, OK.

PERIOD OF RECORD.--November 1985 to September 1989, October 2002 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharge. Records fair. Several unpublished observations of water temperature were made during the year and are available at the District Office. U.S.Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11 ft^3/s. Mar.28, Apr. 1, 2, 1988, gage height, 0.75 ft; minimum daily discharge 0.04 ft^3/s, Feb. 2, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.2 ft^3/s, July 29, gage height, 0.54 ft; minimum daily discharge, .04 ft^3/s, Feb. 2.

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

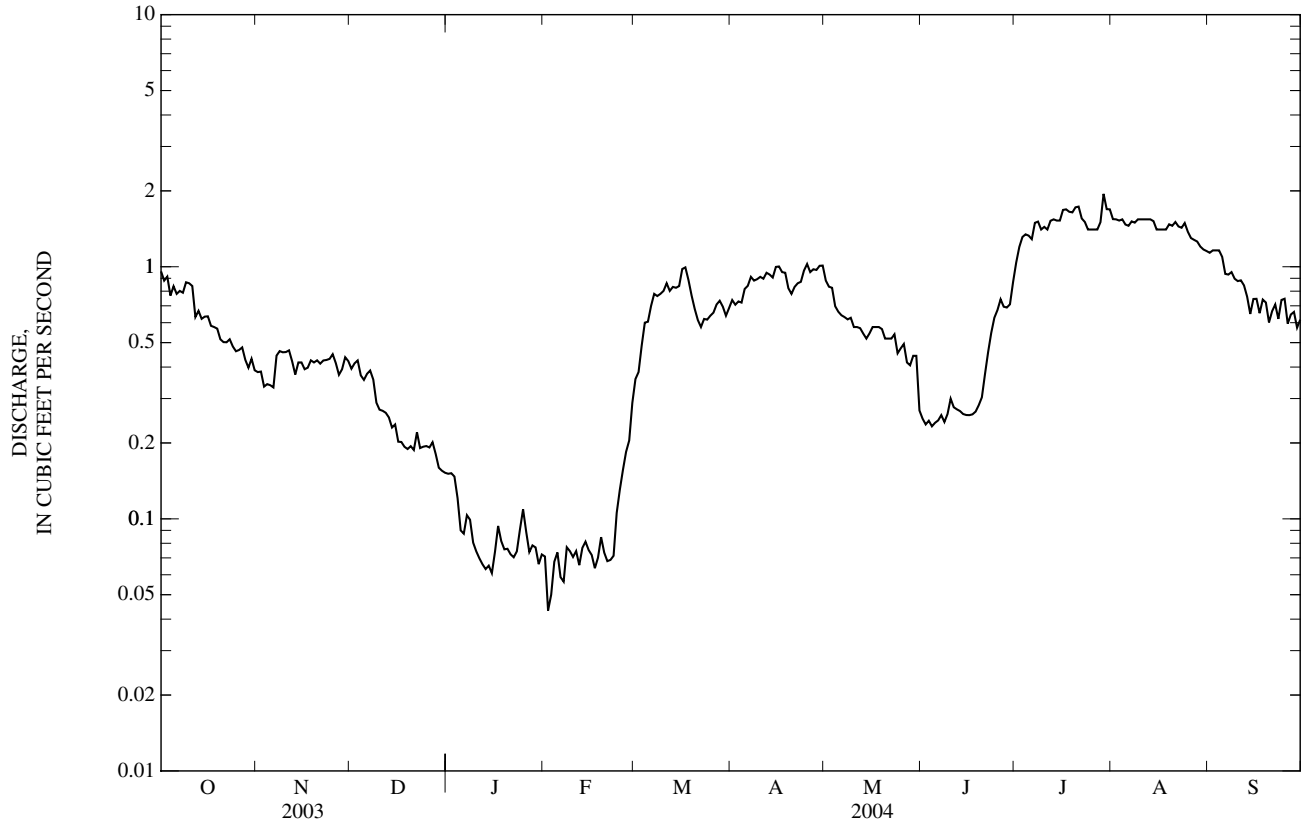
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.96	0.38	0.39	0.15	0.07	0.36	0.74	0.88	0.25	1.0	1.5	1.1
2	0.88	0.38	0.41	0.15	0.04	0.38	0.71	0.83	0.24	1.2	1.5	1.2
3	0.91	0.33	0.42	0.15	0.05	0.49	0.73	0.82	0.24	1.3	1.5	1.2
4	0.77	0.34	0.37	0.12	0.07	0.60	0.72	0.70	0.23	1.3	1.5	1.2
5	0.84	0.34	0.36	0.09	0.07	0.61	0.82	0.66	0.24	1.3	1.5	1.1
6	0.78	0.33	0.38	0.09	0.06	0.70	0.84	0.64	0.25	1.3	1.5	0.94
7	0.80	0.44	0.39	0.10	0.06	0.78	0.91	0.63	0.26	1.5	1.5	0.93
8	0.79	0.46	0.36	0.10	0.08	0.77	0.88	0.62	0.24	1.5	1.5	0.95
9	0.87	0.46	0.29	0.08	0.07	0.78	0.89	0.63	0.26	1.4	1.5	0.90
10	0.86	0.46	0.27	0.07	0.07	0.80	0.91	0.58	0.30	1.4	1.5	0.88
11	0.84	0.47	0.27	0.07	0.07	0.86	0.90	0.58	0.28	1.4	1.5	0.88
12	0.63	0.42	0.26	0.07	0.07	0.80	0.95	0.57	0.27	1.5	1.5	0.84
13	0.67	0.37	0.25	0.06	0.08	0.83	0.93	0.54	0.27	1.5	1.5	0.76
14	0.62	0.42	0.23	0.07	0.08	0.83	0.91	0.52	0.26	1.5	1.5	0.65
15	0.63	0.42	0.24	0.06	0.08	0.84	1.00	0.54	0.26	1.5	1.4	0.74
16	0.64	0.39	0.20	0.07	0.07	0.98	1.0	0.58	0.26	1.7	1.4	0.75
17	0.58	0.40	0.20	0.09	0.06	0.99	0.95	0.58	0.26	1.7	1.4	0.65
18	0.58	0.43	0.19	0.08	0.07	0.89	0.95	0.58	0.27	1.7	1.4	0.74
19	0.57	0.42	0.19	0.08	0.08	0.77	0.82	0.57	0.28	1.6	1.5	0.72
20	0.52	0.43	0.19	0.08	0.07	0.68	0.78	0.52	0.30	1.7	1.5	0.60
21	0.50	0.41	0.19	0.07	0.07	0.61	0.83	0.52	0.37	1.7	1.5	0.67
22	0.50	0.42	0.22	0.07	0.07	0.58	0.86	0.52	0.46	1.6	1.4	0.71
23	0.52	0.43	0.19	0.07	0.07	0.62	0.87	0.54	0.55	1.5	1.4	0.62
24	0.48	0.43	0.19	0.09	0.11	0.62	0.97	0.45	0.63	1.4	1.5	0.74
25	0.46	0.45	0.19	0.11	0.13	0.64	1.0	0.47	0.67	1.4	1.4	0.75
26	0.47	0.41	0.19	0.09	0.16	0.66	0.95	0.49	0.74	1.4	1.3	0.59
27	0.48	0.37	0.20	0.07	0.18	0.71	0.98	0.42	0.69	1.4	1.3	0.65
28	0.43	0.39	0.18	0.08	0.20	0.73	0.97	0.41	0.69	1.5	1.3	0.66
29	0.40	0.44	0.16	0.08	0.29	0.69	1.0	0.44	0.71	1.9	1.2	0.57
30	0.43	0.42	0.16	0.07	---	0.64	1.0	0.44	0.87	1.7	1.2	0.62
31	0.39	---	0.15	0.07	---	0.69	---	0.27	---	1.7	1.2	---
TOTAL	19.80	12.26	7.88	2.70	2.65	21.93	26.77	17.54	11.60	46.2	44.3	24.31
MEAN	0.64	0.41	0.25	0.09	0.09	0.71	0.89	0.57	0.39	1.49	1.43	0.81
MAX	0.96	0.47	0.42	0.15	0.29	0.99	1.0	0.88	0.87	1.9	1.5	1.2
MIN	0.39	0.33	0.15	0.06	0.04	0.36	0.71	0.27	0.23	1.0	1.2	0.57
AC-FT	39	24	16	5.4	5.3	43	53	35	23	92	88	48

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2004, BY WATER YEAR (WY)

MEAN	1.97	2.14	3.08	3.71	3.57	3.85	3.76	3.42	3.39	3.12	2.67	2.31
MAX	3.15	3.85	5.22	7.48	7.10	7.81	7.94	5.88	5.15	4.07	3.32	3.25
(WY)	(1988)	(1988)	(1986)	(1988)	(1988)	(1988)	(1988)	(1988)	(1987)	(1986)	(1987)	(1988)
MIN	0.64	0.41	0.25	0.09	0.09	0.71	0.89	0.57	0.39	1.49	1.43	0.81
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

07329849 ANTELOPE SPRING AT SULPHUR, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1986 - 2004	
ANNUAL TOTAL	819.97		237.94			
ANNUAL MEAN	2.25		0.65		2.93	
HIGHEST ANNUAL MEAN					5.27	1988
LOWEST ANNUAL MEAN					0.65	2004
HIGHEST DAILY MEAN	4.6	Jan 11	1.9	Jul 29	11	Mar 28, 1988
LOWEST DAILY MEAN	0.15	Dec 31	0.04	Feb 2	0.04	Feb 2, 2004
ANNUAL SEVEN-DAY MINIMUM	0.18	Dec 25	0.06	Feb 1	0.06	Feb 1, 2004
MAXIMUM PEAK FLOW			2.2	Jul 29	11	Mar 28, 1988
MAXIMUM PEAK STAGE			0.54	Jul 29	0.75	Mar 28, 1988
INSTANTANEOUS LOW FLOW					0.08	Feb 9, 1989
ANNUAL RUNOFF (AC-FT)	1,630		472		2,120	
10 PERCENT EXCEEDS	4.0		1.4		5.2	
50 PERCENT EXCEEDS	2.3		0.58		3.0	
90 PERCENT EXCEEDS	0.39		0.08		0.46	



07329852 ROCK CREEK AT SULPHUR, OK

LOCATION.--Lat 34°29'43", long 96°59'18", in SE ¼ SE ¼ sec.4, T.1 S., R.3 E., Murray County, Hydrologic Unit 11130303, 80 ft west of campsite 69 in Rock Creek Campground, in the Chickasaw National Park at Sulphur, OK, and at mile 11.0.

DRAINAGE AREA.--44.1 mi^2.

PERIOD OF RECORD.--Oct. 1, 1989 to current year.

REVISED RECORDS.--WDR OK-94-2: 1993.

GAGE.--Water-stage recorder. Datum of gage is 896.97 ft above sea level.

REMARKS.--No estimated daily discharge. Records fair. Flow regulated by numerous flood-retarding structures. U.S. Geological Survey satellite telemeter at station.

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	5.1	4.8	4.4	4.1	4.2	15	8.5	9.2	2.5	314	30	6.6
2	5.1	4.9	4.3	4.2	4.4	9.0	8.4	8.4	4.5	435	23	6.5
3	5.1	4.9	4.5	4.1	3.7	17	8.4	7.7	4.1	387	19	5.9
4	5.1	5.4	4.4	4.0	6.4	121	8.2	6.9	3.7	222	16	6.2
5	5.2	6.1	4.3	3.7	9.4	93	8.1	6.2	3.3	77	14	6.2
6	5.5	7.4	4.3	3.5	6.5	36	8.0	5.7	3.4	41	11	7.4
7	5.3	20	4.5	3.5	5.0	24	13	5.5	199	77	9.3	6.4
8	5.3	6.2	4.5	3.6	4.6	20	12	5.4	128	31	8.7	6.2
9	6.8	5.9	4.7	3.6	4.5	17	9.7	5.3	186	22	8.6	6.1
10	5.5	5.2	4.3	3.5	4.3	15	9.1	5.3	210	16	8.4	6.1
11	5.4	5.0	4.3	3.3	4.5	13	8.4	5.4	76	14	16	6.2
12	5.4	4.7	8.9	3.4	4.3	11	8.2	5.3	24	12	10	6.0
13	5.5	4.4	7.3	4.0	4.1	11	7.9	5.2	11	10	8.1	5.9
14	5.6	5.0	5.3	3.5	4.7	12	7.8	4.8	7.0	9.5	7.9	5.9
15	5.5	5.0	5.1	3.4	4.6	12	7.7	5.2	5.2	8.8	8.6	6.1
16	5.4	4.7	4.7	4.9	4.3	11	7.5	5.1	4.0	8.3	8.4	6.3
17	5.3	5.6	4.5	21	4.1	11	7.3	4.8	3.2	7.9	9.6	6.6
18	5.3	6.1	4.4	8.5	3.9	11	6.9	4.7	5.9	7.6	8.2	6.5
19	5.3	5.6	4.3	5.3	4.0	10	6.8	4.6	16	7.5	9.3	6.4
20	5.1	5.0	4.4	4.7	3.9	11	6.8	4.3	7.4	7.2	8.5	6.0
21	5.1	4.8	4.4	4.3	3.6	10	7.6	4.1	81	7.0	8.4	5.9
22	4.8	4.8	4.6	4.0	3.6	9.6	7.1	4.1	222	6.9	8.1	6.0
23	4.8	8.2	4.4	3.9	105	8.7	6.7	3.9	90	6.7	7.9	5.6
24	4.8	5.1	4.3	4.1	67	8.9	20	3.8	33	8.0	7.7	5.6
25	4.8	5.0	4.2	5.2	13	9.4	8.3	3.7	17	6.9	7.7	6.0
26	5.1	5.1	4.3	4.2	8.6	9.4	6.9	3.8	12	7.3	7.5	5.7
27	5.3	4.5	5.1	2.8	7.4	8.9	6.2	3.9	10	7.0	7.2	5.5
28	5.2	4.5	5.5	3.7	6.5	10	5.9	4.1	9.1	17	8.9	5.7
29	4.9	4.6	4.4	3.7	15	9.8	7.1	3.6	8.5	548	7.7	5.8
30	5.0	4.6	4.2	3.7	---	8.6	16	3.3	235	87	7.3	5.5
31	4.9	---	4.2	3.7	---	8.5	---	2.6	---	44	6.7	---
TOTAL	162.5	173.1	147.0	143.1	325.1	581.8	260.5	155.9	1,621.8	2,460.6	327.7	182.8
MEAN	5.24	5.77	4.74	4.62	11.2	18.8	8.68	5.03	54.1	79.4	10.6	6.09
MAX	6.8	20	8.9	21	105	121	20	9.2	235	548	30	7.4
MIN	4.8	4.4	4.2	2.8	3.6	8.5	5.9	2.6	2.5	6.7	6.7	5.5
AC-FT	322	343	292	284	645	1,150	517	309	3,220	4,880	650	363

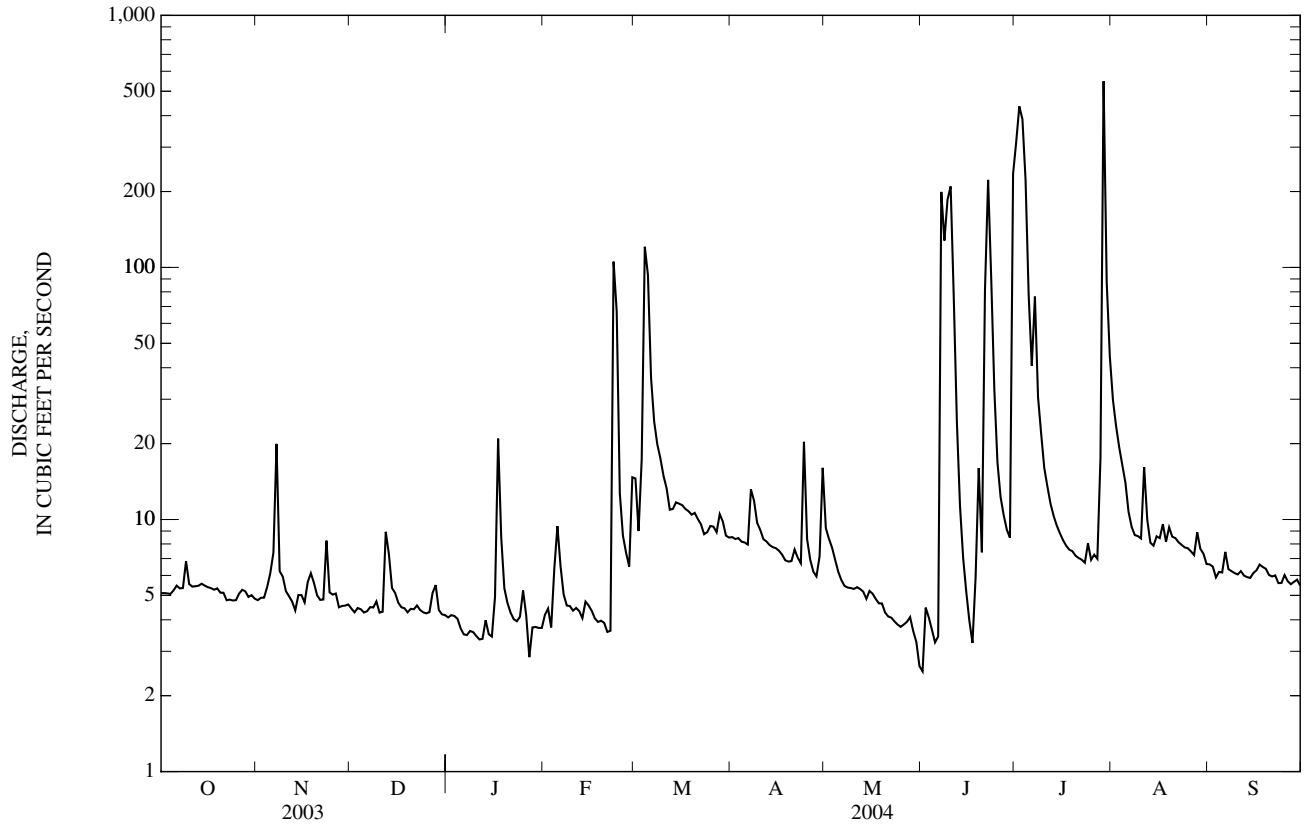
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	26.6	39.4	56.8	58.9	56.5	92.9	95.0	87.4	62.5	26.6	16.8	49.4
MAX	77.3	170	210	281	243	261	390	406	211	121	53.1	213
(WY)	(1997)	(1997)	(1992)	(1998)	(2001)	(1990)	(1990)	(1990)	(1991)	(1992)	(1996)	(1993)
MIN	5.24	5.77	4.74	4.62	7.66	18.8	8.68	5.03	8.49	6.09	3.48	2.34
(WY)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2004)	(2004)	(2000)	(2000)	(2000)	(2000)

07329852 ROCK CREEK AT SULPHUR, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	5,598.4		6,541.9			
ANNUAL MEAN	15.3		17.9		55.7	
HIGHEST ANNUAL MEAN					129	1990
LOWEST ANNUAL MEAN					10.4	2000
HIGHEST DAILY MEAN	244	May 16	548	Jul 29	3,450	May 2, 1990
LOWEST DAILY MEAN	4.2	Dec 25	2.5	Jun 1	1.9	Sep 21, 2000
ANNUAL SEVEN-DAY MINIMUM	4.4	Dec 19	3.4	May 26	2.0	Sep 16, 2000
MAXIMUM PEAK FLOW			2,030	Jul 29	a10,400	Apr 26, 1990
MAXIMUM PEAK STAGE			10.64	Jul 29	19.65	Apr 26, 1990
ANNUAL RUNOFF (AC-FT)	11,100		12,980		40,320	
10 PERCENT EXCEEDS	28		18		96	
50 PERCENT EXCEEDS	9.3		6.1		19	
90 PERCENT EXCEEDS	4.6		4.0		6.9	

a From indirect measurement.



07331000 WASHITA RIVER NEAR DICKSON, OK

LOCATION.--Lat 34°14'00", long 96°58'32", in SW 1/4 SE 1/4 sec.3, T.4 S., R.3 E., Carter County, Hydrologic Unit 11130303, on right bank on downstream side of bridge on U.S. Highway 177, 1.3 mi downstream from Caddo Creek, 3.2 mi north of Dickson, 12.0 mi northeast of Ardmore, and at mile 63.4.

DRAINAGE AREA.--7,202 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to Oct. 1, 1979, published as Washita River near Durwood.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1281: 1935 (M).

GAGE.--Water-stage recorder. Datum of gage is 650.57 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 16, 1939, nonrecording gage, at same site and datum. Dec. 15, 1950, to Feb. 19, 1952, nonrecording gage, at site 500 ft upstream, at same datum. Apr. 24, 1975, to May 8, 1986, water-stage recorder, at site 500 ft upstream, at same datum.

REMARKS.--Records fair. Some diversions for irrigation upstream from station. Flow regulated by Fort Cobb Reservoir (station 07325900) since March 1959; by Foss Reservoir (station 07324300) since February 1961; and by numerous flood-retarding struc- tures. U.S. Army Corps of Engineers satellite telemeter at station.

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	274	154	245	261	293	817	694	1,720	203	5,230	1,200	181
2	264	154	241	262	300	835	687	1,400	202	6,630	860	170
3	256	153	235	262	309	756	644	1,080	286	8,030	633	153
4	253	157	240	263	333	4,940	699	925	271	5,160	527	345
5	251	179	238	259	413	9,720	759	1,090	498	6,220	490	431
6	243	205	234	249	446	6,800	622	1,710	382	6,690	426	322
7	247	294	235	242	458	5,020	602	1,490	2,100	6,710	397	253
8	240	307	235	240	421	7,220	612	1,280	5,550	6,230	364	209
9	246	293	239	243	387	7,960	607	1,070	3,070	4,410	363	182
10	246	274	242	242	368	5,610	587	907	7,650	3,900	348	167
11	233	250	237	241	361	3,930	566	819	4,920	3,600	331	159
12	229	237	254	247	351	3,520	576	751	3,190	2,550	332	149
13	224	219	309	259	325	3,290	574	683	2,450	2,050	312	142
14	226	214	319	259	317	2,930	618	669	1,900	1,620	295	133
15	212	240	306	263	321	2,610	735	628	1,570	1,300	292	125
16	215	241	309	275	308	2,440	717	566	1,300	1,050	292	118
17	213	234	302	332	298	2,170	589	545	1,090	772	239	112
18	200	287	299	396	289	1,990	510	498	953	624	228	106
19	194	635	291	473	275	1,860	493	451	971	531	254	100
20	191	386	284	422	271	1,700	482	423	2,000	405	275	96
21	189	313	279	414	261	1,450	475	380	1,880	334	282	92
22	200	285	279	407	256	1,250	490	349	5,710	299	283	89
23	191	292	279	392	419	1,120	495	332	5,190	267	280	86
24	189	270	273	392	1,780	986	2,170	320	3,180	250	220	87
25	176	260	269	493	1,880	825	1,860	284	2,810	245	195	91
26	163	259	265	456	1,170	726	1,360	267	3,040	211	230	85
27	158	261	265	402	810	681	1,040	256	3,570	201	215	82
28	159	253	280	365	632	702	908	264	3,180	217	211	81
29	155	251	288	340	588	713	870	241	2,380	5,520	212	79
30	153	248	268	320	---	677	919	225	4,780	3,660	309	81
31	157	---	258	302	---	692	---	215	---	e3,000	249	---
TOTAL	6,547	7,805	8,297	9,973	14,640	85,940	22,960	21,838	76,276	87,916	11,144	4,506
MEAN	211	260	268	322	505	2,772	765	704	2,543	2,836	359	150
MAX	274	635	319	493	1,880	9,720	2,170	1,720	7,650	8,030	1,200	431
MIN	153	153	234	240	256	677	475	215	202	201	195	79
AC-FT	12,990	15,480	16,460	19,780	29,040	170,500	45,540	43,320	151,300	174,400	22,100	8,940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

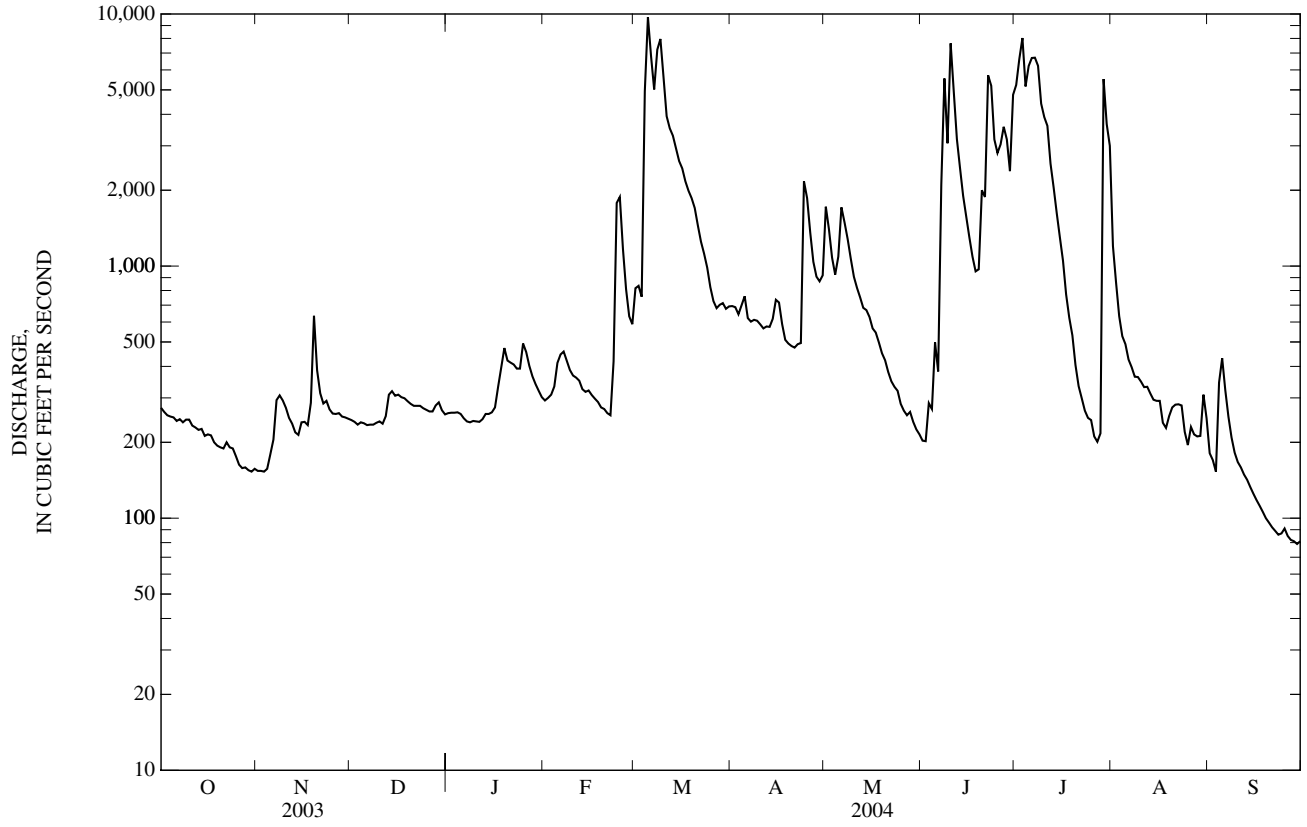
MEAN	1,473	1,563	1,390	1,219	1,523	2,386	2,455	3,893	3,443	1,036	595	1,118
MAX	8,274	5,879	9,324	6,061	6,996	10,890	15,940	18,720	14,090	4,042	3,048	5,236
(WY)	(1987)	(1987)	(1992)	(1998)	(2001)	(1990)	(1990)	(1993)	(1995)	(1987)	(1995)	(1991)
MIN	30.4	73.5	103	103	93.6	78.4	210	249	158	31.4	12.8	42.1
(WY)	(1964)	(1964)	(1967)	(1967)	(1967)	(1967)	(1971)	(1971)	(1966)	(1964)	(1972)	(1972)

e Estimated

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	289,869		357,842			
ANNUAL MEAN	794		978		a1,840	
HIGHEST ANNUAL MEAN					5,644	1987
LOWEST ANNUAL MEAN					340	1964
HIGHEST DAILY MEAN	4,340	Sep 12	9,720	Mar 5	94,400	May 3, 1990
LOWEST DAILY MEAN	76	Aug 29	79	Sep 29	b0.10	Aug 11, 1964
ANNUAL SEVEN-DAY MINIMUM	82	Aug 23	84	Sep 24	0.30	Aug 8, 1964
MAXIMUM PEAK FLOW			10,600	Mar 4	c118,000	May 3, 1990
MAXIMUM PEAK STAGE			16.28	Mar 4	45.24	May 30, 1987
ANNUAL RUNOFF (AC-FT)	575,000		709,800		1,333,000	
10 PERCENT EXCEEDS	2,060		2,950		4,190	
50 PERCENT EXCEEDS	549		320		705	
90 PERCENT EXCEEDS	159		182		146	

a Prior to regulation, water years 1929-58, 1,573 ft^3/s.
b No flow Aug. 28, Sept. 14 to Oct. 1, 7-12, 1956.
c Gage height 44.26 ft.



07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1944 to September 1995; October 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1944 to January 1982, February 1984 to April 1990; December 1996 to current year.
WATER TEMPERATURE: April 1947 to January 1982, February 1984 to April 1990; December 1996 to current year.

REMARKS.--Samples were collected monthly and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,180 microsiemens, Sept. 29, 2000; minimum daily, 95 microsiemens, Nov. 2, 1951.
WATER TEMPERATURE: Maximum daily, 38.0°C, July 16, 1985; minimum daily, -0.5°C, Dec. 20, 1996, Jan. 12-18, 1997, Jan. 4, 5, 10, 1999.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,780 microsiements, Jan. 29; minimum, 108 microsiemens, June 7.
WATER TEMPERATURE: Maximum, 34.0°C, July 23; minimum, 1.1°C, Jan. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Depth at sample location, feet (81903)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	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)	Location in X-sect. looking dwnstrm ft from l bank (00009)
OCT										
09...	0916	1.28	10.00	240	744	6.3	8.0	1,280	22.7	20.0
09...	0917	1.47	10.00	240	744	6.9	8.1	1,280	22.7	40.0
09...	0918	1.26	10.00	240	744	6.9	8.1	1,270	22.7	60.0
09...	0919	1.08	10.00	240	744	6.7	8.1	1,270	22.7	80.0
09...	0920	.90	10.00	240	744	7.0	8.1	1,280	22.7	100
09...	0921	1.40	10.00	240	744	6.9	8.1	1,270	22.7	120
09...	0922	1.48	10.00	240	744	7.2	8.1	1,270	22.7	140
09...	0923	1.11	10.00	240	744	7.1	8.1	1,280	22.7	160
09...	0924	.95	10.00	240	744	7.2	8.1	1,280	22.7	180
09...	0925	1.04	10.00	240	744	7.1	8.1	1,280	22.7	200
09...	0926	.70	10.00	240	744	7.1	8.1	1,270	22.7	220
AUG										
04...	0908	2.83	11.07	536	740	8.6	8.0	746	29.1	20.0
04...	0909	2.08	11.07	536	740	8.4	7.9	747	29.0	40.0
04...	0910	1.74	11.07	536	740	8.2	7.9	748	29.0	60.0
04...	0911	1.75	11.07	536	740	8.2	7.9	748	28.9	80.0
04...	0912	1.77	11.07	536	740	8.2	7.9	748	28.9	100
04...	0913	2.38	11.07	536	740	8.1	7.9	748	28.9	120
04...	0914	2.70	11.07	536	740	8.1	7.9	748	28.9	140
04...	0915	2.14	11.07	536	740	8.1	7.9	748	28.9	160
04...	0916	1.93	11.07	536	740	8.1	7.9	748	28.9	180
04...	0917	1.49	11.07	536	740	8.1	7.9	748	28.9	200
04...	0918	1.24	11.07	536	740	8.0	7.9	748	28.9	220

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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)
OCT													
09...	0930	1028	80020	10.00	240	744	7.1	85	8.0	1,300	22.7	22.7	300
NOV													
12...	0810	1028	80020	10.00	226	745	10.0	105	8.1	1,430	17.8	16.7	310
DEC													
09...	1240	1028	80020	9.86	239	746	10.1	95	8.2	1,610	9.8	11.5	410
JAN													
06...	1000	1028	80020	9.90	249	777	14.0	98	7.4	1,540	-2.1	1.2	420
FEB													
11...	1315	1028	80020	10.32	364	758	11.3	91	7.4	1,330	5.7	5.8	330
MAR													
02...	0800	1028	80020	11.06	883	758	9.2	84	7.4	990	5.8	10.9	220
APR													
06...	1050	1028	80020	10.75	642	748	17.6	186	8.3	1,620	18.1	16.9	630
MAY													
12...	0750	1028	80020	10.54	751	746	5.0	59	7.8	1,040	21.2	22.7	220
JUN													
08...	0910	1028	80020	15.64	9,270	747	4.7	55	7.3	519	24.2	22.4	110
JUL													
13...	0755	1028	80020	12.52	2,190	748	5.3	70	7.5	567	22.9	28.5	93
AUG													
04...	0945	1028	80020	11.07	536	740	8.1	109	7.9	748	24.8	28.9	140
SEP													
01...	0805	1028	80020	10.20	184	752	6.2	78	7.8	1,510	18.1	25.8	430

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	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)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
09...	500	110	55.6	5.11	2	86.6	27	206	245	3	90.0	.7	5.6
NOV													
12...	540	116	59.4	4.66	2	102	29	230	276	2	136	.7	5.6
DEC													
09...	660	154	67.3	3.51	2	110	26	249	E296	E4	150	.8	7.6
JAN													
06...	630	147	63.4	3.83	2	103	26	204	245	2	146	.5	3.5
FEB													
11...	570	140	53.4	3.95	1	74.2	22	238	E282	E4	99.6	1.2	4.8
MAR													
02...	420	109	36.7	3.70	1	58.9	23	207	E250	E1	68.9	.6	4.0
APR													
06...	800	192	78.6	5.83	1	87.8	19	176	210	2	82.3	.6	4.6
MAY													
12...	370	89.7	34.6	5.23	1	62.5	27	152	182	2	83.1	.5	6.2
JUN													
08...	190	47.3	17.7	3.97	.9	27.3	23	84	102	.0	30.5	.3	5.7
JUL													
13...	220	58.3	17.3	5.04	.8	25.4	20	124	149	.0	29.1	.3	9.5
AUG													
04...	260	57.7	28.9	4.08	1	43.6	26	121	E145	E1	52.6	.4	8.7
SEP													
01...	560	118	63.5	5.45	2	101	28	131	157	.0	137	.5	8.2

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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)
OCT													
09...	264	741	1.01	480	48	<.10	--	E.006	.124	.03	.032	.013	.004
NOV													
12...	323	888	1.21	542	23	1.2	--	E.005	.788	.18	.197	.062	.019
DEC													
09...	421	1,060	1.45	687	13	.49	.01	.011	1.04	.23	.248	.043	.013
JAN													
06...	443	1,030	1.41	695	<10	.59	.13	.104	.735	.17	.180	.046	.014
FEB													
11...	357	878	1.19	863	13	.71	.10	.081	1.34	.30	.321	.062	.019
MAR													
02...	217	624	.85	1,490	40	.90	.06	.047	.584	.13	.145	.043	.013
APR													
06...	629	1,190	1.61	2,060	64	.88	--	E.010	.084	.02	.027	.026	.008
MAY													
12...	241	617	.84	1,250	560	1.3	.02	.012	2.51	.57	.588	.072	.022
JUN													
08...	102	287	.39	7,180	1,070	5.7	.22	.167	1.58	.36	.389	.102	.031
JUL													
13...	100	322	.44	1,900	685	1.9	--	E.006	2.12	.48	.484	.016	.005
AUG													
04...	170	439	.60	635	57	2.0	--	E.006	--	--	<.016	--	E.001
SEP													
01...	441	953	1.30	474	50	1.1	--	<.010	.181	.04	.053	.039	.012

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic nitro-gen, water, unfltrd mg/L (00605)	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, water, unfltrd mg/L (00600)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover-able, ug/L (01007)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, fltrd, ug/L (01030)
OCT													
09...	--	--	<.006	.006	.106	--	2.5	2	213	226	E.02	.04	<.8
NOV													
12...	--	.086	.028	.041	.124	1.4	2.0	2	197	205	E.02	E.03	E.7
DEC													
09...	.48	.089	.029	.044	.084	.74	2.1	<2	172	187	<.04	E.03	<.8
JAN													
06...	.48	.166	.054	.065	.105	.77	1.8	<2	153	162	.04	E.04	<.8
FEB													
11...	.63	.061	.020	.032	.086	1.0	1.7	E2	153	149	E.03	E.03	<.8
MAR													
02...	.86	.083	.027	.045	.164	1.0	1.4	2	135	144	<.04	.05	<.8
APR													
06...	--	.028	.009	.025	.189	.91	2.1	3	238	255	E.04	.05	<.8
MAY													
12...	1.3	.074	.024	.035	.39	1.9	2.7	4	128	238	<.04	.09	<.8
JUN													
08...	5.5	.052	.017	.030	2.40	6.1	1.5	12	95	1,030	<.04	.49	<.8
JUL													
13...	--	.193	.063	.084	.65	2.4	3.2	4	111	399	<.04	.15	<.8
AUG													
04...	--	--	E.004	.006	.189	--	2.3	2	134	146	<.04	E.04	<.8
SEP													
01...	--	--	E.003	.014	.129	1.1	3.0	3	248	239	E.04	.06	<.8

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chromium, water, unfltrd recoverable, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recoverable, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recoverable, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recoverable, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recoverable, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recoverable, ug/L (01067)
OCT													
09...	E.4	2.0	5.1	<6	270	<.08	.54	3.2	49	<.02	<.02	2.70	5.59
NOV													
12...	E.4	2.2	4.5	E4	340	<.08	.66	5.3	55	<.02	<.02	2.84	4.45
DEC													
09...	<.8	2.2	6.3	11	260	<.08	.33	17.3	37	<.02	<.02	3.08	7.57
JAN													
06...	<.8	6.4	6.1	14	180	.18	.36	23.9	45	<.02	<.02	5.10	6.27
FEB													
11...	<.8	2.3	3.1	8	290	.14	.41	24.3	43	<.02	<.02	2.26	4.87
MAR													
02...	1.0	2.6	4.5	7	1,120	.09	1.65	7.1	95	<.02	<.02	3.61	5.64
APR													
06...	1.0	5.6	7.5	<6	790	.08	1.28	6.4	104	<.02	<.02	3.61	5.70
MAY													
12...	5.2	2.9	10.9	<6	5,710	E.07	7.19	.4	412	<.02	<.02	1.22	12.2
JUN													
08...	35.9	1.6	43.5	8	29,000	<.08	48.1	1.2	2,550	<.02	.05	1.93	55.2
JUL													
13...	7.6	2.3	14.4	<6	5,460	E.04	12.5	E.2	822	<.02	E.02	2.13	16.1
AUG													
04...	1.0	2.1	3.5	<6	880	<.08	1.10	10.8	82	<.02	<.02	2.27	3.67
SEP													
01...	E.7	5.2	9.2	E3	520	.08	.90	3.6	110	<.02	<.02	3.67	7.33

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recoverable, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recoverable, ug/L (01092)	Aldrin, water, unfltrd ug/L (39330)	alpha-Endosulfan, water, unfltrd ug/L (34361)	alpha-HCH, water, unfltrd ug/L (39337)	alpha-HCH-d6, surrog, Sch1608 water, unfltrd pct rcv (99778)	Aroclor 1016 + 1242, water, unfltrd ug/L (81648)	Aroclor 1221, water, unfltrd ug/L (39488)	Aroclor 1232, water, unfltrd ug/L (39492)
OCT													
09...	.8	1.0	<.2	<.16	1.1	4	--	--	--	--	--	--	--
NOV													
12...	<1	--	<.2	<.16	2.2	5	<.04	<.1	<.03	59.4	<.1	<1	<.1
DEC													
09...	1.4	--	<.2	<.16	2.5	6	--	--	--	--	--	--	--
JAN													
06...	1.1	--	<.2	<.16	5.0	6	--	--	--	--	--	--	--
FEB													
11...	<1	<1	<.2	<.16	2.0	3	--	--	--	--	--	--	--
MAR													
02...	2	2	<.2	<.16	2.7	11	--	--	--	--	--	--	--
APR													
06...	<1	<1	<.2	<.16	5.0	17	--	--	--	--	--	--	--
MAY													
12...	<1	2	<.2	<.16	1.3	27	<.04	<.1	<.03	E16.3	<.1	<1	<.1
JUN													
08...	<1	2	<.2	.16	.8	104	--	--	--	--	--	--	--
JUL													
13...	<1	<1	<.2	<.16	5.9	32	--	--	--	--	--	--	--
AUG													
04...	<1	<1	<.2	<.16	1.6	5	--	--	--	--	--	--	--
SEP													
01...	<1	<1	<.2	<.16	3.2	11	--	--	--	--	--	--	--

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endo-sulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlor-dane, tech-nical, water, unfltrd ug/L (39350)	cis-Chlor-dane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Diel-drin, water, unfltrd ug/L (39380)	Endo-sulfan sulfate water unfltrd ug/L (34351)	Endrin alde-hyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Hepta-chlor epoxide water unfltrd ug/L (39420)
OCT													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
12...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
DEC													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
12...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUN													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Hepta-chlor, water, unfltrd ug/L (39410)	Isodrin surrog, Sch1608 wat unf percent recovry (90570)	Lindane water, unfltrd ug/L (39340)	p,p'-DDD, water, unfltrd ug/L (39310)	p,p'-DDE, water, unfltrd ug/L (39320)	p,p'-DDT, water, unfltrd ug/L (39300)	PCB 207, surrog, Sch1608 water, unfltrd pct rcv (99781)	Toxa-phene, water, unfltrd ug/L (39400)	trans-Chlor-dane, water, unfltrd ug/L (39065)
OCT									
09...	--	--	--	--	--	--	--	--	--
NOV									
12...	<.03	71.2	<.03	<.1	<.04	<.1	68.3	<2	<.1
DEC									
09...	--	--	--	--	--	--	--	--	--
JAN									
06...	--	--	--	--	--	--	--	--	--
FEB									
11...	--	--	--	--	--	--	--	--	--
MAR									
02...	--	--	--	--	--	--	--	--	--
APR									
06...	--	--	--	--	--	--	--	--	--
MAY									
12...	<.03	E13.8	<.03	<.1	<.04	<.1	E7.8	<2	<.1
JUN									
08...	--	--	--	--	--	--	--	--	--
JUL									
13...	--	--	--	--	--	--	--	--	--
AUG									
04...	--	--	--	--	--	--	--	--	--
SEP									
01...	--	--	--	--	--	--	--	--	--

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

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	1,150	1,130	1,140	1,670	1,640	1,650	1,610	1,550	1,570	1,570	1,530	1,550
2	1,230	1,130	1,170	1,660	1,630	1,640	---	---	e1,620	1,590	1,560	1,580
3	1,280	1,230	1,260	1,680	1,620	1,650	---	---	e1,600	1,570	1,540	1,550
4	1,310	1,280	1,290	1,620	1,500	1,560	---	---	e1,620	1,560	1,520	1,540
5	1,310	1,280	1,290	1,530	1,370	1,460	---	---	e1,620	1,570	1,520	1,540
6	1,310	1,290	1,300	1,430	1,360	1,390	---	---	e1,630	1,560	1,520	1,540
7	1,310	1,270	1,290	1,390	1,030	1,230	1,640	1,610	1,630	1,570	1,530	1,550
8	1,310	1,280	1,300	1,260	1,110	1,180	1,730	1,620	1,650	1,570	1,530	1,550
9	1,320	1,260	1,280	1,340	1,200	1,260	1,700	1,600	1,640	1,580	1,560	1,570
10	1,290	1,250	1,270	1,390	1,340	1,360	1,630	1,590	1,610	1,630	1,560	1,600
11	1,290	1,270	1,280	1,420	1,370	1,390	1,620	1,580	1,600	1,690	1,590	1,640
12	1,310	1,280	1,300	1,460	1,420	1,440	1,620	1,500	1,570	1,740	1,630	1,690
13	1,330	1,290	1,310	1,510	1,450	1,480	1,530	1,420	1,500	1,690	1,600	1,640
14	1,350	1,310	1,330	1,510	1,470	1,490	1,520	1,460	1,500	1,630	1,560	1,600
15	1,390	1,330	1,360	1,500	1,450	1,480	1,470	1,430	1,440	1,600	1,570	1,580
16	1,420	1,350	1,380	1,570	1,460	1,500	1,470	1,430	1,450	1,600	1,490	1,550
17	1,390	1,340	1,370	1,580	1,470	1,510	1,560	1,460	1,510	1,490	1,380	1,430
18	1,400	1,350	1,370	1,480	1,400	1,460	1,570	1,490	1,550	1,470	1,390	1,430
19	1,380	1,330	1,360	1,570	813	1,290	1,580	1,540	1,560	1,410	1,340	1,360
20	1,390	1,340	1,360	---	---	e978	1,580	1,540	1,550	1,340	1,270	1,300
21	1,380	1,340	1,360	1,210	985	1,070	1,570	1,520	1,550	1,340	1,280	1,310
22	1,390	1,350	1,370	1,370	1,200	1,290	1,580	1,530	1,550	1,400	1,340	1,370
23	1,390	1,340	1,370	1,360	1,300	1,330	1,590	1,550	1,570	1,410	1,380	1,390
24	1,380	1,300	1,360	1,450	1,350	1,380	1,590	1,550	1,570	1,430	1,350	1,410
25	1,420	1,340	1,380	1,440	1,390	1,410	1,610	1,560	1,580	1,530	1,340	1,430
26	1,440	1,400	1,420	1,480	1,440	1,460	1,600	1,550	1,580	1,550	1,500	1,540
27	1,580	1,420	1,540	1,490	1,460	1,470	1,570	1,530	1,550	1,530	1,470	1,500
28	1,620	1,580	1,600	1,540	1,490	1,510	1,560	1,530	1,540	1,760	1,530	1,640
29	1,660	1,570	1,620	1,540	1,520	1,530	1,560	1,520	1,540	1,780	1,630	1,720
30	1,670	1,660	1,660	1,570	1,540	1,550	1,570	1,520	1,540	1,630	1,290	1,420
31	1,670	1,650	1,660	---	---	---	1,580	1,530	1,560	1,290	1,200	1,240
MONTH	1,670	1,130	1,370	1,680	813	1,410	1,730	1,420	1,570	1,780	1,200	1,510
		FEBRUARY			MARCH			APRIL			MAY	
1	1,260	1,200	1,230	1,020	943	983	1,450	1,350	1,410	1,410	829	1,040
2	1,300	1,250	1,280	1,020	967	989	1,530	1,450	1,510	1,340	1,120	1,260
3	1,340	1,290	1,310	1,050	967	1,010	1,590	1,510	1,540	1,280	1,190	1,240
4	1,360	1,300	1,330	1,190	531	877	1,610	1,560	1,580	1,350	1,260	1,300
5	1,330	1,250	1,290	603	390	439	1,580	1,530	1,550	1,400	1,270	1,340
6	1,340	1,290	1,310	596	457	544	1,630	1,560	1,610	1,660	1,400	1,530
7	1,300	1,270	1,290	704	513	548	1,630	1,510	1,590	1,670	1,200	1,560
8	1,290	1,270	1,280	955	666	817	1,510	1,410	1,460	1,200	935	1,020
9	1,340	1,290	1,310	695	577	639	1,430	1,260	1,380	992	919	942
10	1,340	1,340	1,340	597	579	590	1,260	1,150	1,190	1,040	992	1,020
11	1,350	1,330	1,340	628	597	612	1,220	1,140	1,170	1,060	1,030	1,040
12	1,340	1,330	1,340	665	628	645	1,310	1,220	1,260	1,070	1,030	1,050
13	1,360	1,340	1,350	700	664	684	1,450	1,310	1,380	1,090	1,060	1,070
14	1,370	1,340	1,360	724	698	708	1,580	1,440	1,500	1,120	1,080	1,100
15	1,400	1,360	1,380	751	724	741	1,690	1,580	1,640	1,160	1,120	1,130
16	1,410	1,380	1,390	773	750	762	1,740	1,680	1,720	1,270	1,160	1,200
17	1,390	1,360	1,370	792	773	784	1,720	1,390	1,520	1,320	1,270	1,290
18	1,360	1,340	1,350	820	791	803	1,390	1,340	1,360	1,420	1,370	1,390
19	1,410	1,360	1,390	842	820	834	1,360	1,340	1,350	1,460	1,420	1,440
20	1,420	1,380	1,410	851	834	838	1,480	1,360	1,400	1,480	1,460	1,470
21	1,430	1,420	1,420	879	851	866	1,680	1,480	1,610	1,500	1,430	1,460
22	1,430	1,400	1,420	928	879	902	1,730	1,640	1,690	1,560	1,500	1,540
23	1,430	874	1,300	953	927	941	1,700	1,490	1,660	1,600	1,560	1,580
24	874	676	752	1,000	953	970	1,490	817	1,020	1,640	1,550	1,610
25	802	717	756	1,020	1,000	1,020	1,210	941	1,050	1,630	1,610	1,620
26	827	769	806	1,050	1,020	1,040	1,260	1,100	1,200	1,650	1,620	1,630
27	957	824	894	1,060	1,030	1,040	1,400	1,250	1,310	1,660	1,610	1,640
28	1,040	957	1,000	1,050	1,030	1,040	1,520	1,400	1,470	1,640	1,590	1,620
29	1,070	1,020	1,050	1,150	1,050	1,080	1,580	1,510	1,550	1,600	1,540	1,570
30	---	---	---	1,260	1,150	1,210	1,570	1,410	1,530	1,580	1,540	1,570
31	---	---	---	1,350	1,260	1,300	---	---	---	1,620	1,580	1,610
MONTH	1,430	676	1,240	1,350	390	847	1,740	817	1,440	1,670	829	1,350

07331000 WASHITA RIVER NEAR DICKSON, OK—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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,660	1,620	1,640	625	374	520	---	---	e550	1,550	1,340	1,460
2	1,670	1,530	1,630	439	349	378	---	---	e666	1,340	1,040	1,140
3	1,590	1,500	1,540	386	293	325	736	694	722	1,240	1,090	1,190
4	1,630	1,590	1,600	407	322	372	---	---	e742	---	---	e1,130
5	1,710	1,550	1,630	667	407	517	---	---	e737	---	---	e1,150
6	1,630	1,500	1,590	667	499	562	---	---	e813	---	---	e1,170
7	1,500	108	630	578	351	469	953	868	921	---	---	e1,300
8	1,190	344	493	457	383	420	1,010	953	988	1,250	1,070	1,170
9	360	281	336	529	457	498	1,040	1,010	1,020	1,070	1,010	1,030
10	426	278	344	549	524	535	1,060	1,030	1,050	1,030	981	1,010
11	413	320	352	604	540	581	1,040	897	986	992	977	986
12	430	389	403	603	587	596	1,160	953	1,100	1,060	990	1,020
13	477	430	449	---	---	e605	1,130	1,090	1,110	1,110	1,060	1,090
14	592	477	533	---	---	e610	1,240	1,130	1,200	1,160	1,110	1,140
15	693	592	642	---	---	e615	1,250	1,220	1,240	1,210	1,150	1,190
16	759	693	728	696	643	666	1,240	1,150	1,210	1,220	1,190	1,200
17	785	721	758	814	698	756	1,230	1,140	1,190	1,280	1,220	1,250
18	756	719	736	864	814	850	1,300	1,200	1,240	1,310	1,280	1,300
19	855	751	806	866	827	852	1,300	1,100	1,200	1,320	1,310	1,310
20	832	686	769	885	821	840	1,360	1,100	1,250	1,380	1,310	1,350
21	724	600	655	962	885	922	1,440	1,360	1,410	1,370	1,290	1,330
22	807	321	493	992	962	981	1,450	1,420	1,430	1,360	1,300	1,330
23	406	338	376	983	911	952	1,430	1,180	1,330	1,390	1,350	1,370
24	419	388	398	952	899	930	1,400	1,170	1,280	1,410	1,390	1,400
25	479	389	445	972	893	930	1,400	1,310	1,360	1,460	1,400	1,420
26	689	422	497	1,000	970	989	1,310	1,250	1,270	1,500	1,460	1,480
27	1,270	689	1,020	1,040	998	1,020	1,470	1,260	1,410	1,540	1,500	1,520
28	1,290	711	975	1,050	1,020	1,040	1,440	1,210	1,300	1,580	1,540	1,560
29	711	604	631	1,030	264	521	1,340	1,230	1,310	1,620	1,570	1,600
30	659	259	487	---	---	e450	1,430	1,270	1,340	1,680	1,620	1,650
31	---	---	---	---	---	e500	1,550	1,340	1,430	---	---	---
MONTH	1,710	108	786	1,050	264	671	1,550	694	1,120	1,680	977	1,270

e Estimated

07331000 WASHITA RIVER NEAR DICKSON, OK—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	20.9	18.3	19.4	22.4	18.3	20.0	11.6	8.2	9.6	11.9	9.0	10.5
2	19.3	17.2	18.1	22.7	19.5	20.9	---	---	---	16.3	11.9	13.8
3	21.3	16.7	18.8	22.7	20.4	21.4	10.9	8.7	9.6	16.5	14.6	15.5
4	21.7	17.9	19.8	24.2	20.5	21.8	10.6	7.3	8.8	16.0	9.5	13.7
5	22.4	19.7	20.8	20.6	11.8	16.2	---	---	---	9.5	4.8	6.8
6	23.6	21.1	21.9	14.4	11.5	12.7	---	---	---	4.8	1.4	3.0
7	25.2	20.7	22.5	11.5	8.9	10.5	8.1	4.5	6.2	2.5	1.1	1.7
8	24.5	21.0	22.7	11.4	10.4	10.9	9.8	6.1	7.7	6.3	1.8	3.8
9	25.8	22.4	23.7	12.1	10.8	11.4	11.5	7.7	9.8	6.6	3.0	4.7
10	26.7	22.9	24.4	13.5	10.8	12.2	8.0	4.7	6.3	6.9	2.8	4.7
11	25.1	22.3	23.7	17.9	13.0	15.2	7.4	3.8	5.4	7.9	3.6	5.5
12	24.1	20.7	22.4	19.2	16.6	17.5	5.5	4.4	4.7	8.5	5.7	7.1
13	25.1	21.2	22.9	16.6	10.9	13.7	5.4	4.6	4.9	10.7	8.0	9.1
14	23.8	19.3	21.7	12.3	11.3	11.6	7.1	3.9	5.2	12.9	9.3	10.7
15	21.5	17.3	19.4	15.6	11.0	13.0	9.9	5.3	7.2	12.0	9.7	11.0
16	22.9	17.4	19.8	15.4	12.3	13.3	7.9	5.5	6.8	11.4	10.5	10.8
17	21.5	18.2	20.0	17.3	12.6	15.3	7.3	3.5	5.4	11.5	10.5	10.9
18	22.1	16.7	19.2	16.6	13.7	15.2	7.7	4.2	5.7	10.6	6.2	8.3
19	23.1	17.6	20.1	14.8	11.7	13.1	7.4	3.7	5.5	7.0	3.8	5.4
20	23.9	18.5	21.0	---	---	---	7.6	3.7	5.6	6.0	3.1	4.7
21	24.9	19.8	22.1	15.3	11.5	12.9	10.2	5.3	7.5	7.1	3.5	5.2
22	24.8	20.0	22.2	15.5	12.5	13.6	12.3	9.5	10.8	8.3	3.7	5.9
23	25.0	19.7	22.1	17.0	10.3	13.9	10.8	8.2	9.5	9.5	4.4	7.0
24	24.6	20.1	22.2	10.5	5.5	8.7	9.3	6.0	7.6	10.8	8.9	9.8
25	22.4	15.7	19.5	9.5	6.3	7.9	9.1	5.9	7.4	13.6	10.3	11.7
26	17.3	13.9	15.4	11.4	7.5	9.3	9.7	7.4	8.3	12.1	5.9	9.4
27	17.7	13.0	15.1	10.7	8.3	9.3	13.3	9.7	11.7	6.8	3.2	4.9
28	18.2	14.5	15.9	9.5	6.2	7.8	13.4	10.7	12.4	6.9	2.1	4.5
29	19.0	13.8	16.1	9.4	5.4	7.2	10.7	7.9	9.3	7.3	4.5	5.7
30	21.6	16.0	18.5	10.7	6.3	8.3	9.1	5.9	7.5	6.6	3.3	4.9
31	22.2	19.3	20.5	---	---	---	9.6	5.8	7.7	5.2	3.8	4.5
MONTH	26.7	13.0	20.4	24.2	5.4	13.3	13.4	3.5	7.6	16.5	1.1	7.6
		FEBRUARY			MARCH			APRIL			MAY	
1	6.3	5.1	5.6	14.4	9.9	12.1	20.4	15.2	17.7	21.9	17.1	18.3
2	8.1	4.6	6.2	14.2	11.0	12.7	21.3	16.5	18.9	21.3	15.5	18.1
3	7.1	3.7	5.6	13.3	12.5	12.8	21.1	17.6	19.2	22.9	17.7	20.1
4	6.0	4.4	5.0	13.8	12.7	13.2	21.1	16.6	18.7	24.6	19.2	21.8
5	5.2	4.3	4.7	14.4	12.8	13.5	20.5	17.4	18.8	25.9	20.6	23.1
6	5.6	3.8	4.7	14.7	12.9	13.8	19.0	16.6	17.9	26.5	22.3	24.2
7	6.3	1.9	4.1	14.6	13.0	13.8	19.1	17.0	17.9	27.4	23.6	25.2
8	5.0	2.3	4.0	13.8	12.1	12.9	21.8	16.1	18.7	27.5	23.6	25.4
9	5.5	4.7	5.1	13.1	11.8	12.5	21.6	18.2	20.0	26.3	23.8	25.0
10	7.2	4.0	5.6	13.2	11.3	12.3	20.6	15.9	18.4	25.9	22.8	24.3
11	6.3	5.5	6.0	13.2	12.0	12.6	15.9	13.7	14.9	26.8	23.2	24.8
12	7.2	3.6	5.4	13.6	12.3	13.1	16.6	13.1	14.7	27.7	23.6	25.4
13	5.5	2.5	4.3	13.1	12.3	12.7	17.4	12.7	15.0	26.6	23.8	25.7
14	4.8	3.2	3.9	13.3	12.0	12.5	19.1	12.8	15.7	23.8	19.8	21.1
15	6.0	2.4	4.0	13.5	12.6	13.0	21.5	15.2	18.1	24.7	18.0	21.0
16	8.4	2.9	5.4	13.0	12.1	12.5	24.1	18.6	21.0	26.4	20.6	23.4
17	10.5	5.2	7.7	15.9	11.2	13.5	24.5	20.3	22.1	26.9	22.2	24.2
18	11.5	6.2	8.9	19.2	15.1	17.0	22.6	20.6	21.2	28.9	23.6	26.1
19	14.4	8.8	11.4	20.5	18.1	19.1	20.6	19.1	20.0	30.0	24.8	27.1
20	14.9	11.0	12.9	21.6	19.2	20.1	23.0	18.9	20.5	30.8	25.0	27.9
21	14.3	9.3	11.8	19.7	16.7	17.8	25.3	19.8	22.3	29.7	25.2	27.5
22	15.0	9.5	12.3	16.7	14.6	15.7	25.6	21.6	23.3	27.5	24.2	26.0
23	13.5	10.9	12.3	17.4	13.4	15.3	24.7	22.8	23.8	30.0	23.7	26.4
24	10.9	9.3	10.1	16.4	15.8	16.1	22.8	19.9	20.9	28.9	24.9	26.7
25	9.9	8.0	8.9	18.1	16.2	17.0	23.6	18.9	21.0	26.9	24.3	25.5
26	11.0	7.1	8.9	19.8	17.6	18.7	24.9	20.6	22.5	28.0	23.8	25.7
27	12.1	7.3	9.6	19.1	18.0	18.5	25.7	20.2	22.9	27.5	24.1	25.8
28	10.7	8.6	9.8	19.7	17.4	18.2	24.0	21.4	22.7	31.3	23.4	26.9
29	12.8	9.6	10.8	20.1	15.5	17.8	24.1	20.3	22.0	28.2	25.5	26.8
30	---	---	---	19.6	15.8	17.6	23.8	21.0	22.5	31.0	24.5	27.3
31	---	---	---	19.7	14.9	17.2	---	---	---	30.0	23.7	26.8
MONTH	15.0	1.9	7.4	21.6	9.9	15.0	25.7	12.7	19.8	31.3	15.5	24.6

07331000 WASHITA RIVER NEAR DICKSON, OK—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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	31.0	23.6	27.1	26.6	24.4	25.2	---	---	---	29.9	25.6	27.8
2	31.5	25.6	27.6	27.1	24.8	25.8	---	---	---	30.7	25.6	28.0
3	29.4	23.5	26.3	27.7	24.8	26.3	33.5	28.5	31.0	30.1	25.3	27.6
4	29.2	24.1	26.6	29.8	27.1	28.3	---	---	---	---	---	---
5	26.6	24.0	25.2	29.9	27.8	28.9	---	---	---	---	---	---
6	29.7	23.6	26.1	29.5	27.1	28.1	---	---	---	---	---	---
7	27.0	21.0	24.1	28.0	25.5	27.0	30.0	26.1	28.0	---	---	---
8	25.3	22.3	23.2	29.0	25.7	27.3	28.6	25.7	26.7	26.8	21.0	23.8
9	23.4	22.4	22.8	30.1	27.8	28.9	30.7	24.6	27.3	27.4	20.9	24.0
10	24.2	22.7	23.3	29.9	27.7	28.9	32.4	26.2	29.1	28.0	21.8	24.7
11	27.3	23.9	25.4	30.5	27.9	29.2	30.4	25.9	27.6	29.4	22.9	25.8
12	29.1	25.7	27.2	31.0	28.2	29.6	28.9	23.5	26.1	29.9	24.1	26.8
13	29.2	26.3	27.6	---	---	---	29.1	24.3	26.5	29.7	24.3	26.8
14	31.3	26.8	28.9	---	---	---	27.1	24.6	25.6	28.8	25.3	26.9
15	30.0	27.6	28.9	---	---	---	25.4	23.6	24.3	29.7	25.2	27.0
16	32.3	26.9	29.2	32.2	29.0	30.6	28.9	23.1	25.5	31.8	25.9	28.5
17	33.0	28.1	30.3	32.1	28.9	30.4	30.5	24.8	27.4	32.5	26.8	29.3
18	30.8	28.7	29.6	31.5	27.5	29.4	30.6	25.8	28.1	31.4	26.8	28.9
19	28.8	26.6	27.4	32.6	26.8	29.5	28.8	25.9	26.8	29.5	25.3	27.3
20	28.1	25.0	26.5	33.4	27.8	30.5	26.3	24.6	25.5	28.5	23.2	25.7
21	26.9	25.5	25.9	33.1	28.9	31.1	28.2	23.7	25.8	28.1	23.2	25.4
22	25.6	23.5	24.5	33.6	28.3	30.9	30.1	24.9	27.2	27.1	23.1	25.0
23	26.7	23.9	25.1	34.0	28.9	31.5	31.0	26.4	28.5	26.5	22.9	24.6
24	28.7	25.0	26.7	33.2	29.2	30.9	31.9	27.0	29.2	28.5	23.7	25.5
25	28.5	26.3	27.3	29.9	25.3	26.8	30.3	27.6	29.1	28.0	22.9	25.2
26	27.7	25.7	26.6	29.8	23.8	26.4	32.2	27.0	29.3	29.0	23.1	25.6
27	27.7	26.5	27.0	29.3	24.8	27.2	32.2	27.7	29.8	28.0	22.3	25.0
28	29.0	25.9	27.1	28.4	24.7	26.1	30.0	26.6	28.4	24.8	21.4	23.0
29	28.6	26.9	27.5	24.7	22.3	23.3	30.8	25.5	28.0	27.3	20.1	23.2
30	27.4	23.5	25.4	---	---	---	30.1	25.0	27.6	24.0	20.3	22.2
31	---	---	---	---	---	---	30.7	24.9	27.7	---	---	---
MONTH	33.0	21.0	26.5	34.0	22.3	28.4	33.5	23.1	27.5	32.5	20.1	25.9

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07331300 PENNINGTON CREEK NEAR REAGAN, OK

LOCATION.--Lat 34°20'51", long 96°42'28", in SE ¼ SE ¼ sec.30, T.2 S., R.6 E., Johnston County, Hydrologic Unit 11130304, on leftt bank 1000 ft downstream from SH 7 bridge, 0.9 mi east of Reagan.

DRAINAGE AREA.--65.7 mi^2.

PERIOD OF RECORD.--October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 843.06 ft above sea level.

REMARKS.--Records fair. Small diversions for Tishomingo National Fish Hatchery. U.S. Geological Survey satellite telemeter at station.

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	27	24	16	18	22	35	30	26	21	26	24	21
2	28	24	15	19	22	35	28	22	22	24	24	22
3	28	24	14	18	20	38	27	21	21	33	23	22
4	28	28	15	17	27	127	27	22	19	27	23	21
5	28	26	15	16	34	117	28	21	19	23	22	21
6	29	27	15	15	28	53	27	21	19	22	22	23
7	27	32	15	16	27	46	31	21	23	117	22	21
8	28	18	15	16	27	44	28	20	22	39	22	20
9	28	16	15	16	27	43	27	20	38	31	23	20
10	27	16	11	15	26	41	27	20	34	28	22	19
11	27	15	9.9	15	28	39	26	20	23	27	29	19
12	27	15	13	15	26	37	26	20	21	27	30	19
13	28	14	17	15	26	39	27	26	21	25	29	18
14	29	15	14	14	28	39	26	20	22	24	29	19
15	26	16	15	15	27	38	26	20	22	24	28	22
16	26	15	14	20	26	37	25	19	20	24	26	18
17	25	26	16	38	26	37	25	19	19	e22	25	18
18	25	24	12	26	26	36	25	19	19	e21	25	18
19	26	21	14	24	26	35	26	20	20	21	28	17
20	26	16	14	23	26	34	26	19	19	22	25	19
21	24	18	14	22	25	33	26	17	25	22	25	19
22	26	17	15	22	25	33	25	17	25	22	24	18
23	25	19	14	22	34	33	27	17	20	21	24	17
24	25	17	14	22	39	33	71	19	20	e30	23	19
25	24	17	14	24	34	32	30	20	21	e22	24	20
26	24	17	14	22	32	32	24	21	19	e22	23	17
27	25	16	18	21	32	32	22	22	20	22	23	18
28	24	16	21	22	32	33	21	22	19	24	26	18
29	24	16	17	22	36	31	22	21	19	45	22	17
30	24	16	17	21	---	31	26	20	29	26	22	16
31	24	---	17	21	---	32	---	19	---	25	21	---
TOTAL	812	581	459.9	612	814	1,305	832	631	661	888	758	576
MEAN	26.2	19.4	14.8	19.7	28.1	42.1	27.7	20.4	22.0	28.6	24.5	19.2
MAX	29	32	21	38	39	127	71	26	38	117	30	23
MIN	24	14	9.9	14	20	31	21	17	19	21	21	16
AC-FT	1,610	1,150	912	1,210	1,610	2,590	1,650	1,250	1,310	1,760	1,500	1,140

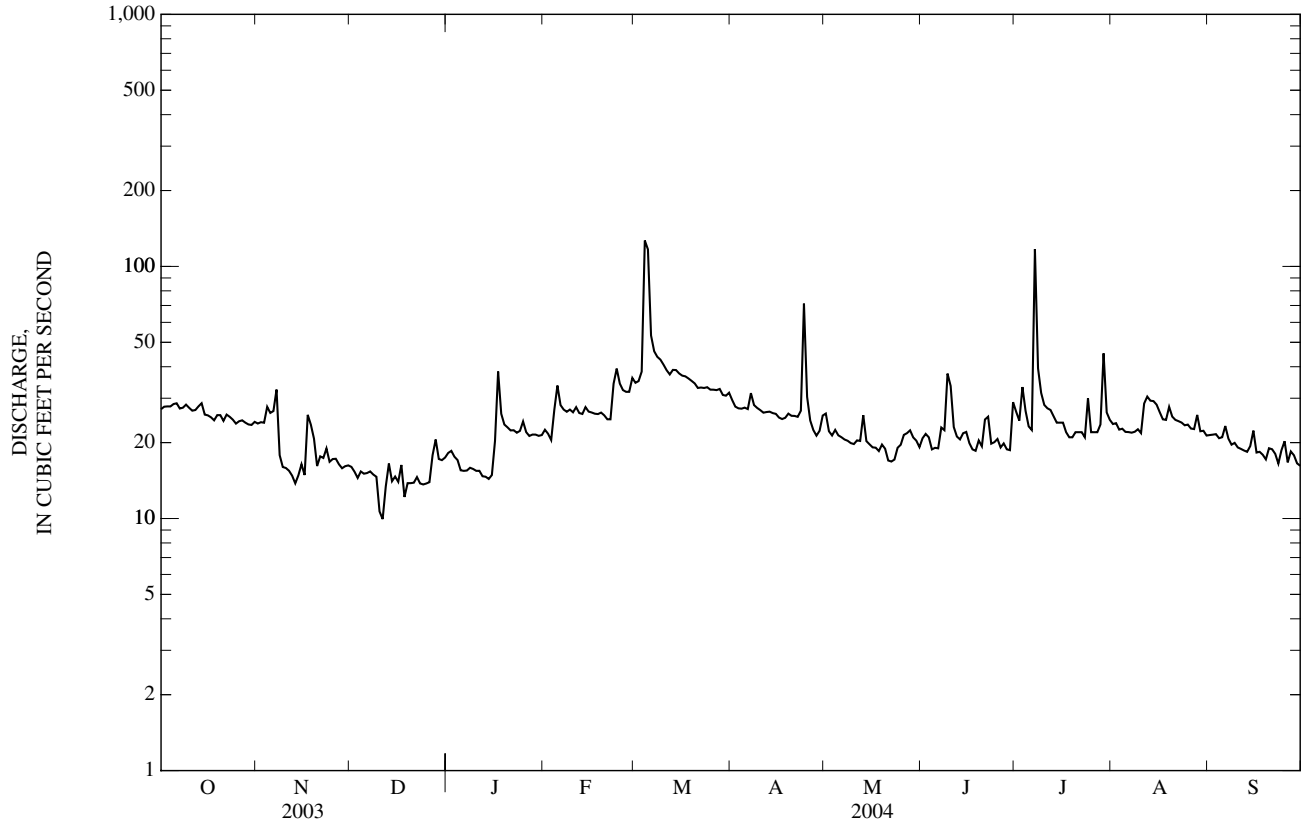
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2004, BY WATER YEAR (WY)

MEAN	26.2	19.4	14.8	19.7	28.1	42.1	27.7	20.4	22.0	28.6	24.5	19.2
MAX	26.2	19.4	14.8	19.7	28.1	42.1	27.7	20.4	22.0	28.6	24.5	19.2
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)
MIN	26.2	19.4	14.8	19.7	28.1	42.1	27.7	20.4	22.0	28.6	24.5	19.2
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)

e Estimated

07331300 PENNINGTON CREEK NEAR REAGAN, OK—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR	
ANNUAL TOTAL	8,929.9	
ANNUAL MEAN	24.4	
HIGHEST DAILY MEAN	127	Mar 4
LOWEST DAILY MEAN	9.9	Dec 11
ANNUAL SEVEN-DAY MINIMUM	13	Dec 6
MAXIMUM PEAK FLOW	557	Mar 4
MAXIMUM PEAK STAGE	9.07	Mar 4
ANNUAL RUNOFF (AC-FT)	17,710	
10 PERCENT EXCEEDS	33	
50 PERCENT EXCEEDS	22	
90 PERCENT EXCEEDS	16	



07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX

LOCATION.--Lat 33°49'08", long 96°33'47", Grayson County, Hydrologic Unit 11140101, on right bank 1,800 ft downstream from Denison Dam powerhouse, 0.4 mi upstream from Shawnee Creek (spillway flow return), 4.5 mi north of Denison, and at mile 725.5.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--39,720 mi^2, of which 5,936 mi^2 is probably noncontributing. At site used prior to October 1961 drainage area was 39,777 mi^2, of which 5,936 mi^2 probably was noncontributing.

PERIOD OF RECORD.--October 1923 to September 1989; December 1996 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to October 1934, published as "near Denison, TX", and October 1934 to September 1961, published as "near Colbert, OK". Gage-height records collected at various sites in this vicinity 1892-93, 1906-28, 1931-49 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 807: 1935 (M). WSP 1211: Drainage area. WSP 1241: 1924-29, 1932-33, 1934 (M), 1935.

GAGE.--Water-stage recorder. Datum of gage is 495.00 ft above National Geodetic Vertical Datum of 1929. Oct. 9, 1923, to Sept. 24, 1934, nonrecording gage, and July 29, 1942, to Sept. 30, 1961, water-stage recorder, at county road bridge 2.5 mi downstream. Prior to Oct. 1, 1931, at datum 11.85 ft higher; Oct. 1, 1931, to Sept 24, 1934, at datum 12.07 ft higher; and July 29, 1942, to Sept. 30, 1961, at datum 2.36 ft higher; Sept. 25, 1934, to July 28, 1942, water-stage recorder at railway bridge 1.9 mi downstream at datum 12.36 ft higher. July 29, 1942 to Sept. 30, 1989, at same site and datum 5.00 ft higher.

REMARKS.--No estimated daily discharge. Records good except for discharges less than 100 ft^3/s which are poor. Flow regulated since October 1943 by Lake Texoma (station 07331500). U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 26, 1908, reached a stage of 45.5 ft (at site and datum used July 29, 1942, to Sept. 30, 1961); from record of National Weather Service.

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	3,070	196	1,560	169	173	1,490	2,240	1,090	2,900	4,010	3,360	3,170
2	3,050	82	2,360	124	2,290	1,910	2,250	87	3,550	4,730	6,320	3,160
3	3,050	1,410	1,990	122	2,440	1,500	620	2,370	3,550	478	8,530	3,140
4	202	2,250	1,900	115	2,920	1,960	66	2,710	2,340	112	8,540	272
5	73	2,260	1,890	1,890	2,700	1,890	1,670	3,330	275	2,870	8,570	99
6	1,650	2,000	406	1,910	2,760	436	2,250	3,030	103	4,600	8,640	100
7	1,790	1,800	169	1,980	188	101	2,190	2,720	1,730	5,880	4,130	3,000
8	1,770	552	1,660	1,960	169	1,530	2,160	959	1,920	7,050	3,570	3,130
9	1,780	110	1,780	167	2,460	1,850	2,160	78	1,970	10,700	7,980	3,130
10	1,800	1,410	2,490	144	2,160	2,130	593	2,460	1,920	10,700	8,550	3,150
11	214	1,830	2,360	139	1,980	1,550	58	3,060	1,880	10,800	8,610	257
12	72	1,880	2,390	1,890	2,190	1,830	1,610	3,060	290	10,900	8,590	88
13	1,610	1,840	201	1,960	5,260	425	2,130	3,050	109	7,580	5,440	2,950
14	1,750	1,950	150	1,890	786	95	1,750	3,410	1,700	5,920	636	3,170
15	1,780	428	2,510	1,920	161	1,500	2,170	658	1,850	6,680	105	3,180
16	1,810	102	2,200	1,670	2,190	1,830	2,460	81	3,130	7,540	3,000	3,120
17	1,770	1,540	2,750	693	3,300	1,870	562	2,860	3,140	4,730	3,190	3,130
18	213	1,840	2,320	167	2,390	1,820	66	3,480	3,030	3,980	3,190	240
19	71	1,850	1,900	2,320	2,440	2,010	1,920	3,490	1,580	6,440	3,240	75
20	1,750	1,300	175	2,380	2,970	191	2,440	3,480	1,420	6,840	3,210	2,950
21	1,200	2,160	149	2,360	367	77	2,440	3,480	3,050	7,060	274	4,100
22	1,110	480	1,890	2,400	126	2,010	2,400	696	3,760	6,900	96	4,140
23	1,140	111	1,450	181	2,570	3,008	2,500	89	3,290	6,950	3,020	280
24	1,090	2,820	2,250	136	2,620	3,160	784	2,890	1,990	5,910	3,190	3,890
25	196	3,470	187	121	2,580	3,160	99	3,520	313	5,780	3,190	334
26	74	2,900	153	1,980	2,340	3,110	1,920	3,480	110	6,290	3,170	68
27	1,080	468	145	2,580	2,380	696	1,570	3,510	154	6,330	3,180	2,960
28	1,120	118	136	2,800	193	79	1,230	3,520	2,970	6,350	3,160	3,110
29	1,140	135	1,860	2,390	162	2,830	1,450	742	3,220	5,430	264	3,120
30	888	147	1,940	2,350	---	3,550	2,550	111	3,950	3,220	3,010	3,120
31	1,100	---	1,910	206	---	4,580	---	97	---	4,000	3,670	---
TOTAL	39,413	39,439	45,231	41,114	55,265	54,178	48,308	67,598	61,194	186,760	133,625	66,633
MEAN	1,271	1,315	1,459	1,326	1,906	1,748	1,610	2,181	2,040	6,025	4,310	2,221
MAX	3,070	3,470	2,750	2,800	5,260	4,580	2,550	3,520	3,950	10,900	8,640	4,140
MIN	71	82	136	115	126	77	58	78	103	112	96	68
AC-FT	78,180	78,230	89,720	81,550	109,600	107,500	95,820	134,100	121,400	370,400	265,000	132,200

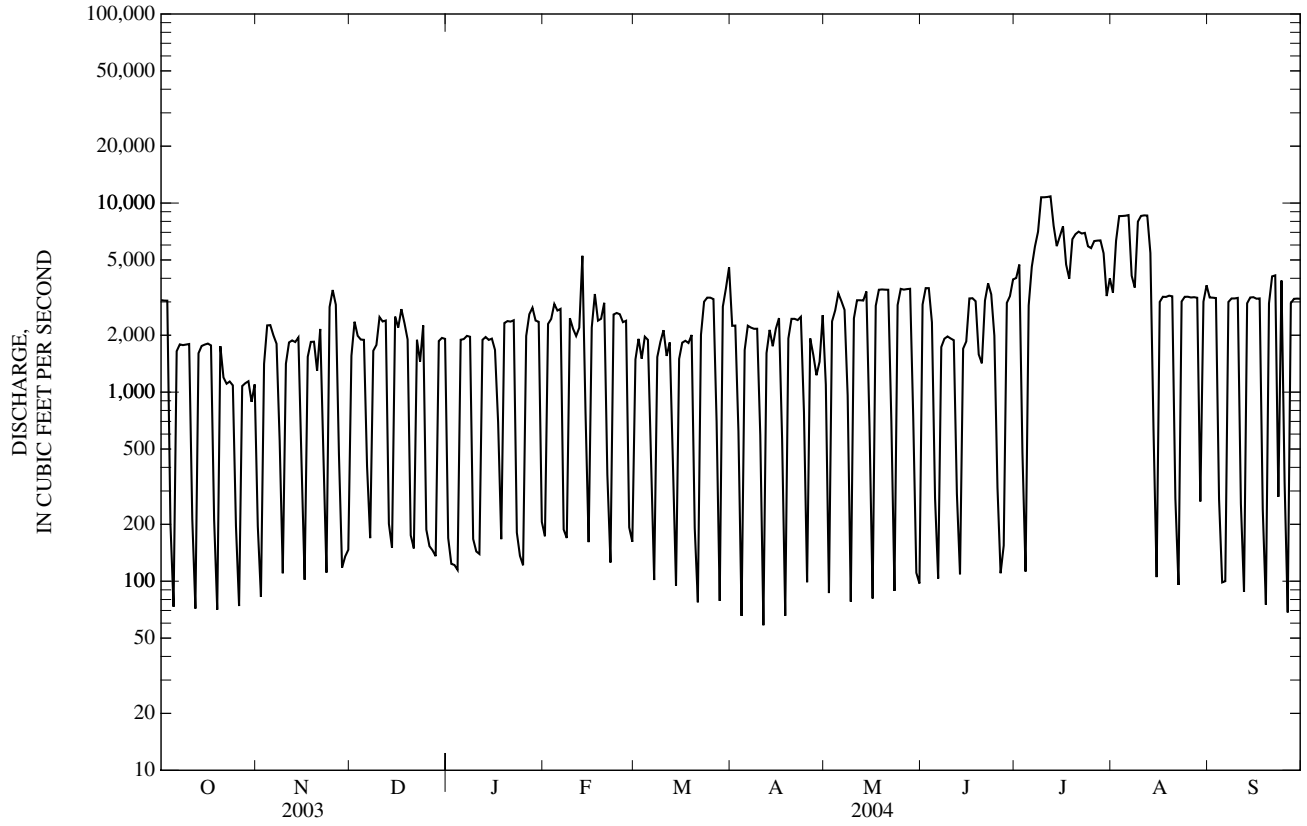
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	4,646	3,598	3,390	3,701	3,528	4,623	4,865	7,284	10,820	5,447	3,521	2,590
MAX	27,860	18,880	13,320	20,630	13,800	24,760	20,400	34,710	66,960	21,820	25,570	10,330
(WY)	(1987)	(1975)	(1997)	(1998)	(1987)	(1987)	(1945)	(1957)	(1957)	(1982)	(1950)	(1950)
MIN	66.7	79.6	569	271	678	614	789	712	1,449	1,580	953	325
(WY)	(1957)	(1957)	(1981)	(1945)	(1945)	(1976)	(1978)	(1959)	(1956)	(1956)	(1972)	(1984)

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	989,178		838,758			
ANNUAL MEAN	2,710		2,292		a4,782	
HIGHEST ANNUAL MEAN					16,030	1987
LOWEST ANNUAL MEAN					1,510	1964
HIGHEST DAILY MEAN	11,500	Feb 26	10,900	Jul 12	96,200	Jun 5, 1957
LOWEST DAILY MEAN	16	Feb 16	58	Apr 11	16	Feb 16, 2003
ANNUAL SEVEN-DAY MINIMUM	617	Mar 15	798	Oct 24	25	Mar 8, 2000
MAXIMUM PEAK FLOW			12,200	Aug 6	b102,000	Jun 5, 1957
MAXIMUM PEAK STAGE			10.87	Aug 6	c26.26	Jun 5, 1957
ANNUAL RUNOFF (AC-FT)	1,962,000		1,664,000		3,464,000	
10 PERCENT EXCEEDS	5,860		4,270		10,500	
50 PERCENT EXCEEDS	2,100		1,980		2,760	
90 PERCENT EXCEEDS	136		122		183	

a Prior to regulation, water years 1924-43, 5,684 ft^3/s.
b Maximum discharge for period of record, 201,000 ft^3/s May 21, 1935.
c Maximum gage height for period of record, 32.00 ft Apr. 25, 1942, site and datum then in use.



07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1944 to August 1989; October 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1944 to September 1989; February 1997 to current year.
WATER TEMPERATURE: October 1945 to September 1989; February 1997 to current year.

INSTRUMENTATION.--Water-quality monitor February 1997 to current year.

REMARKS.--Samples were collected monthly, and specific conductance, pH, water temperature, alkalinity and dissolved oxygen were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 3,520 microsiemens Aug. 14, 1944; minimum daily, 656 microsiemens Oct. 16, 1945.
WATER TEMPERATURE: Maximum daily, 31.0°C July 17, 1969; minimum daily, 3.0°C Feb. 2-4, 7, 1966.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 microsiemens several days; minimum, 1250 microsiemens Nov. 7.
WATER TEMPERATURE: Maximum, 28.3°C Sept. 12; minimum, 5.3°C Feb. 7.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Depth at sample location, feet (81903)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	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)	Location in X-sect. looking dwnstrm ft from l bank (00009)
OCT												
08...	0918	1028	1028	1.05	4.97	40	751	9.6	8.0	1,620	22.5	10.0
08...	0919	1028	1028	1.50	4.97	40	751	9.3	8.0	1,620	22.6	20.0
08...	0920	1028	1028	.90	4.97	40	751	9.1	8.0	1,620	22.7	30.0
08...	0921	1028	1028	1.55	4.97	40	751	9.3	8.0	1,620	22.7	40.0
08...	0922	1028	1028	1.15	4.97	40	751	9.0	8.0	1,620	22.7	50.0
08...	0923	1028	1028	.84	4.97	40	751	9.0	8.0	1,620	22.7	60.0
08...	0924	1028	1028	1.10	4.97	40	751	9.1	8.0	1,620	22.7	170
08...	0925	1028	1028	.80	4.97	40	751	9.1	8.0	1,620	22.7	180
08...	0926	1028	1028	.90	4.97	40	751	8.9	8.0	1,620	22.6	190
08...	0927	1028	1028	1.25	4.97	40	751	8.8	8.0	1,620	22.6	200
08...	0928	1028	1028	1.45	4.97	40	751	8.9	8.0	1,620	22.6	210

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Gage height, feet (00065)	Instantaneous discharge, cfs (00061)	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)
OCT													
02...	0900	1028	80020	4.95	147	754	9.5	109	7.6	1,640	--	21.7	--
08...	0935	1028	80020	4.97	40	751	9.6	113	8.0	1,620	16.8	22.5	230
NOV													
12...	1200	1028	80020	4.92	33	757	12.5	139	8.3	1,680	22.5	19.8	220
DEC													
10...	1225	1028	80020	7.13	3,110	760	11.6	108	7.6	1,710	8.7	11.8	220
JAN													
06...	0756	1028	80020	9.51	8,350	777	10.6	92	7.9	1,650	-7.8	9.5	270
FEB													
10...	1340	1028	80020	5.89	1,650	765	12.1	103	7.9	1,770	11.9	8.2	250
MAR													
01...	1110	1028	80020	4.76	96	752	13.9	123	8.3	1,740	16.3	9.0	270
APR													
06...	0755	1028	80020	5.28	555	748	13.4	130	8.3	1,740	12.0	12.7	270
MAY													
11...	1300	1028	80020	5.00	262	747	10.7	118	7.9	1,750	--	19.0	250
JUN													
08...	1205	1028	80020	4.91	202	747	6.3	70	7.2	1,730	24.5	19.4	260
JUL													
12...	1250	1028	80020	10.33	10,300	748	5.5	67	7.3	1,870	28.9	24.5	210
AUG													
04...	1500	1028	80020	10.69	11,800	740	4.9	62	7.5	1,840	36.1	25.7	--
SEP													
01...	1020	1028	80020	4.91	177	752	4.8	58	7.2	1,830	25.6	23.4	230

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	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)	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)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	340	84.7	32.4	5.33	5	197	55	110	134	.0	310	.3	4.8
NOV													
12...	340	84.8	32.1	5.39	5	205	56	120	139	3	317	.3	5.0
DEC													
10...	350	85.9	31.9	5.41	5	198	55	124	148	1	323	.3	4.5
JAN													
06...	370	93.9	33.9	5.74	5	207	54	106	127	.0	330	.3	4.7
FEB													
10...	350	87.7	32.6	5.46	5	213	56	107.6	E128	E1	333	.3	4.8
MAR													
01...	370	92.7	34.1	5.77	5	224	56	106	E126	E1	325	.3	3.6
APR													
06...	380	95.8	35.0	5.86	5	223	55	114	137	.0	330	.3	5.2
MAY													
11...	360	88.9	34.4	5.62	5	209	55	118	142	1	323	.3	6.2
JUN													
08...	380	97.2	34.0	5.36	5	209	54	119	144	.0	325	.3	6.7
JUL													
12...	340	83.2	30.9	5.01	5	205	57	121	145	.0	354	.3	6.2
AUG													
04...	360	88.2	33.1	5.42	5	214	56	--	--	--	354	.3	6.2
SEP													
01...	360	88.9	34.1	5.69	5	212	56	133	161	.0	357	.3	9.1

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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)
OCT													
02...	--	--	--	--	--	--	.23	.18	.146	.03	.09	.171	.052
08...	226	928	1.26	100	<10	.49	.10	.078	.230	.05	.078	.085	.026
NOV													
12...	230	951	1.29	84.8	<10	.44	.05	.040	.376	.08	.092	.023	.007
DEC													
10...	231	955	1.30	8,020	<10	.47	.04	.033	.553	.12	.127	.007	.002
JAN													
06...	237	976	1.33	22,000	<10	.47	.07	.056	.500	.11	.115	.007	.002
FEB													
10...	241	983	1.34	4,380	<10	.47	.04	.031	.474	.11	.109	.007	.002
MAR													
01...	241	990	1.35	257	<10	.42	.02	.012	.186	.04	.044	.007	.002
APR													
06...	220	984	1.34	1,470	<10	.52	.10	.075	.212	.05	.052	.013	.004
MAY													
11...	233	973	1.32	688	<10	.57	.24	.190	.336	.08	.089	.043	.013
JUN													
08...	234	984	1.34	537	<10	.44	.05	.036	.916	.21	.215	.026	.008
JUL													
12...	251	1,010	1.37	28,100	<10	.44	.11	.087	.212	.05	.054	.020	.006
AUG													
04...	251	--	--	--	<10	.48	.11	.085	--	--	<.016	--	<.002
SEP													
01...	242	1,030	1.40	493	15	1.3	1.05	.817	--	--	<.016	--	<.002

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Organic nitrogen, water, unfltrd mg/L (00605)	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 flt by anal ysis, mg/L (62854)	Total nitro-gen, water, unfltrd mg/L (00600)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Barium, water, unfltrd recover -able, ug/L (01007)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)
OCT													
02...	--	.126	.041	.056	--	.56	--	--	--	--	--	--	--
08...	.41	.028	.009	.019	.036	--	.57	1.4	2	86	129	E.04	E.03
NOV													
12...	.40	.028	.009	.017	.028	--	.53	1.8	E2	131	133	<.04	E.04
DEC													
10...	.44	.031	.010	.020	.041	--	.59	1.8	<2	128	138	.17	.21
JAN													
06...	.42	.040	.013	.019	.037	--	.59	1.6	E2	130	131	.07	.06
FEB													
10...	.43	--	E.005	.013	.031	--	.57	1.6	E1	133	124	.08	.08
MAR													
01...	.41	--	<.006	.010	.022	--	.47	1.3	E2	136	128	<.04	<.04
APR													
06...	.44	--	<.006	.011	.031	--	.57	1.5	<2	134	135	<.04	<.04
MAY													
11...	.38	.071	.023	.037	.047	--	.66	2.2	E2	137	119	<.04	<.04
JUN													
08...	.40	.132	.043	.057	.071	--	.65	2.6	3	123	130	<.20	E.02
JUL													
12...	.35	.077	.025	.043	.059	--	.49	2.1	<2	125	133	<.04	E.03
AUG													
04...	.39	.089	.029	.035	.052	--	--	2.5	M	130	126	E.03	E.03
SEP													
01...	.46	.675	.220	.22	.24	--	--	3.7	3	139	127	.04	.04

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Chrom-ium, water, fltrd, ug/L (01030)	Chrom-ium, water, unfltrd recover -able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover -able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover -able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover -able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	E.8	<.8	1.3	3.4	<6	120	.31	.29	6.0	59	<.02	<.02	1.27
NOV													
12...	<.8	<.8	1.5	3.4	<6	90	<.08	.38	3.3	33	<.02	<.02	1.94
DEC													
10...	<.8	E.7	3.8	6.0	<6	130	E.07	1.37	1.2	27	<.02	E.01	2.33
JAN													
06...	<.8	<.8	4.0	4.1	<6	90	.27	.64	1.1	20	<.02	<.02	3.53
FEB													
10...	<.8	<.8	2.5	3.1	<6	40	.13	.22	1.1	15	<.02	E.01	1.91
MAR													
01...	<.8	<.8	1.8	2.4	<6	40	E.05	.09	2.0	14	<.02	<.02	2.60
APR													
06...	<.8	<.8	2.3	4.5	<6	90	<.08	.19	4.2	32	<.02	<.02	4.75
MAY													
11...	<.8	<.8	2.1	2.1	<6	80	E.05	.15	182	238	<.02	<.02	1.10
JUN													
08...	<.8	<.8	3.3	3.7	<6	100	<.40	.24	262	324	<.02	<.02	2.64
JUL													
12...	<.8	<.8	2.1	3.4	<6	70	E.05	.14	174	218	<.02	<.02	2.54
AUG													
04...	<.8	<.8	2.2	2.7	<6	30	E.08	.32	200	194	<.02	<.02	3.17
SEP													
01...	<.8	<.8	1.6	4.1	21	80	.11	.23	643	636	<.02	<.02	2.75

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Nickel, water, unfltrd recover -able, ug/L (01067)	Selen- ium, water, fltrd, ug/L (01145)	Selen- ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover -able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover -able, ug/L (01092)	Aldrin, water, unfltrd ug/L (39330)	alpha- Endo- sulfan, water, unfltrd ug/L (34361)	alpha- HCH, water, unfltrd ug/L (39337)	alpha- HCH-d6, surrog, Sch1608 water, unfltrd pct rcv (99778)	Aroclor 1016 + 1242, water, unfltrd ug/L (81648)	Aroclor 1221, water, unfltrd ug/L (39488)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	4.08	E.3	.9	<.2	<.16	4.5	3	--	--	--	--	--	--
NOV													
12...	3.46	<1	--	<.2	<.16	.9	2	<.04	<.1	<.03	62.5	<.1	<1
DEC													
10...	5.46	.7	--	<.2	<.16	7.4	27	--	--	--	--	--	--
JAN													
06...	4.32	.6	--	<.2	<.16	3.9	4	--	--	--	--	--	--
FEB													
10...	3.72	<1	4	<.2	<.16	2.5	4	--	--	--	--	--	--
MAR													
01...	3.60	1	<1	<.2	<.16	1.3	<2	--	--	--	--	--	--
APR													
06...	3.07	<1	<1	<.2	<.16	2.0	5	--	--	--	--	--	--
MAY													
11...	2.83	<1	<1	<.2	<.16	1.5	E2	<.04	<.1	<.03	E18.1	<.1	<1
JUN													
08...	3.53	1	<1	<1.0	<.16	E3.0	3	--	--	--	--	--	--
JUL													
12...	3.69	<1	2	<.2	<.16	7.6	5	--	--	--	--	--	--
AUG													
04...	3.02	<1	<1	<.2	<.16	3.7	4	--	--	--	--	--	--
SEP													
01...	4.94	<1	<1	<.2	<.16	6.5	8	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Aroclor 1232, water, unfltrd ug/L (39492)	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta- Endo- sulfan, water, unfltrd ug/L (34356)	beta- HCH, water, unfltrd ug/L (39338)	Chlor- dane, tech- nical, water, unfltrd ug/L (39350)	cis- Chlor- dane, water, unfltrd ug/L (39062)	delta- HCH, water, unfltrd ug/L (34259)	Diel- drin, water, unfltrd ug/L (39380)	Endo- sulfan sulfate water unfltrd ug/L (34351)	Endrin alde- hyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)
OCT													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
12...	<.1	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06
DEC													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY													
11...	<.1	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06
JUN													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
01...	--	--	--	--	--	--	--	--	--	--	--	--	--

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

Date	Hepta-chlor epoxide water unfltrd ug/L (39420)	Hepta-chlor, water, unfltrd ug/L (39410)	Isodrin surrog, Sch1608 wat unf percent recovry (90570)	Lindane water, unfltrd ug/L (39340)	p,p-' DDD, water, unfltrd ug/L (39310)	p,p-' DDE, water, unfltrd ug/L (39320)	p,p-' DDT, water, unfltrd ug/L (39300)	PCB 207, surrog, Sch1608 water, unfltrd pct rcv (99781)	Toxa-phene, water, unfltrd ug/L (39400)	trans-Chlor-dane, water, unfltrd ug/L (39065)
OCT										
02...	--	--	--	--	--	--	--	--	--	--
08...	--	--	--	--	--	--	--	--	--	--
NOV										
12...	<.8	<.03	77.0	<.03	<.1	<.04	<.1	62.3	<2	<.1
DEC										
10...	--	--	--	--	--	--	--	--	--	--
JAN										
06...	--	--	--	--	--	--	--	--	--	--
FEB										
10...	--	--	--	--	--	--	--	--	--	--
MAR										
01...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	--	--	--	--	--
MAY										
11...	<.8	<.03	E16.8	<.03	<.1	<.04	<.1	E11.7	<2	<.1
JUN										
08...	--	--	--	--	--	--	--	--	--	--
JUL										
12...	--	--	--	--	--	--	--	--	--	--
AUG										
04...	--	--	--	--	--	--	--	--	--	--
SEP										
01...	--	--	--	--	--	--	--	--	--	--

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	1,600	1,610	1,680	1,660	1,670	1,660	1,630	1,650	1,680	1,640	1,660
2	1,630	1,600	1,620	1,680	1,660	1,670	1,670	1,640	1,660	1,670	1,650	1,660
3	1,630	1,610	1,620	1,680	1,670	1,680	1,670	1,640	1,660	1,670	1,650	1,660
4	1,640	1,610	1,620	1,690	1,670	1,680	1,680	1,650	1,670	1,670	1,640	1,660
5	1,620	1,590	1,610	1,690	1,540	1,670	1,690	1,660	1,680	1,660	1,650	1,650
6	1,640	1,610	1,620	1,690	1,540	1,660	1,690	1,660	1,680	1,660	1,650	1,650
7	1,640	1,610	1,630	1,690	1,250	1,600	1,700	1,670	1,680	1,660	1,650	1,660
8	1,650	1,620	1,640	1,680	1,670	1,670	1,700	1,680	1,690	1,680	1,660	1,670
9	1,660	1,630	1,640	1,680	1,660	1,670	1,710	1,700	1,700	1,680	1,660	1,670
10	1,670	1,650	1,660	1,680	1,660	1,670	1,720	1,700	1,710	1,680	1,660	1,670
11	1,690	1,650	1,670	1,700	1,670	1,680	1,720	1,700	1,710	1,680	1,660	1,670
12	1,710	1,680	1,690	1,690	1,650	1,680	1,720	1,580	1,680	1,690	1,670	1,680
13	1,710	1,650	1,690	1,660	1,650	1,660	1,700	1,660	1,680	1,700	1,670	1,680
14	1,700	1,650	1,670	1,660	1,650	1,660	1,710	1,680	1,700	1,730	1,660	1,690
15	1,670	1,650	1,660	1,660	1,640	1,650	1,710	1,700	1,700	1,700	1,680	1,690
16	1,670	1,650	1,660	1,660	1,640	1,660	1,710	1,680	1,700	1,690	1,630	1,670
17	1,670	1,640	1,660	1,670	1,620	1,660	1,720	1,690	1,700	1,680	1,600	1,650
18	1,670	1,630	1,660	1,670	1,570	1,650	1,710	1,700	1,700	1,700	1,680	1,680
19	1,670	1,640	1,660	1,670	1,640	1,660	1,710	1,690	1,700	1,700	1,690	1,700
20	1,670	1,640	1,660	1,670	1,640	1,650	1,700	1,680	1,690	1,710	1,690	1,700
21	1,670	1,650	1,670	1,660	1,640	1,650	1,700	1,680	1,690	1,710	1,690	1,700
22	1,670	1,650	1,660	1,660	1,640	1,650	1,700	1,680	1,690	1,720	1,700	1,710
23	1,670	1,650	1,670	1,650	1,290	1,610	1,700	1,670	1,680	1,730	1,700	1,720
24	1,670	1,650	1,670	1,670	1,640	1,660	1,700	1,680	1,690	1,730	1,710	1,720
25	1,670	1,630	1,660	1,660	1,650	1,660	1,700	1,660	1,680	1,720	1,700	1,710
26	1,670	1,650	1,660	1,670	1,640	1,650	1,680	1,670	1,680	1,740	1,720	1,730
27	1,680	1,660	1,670	1,660	1,640	1,650	1,680	1,650	1,680	1,730	1,720	1,730
28	1,680	1,660	1,680	1,660	1,630	1,650	1,680	1,650	1,670	1,730	1,730	1,730
29	1,680	1,670	1,680	1,650	1,630	1,640	1,680	1,670	1,670	1,750	1,720	1,740
30	1,690	1,670	1,680	1,650	1,640	1,640	1,680	1,660	1,670	1,750	1,730	1,740
31	1,680	1,680	1,680	---	---	---	1,680	1,670	1,670	1,750	1,720	1,730
MONTH	1,710	1,590	1,660	1,700	1,250	1,660	1,720	1,580	1,680	1,750	1,600	1,690

07331600 RED RIVER AT DENISON DAM NEAR DENISON, 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	1,760	1,720	1,740	1,770	1,710	1,740	1,760	1,740	1,760	1,730	1,720	1,730
2	1,760	1,750	1,750	1,750	1,710	1,730	1,760	1,740	1,750	1,740	1,710	1,730
3	1,770	1,750	1,750	1,740	1,710	1,730	1,750	1,740	1,750	1,750	1,720	1,740
4	1,760	1,580	1,720	1,740	1,540	1,710	1,770	1,740	1,750	1,760	1,730	1,740
5	1,760	1,690	1,740	1,730	1,680	1,720	1,760	1,740	1,750	1,760	1,730	1,750
6	1,770	1,750	1,760	1,740	1,690	1,720	1,760	1,740	1,750	1,770	1,720	1,750
7	1,770	1,750	1,760	1,730	1,700	1,720	1,760	1,700	1,750	1,770	1,720	1,750
8	1,770	1,740	1,760	1,740	1,680	1,720	1,770	1,730	1,750	1,770	1,730	1,750
9	1,780	1,770	1,770	1,740	1,710	1,730	1,770	1,740	1,750	1,760	1,730	1,740
10	1,790	1,770	1,780	1,750	1,730	1,730	1,780	1,750	1,760	1,760	1,740	1,750
11	1,790	1,770	1,770	1,740	1,710	1,720	1,780	1,750	1,770	1,760	1,720	1,740
12	1,780	1,750	1,770	1,740	1,710	1,730	1,770	1,720	1,750	1,740	1,710	1,730
13	1,790	1,770	1,780	1,740	1,690	1,710	1,750	1,720	1,740	1,740	1,730	1,740
14	1,790	1,690	1,750	1,730	1,700	1,710	1,760	1,720	1,740	1,750	1,720	1,730
15	1,770	1,690	1,730	1,730	1,710	1,720	1,760	1,740	1,750	1,750	1,700	1,730
16	1,810	1,750	1,770	1,740	1,700	1,730	1,760	1,740	1,750	1,750	1,690	1,730
17	1,800	1,780	1,790	1,740	1,710	1,730	1,760	1,730	1,740	1,760	1,730	1,750
18	1,800	1,780	1,780	1,730	1,690	1,720	1,750	1,730	1,740	1,820	1,740	1,770
19	1,790	1,780	1,780	1,740	1,720	1,730	1,750	1,720	1,740	1,820	1,760	1,800
20	1,820	1,780	1,790	1,740	1,710	1,730	1,730	1,720	1,720	1,820	1,770	1,800
21	1,820	1,780	1,810	1,740	1,710	1,730	1,730	1,720	1,720	1,810	1,770	1,790
22	1,810	1,770	1,790	---	---	e1,740	1,730	1,720	1,730	1,810	1,690	1,790
23	1,810	1,730	1,780	---	---	e1,740	1,730	1,720	1,730	1,800	1,770	1,780
24	1,780	1,720	1,760	---	---	e1,760	1,730	1,620	1,690	1,810	1,620	1,790
25	1,770	1,720	1,760	---	---	e1,780	1,740	1,710	1,720	1,810	1,790	1,800
26	1,780	1,750	1,760	1,810	1,780	1,800	1,740	1,710	1,730	1,810	1,790	1,800
27	1,780	1,750	1,770	1,790	1,760	1,780	1,750	1,720	1,740	1,820	1,790	1,810
28	1,780	1,720	1,750	1,780	1,760	1,770	1,740	1,720	1,730	1,810	1,770	1,800
29	1,770	1,740	1,760	1,780	1,760	1,770	1,750	1,720	1,740	1,810	1,690	1,800
30	---	---	---	1,780	1,760	1,770	1,750	1,690	1,730	1,820	1,790	1,800
31	---	---	---	1,770	1,760	1,760	---	---	---	1,830	1,800	1,820
MONTH	1,820	1,580	1,760	1,810	1,540	1,740	1,780	1,620	1,740	1,830	1,620	1,770
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,840	1,800	1,820	1,860	1,800	1,830	1,860	1,830	1,850	1,830	1,760	1,800
2	1,840	1,800	1,820	1,860	1,800	1,840	1,850	1,840	1,840	1,840	1,760	1,800
3	1,810	1,780	1,800	1,850	1,780	1,810	1,860	1,840	1,850	1,850	1,760	1,810
4	1,800	1,770	1,790	1,820	1,800	1,810	1,850	1,830	1,840	1,850	1,800	1,840
5	1,790	1,750	1,770	1,860	1,760	1,830	1,850	1,830	1,840	1,850	1,830	1,850
6	1,770	1,730	1,750	1,880	1,830	1,850	1,850	1,830	1,840	1,850	1,820	1,840
7	1,770	1,700	1,730	1,870	1,810	1,850	1,860	1,830	1,840	1,860	1,760	1,810
8	1,770	1,710	1,750	1,860	1,830	1,850	1,860	1,840	1,850	1,820	1,740	1,780
9	1,770	1,650	1,720	1,860	1,850	1,860	1,860	1,830	1,840	1,800	1,750	1,780
10	1,770	1,710	1,740	1,870	1,860	1,860	1,860	1,830	1,840	1,800	1,750	1,770
11	1,770	1,740	1,760	1,870	1,750	1,850	1,850	1,820	1,830	1,810	1,770	1,790
12	1,770	1,740	1,750	1,870	1,790	1,860	1,840	1,820	1,830	1,810	1,790	1,800
13	1,760	1,740	1,750	1,870	1,770	1,860	1,850	1,820	1,830	1,810	1,760	1,790
14	1,780	1,750	1,760	1,870	1,840	1,860	1,860	1,830	1,850	1,800	1,670	1,770
15	1,780	1,750	1,770	1,870	1,850	1,860	1,860	1,850	1,860	1,780	1,670	1,750
16	1,780	1,750	1,770	1,870	1,840	1,860	1,870	1,830	1,850	1,790	1,760	1,770
17	1,780	1,740	1,760	1,870	1,830	1,860	1,860	1,840	1,850	1,790	1,760	1,770
18	1,790	1,640	1,750	1,870	1,820	1,860	1,860	1,820	1,840	1,780	1,760	1,770
19	1,800	1,690	1,770	1,870	1,840	1,860	1,860	1,740	1,810	1,780	1,760	1,770
20	1,800	1,760	1,780	1,870	1,840	1,860	1,840	1,790	1,820	1,780	1,750	1,760
21	1,810	1,750	1,790	1,880	1,850	1,860	1,850	1,820	1,840	1,760	1,750	1,750
22	1,810	1,340	1,740	1,880	1,840	1,870	1,860	1,840	1,850	1,760	1,750	1,750
23	1,800	1,770	1,790	1,880	1,840	1,870	1,860	1,820	1,840	1,760	1,750	1,750
24	1,820	1,780	1,800	1,880	1,840	1,860	1,860	1,800	1,830	1,760	1,740	1,750
25	1,810	1,770	1,790	1,870	1,840	1,860	1,850	1,790	1,820	1,770	1,740	1,750
26	1,800	1,780	1,790	1,860	1,840	1,860	1,850	1,780	1,820	1,770	1,740	1,760
27	1,800	1,750	1,780	1,870	1,840	1,860	1,840	1,770	1,810	1,770	1,760	1,760
28	1,830	1,780	1,800	1,880	1,850	1,870	1,830	1,760	1,790	1,770	1,750	1,760
29	1,840	1,760	1,820	1,880	1,750	1,850	1,850	1,790	1,830	1,770	1,740	1,760
30	1,850	1,730	1,820	1,870	1,840	1,860	1,850	1,760	1,810	1,760	1,740	1,760
31	---	---	---	1,870	1,840	1,860	1,840	1,760	1,800	---	---	---
MONTH	1,850	1,340	1,770	1,880	1,750	1,850	1,870	1,740	1,830	1,860	1,670	1,780

e Estimated

07331600 RED RIVER AT DENISON DAM NEAR DENISON, 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	23.8	21.6	22.9	23.1	20.0	21.2	15.9	12.7	14.0	11.3	10.3	10.7
2	23.5	21.6	22.6	22.8	20.2	21.3	14.0	12.8	13.5	12.5	10.6	11.4
3	23.2	21.3	22.4	22.7	20.6	21.3	14.9	13.3	13.8	11.7	10.8	11.2
4	25.3	21.1	23.0	22.7	20.8	21.4	14.9	12.2	13.4	11.1	8.8	10.3
5	24.2	22.1	22.9	20.8	19.1	19.8	13.4	11.4	12.6	10.2	7.8	9.1
6	24.1	22.3	22.7	19.9	18.3	19.0	13.9	11.1	12.3	9.8	7.6	8.7
7	24.9	21.7	22.6	19.5	14.5	18.2	13.7	10.8	12.0	9.3	6.8	8.4
8	24.9	21.4	22.6	19.2	17.7	18.3	14.5	11.6	12.6	9.6	7.9	8.9
9	23.8	22.4	22.7	19.0	17.5	18.1	13.7	11.1	12.6	10.1	7.3	8.5
10	24.8	22.1	22.7	19.2	17.4	18.2	12.5	10.2	11.5	10.3	6.8	8.2
11	24.7	21.5	22.9	20.8	18.3	19.3	12.7	9.7	11.4	10.4	6.7	8.4
12	23.8	21.7	22.7	19.6	17.6	18.6	11.8	10.0	10.9	10.1	7.8	8.9
13	24.5	21.7	22.6	17.6	15.9	16.6	10.7	9.5	10.3	10.5	8.6	9.2
14	24.1	20.8	22.3	17.4	15.9	16.5	12.3	8.9	10.3	10.6	8.6	9.3
15	23.9	20.4	21.8	19.0	16.8	17.6	12.6	9.9	11.1	10.0	8.5	9.3
16	24.3	20.6	22.0	19.3	15.5	17.2	11.0	9.1	10.2	9.7	8.8	9.2
17	23.9	20.7	21.9	18.1	16.9	17.3	11.8	9.7	10.6	10.7	8.9	9.6
18	24.6	20.2	22.1	17.2	15.7	16.6	11.7	9.7	10.6	9.5	7.3	8.3
19	24.6	20.3	22.1	18.4	14.7	16.4	11.6	8.8	10.2	9.6	6.6	8.1
20	24.0	20.3	21.8	18.0	15.1	16.4	11.7	8.3	9.8	9.2	6.6	8.1
21	24.6	20.9	22.1	17.2	15.2	16.3	12.1	9.2	10.5	10.1	6.8	8.4
22	24.4	20.7	21.9	18.6	16.1	17.2	11.7	9.8	10.8	9.7	7.1	8.3
23	24.9	20.5	21.9	17.2	12.5	14.9	11.6	9.2	10.2	10.6	6.8	8.5
24	24.2	20.7	21.9	15.8	12.3	14.0	11.3	9.2	10.3	9.8	8.9	9.3
25	22.5	20.2	21.4	15.6	14.0	15.0	11.6	8.5	9.8	11.5	8.7	9.8
26	20.9	19.5	20.1	16.4	13.6	14.8	11.4	9.3	10.3	9.4	7.7	8.6
27	23.0	18.8	20.5	15.2	12.5	14.3	11.5	10.8	11.1	9.6	6.6	8.1
28	23.0	19.3	20.6	14.5	11.5	12.9	11.0	9.3	10.5	9.4	6.3	8.1
29	22.7	18.9	20.5	15.1	11.9	13.2	11.1	8.3	9.7	9.2	7.3	8.3
30	22.9	19.5	20.8	15.6	12.3	13.7	10.8	8.0	9.6	8.6	6.8	7.8
31	22.8	20.5	21.3	---	---	---	10.9	8.4	9.9	8.1	6.6	7.4
MONTH	25.3	18.8	22.0	23.1	11.5	17.2	15.9	8.0	11.2	12.5	6.3	8.9
		FEBRUARY			MARCH			APRIL			MAY	
1	9.1	7.6	8.2	11.5	7.6	9.2	15.8	11.9	13.6	17.9	15.8	16.6
2	9.2	6.8	7.9	11.2	7.7	9.0	15.7	12.2	13.6	20.4	15.1	17.4
3	8.7	6.2	7.6	10.5	8.3	8.9	16.5	12.4	13.9	19.8	14.9	17.2
4	7.7	6.4	7.2	11.9	8.6	9.6	15.8	11.1	13.2	20.1	16.6	18.2
5	8.0	6.7	7.4	12.9	8.4	10	14.2	11.7	12.9	20.7	17.0	18.2
6	8.2	6.1	7.3	12.5	8.7	10.3	15.1	12.3	13.4	21.2	16.8	18.3
7	9.4	5.3	7.0	13.3	8.6	10.6	14.3	12.7	13.5	21.0	17.2	18.5
8	8.1	5.5	6.8	12.8	8.1	10.2	16.8	12.7	14.2	20.1	17.6	18.8
9	7.6	7.1	7.3	13.5	9.3	10.9	15.8	12.8	14.0	20.9	17.4	18.9
10	8.8	6.7	7.6	12.4	8.8	10.8	13.8	12.4	13.3	20.7	17.3	18.4
11	7.5	7.0	7.3	11.9	9.3	10.3	13.7	12.2	12.8	20.0	17.5	18.3
12	9.4	6.0	7.3	11.2	9.4	10.3	17.1	12.7	14.4	20.5	17.4	18.0
13	7.7	6.0	7.0	11.1	9.9	10.4	17.9	13.2	15.2	19.0	17.7	18.3
14	7.0	5.7	6.4	13.2	9.8	11.0	18.0	13.6	15.4	19.6	16.5	18.4
15	9.3	5.5	7.0	11.2	9.5	10.5	18.0	13.8	15.3	20.6	17.3	18.9
16	9.4	5.7	7.0	12.1	9.5	10.7	17.9	14.3	15.1	20.7	16.5	18.7
17	9.2	6.3	7.2	14.1	9.4	11.1	18.6	14.4	16.0	20.6	17.2	18.5
18	8.5	6.0	7.3	13.8	10.3	11.7	17.2	15.2	16.1	21.2	18.4	19.1
19	9.2	6.8	7.9	12.5	10.3	10.9	16.2	15.1	15.5	22.0	18.5	19.3
20	10.7	7.2	8.3	14.0	11.1	12.4	16.7	15.0	15.4	22.1	18.5	19.4
21	10.7	6.4	8.1	14.4	10.1	12.0	17.8	15.3	15.8	21.7	18.7	19.4
22	10.4	6.7	8.5	---	---	---	17.3	15.4	15.9	20.6	18.3	19.4
23	8.6	7.7	8.1	---	---	---	16.8	15.8	16.2	22.1	18.5	20.0
24	8.2	7.5	7.8	---	---	---	16.6	15.5	16.1	20.9	18.6	19.6
25	9.3	7.1	7.9	---	---	---	19.6	14.7	16.7	20.4	19.0	19.8
26	10.5	6.8	8.4	12.6	11.5	11.9	19.3	14.9	16.7	21.7	19.2	20.2
27	10.0	6.5	8.4	13.4	11.5	12.2	19.2	15.5	17.1	21.6	19.4	20.5
28	9.7	7.2	8.5	13.3	11.3	12.2	17.8	15.8	16.8	23.2	19.6	21.1
29	9.9	8.6	9.0	14.5	10.0	12.2	18.4	16.0	17.1	22.2	19.7	20.9
30	---	---	---	15.8	11.5	13.4	19.4	16.4	17.3	24.1	19.6	21.1
31	---	---	---	14.7	11.9	13.6	---	---	---	22.9	18.4	20.6
MONTH	10.7	5.3	7.6	15.8	7.6	11.0	19.6	11.1	15.1	24.1	14.9	19.0

07331600 RED RIVER AT DENISON DAM NEAR DENISON, 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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.1	18.6	21.0	23.4	20.0	21.9	25.3	22.0	23.8	27.0	23.0	25.2
2	23.1	20.2	21.5	23.3	20.5	22.1	25.4	22.1	24.1	26.9	23.2	25.2
3	23.3	20.3	21.8	23.3	20.2	21.7	25.4	23.2	24.9	26.8	23.0	25.0
4	22.9	20.1	21.7	24.1	19.9	21.8	26.0	23.5	25.1	25.7	23.3	24.6
5	21.4	19.4	20.2	23.4	20.2	21.8	26.7	23.8	25.8	26.5	23.1	24.5
6	21.9	18.7	20.1	24.2	20.6	22.5	26.2	23.3	25.4	26.4	23.0	24.3
7	21.8	18.8	20.1	24.0	20.7	22.6	25.8	23.7	24.9	26.7	21.8	24.3
8	21.5	19.4	20.2	23.8	21.8	23.2	25.7	23.5	24.7	26.7	22.5	24.8
9	21.4	19.4	20.3	24.1	23.5	23.7	26.1	23.6	25.5	26.5	22.8	24.9
10	21.8	19.3	20.5	24.2	23.6	24.0	26.2	23.7	25.6	26.6	22.9	25.0
11	22.7	19.6	20.8	24.3	23.8	24.0	27.0	23.5	25.9	28.1	23.3	25.4
12	22.5	19.5	20.7	24.6	24.0	24.3	26.9	23.9	26.1	28.3	23.3	25.5
13	22.6	19.3	20.8	24.8	22.8	24.1	26.5	23.6	25.4	26.4	23.1	24.9
14	22.9	19.4	21.0	25.0	22.5	23.9	25.6	22.6	23.8	26.3	24.2	25.3
15	22.7	19.3	20.8	24.7	22.4	24.0	24.5	21.6	22.9	26.3	24.4	25.4
16	22.8	19.6	21.2	24.8	22.5	24.1	26.1	21.8	23.8	27.7	24.6	25.7
17	23.0	19.6	21.3	25.6	22.2	24.2	26.1	22.2	24.3	27.3	24.6	25.8
18	23.0	19.6	21.2	25.2	21.3	23.5	26.0	22.3	24.2	27.9	24.7	26.2
19	22.7	20.0	21.2	25.0	20.9	23.6	25.8	22.6	24.1	27.8	23.8	25.6
20	22.8	20.0	21.8	24.8	22.2	23.9	26.2	22.8	24.5	26.6	23.5	24.9
21	23.4	19.3	21.3	25.0	22.2	24.1	25.1	22.6	23.9	26.0	23.8	25.1
22	23.6	19.6	21.7	25.2	22.5	24.2	25.7	22.2	23.6	25.9	23.9	25.1
23	23.9	19.7	21.8	25.2	22.7	24.2	26.0	22.5	24.2	27.2	24.1	25.5
24	23.3	19.8	21.5	25.7	22.8	24.4	26.1	23.2	24.7	26.8	24.1	25.1
25	22.1	19.9	20.8	26.1	22.0	24.6	26.2	23.5	24.9	28.1	24.0	25.8
26	22.5	19.2	20.5	26.1	23.0	24.9	26.1	23.6	25.0	28.1	23.8	25.7
27	21.3	19.4	20.2	25.5	22.7	24.5	26.3	23.7	25.1	26.4	23.2	24.8
28	23.3	19.3	21.1	25.2	22.4	24.2	26.9	23.4	25.2	25.8	23.6	24.8
29	23.2	20.1	21.7	25.0	22.6	24.1	27.5	23.4	25.2	26.5	23.4	24.9
30	23.1	20.0	21.6	25.3	23.2	24.4	27.1	22.2	24.8	26.0	23.1	24.7
31	---	---	---	25.5	22.5	24.2	27.0	22.7	25.2	---	---	---
MONTH	24.1	18.6	21.0	26.1	19.9	23.6	27.5	21.6	24.7	28.3	21.8	25.1

07332390 BLUE RIVER NEAR CONNERVILLE, OK

LOCATION.--Lat 34°23'00", long 96°36'01", in SW $^1/_4$ NW $^1/_4$ sec.17, T.2 S., R.7 E., Johnston County, Hydrologic Unit 11140102, on left bank, 2.0 mi upstream fron State Highway 7, 4.0 mi southeast of Connerville, and at mile 99.9.

DRAINAGE AREA.--162 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October1976 to September 1979, October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 896.75 ft above sea level.

REMARKS.--Records fair. U.S. Geolological Survey satellite telemeter at station.

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	42	47	56	47	48	66	53	53	40	74	41	35
2	42	47	56	47	48	61	53	48	41	69	40	35
3	42	47	57	47	47	66	52	47	44	70	40	34
4	42	48	56	47	64	245	52	46	40	59	42	34
5	42	47	56	45	95	163	52	46	40	48	39	34
6	43	49	56	45	61	82	52	46	42	46	39	39
7	43	55	55	46	56	66	56	46	45	180	39	35
8	42	50	56	47	54	62	54	46	42	58	39	35
9	43	47	56	46	55	62	52	45	52	50	39	35
10	42	47	55	44	53	60	52	45	62	46	39	34
11	43	48	55	44	54	59	51	46	43	44	43	35
12	42	47	58	44	53	58	50	46	42	43	41	35
13	43	46	60	45	52	60	49	48	42	41	41	34
14	42	48	56	44	55	60	49	48	40	41	40	36
15	43	51	56	44	54	59	49	46	40	40	39	39
16	43	50	54	49	55	58	49	44	40	40	39	34
17	43	55	53	114	54	58	49	44	39	40	38	34
18	44	62	52	60	53	58	48	44	42	40	38	33
19	44	52	52	52	59	57	48	43	41	40	39	33
20	44	51	52	50	55	57	48	43	40	40	39	33
21	44	52	53	50	54	e57	48	42	42	40	38	33
22	43	53	53	49	53	e56	49	42	54	40	38	33
23	44	58	52	49	74	e56	48	42	45	40	37	33
24	45	54	51	49	100	56	61	42	40	60	38	34
25	45	54	52	52	67	56	50	42	40	57	39	36
26	45	55	52	49	62	55	49	42	40	40	37	34
27	46	54	55	47	60	55	47	42	39	40	36	33
28	47	55	58	47	60	57	47	44	39	40	36	33
29	46	56	48	48	65	54	48	41	47	102	36	33
30	46	56	47	47	---	53	54	41	61	50	35	33
31	46	---	47	47	---	53	---	40	---	43	35	---
TOTAL	1,351	1,541	1,675	1,541	1,720	2,125	1,519	1,380	1,304	1,661	1,199	1,031
MEAN	43.6	51.4	54.0	49.7	59.3	68.5	50.6	44.5	43.5	53.6	38.7	34.4
MAX	47	62	60	114	100	245	61	53	62	180	43	39
MIN	42	46	47	44	47	53	47	40	39	40	35	33
AC-FT	2,680	3,060	3,320	3,060	3,410	4,210	3,010	2,740	2,590	3,290	2,380	2,040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2004, BY WATER YEAR (WY)

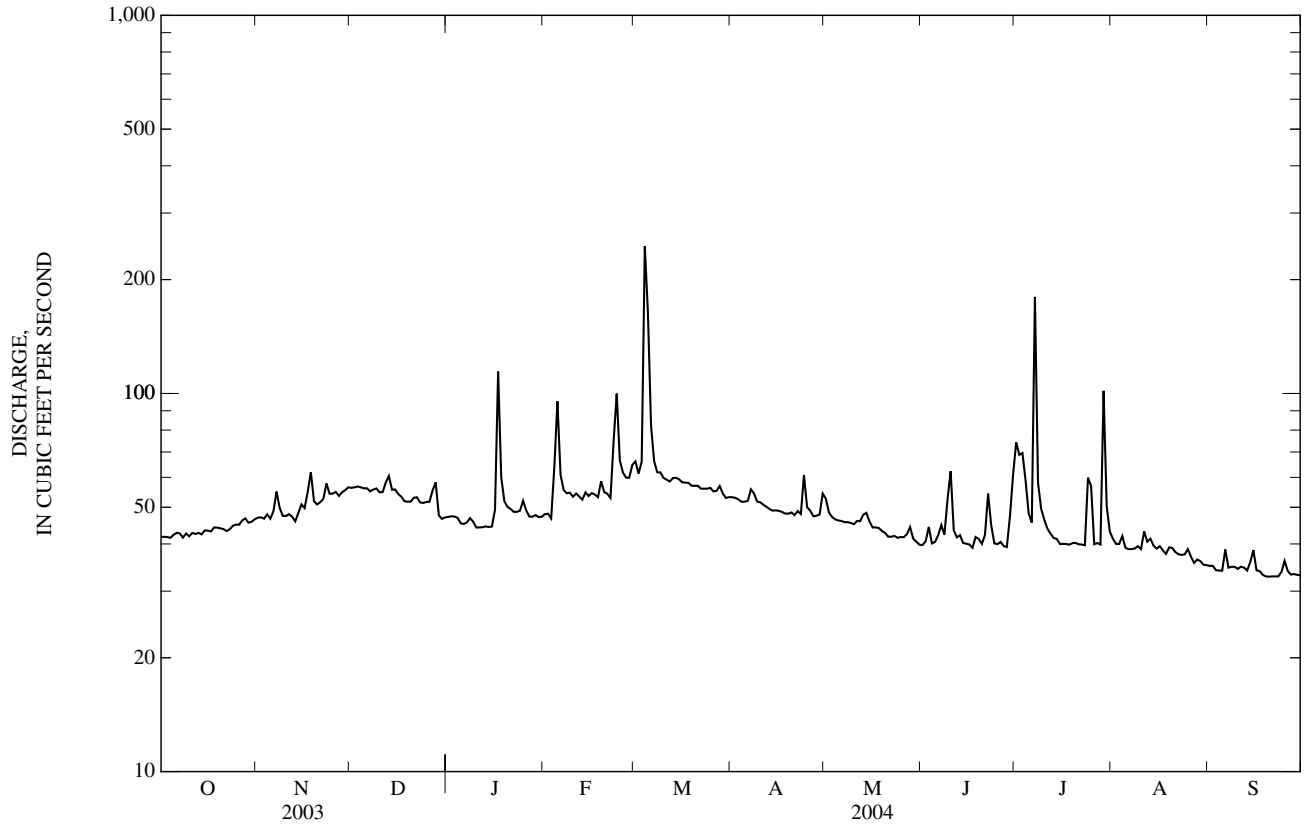
MEAN	41.1	41.5	41.3	41.4	50.2	109	79.3	101	94.8	53.4	43.7	39.8
MAX	43.6	51.4	54.0	50.2	63.7	208	103	150	148	56.0	48.4	42.5
(WY)	(2004)	(2004)	(2004)	(1977)	(1977)	(1977)	(1977)	(1978)	(1979)	(1978)	(1978)	(1977)
MIN	37.2	36.0	33.6	32.2	36.9	68.5	50.6	44.5	43.5	50.1	38.7	34.4
(WY)	(1979)	(1978)	(1978)	(1978)	(1979)	(2004)	(2004)	(2004)	(2004)	(1977)	(2004)	(2004)

e Estimated

07332390 BLUE RIVER NEAR CONNERVILLE, OK—Continued

SUMMARY STATISTICS	FOR 2004 WATER YEAR		WATER YEARS 1977 - 2004	
ANNUAL TOTAL	18,047			
ANNUAL MEAN	49.3		61.5	
HIGHEST ANNUAL MEAN			73.4	1977
LOWEST ANNUAL MEAN			49.3	2004
HIGHEST DAILY MEAN	245	Mar 4	3,700	Mar 27, 1977
LOWEST DAILY MEAN	33	[a]Sep 18	29	Jan 8, 1978
ANNUAL SEVEN-DAY MINIMUM	33	Sep 17	31	Jan 28, 1978
MAXIMUM PEAK FLOW	852	Mar 4	7,100	Mar 27, 1977
MAXIMUM PEAK STAGE	7.57	Mar 4	12.01	Mar 27, 1977
ANNUAL RUNOFF (AC-FT)	35,800		44,530	
10 PERCENT EXCEEDS	59		78	
50 PERCENT EXCEEDS	47		46	
90 PERCENT EXCEEDS	38		34	

[a] Also occurred Sept. 19-23, 27-30.



07332390 BLUE RIVER NEAR CONNERVILLE, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to September 1979; October 2003 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 2003 to current year.
WATER TEMPERATURE: October 2003 to current year.

INSTRUMENTATION.--Water-quality monitor October 2003 to current year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 588 microsiemens May 8, 9; minimum, 265 microsiemens July 7.
WATER TEMPERATURE: Maximum, 31.0°C July 15; minimum, 4.3°C Jan. 7.

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	---	---	---	558	529	547	555	543	550	554	545	550
2	---	---	---	561	531	550	551	544	548	557	545	552
3	---	---	---	563	539	554	555	540	548	558	550	554
4	---	---	---	565	518	553	552	540	546	559	543	553
5	---	---	---	554	530	548	551	538	545	554	546	550
6	---	---	---	555	550	552	550	537	544	554	545	550
7	---	---	---	556	478	528	549	535	543	555	549	552
8	---	---	---	546	535	543	550	535	543	557	553	555
9	---	---	---	547	538	543	549	541	545	560	550	555
10	---	---	---	552	545	550	552	539	545	560	550	555
11	---	---	---	558	549	553	550	540	545	559	547	554
12	---	---	---	562	552	557	550	533	544	558	547	553
13	---	---	---	559	556	558	543	535	540	557	547	552
14	---	---	---	561	558	559	548	538	543	558	546	552
15	---	---	---	564	558	560	547	537	542	557	547	552
16	550	529	541	566	558	562	548	539	543	552	491	541
17	553	526	541	563	554	560	549	541	545	517	346	403
18	552	528	541	558	553	555	550	541	546	416	358	375
19	552	528	541	556	538	550	549	540	545	484	416	455
20	553	528	542	538	509	520	549	541	545	525	484	505
21	554	526	543	552	513	536	550	538	544	542	525	536
22	555	526	543	561	552	556	547	541	545	551	542	547
23	554	526	544	556	533	544	552	540	546	556	546	551
24	556	523	544	550	541	545	549	543	546	558	550	556
25	556	542	550	552	543	548	550	541	546	558	543	551
26	559	534	549	558	550	554	550	545	547	558	550	555
27	559	534	549	559	553	555	552	413	540	559	547	553
28	559	533	549	560	552	556	521	498	509	559	550	554
29	560	529	548	559	551	555	532	496	511	557	550	553
30	560	519	545	558	547	553	545	532	540	557	546	551
31	557	529	546	---	---	---	552	540	546	554	548	551
MONTH	560	519	545	566	478	550	555	413	542	560	346	536

07332390 BLUE RIVER NEAR CONNERVILLE, OK—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	555	544	550	523	507	515	515	509	512	540	526	531
2	552	542	547	521	500	512	519	509	512	547	530	536
3	548	539	543	518	503	512	522	516	518	554	535	541
4	545	465	527	517	279	453	522	515	518	555	534	543
5	504	378	415	369	350	357	519	514	516	552	539	544
6	450	379	412	439	369	412	519	515	517	---	---	---
7	496	450	471	474	439	452	520	515	517	554	542	548
8	526	496	513	518	474	495	518	514	515	554	543	550
9	539	526	533	550	518	537	521	514	516	588	541	556
10	544	534	539	563	550	558	524	514	519	588	553	560
11	545	540	542	564	553	560	528	515	523	---	---	---
12	547	534	541	553	546	550	515	502	509	570	553	559
13	545	535	540	546	539	542	504	494	500	564	549	558
14	542	529	535	544	539	541	497	476	487	558	552	556
15	539	525	532	539	530	533	497	476	486	559	546	554
16	535	524	530	531	527	529	497	477	489	568	547	556
17	533	523	529	527	520	523	504	482	493	564	548	556
18	536	522	530	---	---	---	506	495	501	569	548	559
19	534	520	528	---	---	---	524	506	513	568	546	557
20	533	516	525	---	---	---	539	516	522	567	540	557
21	526	515	520	---	---	---	529	518	524	561	534	552
22	530	517	523	---	---	---	527	515	523	563	542	554
23	523	463	510	---	---	---	540	461	526	560	538	552
24	489	383	415	---	---	---	509	461	502	576	529	554
25	445	394	424	525	518	520	---	---	---	576	544	551
26	493	445	472	533	525	529	---	---	---	557	533	549
27	512	493	505	532	527	530	532	525	528	559	545	553
28	521	512	517	533	529	530	537	528	532	559	517	543
29	523	502	517	540	533	536	541	533	536	562	532	547
30	---	---	---	534	521	529	540	529	534	568	501	544
31	---	---	---	524	515	520	---	---	---	580	501	539
MONTH	555	378	510	564	279	511	541	461	514	588	501	550
		JUNE			JULY			AUGUST			SEPTEMBER	
1	557	491	531	482	337	456	540	480	508	---	---	---
2	549	510	536	483	454	466	556	526	533	---	---	---
3	558	513	544	504	466	479	557	518	533	555	533	541
4	559	530	549	545	480	529	548	514	529	546	539	541
5	555	543	551	556	494	536	552	497	525	550	538	543
6	565	514	549	513	487	497	538	493	516	552	506	535
7	557	526	548	527	265	365	553	468	513	555	533	540
8	555	537	547	408	304	356	572	483	527	555	533	537
9	549	353	529	509	408	460	556	465	513	540	527	534
10	514	446	480	543	509	530	545	465	503	549	527	536
11	532	460	498	555	541	548	515	483	500	544	529	535
12	539	518	530	563	551	557	516	471	500	548	530	538
13	558	533	548	564	556	561	513	459	497	552	534	544
14	563	525	551	---	---	---	516	487	505	560	497	538
15	555	524	544	---	---	---	520	498	511	536	511	522
16	570	500	546	578	546	557	528	474	511	552	512	536
17	568	499	543	566	528	551	533	478	513	549	512	534
18	567	533	551	559	516	541	519	475	503	548	515	529
19	571	550	560	561	505	538	522	498	510	545	513	526
20	565	544	557	554	494	531	528	512	521	546	507	527
21	566	547	556	532	478	511	543	511	530	544	502	522
22	558	521	542	528	475	510	543	524	534	533	498	514
23	549	490	528	559	475	515	574	528	555	529	495	509
24	531	492	509	543	280	482	574	541	556	529	494	512
25	546	516	536	443	397	412	546	532	538	524	487	505
26	552	516	540	464	416	431	547	536	541	537	484	511
27	556	524	545	537	464	508	548	532	539	531	479	495
28	559	513	542	552	516	524	545	530	538	527	475	493
29	533	318	461	534	298	426	557	536	547	523	475	497
30	557	409	502	419	363	384	558	539	547	514	482	489
31	---	---	---	493	411	452	---	---	---	---	---	---
MONTH	571	318	535	578	265	490	574	459	523	560	475	524

07332390 BLUE RIVER NEAR CONNERVILLE, OK—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	---	---	---	19.8	17.4	18.6	11.8	9.2	10.5	12.1	10.4	11.3
2	---	---	---	20.5	18.4	19.4	10.9	9.8	10.2	14.9	11.9	13.3
3	---	---	---	21.1	19.5	20.2	11.9	10.1	10.8	16.1	14.4	15.3
4	---	---	---	21.2	19.1	20.1	11.2	8.7	10.0	16.0	11.1	14.4
5	---	---	---	19.1	14.8	16.9	10.0	8.1	9.0	11.1	7.4	9.0
6	---	---	---	14.8	12.7	13.6	9.4	6.9	8.2	7.4	5.1	6.2
7	---	---	---	12.7	11.0	11.8	9.6	7.3	8.5	5.4	4.3	4.9
8	---	---	---	12.1	11.7	11.9	11.6	8.4	9.9	6.8	4.8	5.8
9	---	---	---	12.6	11.5	12.0	12.4	9.2	11.3	7.7	5.3	6.5
10	---	---	---	13.5	12.3	12.7	9.3	7.2	8.3	8.2	5.1	6.6
11	---	---	---	17.1	13.5	15.2	9.0	6.6	7.8	9.2	6.0	7.6
12	---	---	---	17.7	15.7	16.6	7.9	6.8	7.1	10.2	7.8	8.9
13	---	---	---	15.7	13.0	14.0	7.5	7.0	7.2	11.7	9.4	10.4
14	---	---	---	13.0	12.4	12.6	8.5	6.5	7.5	13.2	10.3	11.7
15	---	---	---	15.1	12.4	13.6	10.9	7.5	9.1	12.6	10.7	11.7
16	20.3	16.5	18.3	15.5	13.0	14.2	9.7	7.5	8.4	12.2	11.3	11.8
17	19.6	17.2	18.3	16.1	14.5	15.3	9.1	6.4	7.7	11.7	11.0	11.3
18	19.2	15.6	17.3	15.9	13.9	15.2	9.3	7.0	8.1	11.1	8.4	9.8
19	20.0	16.3	17.9	15.4	12.4	13.9	9.0	6.6	7.8	9.2	6.6	7.9
20	20.7	17.1	18.7	15.3	12.4	13.8	9.0	6.2	7.6	7.8	5.9	6.9
21	21.3	17.9	19.4	15.4	12.7	14.0	10.7	7.4	9.0	9.1	6.1	7.4
22	21.2	18.0	19.5	16.7	14.0	15.3	12.3	10.4	11.4	9.9	6.3	8.0
23	21.1	17.7	19.3	16.7	11.2	14.2	11.2	9.6	10.4	10.7	7.0	8.9
24	21.1	17.8	19.4	11.6	9.4	10.5	10.4	8.0	9.3	11.5	10.4	10.9
25	19.9	15.9	18.1	10.3	8.5	9.5	10.0	8.1	9.0	14.4	11.4	12.6
26	16.1	14.4	15.1	11.7	9.2	10.4	10.6	8.6	9.3	12.7	7.8	10.6
27	16.6	13.2	14.8	11.0	9.2	10.2	13.6	10.6	12.0	9.0	5.8	7.4
28	16.5	14.4	15.3	10.4	7.8	9.1	13.0	11.2	12.4	9.0	5.7	7.3
29	16.9	13.5	15.2	10.4	7.6	9.0	11.4	9.2	10.3	8.8	7.0	7.8
30	19.3	15.5	17.3	11.2	8.3	9.7	10.6	8.2	9.4	8.6	5.6	7.2
31	20.4	18.3	19.0	---	---	---	10.6	8.2	9.4	7.5	6.3	6.9
MONTH	21.3	13.2	17.7	21.2	7.6	13.8	13.6	6.2	9.3	16.1	4.3	9.2
		FEBRUARY			MARCH			APRIL			MAY	
1	8.9	7.4	8.1	15.5	11.0	13.0	19.8	14.5	17.0	20.9	17.2	18.7
2	9.7	7.3	8.5	14.9	11.8	13.4	20.6	15.6	17.9	21.1	15.7	18.0
3	9.4	6.5	8.0	14.0	13.2	13.6	20.2	16.3	18.1	21.1	16.3	18.6
4	8.5	6.4	7.4	15.5	13.4	14.3	20.5	15.8	17.9	23.0	17.6	19.9
5	6.7	6.0	6.4	15.9	12.8	14.2	19.2	16.3	17.7	24.1	18.9	21.2
6	7.8	6.0	6.7	17.2	13.5	15.0	18.7	15.9	17.2	---	---	---
7	8.7	5.0	6.7	17.0	13.4	14.9	17.8	16.5	17.1	25.2	21.0	22.8
8	7.1	5.3	6.4	16.5	12.4	14.3	21.0	15.8	18.0	25.6	21.2	23.2
9	7.7	7.1	7.4	17.1	13.1	14.8	20.4	16.8	18.6	24.6	21.9	23.1
10	9.4	6.6	7.9	16.5	12.1	14.2	19.2	15.8	17.5	23.7	21.4	22.4
11	8.6	8.2	8.4	15.8	13.0	14.3	16.4	14.2	15.3	---	---	---
12	9.6	6.7	8.0	15.0	13.2	14.2	16.9	13.6	15.0	24.6	21.5	22.8
13	8.5	5.8	7.2	14.2	13.4	13.7	17.4	13.1	15.1	23.6	22.0	23.0
14	8.0	6.5	7.0	15.4	13.0	13.9	19.0	13.1	15.8	22.0	19.3	20.3
15	9.7	5.7	7.4	14.3	12.8	13.6	20.9	15.1	17.7	22.5	18.2	19.9
16	10.5	6.6	8.4	13.8	12.2	13.1	22.8	17.7	19.9	22.4	19.0	20.5
17	12.2	8.0	9.9	17.7	11.4	14.3	22.9	18.9	20.6	24.1	19.9	21.6
18	12.5	8.7	10.6	---	---	---	21.0	19.5	20.2	25.7	21.6	23.2
19	14.7	10.5	12.4	---	---	---	19.9	18.9	19.3	26.8	22.6	24.3
20	14.8	11.9	13.3	---	---	---	20.3	18.3	19.2	27.7	23.2	25.1
21	14.7	10.6	12.6	---	---	---	22.5	18.8	20.3	27.1	23.8	25.2
22	15.2	11.0	13.0	---	---	---	23.9	20.2	21.7	25.4	23.3	24.3
23	13.9	12.3	13.0	---	---	---	22.7	21.2	21.9	26.5	22.8	24.3
24	12.4	10.2	11.3	---	---	---	21.3	20.2	20.7	25.9	23.4	24.4
25	12.0	9.0	10.3	18.1	16.4	17.1	---	---	---	24.5	23.2	23.7
26	13.0	8.4	10.5	19.2	17.5	18.3	---	---	---	24.9	22.5	23.5
27	13.5	8.7	11.0	18.6	17.8	18.2	23.3	18.1	20.5	24.2	22.7	23.5
28	12.2	10.2	11.3	18.7	16.9	17.9	21.9	19.4	20.6	27.5	22.2	24.3
29	13.4	11.4	12.1	20.1	14.8	17.2	22.1	19.0	20.4	25.5	23.4	24.5
30	---	---	---	19.5	15.0	17.0	22.3	19.6	20.9	28.8	23.9	25.7
31	---	---	---	19.4	14.3	16.7	---	---	---	27.3	22.6	24.8
MONTH	15.2	5.0	9.4	20.1	11.0	15.1	23.9	13.1	18.6	28.8	15.7	22.6

07332390 BLUE RIVER NEAR CONNERVILLE, OK—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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.0	22.6	25.0	25.4	21.9	23.7	27.8	23.5	25.4	---	---	---
2	28.1	24.2	25.6	26.2	23.0	24.4	29.2	24.6	26.6	---	---	---
3	26.8	22.7	24.5	28.2	23.9	25.8	30.4	25.5	27.6	26.8	22.8	24.5
4	25.2	22.4	23.8	29.5	25.0	27.0	29.3	26.2	27.5	26.7	23.6	24.9
5	23.5	22.2	22.8	29.5	25.2	27.2	29.6	25.9	27.5	27.0	23.9	25.2
6	26.9	21.9	23.9	28.2	25.3	26.7	27.8	24.7	26.2	27.3	24.0	25.3
7	25.5	23.0	24.1	26.7	22.9	24.9	28.0	24.0	25.7	26.1	22.1	23.8
8	24.2	22.9	23.4	28.8	24.0	26.0	25.7	23.6	24.7	25.1	20.8	22.6
9	23.2	22.2	22.6	29.0	25.3	27.1	27.9	23.5	25.2	24.9	20.2	22.3
10	24.5	21.9	22.9	29.0	25.3	26.9	28.3	23.7	25.8	24.9	20.4	22.4
11	26.8	22.8	24.5	29.8	25.2	27.2	26.4	23.6	24.8	25.2	20.9	22.8
12	27.5	24.2	25.6	30.0	25.5	27.5	25.8	21.5	23.4	26.0	21.7	23.6
13	27.9	24.3	25.9	30.6	25.8	27.9	26.1	22.2	23.8	26.2	21.9	23.9
14	28.9	24.7	26.6	30.8	26.0	28.1	23.8	21.8	22.9	26.0	23.1	24.3
15	---	---	---	31.0	26.1	28.3	23.4	21.6	22.4	25.9	23.3	24.4
16	29.3	24.9	26.7	30.3	26.4	28.2	26.2	21.8	23.5	27.5	23.6	25.3
17	29.4	25.3	27.0	30.3	26.6	28.1	27.1	22.3	24.3	28.1	24.1	25.8
18	27.6	25.7	26.6	28.9	24.9	26.8	27.6	23.0	25.0	27.9	24.4	26.0
19	26.3	24.6	25.1	29.2	24.2	26.5	25.3	23.5	23.9	26.7	23.4	25.0
20	26.8	23.4	24.8	29.7	25.0	27.1	24.2	22.7	23.3	25.8	22.1	23.8
21	25.4	23.5	24.1	29.4	25.6	27.4	25.3	21.9	23.5	25.3	22.1	23.5
22	25.0	22.2	23.4	29.7	25.3	27.2	26.1	22.6	24.0	25.2	21.9	23.3
23	26.4	21.7	23.8	30.3	25.8	27.7	27.3	23.5	25.1	24.2	21.9	23.0
24	26.1	22.7	24.4	29.2	25.7	27.1	28.6	24.3	26.0	24.9	22.4	23.4
25	26.7	23.7	25.1	26.2	23.0	24.2	27.2	25.2	26.1	25.2	21.6	23.2
26	26.0	23.7	24.7	26.9	22.0	24.0	29.5	24.9	26.7	25.3	21.9	23.3
27	25.5	23.4	24.3	26.5	22.2	24.2	29.1	25.4	27.1	23.9	20.9	22.3
28	26.8	23.1	24.7	24.9	22.8	23.5	27.7	25.2	26.4	22.5	20.3	21.4
29	25.5	23.4	24.2	24.0	21.7	22.8	28.2	23.8	25.7	23.6	20.0	21.4
30	24.7	23.0	23.6	24.4	22.4	23.2	27.2	23.0	24.9	22.4	19.8	21.1
31	---	---	---	27.2	22.0	24.2	---	---	---	---	---	---
MONTH	29.4	21.7	24.6	31.0	21.7	26.2	30.4	21.5	25.2	28.1	19.8	23.6

07332500 BLUE RIVER NEAR BLUE, OK

LOCATION.--Lat 33°59'49", long 96°14'27", on line between sec.27 and 34, T.6 S., R.10 E., Bryan County, Hydrologic Unit 11140102, on left bank on downstream side near end of bridge on U.S. Highway 70, 1.0 mi west of Blue, 7.0 mi east of Durant, 7.7 mi upstream from Caddo Creek, and at mile 38.8.

DRAINAGE AREA.--476 mi^2.

PERIOD OF RECORD.--June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 1731.

REVISED RECORDS.--WSP 957: 1938. WSP 1241: 1936, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.60 ft above sea level. Prior to Oct. 1, 1988, at datum 3.00 ft higher. Prior to Mar. 13, 1945, nonrecording gage and Mar. 13, 1945, to Feb. 2, 1960, water-stage recorder at site 1.2 mi downstream at datum 5.00 ft lower.

REMARKS.--Records good. Some regulation at low flow by a State fish hatchery, 16.0 mi upstream from station. Small diversion for municipal water supply for city of Durant upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station. No flow also occurred Aug. 4, 1936, result of regulation at fish hatchery, and no flow Sept. 19 to Oct. 16, 1956.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 25	0930	*5,590	*19.34	No other peak greater than base discharge.			

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	31	28	32	38	49	114	80	594	45	832	64	20
2	32	29	31	37	49	126	78	636	43	358	43	19
3	33	31	32	36	49	104	76	242	59	249	36	19
4	32	31	31	36	54	273	74	161	54	147	33	19
5	62	29	31	35	486	1,760	75	128	54	113	29	22
6	60	68	31	33	324	677	73	108	48	90	27	22
7	38	78	31	31	167	289	75	92	63	71	27	30
8	34	117	31	31	107	201	210	84	82	183	24	29
9	33	69	31	30	86	162	211	79	78	206	24	26
10	33	53	32	30	77	144	365	72	133	95	23	21
11	33	42	31	31	73	133	142	61	127	66	24	16
12	31	36	31	31	94	124	103	61	95	54	34	15
13	30	e32	41	31	86	121	90	64	65	47	35	17
14	30	e40	40	31	77	123	83	61	53	41	30	17
15	28	e44	41	31	85	121	80	65	45	38	27	43
16	27	e53	38	34	171	115	76	70	46	38	26	70
17	26	e74	34	1,770	145	110	74	64	46	35	23	54
18	27	133	33	513	103	107	73	54	40	33	19	35
19	29	59	32	202	83	103	70	51	63	33	23	31
20	28	48	31	111	72	103	70	47	141	32	50	25
21	28	43	31	82	70	107	71	48	130	30	37	20
22	27	36	35	68	65	102	93	50	1,320	29	32	15
23	27	35	33	60	65	92	81	46	344	29	29	15
24	27	36	30	57	210	89	2,540	45	128	28	24	16
25	25	35	28	63	241	88	4,220	46	85	28	22	17
26	26	36	28	75	172	91	434	49	100	40	22	22
27	27	33	28	67	112	90	217	49	75	53	21	22
28	27	32	34	57	89	88	158	55	76	29	29	22
29	28	31	42	53	81	88	129	79	59	32	54	20
30	28	31	58	51	---	92	185	66	141	83	34	19
31	28	---	44	50	---	85	---	60	---	129	23	---
TOTAL	975	1,442	1,056	3,805	3,542	6,022	10,306	3,387	3,838	3,271	948	738
MEAN	31.5	48.1	34.1	123	122	194	344	109	128	106	30.6	24.6
MAX	62	133	58	1,770	486	1,760	4,220	636	1,320	832	64	70
MIN	25	28	28	30	49	85	70	45	40	28	19	15
AC-FT	1,930	2,860	2,090	7,550	7,030	11,940	20,440	6,720	7,610	6,490	1,880	1,460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2004, BY WATER YEAR (WY)

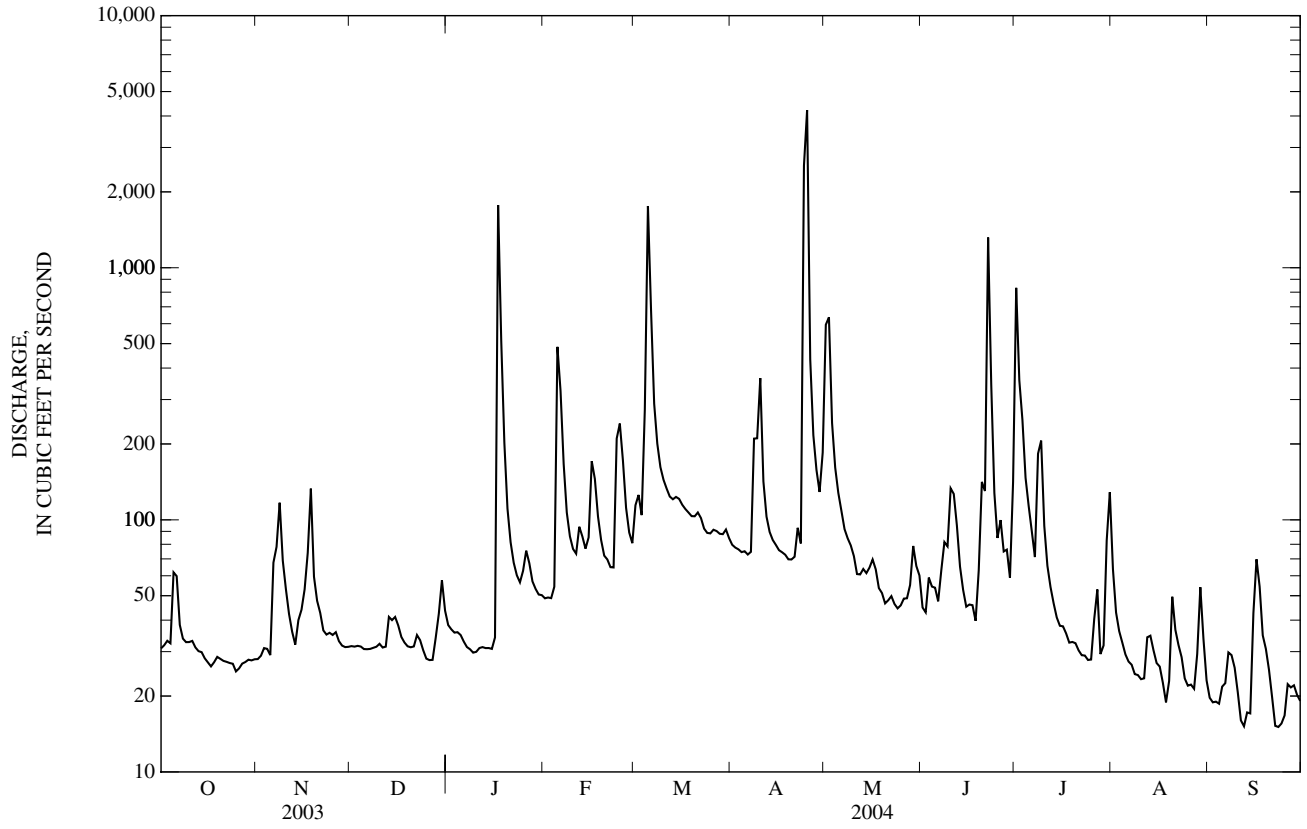
MEAN	242	266	270	235	386	465	580	609	416	143	80.1	160
MAX	3,613	1,813	1,384	1,291	2,156	3,089	3,846	2,953	2,510	780	755	1,501
(WY)	(1982)	(1997)	(1972)	(1998)	(1938)	(1945)	(1990)	(1990)	(1945)	(1950)	(1950)	(1957)
MIN	4.37	11.3	17.8	18.1	27.0	22.8	51.5	33.2	24.2	5.23	0.94	0.42
(WY)	(1940)	(1940)	(1940)	(1940)	(1967)	(1940)	(1956)	(1939)	(1939)	(1956)	(1956)	(1956)

e Estimated

07332500 BLUE RIVER NEAR BLUE, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1936 - 2004	
ANNUAL TOTAL	42,357		39,330			
ANNUAL MEAN	116		107		321	
HIGHEST ANNUAL MEAN					972	1945
LOWEST ANNUAL MEAN					30.8	1956
HIGHEST DAILY MEAN	4,790	Jun 26	4,220	Apr 25	45,500	Oct 14, 1981
LOWEST DAILY MEAN	11	Jul 29	15	Sep 12,22,23	a0.00	Aug 3, 1936
ANNUAL SEVEN-DAY MINIMUM	12	Jul 26	18	Sep 21	0.00	Sep 19, 1956
MAXIMUM PEAK FLOW			5,590	Apr 25	65,200	Oct 14, 1981
MAXIMUM PEAK STAGE			19.34	Apr 25	b44.20	Oct 14, 1981
ANNUAL RUNOFF (AC-FT)	84,020		78,010		232,300	
10 PERCENT EXCEEDS	196		150		531	
50 PERCENT EXCEEDS	63		49		89	
90 PERCENT EXCEEDS	20		26		28	

a Result of regulation at fish hatchery and no flow Sept. 19 to Oct. 16, 1956.
b From high-water mark.



07333010 ATOKA RESERVOIR NEAR STRINGTOWN, OK.

LOCATION.--Lat 34°26'43", long 96°05'00", in NW ¼ NE ¼ sec.30, T.1 S., R.12 E., Atoka County, Hydrologic Unit 11140103, in intake tower on north side of dam on North Boggy Creek, 2.2 mi southwest of Stringtown and at mile 7.4.

DRAINAGE AREA.--172 mi^2 (City of Oklahoma City).

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

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

REMARKS.--Reservoir is formed by earthen dam, construction completed 1960. Top of dam 602.5 ft, contents 225,000 acre-ft, emergency spillway elevation is 590.00 ft, contents 123,500 acre-ft, normal pool. Figures herein represent total contents. Reservoir is used for water supply. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 148,900 acre-ft, Apr. 8, 2002, elevation 594.14 ft; minimum, 61,770 acre-ft, Mar. 2, 4, 2004, elevation 577.33 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 90,390 acre-ft, July 12, 13, elevation 583.84 ft; minimum, 61,770 acre-ft, Mar. 2, 4, elevation 577.33 ft.

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

576	56,660	582	81,670
578	64,410	584	91,160
580	72,780	586	101,300

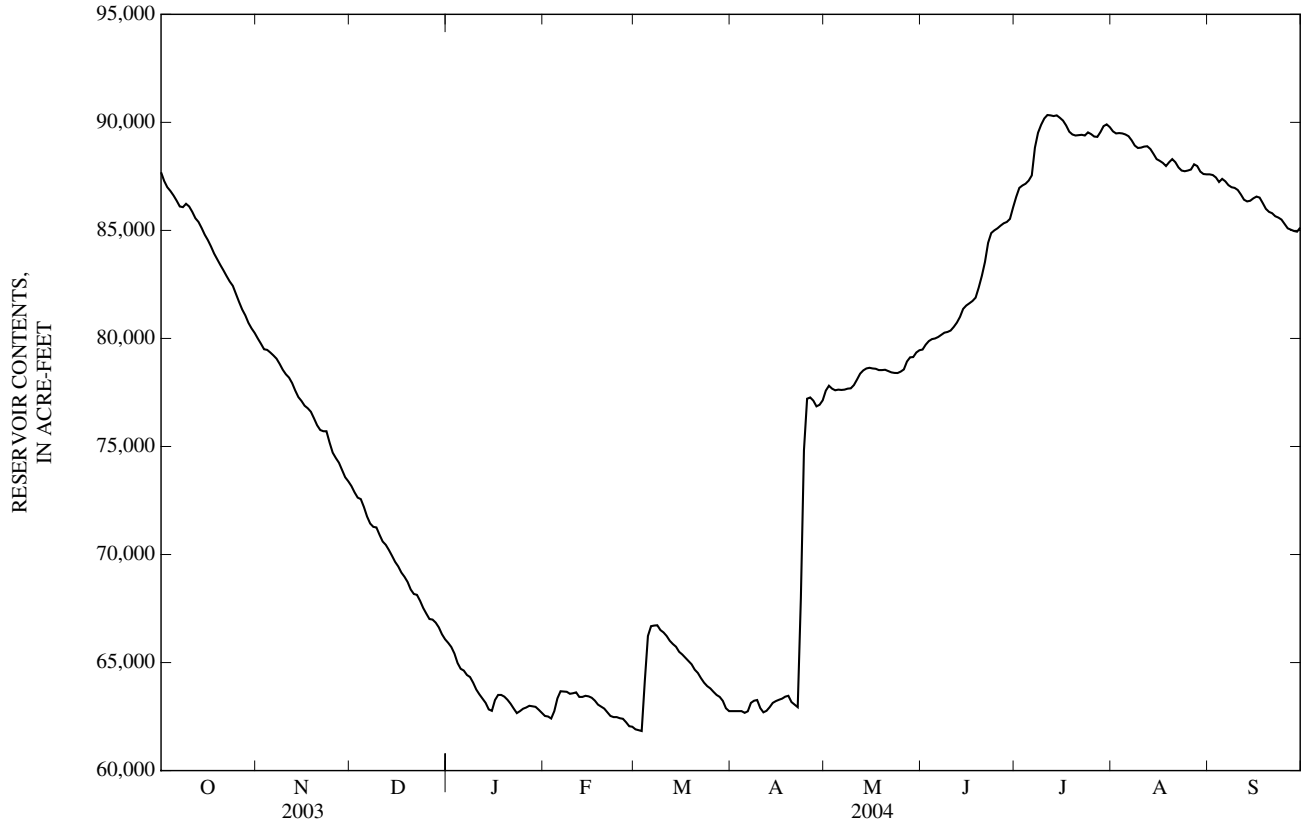
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87,980	80,180	73,340	66,020	62,630	62,040	62,750	77,190	79,460	86,290	89,710	87,590
2	87,550	79,910	73,080	65,860	62,480	61,840	62,750	77,780	79,500	86,680	89,520	87,590
3	87,160	79,680	72,780	65,650	62,520	61,880	62,750	77,830	79,820	87,110	89,470	87,550
4	86,920	79,410	72,560	e65,300	62,360	61,810	62,750	77,600	79,910	87,060	89,520	87,400
5	86,770	79,500	72,560	e64,820	62,950	65,320	62,750	77,600	80,000	87,210	89,470	87,160
6	86,530	79,270	72,010	64,660	63,540	66,680	62,630	77,650	e80,000	87,350	89,420	87,500
7	86,290	79,180	71,630	64,620	63,740	66,680	e62,800	77,600	e80,100	87,640	89,330	87,160
8	86,010	79,000	71,340	64,330	63,620	66,730	e63,300	77,650	e80,200	89,420	89,090	87,060
9	86,110	78,730	71,250	64,330	63,660	66,730	e63,200	77,690	e80,300	89,570	88,850	86,970
10	86,290	78,460	71,250	63,940	63,500	66,390	e63,300	77,690	e80,300	90,050	88,800	86,970
11	86,010	78,280	70,750	63,660	63,620	66,390	e62,690	77,920	e80,400	90,240	88,850	86,820
12	85,780	78,140	70,530	63,460	63,620	66,150	e62,700	78,190	e80,600	90,390	88,890	86,580
13	85,450	77,830	70,410	63,270	63,300	65,940	e62,800	78,460	e80,800	90,290	88,890	86,340
14	85,360	77,470	70,110	63,070	63,460	65,820	e63,000	78,550	e81,100	90,290	88,700	86,340
15	84,990	77,190	69,860	62,710	63,460	65,690	e63,200	78,640	e81,500	90,340	88,460	86,390
16	84,710	77,060	69,560	62,790	63,420	65,400	63,230	78,640	81,540	90,150	88,220	86,530
17	84,470	76,800	69,390	63,500	63,340	65,360	63,300	78,600	81,670	90,050	88,220	86,580
18	84,150	76,760	69,050	63,500	63,190	65,150	63,340	78,600	81,760	89,760	88,080	86,490
19	83,820	76,540	68,930	63,500	62,990	65,030	63,460	78,510	81,950	89,470	87,930	86,150
20	83,590	76,190	68,630	63,380	62,950	64,860	63,460	78,550	82,560	89,420	88,270	85,920
21	83,310	75,880	68,260	63,230	62,830	64,570	63,030	78,550	83,070	89,380	88,320	85,830
22	83,070	75,710	68,130	63,030	62,630	64,490	63,070	78,460	83,770	89,420	88,080	85,780
23	82,790	75,710	68,130	62,790	62,480	64,170	62,870	78,420	84,750	89,420	87,830	85,590
24	82,560	75,710	67,720	62,590	62,480	64,010	70,530	e78,400	84,940	89,380	87,740	85,590
25	82,370	74,920	67,430	62,830	62,480	63,860	76,970	e78,400	85,030	89,620	87,740	85,450
26	81,900	74,610	67,180	e62,880	62,400	63,780	77,330	e78,500	85,130	89,380	87,790	85,220
27	81,580	74,390	66,930	e62,940	62,400	63,580	77,240	e78,600	85,270	89,330	87,830	85,030
28	81,220	74,170	67,020	63,030	62,160	63,460	77,060	e79,100	85,360	89,330	88,170	85,030
29	80,990	73,780	66,770	62,950	62,000	63,380	76,760	79,140	85,410	89,670	87,880	84,940
30	80,590	73,470	66,560	62,950	---	63,150	77,020	79,140	85,590	89,910	87,640	84,940
31	80,400	---	66,190	62,750	---	62,750	---	79,460	---	89,910	87,590	---
MAX	87,980	80,180	73,340	66,020	63,740	66,730	77,330	79,460	85,590	90,390	89,710	87,590
MIN	80,400	73,470	66,190	62,590	62,000	61,810	62,630	77,190	79,460	86,290	87,590	84,940
(‡)	581.72	580.16	578.43	577.58	577.39	577.58	580.97	581.51	582.74	583.74	583.26	582.70
(‡‡)	-7720	-6930	-7280	-3440	-750	+750	+14270	+2440	+6130	+4320	-2320	-2650

CAL YR 2003 MAX 94040 MIN 66190 (‡‡) -25520
WTR YR 2004 MAX 90390 MIN 61810 (‡‡) -3180

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07333010 ATOKA RESERVOIR NEAR STRINGTOWN, OK.—Continued



07333900 MCGEE CREEK RESERVOIR NEAR FARRIS, OK

LOCATION.--Lat 34°18'56", long 95°52'28", in NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.7, T.3 S., R.14 E., Atoka County, Hydrologic Unit 11140103, located in pump house at base of dam on McGee Creek.

DRAINAGE AREA.--178 mi^2.

PERIOD OF RECORD.--October 2003 to September 2004.

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

REMARKS.-- Reservoir is a rolled earthfill structure about 2,000 ft long,. Impoundment of the conservation pool began April 1987. Top of flood control pool 199,000 acre-ft at elevation 595.5 ft. Normal pool 114,00 acre-ft at elveation 577.1 ft. Figures given herein represent total contents. Reservoir is utilized for water supply, water quality control and flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 125,700 acre-ft, May 4, gage height, 580.07 ft; minimum, 90,890 acre-ft, Jan 12-16, gage height, 570.57.

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

568	82,770	574	102,600
570	89,090	577	113,600
572	95,710	580	125,400

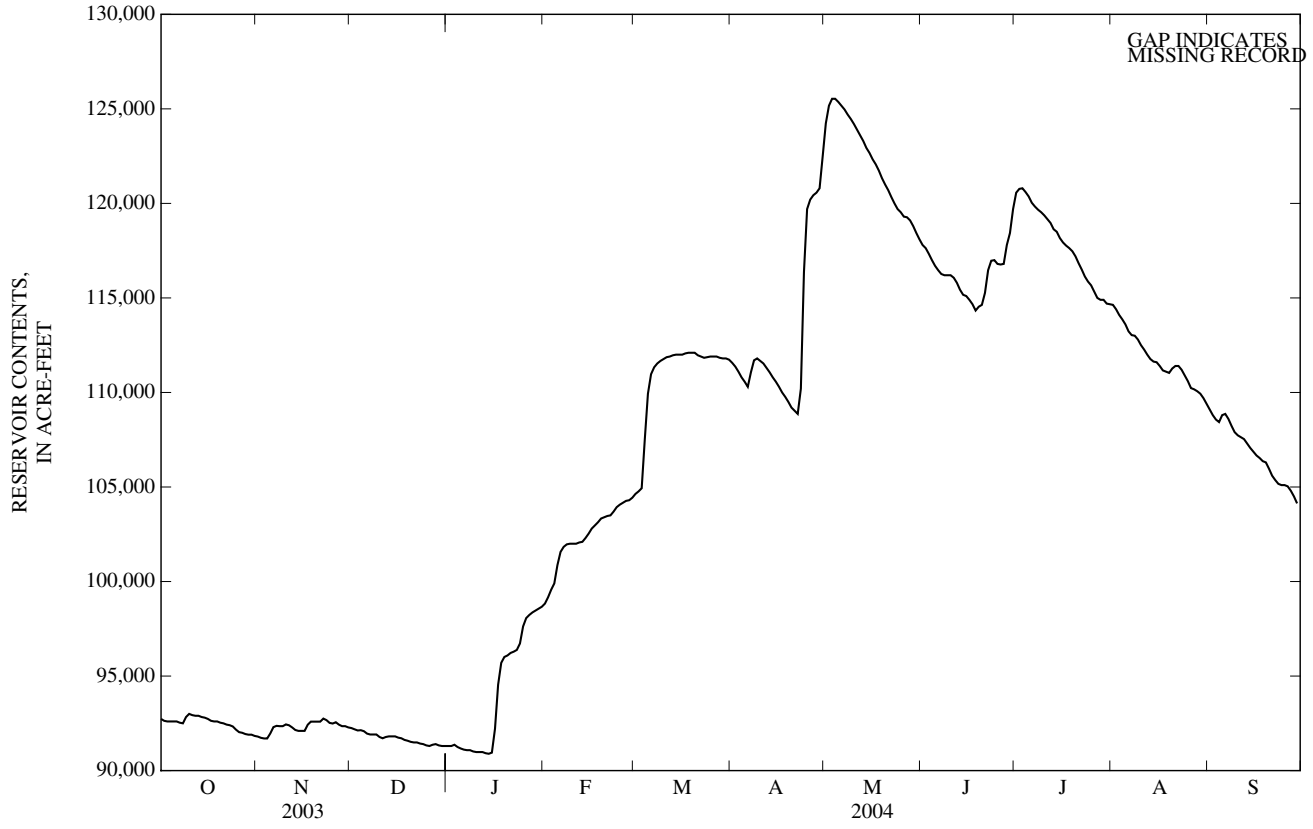
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92,800	91,800	92,250	91,300	e98,700	104,500	111,700	123,300	118,000	120,300	114,700	109,300
2	92,700	91,800	92,250	91,300	e98,900	104,700	111,500	124,700	117,700	120,700	114,600	109,000
3	92,600	91,700	92,150	91,300	e99,300	104,800	111,300	125,400	117,600	120,800	114,300	108,700
4	92,600	91,700	92,110	91,400	e99,700	105,000	111,000	125,600	117,200	120,800	114,000	108,500
5	92,600	91,700	92,150	91,170	e100,000	108,800	110,700	125,500	116,900	120,500	113,800	108,400
6	92,600	92,100	92,050	91,170	101,300	110,500	110,500	125,300	116,600	120,300	113,500	109,000
7	92,600	92,400	91,910	91,080	101,700	111,200	110,200	125,100	116,400	119,900	113,100	108,800
8	92,500	92,350	91,910	91,080	101,900	111,400	111,500	124,900	116,200	119,800	113,000	108,500
9	92,500	92,350	91,910	91,080	102,000	111,600	111,800	124,600	116,200	119,600	113,000	108,100
10	93,000	92,350	91,910	90,980	102,000	111,700	111,800	124,400	116,200	119,500	112,700	107,800
11	93,000	92,490	91,710	90,980	e102,000	111,800	111,600	124,100	116,200	119,300	112,400	107,700
12	92,900	92,350	91,710	90,980	102,000	111,900	111,500	123,800	116,000	119,100	112,200	107,600
13	92,900	92,250	91,810	90,980	102,100	111,900	111,200	123,500	115,700	118,900	111,900	107,500
14	92,900	92,100	91,810	90,890	102,100	112,000	111,000	123,200	115,300	118,500	111,700	107,200
15	92,800	92,100	91,810	90,890	102,400	112,000	110,700	122,800	115,100	118,500	111,600	107,000
16	92,800	92,100	91,810	90,980	102,600	112,000	110,500	122,600	115,100	118,000	111,600	106,800
17	92,700	92,100	91,710	92,830	102,900	112,000	110,200	122,200	114,800	117,900	111,300	106,600
18	92,600	92,590	91,710	95,400	103,000	112,100	109,900	122,000	114,600	117,700	111,100	106,500
19	92,600	92,590	91,580	95,850	103,200	112,100	109,700	121,600	114,200	117,600	e111,100	106,300
20	92,600	92,590	91,580	96,090	103,400	112,100	109,400	121,200	114,700	117,400	111,000	106,300
21	92,500	92,590	91,490	96,090	103,400	112,100	109,100	120,900	114,600	117,100	111,400	105,800
22	92,500	92,590	91,490	96,290	103,500	111,900	109,000	120,600	115,600	116,700	111,400	105,500
23	92,400	92,830	91,490	96,290	103,500	111,900	108,800	120,200	116,900	116,400	111,400	105,300
24	92,400	92,590	91,400	96,430	103,800	111,800	110,900	119,900	117,000	116,000	111,100	105,100
25	92,300	92,490	91,400	96,870	104,000	111,900	119,100	119,600	117,000	115,800	110,800	105,100
26	92,100	92,490	91,300	98,000	104,100	111,900	120,000	119,500	116,700	115,600	110,500	105,100
27	92,000	92,590	91,300	e98,100	104,200	111,900	120,300	119,200	116,800	115,200	110,100	105,000
28	92,000	92,350	91,400	e98,300	104,300	111,900	120,500	119,300	116,800	114,900	110,200	104,700
29	91,900	92,350	91,400	98,400	104,300	111,800	120,600	119,000	118,300	114,900	110,000	104,400
30	91,900	92,350	91,300	98,500	---	111,800	120,900	118,700	118,500	114,900	109,900	104,000
31	91,900	---	91,300	e98,600	---	111,800	---	118,300	---	114,600	109,600	---
MAX	93,000	92,830	92,250	98,600	104,300	112,100	120,900	125,600	118,500	120,800	114,700	109,300
MIN	91,900	91,700	91,300	90,890	98,700	104,500	108,800	118,300	114,200	114,600	109,600	104,000
(‡)	570.89	571.02	570.70	--	574.48	576.51	578.85	578.22	578.26	577.28	575.91	574.40
(‡‡)	-900	+450	-1050	+7300	+5700	+7500	+9100	-2600	+200	-3900	-5000	-5600

WTR YR 2004 MAX 125600 MIN 90890 (‡‡) +11200

e Estimated
(‡) ELEVATION, IN FEET, AT END OF MONTH
(‡‡) CHANGE IN CONTENTS, IN ACRE-FEET

07333900 MCGEE CREEK RESERVOIR NEAR FARRIS, OK—Continued



07334000 MUDDY BOGGY CREEK NEAR FARRIS, OK

LOCATION.--Lat 34°16'17", long 95°54'43", in NE ¼ NW ¼ sec.26, T.3 S., R.13 E., Atoka County, Hydrologic Unit 11140103, on downstream left bank of bridge on State Highway 3, 1.3 mi downstream from McGee Creek, 2.8 mi northwest of Farris, and at mile 57.7.

DRAINAGE AREA.--1,087 mi^2.

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

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 439.58 ft above sea level. Prior to Mar. 13, 1945, nonrecording gage, and Mar. 13, 1945, to Sept. 30, 1961, water-stage recorder at same site at datum 7 ft higher. Prior to Oct. 1, 1989, water-stage recorder at same site and datum 5 ft higher.

REMARKS.--No estimated daily discharge. Records good. Some regulation since June 1959 by Atoka Reservoir, drainage area, 176 mi^2; pipeline diversions to Oklahoma City since November 1963, and since April 1987 by McGee Creek Lake, drainage area 178 mi^2. U.S. Army Corps of Engineers' satellite telemeter at station.

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	21	16	26	29	59	130	71	1,770	41	2,240	150	28
2	20	16	27	35	54	220	63	1,180	38	1,430	96	24
3	20	16	27	39	50	278	53	456	38	922	64	22
4	19	16	27	37	56	679	47	255	35	417	51	21
5	21	22	26	34	731	3,740	41	171	35	211	41	20
6	19	55	24	30	1,450	3,350	38	122	33	134	34	22
7	15	42	24	28	771	1,470	44	94	34	101	30	22
8	15	36	23	27	356	492	804	79	35	2,140	27	20
9	20	32	23	26	211	287	390	69	42	1,320	24	27
10	32	29	22	25	146	196	244	61	92	705	23	30
11	197	25	22	24	116	145	164	55	73	266	23	27
12	157	22	22	24	112	115	114	53	65	269	21	26
13	83	21	24	23	92	97	86	53	150	168	20	25
14	58	20	23	23	83	89	79	50	96	100	19	24
15	42	19	23	23	97	81	73	48	73	74	19	24
16	33	20	22	30	163	74	62	45	61	62	19	25
17	28	27	22	1,310	184	69	54	43	52	53	18	24
18	24	88	21	1,360	167	66	48	43	45	46	18	24
19	22	44	21	1,080	139	62	43	42	196	41	24	24
20	20	30	21	452	110	59	40	41	533	38	26	24
21	18	26	21	221	87	57	38	40	229	35	22	24
22	17	28	20	136	71	53	36	39	2,200	33	21	24
23	16	43	20	97	64	49	35	38	2,560	31	20	24
24	15	42	20	79	125	46	5,040	37	1,330	30	19	24
25	15	39	19	184	868	44	6,950	35	445	29	20	25
26	15	36	19	392	770	43	2,050	33	216	28	20	26
27	14	33	20	195	340	42	583	34	879	27	20	25
28	14	30	23	163	194	41	306	42	402	26	21	24
29	15	28	23	118	141	39	202	60	1,520	38	25	21
30	14	27	24	86	---	37	780	64	825	40	35	23
31	14	---	28	69	---	37	---	48	---	50	34	---
TOTAL	1,033	928	707	6,399	7,807	12,187	18,578	5,200	12,373	11,104	1,004	723
MEAN	33.3	30.9	22.8	206	269	393	619	168	412	358	32.4	24.1
MAX	197	88	28	1,360	1,450	3,740	6,950	1,770	2,560	2,240	150	30
MIN	14	16	19	23	50	37	35	33	33	26	18	20
AC-FT	2,050	1,840	1,400	12,690	15,490	24,170	36,850	10,310	24,540	22,020	1,990	1,430

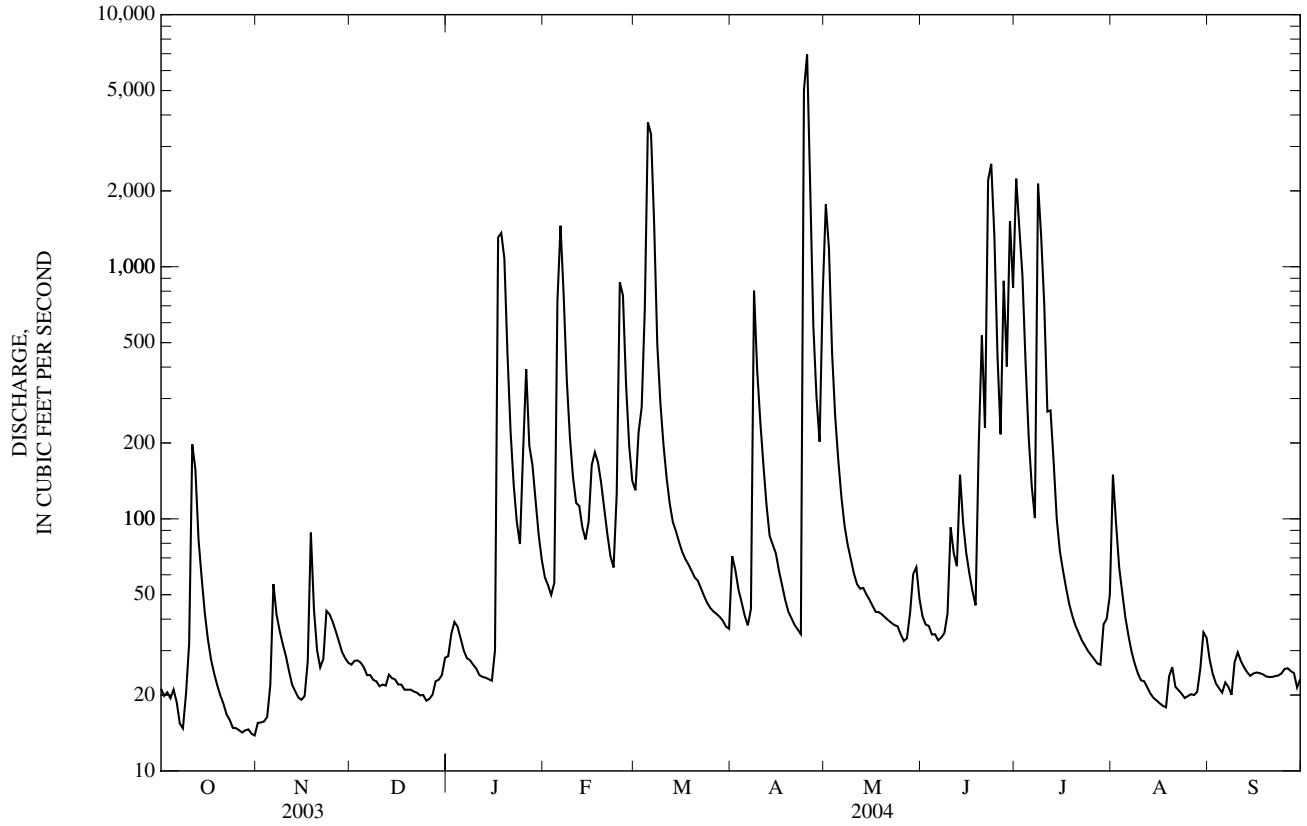
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	247	835	1,319	978	1,144	1,795	1,747	1,774	965	300	193	324
MAX	1,489	4,184	4,223	5,313	4,165	4,541	6,622	8,384	2,764	1,854	1,525	1,026
(WY)	(1992)	(1997)	(1992)	(1998)	(2001)	(1990)	(1990)	(1990)	(1991)	(1992)	(1992)	(1992)
MIN	13.5	26.0	22.8	81.6	41.5	265	37.0	34.7	25.0	15.5	13.7	13.8
(WY)	(2000)	(2002)	(2004)	(2000)	(1996)	(2000)	(2003)	(1988)	(1988)	(1998)	(1998)	(1988)

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	59,428		78,043			
ANNUAL MEAN	163		213		a967	
HIGHEST ANNUAL MEAN					2,145	1990
LOWEST ANNUAL MEAN					197	2003
HIGHEST DAILY MEAN	3,890	Jan 1	6,950	Apr 25	45,700	May 5, 1990
LOWEST DAILY MEAN	14	Oct 27	14	Oct 27,28,30,31	b7.5	Sep 26, 2000
ANNUAL SEVEN-DAY MINIMUM	14	Oct 25	14	Oct 25	11	Oct 18, 1991
MAXIMUM PEAK FLOW			9,820	Apr 24	c49,800	May 5, 1990
MAXIMUM PEAK STAGE			31.86	Apr 24	d48.73	May 5, 1990
INSTANTANEOUS LOW FLOW					7.5	Sep 26, 2000
ANNUAL RUNOFF (AC-FT)	117,900		154,800		700,700	
10 PERCENT EXCEEDS	428		447		2,430	
50 PERCENT EXCEEDS	39		40		118	
90 PERCENT EXCEEDS	20		20		20	

a Prior to regulation, water years 1938-86, 880 ft^3/s.
b No flow at times in many years prior to regulation.
c Maximum discharge for period of record 61,900 ft^3/s, June 17, 1945, from rating curve above 37,000 ft^3/s.
d Maximum gage height for period of record 51.94 ft, June 17, 1945, present datum.



07334200 BYRDS MILL SPRING NEAR FITTSTOWN, OK

LOCATION.--Lat 34°35'40", long 96°39'55", in SW $^1/_4$ SW $^1/_4$ sec.34, T.2 N., R.6 E., Pontotoc County, Hydrologic Unit 11140104, upstream from weir outlet of spring, 0.5 mi upstream from Big Spring Creek, 2.0 mi west of Fittstown, and 12.0 mi south of Ada.

PERIOD OF RECORD.--Creek only, April 1959 to current year. Combined flow from December 1989 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,021.17 ft above sea level. Flow meters on diversion pipe and wells, to City of Ada.

REMARKS.--No estimated daily discharge. Records poor. Prior to December 1989 records do not include diversion of about 6 to 15 ft^3/s by City of Ada for municipal water supply, a part of which is discharged as effluent to Sandy Creek, tributary to Canadian River. Records of zero flow do not include seepage of up to 0.10 ft^3/s. Satellite telemeter at station.

AVERAGE DISCHARGE.--Creek only: 45 years, 8.99 ft^3/s. Combined spring flow: 14 years, 18.8 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Combined flow: maximum daily discharge, 43 ft^3/s, May 4, 5, 1990; minimum daily discharge, 4.6 ft^3/s, Jan. 18, 2004.

EXTREMES FOR CURRENT YEAR.--Combined flow: maximum daily discharge, 12.0 ft^3/s, at times; minimum daily discharge, 4.6 ft^3/s, Jan. 18.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	5.6	4.8	5.7	5.1	2.2	4.6	2.8	2.5	3.0	3.7	5.0
2	4.6	5.5	4.9	5.7	5.1	2.3	4.4	2.8	2.5	3.1	3.6	4.0
3	4.7	5.5	4.8	5.7	5.1	2.6	4.5	2.8	2.5	3.1	3.7	3.3
4	4.6	5.4	4.8	5.6	5.1	2.5	4.5	2.8	2.5	3.1	3.6	3.2
5	4.7	5.4	4.7	5.7	5.1	2.0	3.9	2.8	2.5	3.2	3.3	2.9
6	4.6	5.4	4.7	5.7	5.1	2.2	3.4	2.7	2.4	3.2	4.6	2.9
7	4.7	5.4	4.7	5.7	5.1	2.4	3.4	2.7	3.2	3.4	4.4	2.9
8	4.6	5.4	5.3	5.6	5.3	2.7	3.4	2.7	4.1	3.4	4.3	2.9
9	4.6	5.4	5.7	5.5	5.4	2.9	3.4	2.7	4.2	3.4	4.3	2.9
10	4.6	5.4	5.7	5.5	5.3	3.2	3.4	2.7	4.2	3.4	4.2	2.7
11	4.6	5.4	5.7	5.5	5.3	3.3	3.3	2.7	4.2	3.4	4.3	2.6
12	4.6	5.3	5.7	5.4	5.2	3.5	3.3	2.7	4.4	3.4	3.5	2.5
13	4.9	5.4	5.7	3.8	5.3	3.6	3.2	2.7	4.4	3.4	3.8	2.5
14	5.4	5.4	5.7	5.4	5.3	3.7	3.2	2.6	4.4	3.4	3.5	2.9
15	5.4	5.3	5.7	4.9	5.2	3.8	3.2	2.6	4.3	3.0	3.9	2.5
16	5.4	5.2	5.7	4.2	5.3	4.0	3.2	2.6	4.3	3.7	2.8	3.6
17	5.4	5.2	5.7	4.0	5.3	4.1	3.0	2.5	4.0	4.9	4.5	6.4
18	5.4	5.1	5.7	3.9	5.3	4.1	3.0	2.5	3.2	4.7	5.7	6.3
19	5.5	5.1	5.7	4.7	5.4	4.2	3.1	2.4	2.9	4.7	5.4	6.1
20	5.7	5.1	5.7	5.7	5.4	4.2	3.1	2.4	2.9	4.6	5.4	6.1
21	5.7	5.1	5.6	5.6	5.4	4.3	3.1	2.4	2.9	4.5	5.4	5.9
22	5.7	5.1	5.6	5.4	5.4	4.3	3.0	2.4	2.9	4.4	5.4	5.7
23	5.7	4.9	5.5	5.4	5.4	4.4	2.9	2.3	2.9	4.4	4.2	5.6
24	5.7	5.0	5.5	5.4	2.5	4.4	2.9	2.6	2.9	4.3	3.3	5.4
25	5.7	5.1	5.5	5.4	1.4	4.4	2.9	2.9	2.9	4.3	4.6	5.4
26	5.7	5.0	5.4	5.4	1.6	4.4	2.9	2.8	2.9	2.6	4.6	5.3
27	5.7	4.9	5.4	5.3	1.7	4.5	3.0	2.8	2.9	2.4	4.6	5.3
28	5.7	4.9	5.4	5.2	2.0	4.5	2.9	2.8	2.9	3.6	4.6	5.1
29	5.7	4.8	5.5	5.2	2.1	4.5	2.9	2.8	2.8	3.9	4.6	5.1
30	5.7	4.8	5.8	5.1	---	4.6	2.9	2.7	2.9	3.9	4.6	5.1
31	5.7	---	5.7	5.1	---	4.6	---	2.6	---	3.8	4.6	---
TOTAL	162.0	156.5	168.0	162.4	132.2	112.4	99.9	82.3	98.5	113.6	133.0	128.1
MEAN	5.23	5.22	5.42	5.24	4.56	3.63	3.33	2.65	3.28	3.66	4.29	4.27
MAX	5.7	5.6	5.8	5.7	5.4	4.6	4.6	2.9	4.4	4.9	5.7	6.4
MIN	4.6	4.8	4.7	3.8	1.4	2.0	2.9	2.3	2.4	2.4	2.8	2.5
AC-FT	321	310	333	322	262	223	198	163	195	225	264	254

CAL YR 2003 TOTAL 2551.1 MEAN 6.99 MAX 13 MIN 1.3 AC-FT 5060
WTR YR 2004 TOTAL 1548.9 MEAN 4.23 MAX 6.4 MIN 1.4 AC-FT 3070

07334200 BYRDS MILL SPRING NEAR FITTSTOWN, OK—Continued

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.8	7.9	7.1	5.7	5.1	7.7	12	12	11	10	10	10
2	9.4	7.9	7.1	5.7	5.1	7.8	12	12	11	10	10	10
3	9.5	7.9	6.9	5.7	5.1	8.1	12	12	11	10	10	9.9
4	9.4	7.9	7.0	5.6	5.1	8.8	12	12	11	10	10	10
5	9.6	7.7	6.9	5.7	5.1	9.7	12	12	11	10	10	10
6	9.4	7.6	7.1	5.7	5.1	9.9	12	12	10	10	10	10
7	9.6	7.6	6.9	5.7	5.1	10	12	12	10	11	9.9	10
8	9.4	7.4	6.3	5.6	5.3	10	12	12	10	11	9.8	10
9	9.4	7.6	5.7	5.5	5.4	11	12	12	10	11	9.8	10
10	9.5	7.6	5.7	5.5	5.3	11	12	12	10	11	9.8	9.9
11	9.4	7.5	5.7	5.5	5.3	11	12	12	10	11	9.8	9.8
12	9.4	7.6	5.7	5.4	5.2	11	12	12	10	11	9.8	9.8
13	8.7	7.8	5.7	5.7	5.3	11	12	12	10	11	9.5	9.6
14	7.7	7.7	5.7	5.4	5.3	12	12	11	10	11	9.6	9.6
15	7.9	7.6	5.7	5.5	5.2	12	12	11	10	11	9.5	9.4
16	7.4	7.2	5.7	5.0	5.3	12	12	11	10	11	9.4	10
17	7.4	7.2	5.7	4.8	5.3	12	12	11	10	10	8.7	11
18	7.6	7.4	5.7	4.6	5.3	12	12	11	10	10	9.0	11
19	7.7	7.4	5.7	5.5	5.4	12	12	11	10	10	10	11
20	8.3	7.6	5.7	5.7	5.4	12	12	11	10	10	10	11
21	8.0	7.3	5.6	5.6	5.4	12	12	11	10	10	10	11
22	8.0	7.4	5.7	5.4	5.4	12	12	11	10	10	10	11
23	7.9	7.1	5.5	5.5	5.4	12	12	11	10	9.9	10	11
24	7.9	7.3	5.5	5.4	6.2	12	12	11	10	9.9	10	10
25	7.9	7.5	5.5	5.4	6.8	12	12	11	10	9.9	10	10
26	8.1	7.2	5.4	5.4	7.1	12	12	11	10	9.8	10	10
27	8.2	7.1	5.4	5.3	7.2	12	12	11	10	9.9	10	10
28	8.3	7.1	5.4	5.2	7.5	12	12	11	10	10	10	10
29	8.3	6.6	5.6	5.2	7.6	12	12	11	10	10	10	10
30	8.3	6.9	5.8	5.1	---	12	12	11	10	10	10	10
31	8.1	---	5.7	5.1	---	12	---	11	---	10	10	---
TOTAL	264.5	223.6	184.8	168.1	163.3	343.0	360	354	305	319.4	304.6	305.0
MEAN	8.53	7.45	5.96	5.42	5.63	11.1	12.0	11.4	10.2	10.3	9.83	10.2
MAX	9.6	7.9	7.1	5.7	7.6	12	12	12	11	11	10	11
MIN	7.4	6.6	5.4	4.6	5.1	7.7	12	11	10	9.8	8.7	9.4
AC-FT	525	444	367	333	324	680	714	702	605	634	604	605

CAL YR 2003 TOTAL 4788.9 MEAN 13.1 MAX 20 MIN 5.4 AC-FT 9500
WTR YR 2004 TOTAL 3295.3 MEAN 9.00 MAX 12 MIN 4.6 AC-FT 6540

07335300 MUDDY BOGGY CREEK NEAR UNGER, OK

LOCATION.--Lat 34°01'36", long 95°45'00", in SE ¼ SE ¼ sec.17, T.6 S., R.15 E., Choctaw County, Hydrologic Unit 11140103, at bridge on U.S. Highway 70, 3.5 mi west of Soper, 1.8 mi east of Unger and at mile 18.6.

DRAINAGE AREA.--2,273 mi^2.

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 392.72 ft above sea level. Prior to Sept. 19, 1985, gage 500 ft downstream at same datum.

REMARKS.--Records poor. Some regulation by Atoka and McGee Creek Reservoirs. U.S. Army Corp of Engineers' telemeter at 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	122	31	86	99	247	534	194	4,030	170	2,050	156	47
2	108	33	83	108	229	494	198	6,170	128	3,320	303	54
3	95	29	80	111	216	558	221	4,180	117	2,840	301	47
4	85	29	79	116	269	867	201	1,770	106	1,910	240	38
5	85	33	78	122	1,290	3,000	181	949	90	1,060	e195	32
6	86	67	75	117	1,940	5,290	167	642	80	633	e158	40
7	88	132	75	108	2,380	5,610	201	477	77	432	e121	74
8	80	221	74	102	1,620	4,060	422	377	75	376	e100	114
9	75	211	74	97	913	2,110	1,210	313	89	2,670	e87	89
10	75	158	71	94	620	1,220	1,500	269	2,440	2,810	e79	66
11	96	133	73	90	527	844	828	236	1,290	1,660	70	46
12	185	117	73	87	518	650	524	211	458	1,130	71	43
13	285	102	82	85	439	533	386	196	287	855	67	40
14	204	91	90	83	392	488	309	182	313	590	62	35
15	153	83	99	83	433	460	264	169	275	416	57	33
16	121	76	90	210	555	410	240	156	260	330	53	30
17	102	99	84	842	639	376	216	145	213	275	52	28
18	88	174	80	2,610	593	347	195	136	165	232	54	26
19	74	254	77	2,540	502	325	181	128	201	195	53	25
20	65	209	77	1,870	420	312	173	120	394	165	58	22
21	58	144	80	1,030	362	295	162	112	857	145	73	20
22	52	111	81	615	316	279	147	104	1,350	126	71	22
23	47	96	79	443	291	261	136	97	4,770	111	61	21
24	43	97	78	362	392	243	576	91	4,290	102	54	20
25	39	117	76	540	559	231	5,620	84	2,310	99	50	18
26	34	115	74	589	1,610	223	8,440	78	1,130	85	45	18
27	33	107	73	664	1,600	219	8,300	74	706	78	41	18
28	34	98	89	462	926	217	4,460	402	1,050	72	37	19
29	31	92	105	384	633	220	1,730	263	812	81	35	18
30	29	88	112	328	---	225	1,140	216	1,570	279	31	16
31	29	---	100	279	---	207	---	198	---	201	34	---
TOTAL	2,701	3,347	2,547	15,270	21,431	31,108	38,522	22,575	26,073	25,328	2,869	1,119
MEAN	87.1	112	82.2	493	739	1,003	1,284	728	869	817	92.5	37.3
MAX	285	254	112	2,610	2,380	5,610	8,440	6,170	4,770	3,320	303	114
MIN	29	29	71	83	216	207	136	74	75	72	31	16
AC-FT	5,360	6,640	5,050	30,290	42,510	61,700	76,410	44,780	51,720	50,240	5,690	2,220

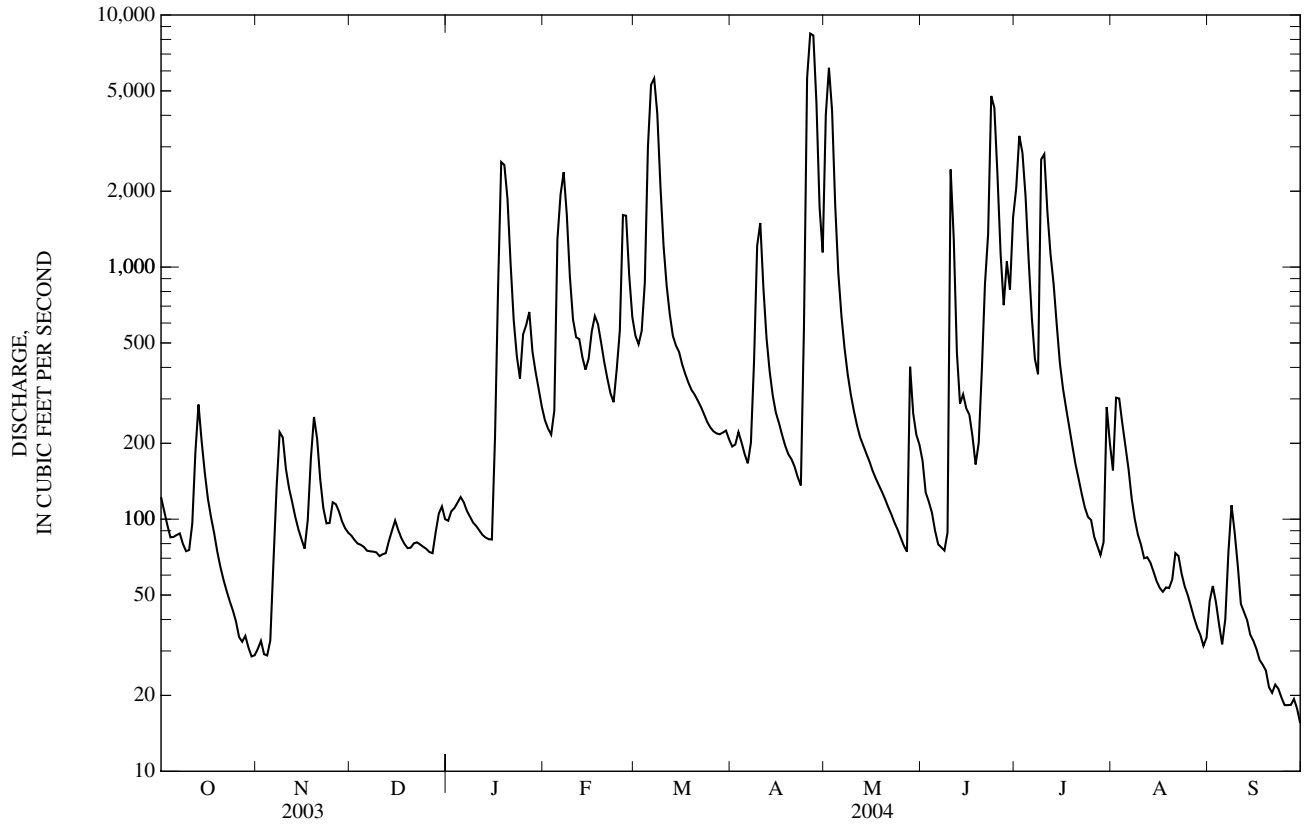
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

MEAN	698	1,818	2,600	1,910	2,514	3,684	3,518	4,013	2,137	597	329	603
MAX	3,713	9,607	9,832	9,591	7,497	10,970	14,270	21,720	7,293	4,536	2,517	2,218
(WY)	(1985)	(1997)	(1992)	(1998)	(2001)	(1990)	(1990)	(1990)	(1991)	(1992)	(1992)	(1996)
MIN	34.0	84.0	76.3	177	195	677	213	92.3	49.8	57.8	28.7	16.7
(WY)	(1989)	(1989)	(1990)	(1984)	(1996)	(1986)	(2003)	(1988)	(1988)	(1998)	(1988)	(2000)

e Estimated

07335300 MUDDY BOGGY CREEK NEAR UNGER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1983 - 2004	
ANNUAL TOTAL	151,524		192,890			
ANNUAL MEAN	415		527		2,032	
HIGHEST ANNUAL MEAN					4,951	1990
LOWEST ANNUAL MEAN					450	2000
HIGHEST DAILY MEAN	6,030	Jan 2	8,440	Apr 26	76,000	May 6, 1990
LOWEST DAILY MEAN	28	Jul 31	16	Sep 30	1.8	Sep 8, 1984
ANNUAL SEVEN-DAY MINIMUM	29	Jul 28	18	Sep 24	2.6	Sep 3, 1984
MAXIMUM PEAK FLOW			9,840	Apr 26	76,700	May 6, 1990
MAXIMUM PEAK STAGE			28.90	Apr 26	55.27	May 6, 1990
ANNUAL RUNOFF (AC-FT)	300,500		382,600		1,472,000	
10 PERCENT EXCEEDS	1,040		1,310		6,160	
50 PERCENT EXCEEDS	182		154		438	
90 PERCENT EXCEEDS	46		40		53	



07335500 RED RIVER AT ARTHUR CITY, TX

LOCATION.--Lat 33°52'30", long 95°30'06", in NW ¼ sec.11, T.8 S., R.17 E., Choctaw County, OK, Hydrologic Unit 11140101, on right downstream bank of bridge on U.S. Highway 271 at Arthur City, 10.6 mi downstream from Muddy Boggy River, 26.0 mi upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA.--44,531 mi^2, of which 5,936 mi^2 probably is noncontributing.

PERIOD OF RECORD.--January to September 1905 (gage heights and discharge measurements only), October 1905 to December 1911, July 1936 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage- height records collected at same site since 1891 are contained in reports of the National Weather Service.

REVISED RECORDS.--WSP 1241: Drainage area. WSP 1311: 1906-11.

GAGE.--Water-stage recorder. Datum of gage is 380.07 ft above sea level. From 1905-11 nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharge. Records poor. Flow regulated since October 1943 by Lake Texoma (station 07331500), 92.8 mi upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

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	1,080	935	791	1,580	2,800	2,710	2,550	4,040	1,530	5,580	4,130	1,180
2	2,910	854	639	1,790	2,060	1,870	4,050	11,000	881	7,720	3,780	2,630
3	3,380	855	562	1,540	1,200	1,680	3,080	10,200	781	8,180	3,540	2,780
4	3,290	732	1,020	882	1,460	2,710	2,300	5,310	2,910	7,340	5,050	2,640
5	3,310	505	1,950	653	5,630	5,680	2,170	2,830	3,680	5,120	7,610	2,640
6	2,660	949	1,820	573	8,080	11,900	1,100	3,630	3,530	2,380	7,920	2,380
7	1,120	2,370	1,780	607	8,240	12,800	702	3,900	2,130	1,770	7,870	983
8	799	2,650	1,780	1,450	6,530	8,800	1,840	3,740	1,090	3,700	7,940	704
9	1,490	2,410	1,090	1,760	3,960	4,880	2,720	3,470	903	6,190	5,220	821
10	1,780	2,300	684	1,810	2,490	2,970	5,720	3,230	3,030	10,200	3,150	2,230
11	1,780	1,380	1,070	1,550	2,070	2,990	6,330	1,470	9,230	13,600	5,350	2,540
12	1,780	859	2,320	877	4,390	3,430	4,130	939	7,310	12,700	7,850	2,570
13	1,830	1,200	2,420	638	4,070	2,300	1,870	2,460	4,330	12,300	7,770	2,200
14	1,080	1,700	2,410	641	3,740	2,500	1,130	3,120	2,760	11,300	7,870	885
15	790	1,810	1,810	1,470	5,920	2,960	1,730	3,180	1,490	8,020	5,660	767
16	1,250	1,790	1,000	1,850	5,070	2,020	2,120	3,290	1,420	7,370	3,110	2,140
17	1,660	1,870	792	3,510	3,750	1,580	1,810	3,230	2,130	7,140	1,250	2,630
18	1,720	1,460	1,600	7,350	4,090	2,120	2,080	1,280	2,380	7,290	1,280	2,670
19	1,740	1,180	2,430	10,000	5,670	2,290	2,100	773	3,420	5,490	2,640	2,650
20	1,700	1,900	2,570	5,740	4,150	2,200	1,010	2,620	3,800	4,150	2,940	2,220
21	945	2,180	2,020	4,120	3,530	2,230	626	3,350	5,060	5,530	3,560	890
22	622	1,950	1,570	3,730	3,110	2,040	1,340	3,380	5,200	6,460	3,410	768
23	1,050	1,440	887	3,330	2,680	1,160	1,890	3,420	11,000	6,560	2,410	2,360
24	1,130	1,830	766	3,140	1,720	911	2,450	3,100	15,700	6,410	905	3,310
25	981	1,150	1,300	2,690	3,390	1,870	6,160	1,180	8,560	6,530	949	2,620
26	983	819	1,790	2,150	6,020	2,590	13,600	695	5,180	5,960	2,370	1,320
27	971	3,380	1,650	1,940	6,400	3,020	12,700	2,540	3,470	5,260	2,620	2,420
28	769	2,410	912	1,730	5,060	3,030	7,660	3,720	2,260	5,530	2,670	936
29	536	2,620	729	3,350	4,140	2,700	5,060	5,010	2,630	5,840	2,740	769
30	610	1,260	687	3,330	---	1,200	3,260	3,940	4,420	6,200	2,770	2,030
31	908	---	756	2,930	---	848	---	3,520	---	6,040	2,220	---
TOTAL	46,654	48,748	43,605	78,711	121,420	101,989	105,288	107,567	122,215	213,860	128,554	57,683
MEAN	1,505	1,625	1,407	2,539	4,187	3,290	3,510	3,470	4,074	6,899	4,147	1,923
MAX	3,380	3,380	2,570	10,000	8,240	12,800	13,600	11,000	15,700	13,600	7,940	3,310
MIN	536	505	562	573	1,200	848	626	695	781	1,770	905	704
AC-FT	92,540	96,690	86,490	156,100	240,800	202,300	208,800	213,400	242,400	424,200	255,000	114,400

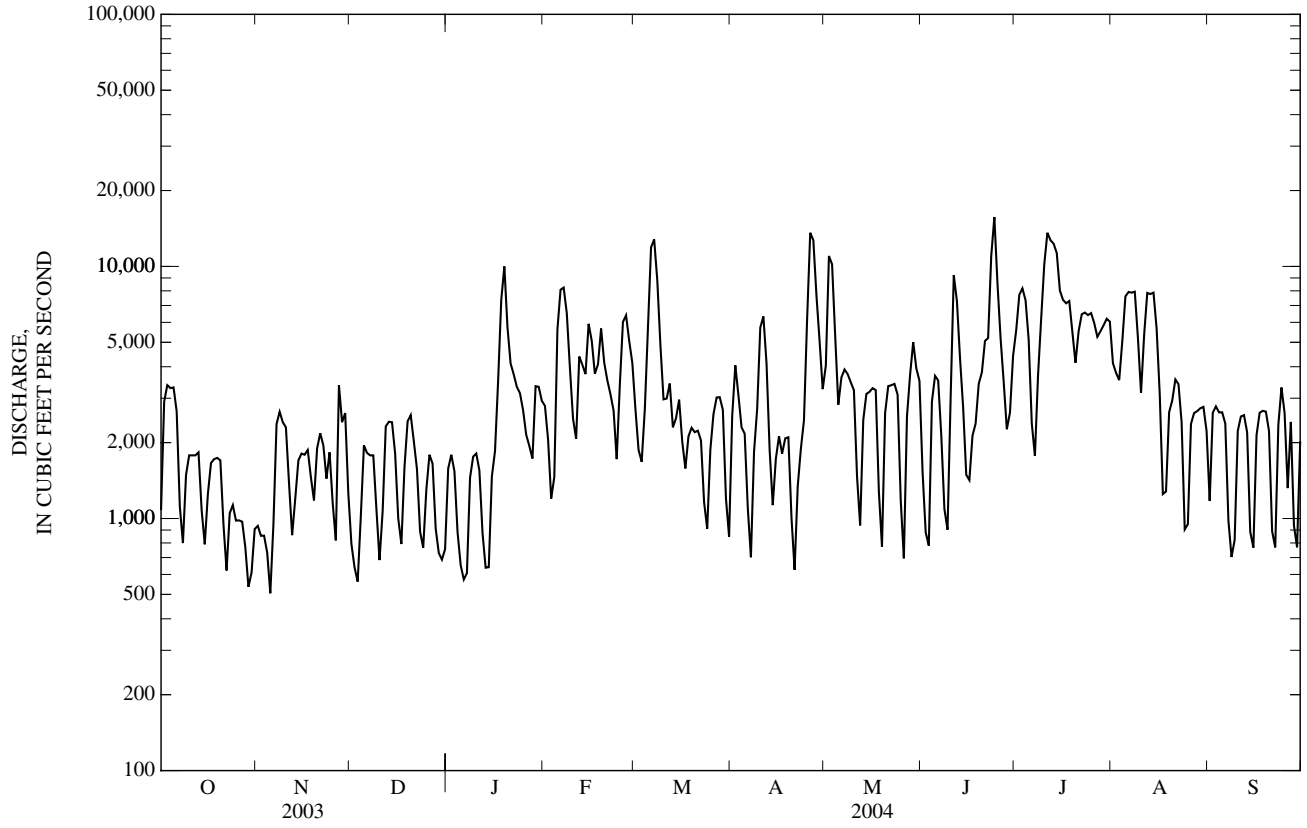
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2004, BY WATER YEAR (WY)

MEAN	6,605	7,246	7,390	7,037	8,641	11,050	11,720	16,240	17,200	7,678	4,854	4,673
MAX	40,240	37,170	32,340	39,930	32,130	39,430	55,500	103,900	83,820	27,700	34,840	19,010
(WY)	(1982)	(1975)	(1992)	(1992)	(2001)	(2001)	(1990)	(1990)	(1957)	(1989)	(1950)	(1950)
MIN	263	242	894	1,126	1,138	1,118	1,344	2,837	2,074	1,586	1,108	859
(WY)	(1957)	(1957)	(1957)	(1964)	(1959)	(1967)	(1956)	(1980)	(1956)	(1956)	(1972)	(1988)

07335500 RED RIVER AT ARTHUR CITY, TX—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1945 - 2004	
ANNUAL TOTAL	1,454,015		1,176,294			
ANNUAL MEAN	3,984		3,214		a9,188	
HIGHEST ANNUAL MEAN					23,290	1990
LOWEST ANNUAL MEAN					2,754	1964
HIGHEST DAILY MEAN	20,700	Mar 1	15,700	Jun 24	269,000	May 4, 1990
LOWEST DAILY MEAN	505	Nov 5	505	Nov 5	134	bDec 11, 1956
ANNUAL SEVEN-DAY MINIMUM	771	Oct 30	771	Oct 30	134	Dec 11, 1956
MAXIMUM PEAK FLOW			17,200	Jun 24	c275,000	May 4, 1990
MAXIMUM PEAK STAGE			8.56	Jun 24	d34.21	May 4, 1990
ANNUAL RUNOFF (AC-FT)	2,884,000		2,333,000		6,656,000	
10 PERCENT EXCEEDS	7,360		6,730		23,600	
50 PERCENT EXCEEDS	3,150		2,440		4,260	
90 PERCENT EXCEEDS	977		858		1,360	

a Prior to regulation, water years 1906-11, 1937-43, 9,266 ft^3/s.
b Also occurred Dec. 12, 1956.
c Maximum discharge for period of record, 400,000 ft^3/s, May 28, 1908.
d Maximum gage height for period of record, 43.2 ft, May 28, 1908.



07335700 KIAMICHI RIVER NEAR BIG CEDAR, OK
(Hydrologic benchmark station)

LOCATION.--Lat 34°38'18", long 94°36'45", in SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.18, T.2 N., R.26 E., Le Flore County, Hydrologic Unit 11140105, in Ouachita National Forest, on downstream side of right bank pier of bridge on State Highway 63, 0.2 mi upstream from Rattlesnake Creek, 1.1 mi upstream from Big Branch, 2.1 mi east of Big Cedar, and at mile 157.6.

DRAINAGE AREA.--40.1 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.97 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 22	1000	*15,000	*16.32	Jul 3	1000	2,440	9.40

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	0.67	1.1	10	42	42	33	28	128	16	173	11	0.62
2	0.60	1.1	8.4	40	37	26	26	106	20	123	8.8	0.54
3	0.52	1.1	7.7	36	31	29	23	89	45	794	6.6	0.49
4	0.44	1.1	6.6	35	38	93	21	74	32	301	5.0	0.49
5	0.80	1.4	5.4	36	304	271	18	61	31	172	4.0	0.55
6	1.0	4.8	4.8	33	208	163	16	49	36	124	3.4	1.2
7	0.92	3.9	4.5	32	140	119	22	40	32	178	2.8	1.2
8	0.80	3.4	4.6	31	108	95	25	32	33	175	2.4	0.81
9	1.7	4.4	6.2	29	93	78	21	26	47	319	2.1	0.67
10	2.3	5.8	6.8	26	77	64	146	21	53	183	1.9	0.72
11	1.6	6.8	5.8	23	80	55	165	18	66	138	1.8	0.75
12	1.4	7.2	5.7	20	102	46	124	16	52	106	1.9	0.69
13	1.2	8.9	8.8	18	91	40	97	17	41	83	1.5	0.66
14	1.5	9.6	8.7	16	88	40	76	33	32	67	1.3	0.61
15	1.7	12	9.5	14	86	35	62	26	25	55	1.1	0.58
16	1.6	12	11	36	85	31	52	22	75	46	0.99	0.61
17	1.6	20	13	436	79	27	43	19	72	39	0.87	0.55
18	1.6	83	16	265	74	25	35	17	53	32	0.81	0.50
19	1.6	58	15	149	73	22	29	15	83	28	1.3	0.45
20	1.6	37	15	107	68	20	26	12	95	23	1.9	0.35
21	1.6	29	16	83	58	18	26	9.3	77	19	1.2	0.28
22	1.6	24	17	66	52	15	101	7.4	2,960	16	1.0	0.24
23	1.5	31	24	54	47	14	98	6.0	467	14	1.1	0.21
24	1.5	35	22	54	43	16	811	5.1	222	13	1.1	0.18
25	1.3	29	20	156	38	42	365	4.6	150	16	0.92	0.16
26	1.3	26	20	131	33	44	200	4.1	119	15	0.76	0.14
27	1.2	24	20	101	28	41	144	3.7	96	13	0.67	0.10
28	1.2	18	36	82	25	40	114	32	80	11	1.2	0.08
29	1.2	16	45	69	28	38	95	23	174	13	1.5	0.06
30	1.1	13	46	57	---	33	84	17	201	33	0.98	0.03
31	1.0	---	44	49	---	30	---	18	---	16	0.72	---
TOTAL	39.65	527.6	483.5	2,326	2,256	1,643	3,093	951.2	5,485	3,338	72.62	14.52
MEAN	1.28	17.6	15.6	75.0	77.8	53.0	103	30.7	183	108	2.34	0.48
MAX	2.3	83	46	436	304	271	811	128	2,960	794	11	1.2
MIN	0.44	1.1	4.5	14	25	14	16	3.7	16	11	0.67	0.03
AC-FT	79	1,050	959	4,610	4,470	3,260	6,130	1,890	10,880	6,620	144	29
CFSM	0.03	0.44	0.39	1.87	1.94	1.32	2.57	0.77	4.56	2.69	0.06	0.01
IN.	0.04	0.49	0.45	2.16	2.09	1.52	2.87	0.88	5.09	3.10	0.07	0.01

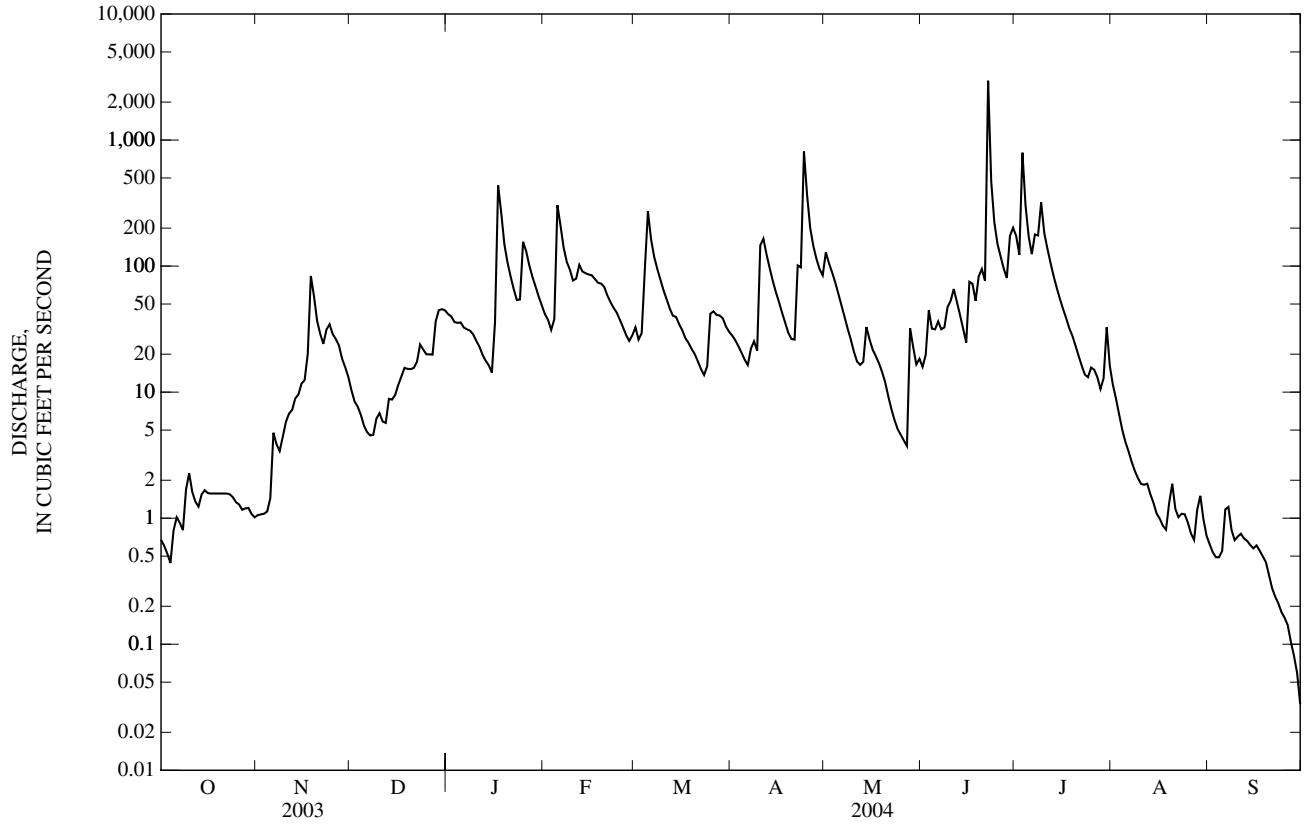
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2004, BY WATER YEAR (WY)

MEAN	60.8	96.7	128	99.9	119	146	127	127	65.0	23.1	6.43	18.6
MAX	514	533	445	253	354	362	362	614	263	128	51.0	283
(WY)	(1985)	(1997)	(1972)	(1998)	(2001)	(1973)	(1991)	(1990)	(2000)	(1991)	(1988)	(1992)
MIN	0.00	0.00	0.92	2.50	6.12	28.8	28.6	6.97	0.08	0.00	0.00	0.00
(WY)	(1984)	(1967)	(1967)	(1967)	(1967)	(1967)	(2003)	(1977)	(1988)	(1988)	(1972)	(1983)

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1966 - 2004	
ANNUAL TOTAL	11,122.10		20,230.09			
ANNUAL MEAN	30.5		55.3		84.7	
HIGHEST ANNUAL MEAN					152	1985
LOWEST ANNUAL MEAN					33.9	1978
HIGHEST DAILY MEAN	508	Jun 17	2,960	Jun 22	5,960	May 13, 1982
LOWEST DAILY MEAN	0.00	Aug 8	0.03	Sep 30	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 8	0.11	Sep 24	0.00	Oct 16, 1966
MAXIMUM PEAK FLOW			15,000	Jun 22	a27,400	May 19, 1990
MAXIMUM PEAK STAGE			16.32	Jun 22	19.60	May 19, 1990
ANNUAL RUNOFF (AC-FT)	22,060		40,130		61,330	
ANNUAL RUNOFF (CFSM)	0.760		1.38		2.11	
ANNUAL RUNOFF (INCHES)	10.32		18.77		28.69	
10 PERCENT EXCEEDS	87		119		173	
50 PERCENT EXCEEDS	11		22		26	
90 PERCENT EXCEEDS	0.62		0.81		0.09	

a From rating curve extended above 9,000 ft^3/s.



07335790 KIAMICHI RIVER NEAR CLAYTON, OK

LOCATION.--Lat 34°34'29", long 95°20'26", in NE $^1/_4$ SE $^1/_4$ sec.7, T.1 N., R.19 E., Pushmataha County, Hydrologic Unit 11140105, on left bank near downstream bridge abutment on U.S. Highway 271, approximately 1 mi southeast of Clayton, and at mile 101.6.

DRAINAGE AREA.--708 mi^2.

PERIOD OF RECORD.--November 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.00 ft above sea level.

REMARKS.--Records fair. Some regulation since December 1982 by Sardis Lake (station 07335775), on Jackfork Creek 4.5 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

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	4.1	0.67	64	153	327	238	123	4,180	71	e2,490	265	7.2
2	3.8	0.61	55	136	294	817	111	4,090	77	2,120	164	7.9
3	3.6	0.57	49	126	266	1,390	105	2,800	638	1,560	112	6.5
4	3.3	0.58	45	122	262	591	96	1,270	377	3,160	84	5.4
5	3.3	0.98	40	115	4,340	3,950	88	682	232	1,840	67	4.6
6	3.1	4.2	36	110	3,500	3,160	80	530	175	821	54	6.9
7	2.9	4.5	33	97	2,180	2,960	439	419	137	1,760	44	6.0
8	2.7	4.4	31	87	1,700	2,610	2,230	334	124	4,180	37	5.5
9	3.8	4.1	32	81	1,460	2,420	588	271	138	1,330	32	5.4
10	4.6	4.7	39	76	1,530	1,600	493	224	139	1,350	27	4.7
11	3.8	11	136	72	1,960	344	845	187	2,330	868	26	4.0
12	3.1	12	87	69	1,400	287	936	162	1,160	521	23	3.7
13	2.8	11	68	63	628	254	678	142	630	327	20	3.3
14	2.9	11	62	59	539	243	516	133	414	237	17	3.0
15	2.6	11	67	56	617	229	413	126	301	179	15	3.0
16	2.6	11	63	109	801	200	345	133	386	136	13	3.0
17	2.6	24	56	2,050	725	175	291	140	1,080	105	12	2.9
18	2.3	514	50	2,800	630	154	248	119	e720	82	11	2.7
19	2.2	378	46	1,570	552	134	214	104	e870	65	12	2.4
20	2.0	274	43	941	503	121	185	94	e2,890	52	14	2.1
21	1.8	185	41	662	443	112	164	85	e4,020	42	16	1.9
22	1.7	125	42	502	381	101	150	76	3,480	34	14	1.7
23	1.6	113	49	394	335	91	187	69	7,800	28	12	1.6
24	1.5	290	75	338	346	366	3,880	63	e4,800	24	11	1.5
25	1.5	207	79	1,890	339	715	5,850	58	e2,740	25	9.2	1.4
26	1.2	153	64	1,800	283	432	2,690	54	e2,890	20	7.8	1.4
27	1.0	120	60	1,070	238	111	3,070	50	e2,470	19	6.7	1.3
28	0.95	99	104	739	209	130	2,770	66	e1,780	24	6.0	1.1
29	0.80	84	400	577	197	163	2,620	77	1,630	111	5.1	0.97
30	0.70	74	239	470	---	175	2,680	66	1,210	328	4.3	0.84
31	0.74	---	188	388	---	146	---	59	---	209	4.2	---
TOTAL	75.59	2,732.31	2,443	17,722	26,985	24,419	33,085	16,863	45,709	24,047	1,145.3	103.91
MEAN	2.44	91.1	78.8	572	931	788	1,103	544	1,524	776	36.9	3.46
MAX	4.6	514	400	2,800	4,340	3,950	5,850	4,180	7,800	4,180	265	7.9
MIN	0.70	0.57	31	56	197	91	80	50	71	19	4.2	0.84
AC-FT	150	5,420	4,850	35,150	53,520	48,440	65,620	33,450	90,660	47,700	2,270	206

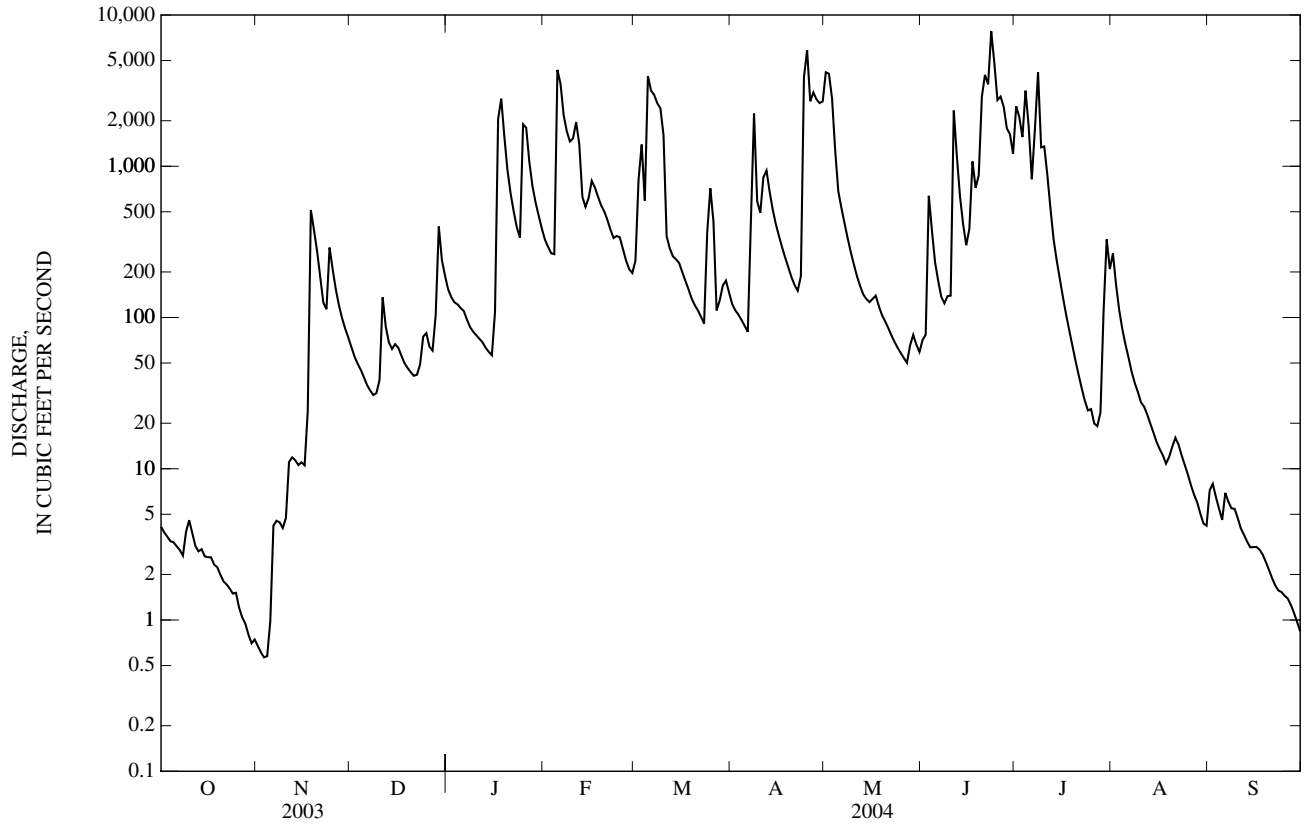
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004, BY WATER YEAR (WY)

MEAN	664	1,211	1,502	1,196	1,532	1,591	1,584	1,744	938	243	159	258
MAX	4,628	4,837	3,376	4,569	4,196	3,882	5,242	7,658	2,288	984	1,268	2,735
(WY)	(1985)	(1985)	(1988)	(1998)	(1990)	(2002)	(2002)	(1990)	(1986)	(1992)	(1992)	(1992)
MIN	0.13	2.89	24.5	88.3	116	517	169	53.7	7.33	3.52	0.29	0.36
(WY)	(2000)	(2000)	(1990)	(1986)	(1996)	(2000)	(2003)	(1988)	(1988)	(1998)	(1998)	(2000)

e Estimated

07335790 KIAMICHI RIVER NEAR CLAYTON, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1982 - 2004	
ANNUAL TOTAL	108,882.73		195,330.11			
ANNUAL MEAN	298		534		1,049	
HIGHEST ANNUAL MEAN					1,967	1990
LOWEST ANNUAL MEAN					340	2003
HIGHEST DAILY MEAN	6,300	Mar 19	7,800	Jun 23	36,800	May 4, 1990
LOWEST DAILY MEAN	0.29	Aug 29	0.57	Nov 3	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.38	Aug 25	0.67	Oct 29	0.00	Oct 3, 1983
MAXIMUM PEAK FLOW			8,880	Jun 23	40,200	May 4, 1990
MAXIMUM PEAK STAGE			10.84	Jun 23	22.23	May 4, 1990
ANNUAL RUNOFF (AC-FT)	216,000		387,400		759,700	
10 PERCENT EXCEEDS	741		1,860		3,030	
50 PERCENT EXCEEDS	59		112		237	
90 PERCENT EXCEEDS	2.0		2.8		3.8	



07336200 KIAMICHI RIVER NEAR ANTLERS, OK

LOCATION.--Lat 34°14'55", long 95°36'18", in SW $^1/_4$ sec.35, T.3 S., R.16 E., Pushmataha County, Hydrologic Unit 11140105, on right bank, 50 ft downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi northeast of Antlers, 7.7 mi downstream from Tenmile Creek, 5.4 mi upstream from Cedar Creek and at mile 59.6.

DRAINAGE AREA.--1,138 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 419.82 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Some regulation since December 1982 by Sardis Lake (station 07335775), located on Jackfork Creek, 42.0 miles upstream from station. Small diversion for municipal water supply for city of Antlers upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

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	8.7	2.0	116	230	493	443	267	6,430	87	3,890	319	9.2
2	7.9	1.9	105	197	447	530	233	6,290	77	2,870	296	8.3
3	6.9	1.7	91	178	409	1,150	211	4,090	84	2,000	240	7.3
4	6.1	1.5	79	168	419	1,540	194	2,290	256	2,150	181	6.5
5	7.5	1.4	69	163	3,880	6,370	180	1,100	372	2,440	142	5.9
6	7.5	7.7	62	153	6,330	5,120	164	712	249	1,250	114	98
7	6.6	46	56	143	3,320	4,010	161	556	198	642	94	39
8	5.7	286	51	136	2,180	3,240	2,390	450	183	3,370	76	35
9	8.0	200	46	126	1,720	2,820	1,640	372	184	2,270	65	23
10	9.4	125	43	116	1,520	2,560	891	311	840	1,270	56	20
11	16	85	41	109	1,800	1,290	856	264	1,280	1,370	51	18
12	40	62	41	104	2,080	605	977	232	2,080	891	44	16
13	41	46	99	100	1,250	518	889	205	875	626	38	13
14	34	33	120	94	814	497	670	183	537	462	34	10
15	29	27	101	88	859	477	534	164	389	364	31	9.5
16	23	22	86	161	1,280	441	447	150	957	292	27	8.4
17	17	42	84	4,080	1,350	391	385	141	1,230	241	23	7.7
18	13	1,090	86	5,140	1,180	347	332	139	1,050	200	21	7.0
19	10	1,000	78	2,940	973	308	292	141	1,140	166	20	6.0
20	8.7	574	69	1,580	819	276	263	126	3,690	140	18	5.4
21	7.6	386	63	1,040	695	249	235	112	4,540	120	19	4.7
22	7.4	289	58	770	591	224	211	99	6,870	105	21	4.1
23	6.8	230	57	604	516	202	193	88	8,130	91	26	3.6
24	5.8	214	54	517	583	195	5,130	79	7,750	85	28	3.4
25	4.9	261	56	1,670	682	411	10,700	71	3,190	79	26	3.3
26	4.3	299	65	3,240	575	798	4,580	65	3,330	65	24	2.9
27	3.5	229	93	1,860	475	549	3,220	61	2,870	63	21	2.4
28	3.2	187	99	1,180	404	233	2,900	114	2,100	58	18	2.2
29	3.0	154	112	867	364	242	2,560	127	5,630	76	16	2.0
30	2.6	131	280	696	---	281	2,440	119	2,740	952	13	1.8
31	2.2	---	279	578	---	300	---	106	---	584	11	---
TOTAL	357.3	6,034.2	2,739	29,028	38,008	36,617	44,145	25,387	62,908	29,182	2,113	383.6
MEAN	11.5	201	88.4	936	1,311	1,181	1,472	819	2,097	941	68.2	12.8
MAX	41	1,090	280	5,140	6,330	6,370	10,700	6,430	8,130	3,890	319	98
MIN	2.2	1.4	41	88	364	195	161	61	77	58	11	1.8
AC-FT	709	11,970	5,430	57,580	75,390	72,630	87,560	50,360	124,800	57,880	4,190	761

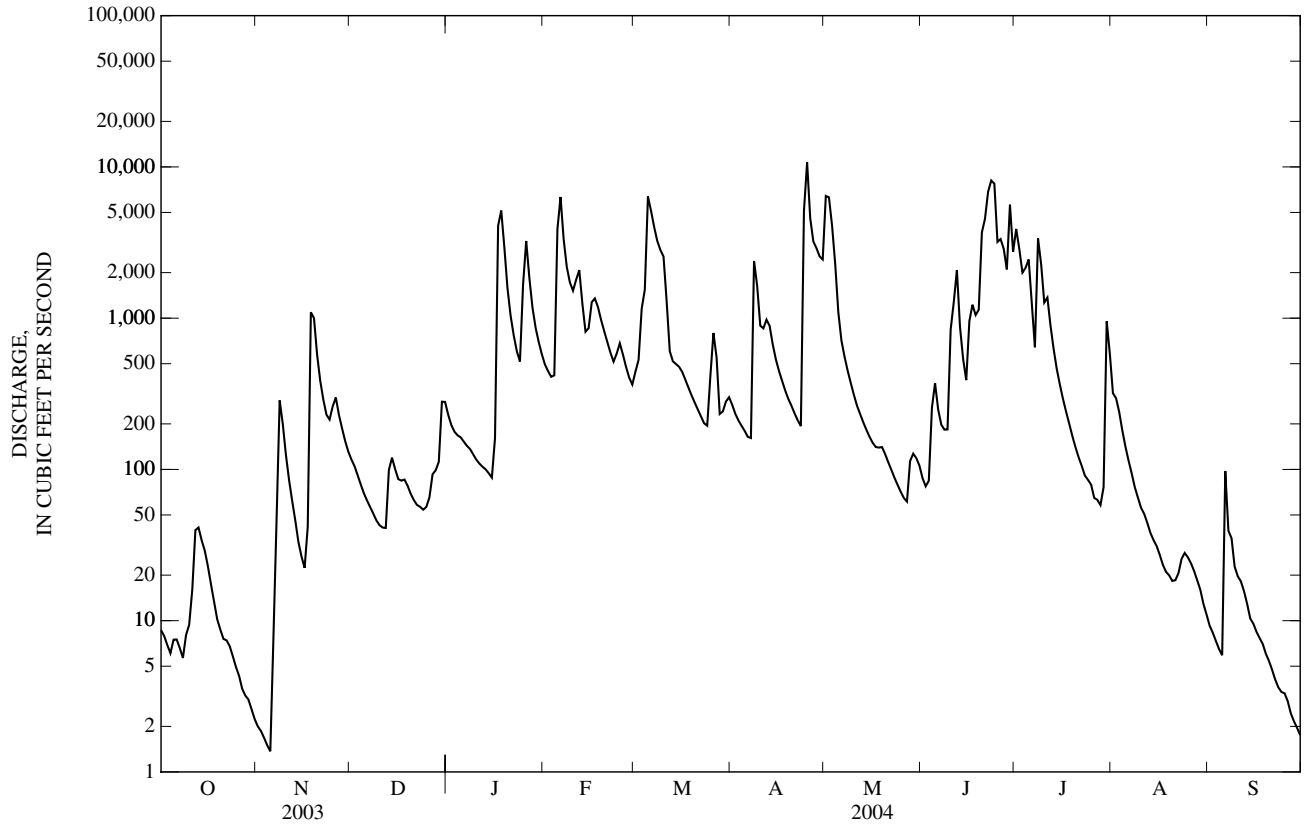
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

MEAN	949	2,020	2,339	1,816	2,344	2,693	2,658	2,665	1,395	396	228	366
MAX	7,763	8,614	5,288	7,159	6,316	5,918	7,401	12,700	3,784	1,704	2,017	2,960
(WY)	(1985)	(1997)	(1993)	(1998)	(1990)	(2002)	(2002)	(1990)	(1992)	(1992)	(1992)	(1992)
MIN	2.37	5.19	7.84	154	154	853	248	77.9	21.5	10.1	0.00	0.16
(WY)	(2000)	(1990)	(1990)	(1986)	(1996)	(2000)	(2003)	(1988)	(1988)	(1998)	(1998)	(2000)

07336200 KIAMICHI RIVER NEAR ANTLERS, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1984 - 2004	
ANNUAL TOTAL	152,274.7		276,902.1			
ANNUAL MEAN	417		757		a1,651	
HIGHEST ANNUAL MEAN					3,184	1990
LOWEST ANNUAL MEAN					479	2003
HIGHEST DAILY MEAN	8,190	Mar 19	10,700	Apr 25	57,000	May 4, 1990
LOWEST DAILY MEAN	1.0	Aug 25	1.4	Nov 5	b0.00	Jul 31, 1998
ANNUAL SEVEN-DAY MINIMUM	1.4	Aug 23	1.9	Oct 30	0.00	Jul 31, 1998
MAXIMUM PEAK FLOW			11,700	Apr 25	62,300	May 3, 1990
MAXIMUM PEAK STAGE			16.79	Apr 25	42.65	May 3, 1990
ANNUAL RUNOFF (AC-FT)	302,000		549,200		1,196,000	
10 PERCENT EXCEEDS	965		2,440		4,540	
50 PERCENT EXCEEDS	105		182		372	
90 PERCENT EXCEEDS	6.7		7.5		8.9	

a Prior to regulation by Sardis Lake, 1973-82, 1,484 ft^3/s.
b Prior to regulation by Sardis Lake, no flow many years.



07337900 GLOVER RIVER NEAR GLOVER, OK

LOCATION.--Lat 34°05'51", long 94°54'07", in NW ¼ NE ¼ sec.28, T.5 S., R.23 E., McCurtain County, Hydrologic Unit 11140107, on right downstream end of bridge on State Highways 3 and 7, 2.0 mi north of Glover, 11.0 mi northwest of Broken Bow, and at mile 9.2.

DRAINAGE AREA.--315 mi^2.

PERIOD OF RECORD.--October 1961 to current year. Prior to October 1990, published as Glover Creek near Glover.

GAGE.--Water-stage recorder. Datum of gage is 378.70 ft above sea level.

REMARKS.--Records fair. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1961 reached a stage of 28.84 ft, from floodmark. Flood in 1908 was higher than in May 1961, from information provided by local residents.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 5	1030	10,000	10.17	Jun 16	1130	8,700	9.49
Jun 10	2200	9,860	10.08	Jun 22	1730	*17,900	*13.58

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	9.9	6.5	141	196	287	168	146	2,050	185	1,110	478	6.5
2	8.8	6.7	123	184	259	182	129	2,070	180	690	326	6.0
3	7.7	6.4	110	176	243	169	116	1,070	325	600	220	6.0
4	6.9	5.9	100	168	277	356	102	671	635	723	156	5.9
5	8.2	6.0	90	151	6,150	3,510	89	468	399	488	115	6.0
6	8.5	133	79	141	3,200	1,780	77	351	334	331	86	6.3
7	8.2	929	71	127	1,640	1,010	98	267	320	497	65	6.7
8	8.7	932	64	118	1,010	673	1,260	208	265	1,620	50	7.4
9	11	595	62	115	777	494	647	169	196	763	41	7.5
10	17	436	64	110	648	380	422	137	1,410	471	34	8.2
11	24	344	187	104	595	303	339	112	2,790	327	33	12
12	83	276	166	95	1,560	246	269	95	1,040	225	29	14
13	90	218	174	88	1,250	207	217	88	618	156	23	12
14	68	174	268	81	935	222	181	352	404	112	22	9.9
15	51	158	272	76	918	283	151	262	281	77	19	8.4
16	40	149	286	82	1,310	241	128	177	4,910	51	16	8.3
17	30	162	315	4,530	1,100	203	112	125	3,170	36	14	8.2
18	24	2,850	251	3,900	864	177	97	96	1,310	24	13	7.3
19	21	1,580	208	1,790	689	158	84	72	869	17	12	7.3
20	18	800	180	1,020	564	144	75	56	2,060	13	13	7.0
21	16	524	155	700	441	129	e68	46	2,510	10	12	6.3
22	15	383	138	513	352	120	e59	36	8,940	8.4	12	5.4
23	13	314	139	396	296	115	53	28	4,470	7.0	12	5.0
24	12	357	198	369	292	112	3,080	23	1,980	6.1	11	4.2
25	11	364	180	2,170	282	146	3,210	19	1,120	6.3	11	4.1
26	10	307	159	2,090	237	335	1,370	17	1,680	6.0	9.4	3.6
27	9.2	265	143	1,100	202	315	770	15	973	5.5	8.4	3.3
28	8.3	227	135	726	176	261	509	580	660	13	8.1	3.2
29	7.4	185	150	544	163	231	371	537	519	12	8.1	3.0
30	6.9	160	192	430	---	204	293	347	529	963	7.4	2.7
31	6.5	---	203	347	---	170	---	212	---	789	6.8	---
TOTAL	659.2	12,853.5	5,003	22,637	26,717	13,044	14,522	10,756	45,082	10,157.3	1,871.2	201.7
MEAN	21.3	428	161	730	921	421	484	347	1,503	328	60.4	6.72
MAX	90	2,850	315	4,530	6,150	3,510	3,210	2,070	8,940	1,620	478	14
MIN	6.5	5.9	62	76	163	112	53	15	180	5.5	6.8	2.7
AC-FT	1,310	25,490	9,920	44,900	52,990	25,870	28,800	21,330	89,420	20,150	3,710	400
CFSM	0.07	1.36	0.51	2.32	2.92	1.34	1.54	1.10	4.77	1.04	0.19	0.02
IN.	0.08	1.52	0.59	2.67	3.16	1.54	1.71	1.27	5.32	1.20	0.22	0.02

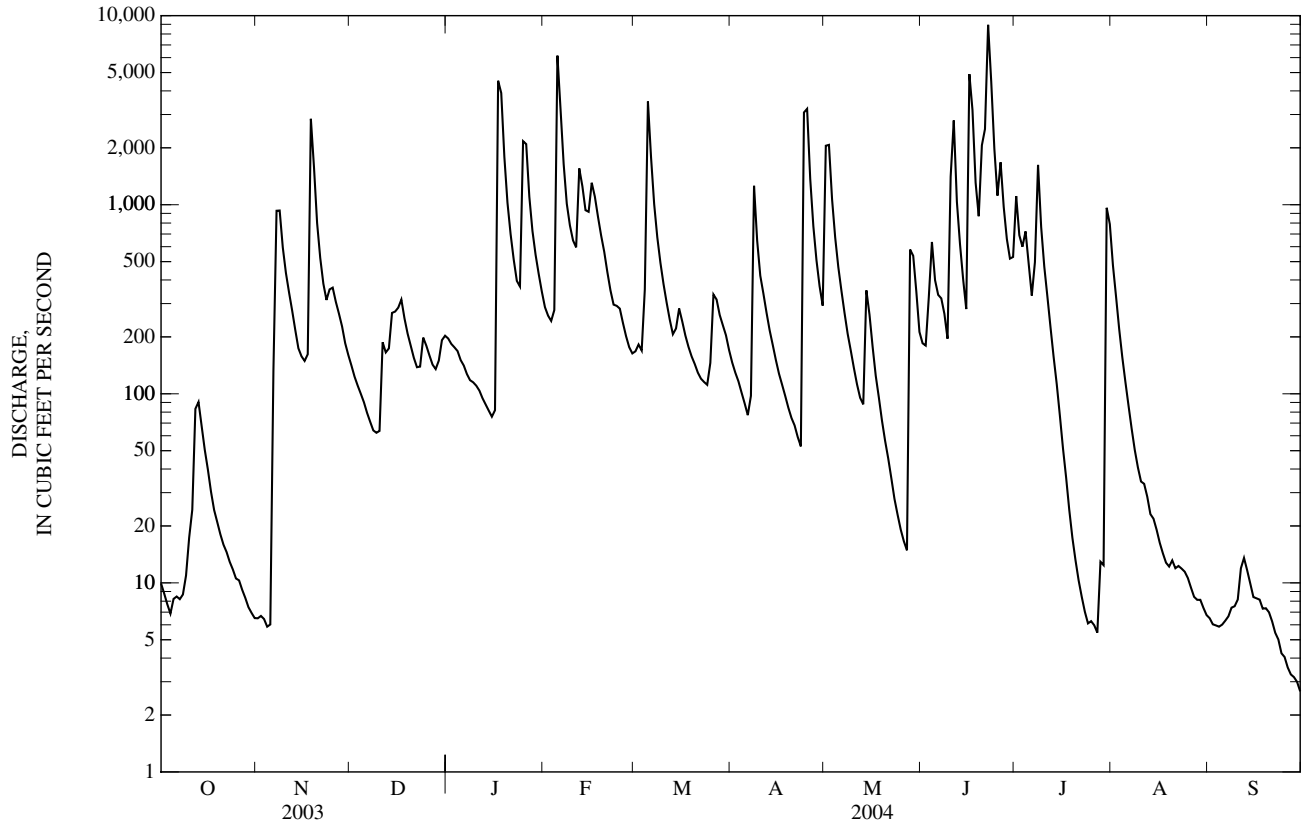
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2004, BY WATER YEAR (WY)

MEAN	365	573	750	517	703	831	695	809	377	93.0	65.4	202
MAX	2,427	2,615	3,376	1,556	1,943	2,506	2,753	3,503	1,514	534	461	2,690
(WY)	(1985)	(1997)	(1972)	(1998)	(1997)	(1973)	(1991)	(1990)	(1973)	(1994)	(1992)	(1974)
MIN	0.00	0.33	2.80	1.96	48.7	96.9	125	40.4	4.59	1.06	0.00	0.00
(WY)	(1979)	(1964)	(1964)	(1964)	(1996)	(1980)	(1987)	(1988)	(1972)	(1966)	(1972)	(1972)

e Estimated

07337900 GLOVER RIVER NEAR GLOVER, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1962 - 2004	
ANNUAL TOTAL	79,110.6		163,503.9			
ANNUAL MEAN	217		447		497	
HIGHEST ANNUAL MEAN					979	1973
LOWEST ANNUAL MEAN					169	1976
HIGHEST DAILY MEAN	2,910	Mar 19	8,940	Jun 22	53,100	Dec 10, 1971
LOWEST DAILY MEAN	1.0	Aug 31	2.7	Sep 30	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 25	3.4	Sep 24	0.00	Aug 4, 1970
MAXIMUM PEAK FLOW			17,900	Jun 22	98,600	Dec 10, 1971
MAXIMUM PEAK STAGE			13.58	Jun 22	29.72	Dec 10, 1971
ANNUAL RUNOFF (AC-FT)	156,900		324,300		360,100	
ANNUAL RUNOFF (CFSM)	0.688		1.42		1.58	
ANNUAL RUNOFF (INCHES)	9.34		19.31		21.44	
10 PERCENT EXCEEDS	523		1,100		1,050	
50 PERCENT EXCEEDS	88		162		125	
90 PERCENT EXCEEDS	8.2		7.4		3.8	



07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OK

LOCATION.--Lat 33°56'28", long 94°45'30", in SE ¼ SE ¼ sec.14, T.7 S., R.24 E., McCurtain County, Hydrologic Unit 11140107, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi northeast of Idabel, and at mile 103.4.

DRAINAGE AREA.--1,226 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 312.08 ft above sea level. Oct. 1, 1946, to Oct. 26, 1950, and for stages below 9.0 ft Oct. 26, 1950, to Oct. 10, 1951, nonrecording gage at same site and datum.

REMARKS.--Records good. Flow regulated since June 1969 by Pine Creek Lake (station 07337300), 41.9 mi upstream. Small diversions for municipal use by City of Idabel at station and by Weyerhaeuser 41 miles above station. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1938 reached a stage of 39.7 ft, from information provided by local resident, discharge, 86,000 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	200	63	183	224	596	e521	276	3,460	306	4,690	3,100	44
2	130	65	212	222	459	e503	250	5,130	537	3,750	2,980	43
3	77	69	559	212	811	672	220	4,760	1,340	2,770	2,920	43
4	65	69	720	203	1,160	675	200	3,930	1,480	2,640	2,880	43
5	66	76	710	194	4,580	2,260	183	3,440	899	1,830	1,310	43
6	70	136	445	178	7,680	4,730	170	3,170	449	1,720	282	43
7	72	311	158	327	6,730	4,560	164	2,970	365	1,710	e150	45
8	69	959	107	622	5,640	3,960	392	1,360	319	2,330	e89	53
9	70	880	96	621	4,930	3,530	1,130	333	314	2,560	e71	51
10	77	603	91	494	5,090	3,260	693	228	362	2,270	e65	47
11	84	453	89	205	5,380	2,180	530	189	2,360	2,270	e59	45
12	82	355	127	140	5,870	1,150	430	166	2,030	2,130	e57	44
13	81	290	184	129	5,590	847	348	162	2,280	2,020	e55	43
14	110	239	199	124	2,750	1,020	287	267	3,210	1,170	e55	43
15	121	209	268	121	1,670	1,120	242	455	3,640	499	e53	44
16	109	193	630	123	1,980	1,030	208	338	5,900	428	e51	44
17	97	190	1,050	703	2,070	912	182	248	8,840	366	e51	45
18	90	870	1,050	4,980	2,770	841	165	198	8,600	199	51	45
19	82	2,980	876	3,920	3,850	791	156	168	7,550	e110	53	43
20	79	1,860	593	1,790	4,070	757	156	162	7,040	e87	56	37
21	77	1,670	271	2,910	2,990	761	156	162	7,300	e74	58	33
22	75	1,380	197	4,220	2,080	737	156	161	8,230	e66	57	106
23	73	1,250	186	4,160	1,910	694	156	162	10,500	e64	57	147
24	70	861	174	4,360	1,930	687	1,260	162	11,800	e62	56	152
25	68	721	202	5,290	1,960	524	6,160	162	10,800	e59	55	153
26	67	1,310	208	6,390	1,380	367	4,220	162	9,100	e57	53	153
27	65	1,270	186	6,230	882	478	2,450	162	8,000	e55	51	150
28	64	1,220	176	5,500	596	444	3,030	337	7,340	e55	53	146
29	64	825	174	4,990	544	396	3,300	1,150	6,990	e69	51	97
30	65	272	179	4,710	---	358	3,160	713	5,630	e145	49	52
31	64	---	206	2,780	---	317	---	486	---	1,980	46	---
TOTAL	2,583	21,649	10,506	67,072	87,948	41,082	30,430	34,953	143,511	38,235	14,974	2,077
MEAN	83.3	722	339	2,164	3,033	1,325	1,014	1,128	4,784	1,233	483	69.2
MAX	200	2,980	1,050	6,390	7,680	4,730	6,160	5,130	11,800	4,690	3,100	153
MIN	64	63	89	121	459	317	156	161	306	55	46	33
AC-FT	5,120	42,940	20,840	133,000	174,400	81,490	60,360	69,330	284,700	75,840	29,700	4,120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2004, BY WATER YEAR (WY)

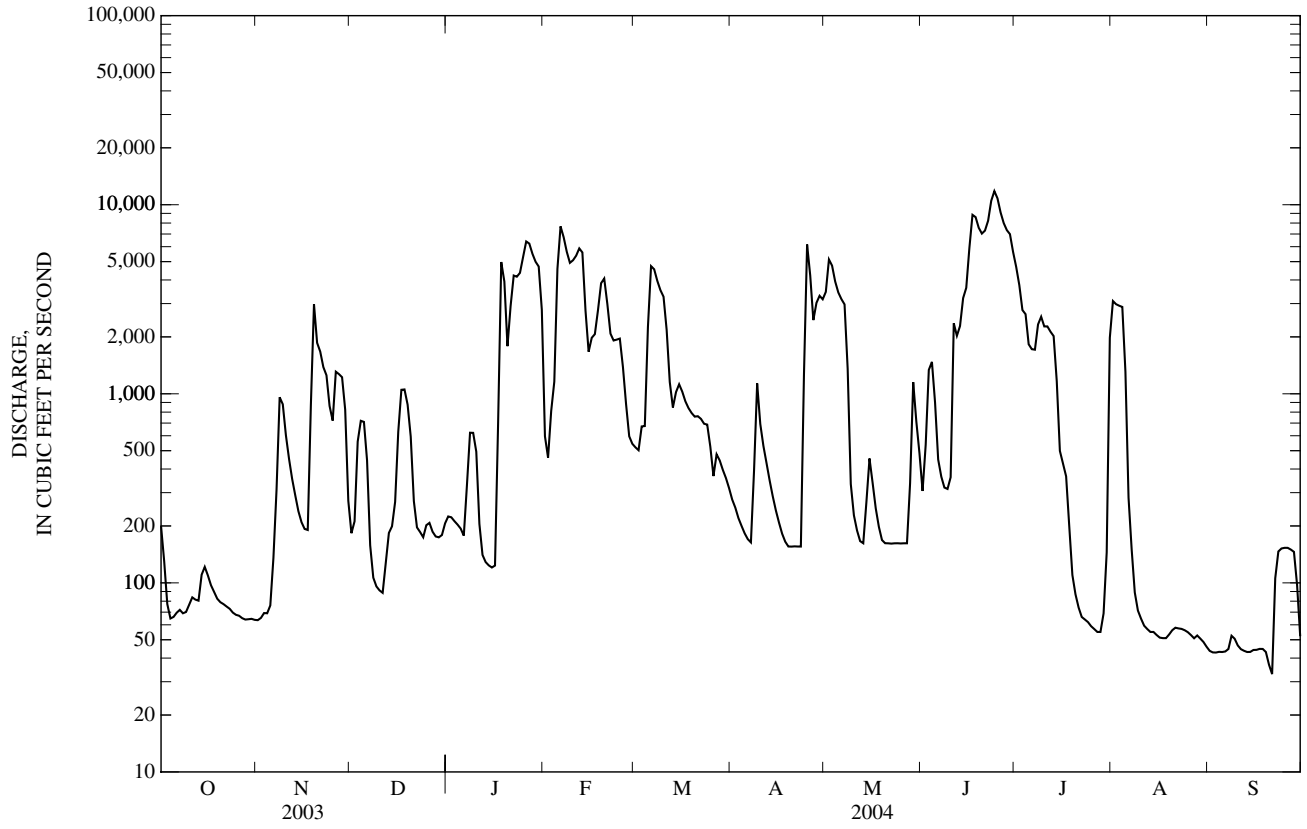
MEAN	1,063	2,220	2,887	2,131	2,620	3,060	2,378	2,866	1,920	443	292	645
MAX	4,453	8,381	10,320	7,746	5,513	7,730	7,843	8,976	6,044	2,058	2,299	6,992
(WY)	(1985)	(1997)	(1972)	(1998)	(1997)	(1973)	(2002)	(1990)	(1973)	(1992)	(1992)	(1974)
MIN	26.4	38.2	37.3	157	176	209	374	143	46.9	31.0	18.5	25.0
(WY)	(1979)	(1990)	(1990)	(1981)	(1976)	(1996)	(2003)	(1988)	(1972)	(1977)	(1972)	(1972)

e Estimated

07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1971 - 2004	
ANNUAL TOTAL	238,736		495,020			
ANNUAL MEAN	654		1,353		a1,872	
HIGHEST ANNUAL MEAN					3,424	1973
LOWEST ANNUAL MEAN					676	1976
HIGHEST DAILY MEAN	8,100	Jan 1	11,800	Jun 24	66,800	Dec 11, 1971
LOWEST DAILY MEAN	43	Aug 24	33	Sep 21	b7.8	Aug 14, 1976
ANNUAL SEVEN-DAY MINIMUM	43	Aug 22	42	Sep 15	11	Oct 15, 1972
MAXIMUM PEAK FLOW			12,000	Jun 24	103,000	Dec 10, 1971
MAXIMUM PEAK STAGE			24.68	Jun 24	39.39	Dec 10, 1971
ANNUAL RUNOFF (AC-FT)	473,500		981,900		1,356,000	
10 PERCENT EXCEEDS	1,730		4,570		5,950	
50 PERCENT EXCEEDS	236		318		567	
90 PERCENT EXCEEDS	65		55		47	

a Prior to regulation, water years 1947-68, 1,622 ft^3/s.
b Minimum daily discharge for period of record, 0.4 ft^3/s, Sept. 15-16, 21 to Oct. 1, 1956.



07338750 MOUNTAIN FORK AT SMITHVILLE, OK

LOCATION.--Lat 34°27'44", long 94°38'06", in SE ¼ SW ¼ sec.13, T.1 S., R.25 E., McCurtain County, Hydrologic Unit 11140108, on right downstream abutment of bridge on Highway 4, .5 mi east of Smithville, 0.6 mi downstream from Rock Creek, 3.5 mi upstream from Big Eagle Creek, and at mi 55.6.

DRAINAGE AREA.--320 mi^2.

PERIOD OF RECORD.--October 1991 to current year.

REVISED RECORDS.--WDR OK-99-2: 1994(M); 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 664.70 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 24	1430	13,400	14.56	Jul 3	1030	*28,500	*21.43
Jun 22	1730	18,100	16.53				

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

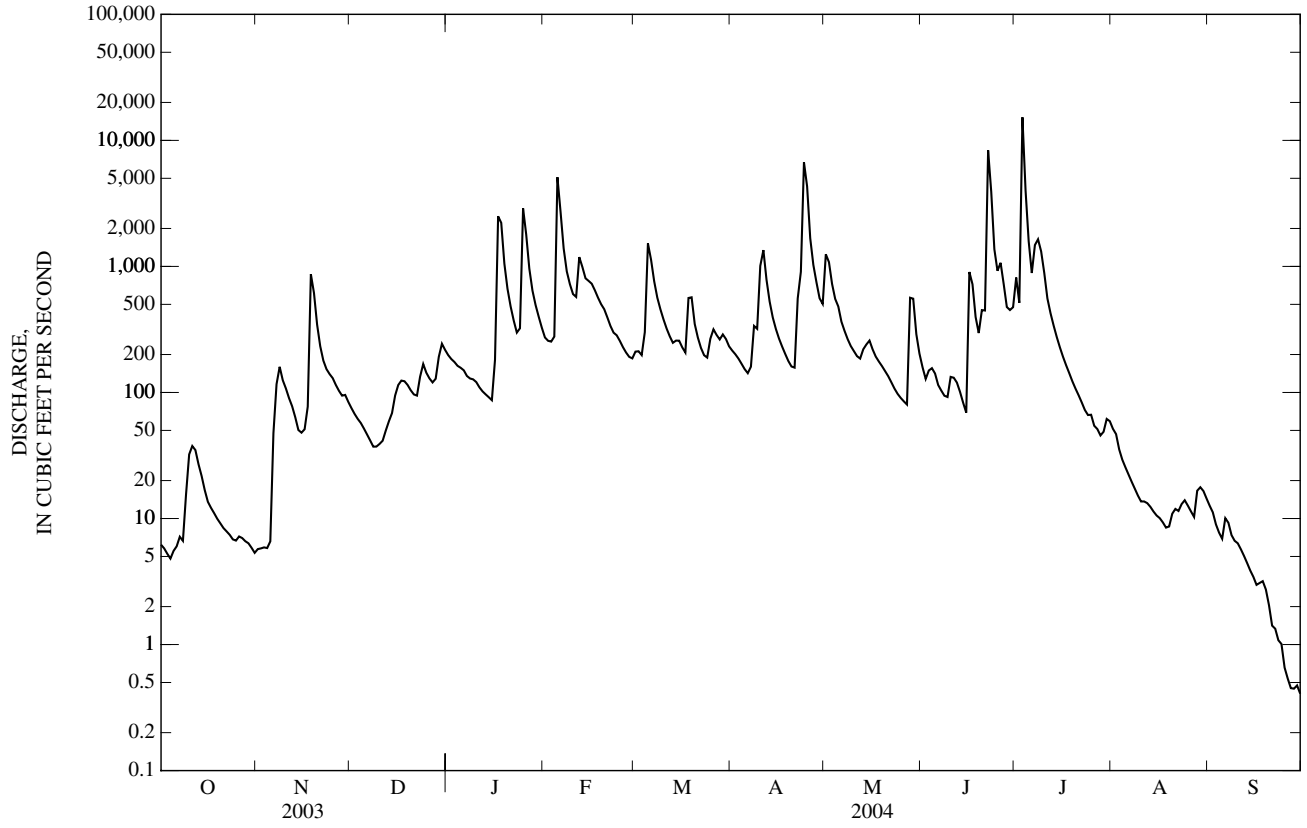
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.7	75	198	273	211	215	1,250	158	816	51	13
2	5.8	5.8	68	184	257	212	201	1,080	128	514	47	11
3	5.3	5.9	62	174	253	198	186	726	149	15,200	35	9.0
4	4.8	5.8	57	163	277	301	169	553	156	4,010	29	7.7
5	5.5	6.6	52	157	5,100	1,520	153	481	141	1,580	25	6.9
6	6.0	47	46	150	2,720	1,130	142	365	115	887	22	10
7	7.2	116	42	135	1,390	763	160	308	103	1,480	20	9.2
8	6.7	160	37	129	913	566	337	265	94	1,640	17	7.4
9	16	125	37	127	722	457	320	234	92	1,310	15	6.7
10	32	108	39	121	603	379	1,010	213	133	886	14	6.4
11	38	90	41	110	573	321	1,350	194	131	557	14	5.7
12	35	78	50	102	1,190	279	783	186	120	426	13	5.0
13	27	64	59	97	990	248	526	220	101	339	12	4.4
14	22	50	69	92	805	258	394	240	83	275	11	3.9
15	17	48	95	87	767	258	319	258	69	228	11	3.4
16	14	51	115	181	729	228	268	220	903	192	10	3.0
17	12	77	124	2,500	647	207	231	193	722	164	9.3	3.1
18	11	868	123	2,220	566	562	202	176	397	142	8.5	3.2
19	10	615	115	1,050	502	569	178	162	296	123	8.6	2.7
20	9.1	346	104	666	458	349	161	148	450	107	11	2.0
21	8.4	233	97	483	394	273	157	135	447	95	12	1.4
22	7.9	179	94	372	337	226	557	120	8,350	83	11	1.3
23	7.4	153	133	299	298	197	907	107	3,910	73	13	1.1
24	6.8	140	168	323	284	189	6,710	98	1,370	66	14	1.0
25	6.7	130	143	2,890	257	267	4,320	90	924	67	13	0.66
26	7.2	115	129	1,790	229	317	1,670	85	1,070	54	11	0.54
27	7.0	103	120	961	207	286	1,030	80	722	51	10	0.45
28	6.6	94	128	643	192	263	748	564	476	46	17	0.45
29	6.4	96	192	494	186	289	559	555	451	49	18	0.47
30	5.9	84	244	399	---	265	504	290	475	62	17	0.41
31	5.3	---	218	327	---	232	---	203	---	59	14	---
TOTAL	366.2	4,199.8	3,076	17,624	22,119	11,820	24,467	9,799	22,736	31,581	533.4	131.48
MEAN	11.8	140	99.2	569	763	381	816	316	758	1,019	17.2	4.38
MAX	38	868	244	2,890	5,100	1,520	6,710	1,250	8,350	15,200	51	13
MIN	4.8	5.7	37	87	186	189	142	80	69	46	8.5	0.41
AC-FT	726	8,330	6,100	34,960	43,870	23,440	48,530	19,440	45,100	62,640	1,060	261

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	469	771	1,094	769	822	836	662	624	475	217	39.5	184
MAX	1,936	1,814	2,351	1,417	2,208	1,886	1,443	1,397	1,825	1,019	158	1,525
(WY)	(1999)	(1997)	(2002)	(1998)	(2001)	(2002)	(2002)	(1993)	(2000)	(2004)	(1996)	(1992)
MIN	7.69	8.97	99.2	190	129	271	165	97.1	78.4	8.01	5.90	4.38
(WY)	(2000)	(1996)	(2004)	(2000)	(1996)	(1996)	(2003)	(1997)	(2001)	(1998)	(2000)	(2004)

07338750 MOUNTAIN FORK AT SMITHVILLE, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	75,509.2		148,452.88			
ANNUAL MEAN	207		406		579	
HIGHEST ANNUAL MEAN					821	1999
LOWEST ANNUAL MEAN					214	1996
HIGHEST DAILY MEAN	3,210	Mar 19	15,200	Jul 3	33,700	Oct 6, 1998
LOWEST DAILY MEAN	4.8	Oct 4	0.41	Sep 30	0.12	Aug 31, 1995
ANNUAL SEVEN-DAY MINIMUM	5.5	Aug 23	0.57	Sep 24	0.57	Sep 24, 2004
MAXIMUM PEAK FLOW			28,500	Jul 3	46,500	Oct 6, 1998
MAXIMUM PEAK STAGE			21.43	Jul 3	30.40	Oct 6, 1998
ANNUAL RUNOFF (AC-FT)	149,800		294,500		419,500	
10 PERCENT EXCEEDS	555		886		1,180	
50 PERCENT EXCEEDS	102		142		202	
90 PERCENT EXCEEDS	7.3		6.7		9.2	



07338905 MOUNTAIN FORK AT HIGHWAY 259A NEAR BROKEN BOW, OK

LOCATION.--Lat 34°08'15", long 94°41'16", in SE ¼ NE ¼ sec.9, T.5 S., R.25 E., McCurtain County, Hydrologic Unit 11140108, on right upstream abutment of bridge on State Highway 259A, 1.0 mi below Broken Bow Dam, 8.0 mi northeast of Broken Bow, and at mile 17.5.

PERIOD OF RECORD.--June 1996 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1996 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 25.5°C Sept. 14, 1997; minimum, 0.3°C Jan. 27, 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 25.2°C July 13; minimum, 2.2°C Jan. 31, Feb. 8.

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	20.0	18.1	19.1	20.7	19.0	19.8	12.4	9.2	10.3	10.0	7.6	8.7
2	20.1	18.0	18.9	20.2	19.3	19.7	11.6	9.2	10.1	12.7	10.0	11.6
3	19.7	17.8	18.8	20.8	19.0	19.8	11.6	9.8	10.3	14.3	12.3	13.2
4	20.1	17.5	18.8	20.5	19.5	20.0	11.9	8.9	10.0	13.7	10.0	12.7
5	19.8	18.6	19.3	21.1	20.0	20.4	9.6	7.3	8.7	10.0	6.0	8.1
6	20.4	19.0	19.6	20.2	17.9	18.9	9.8	6.1	7.5	6.7	3.2	4.7
7	20.5	19.0	19.6	17.9	16.2	17.1	9.6	5.6	7.3	5.3	2.7	3.7
8	21.0	19.3	20.1	16.2	15.1	15.7	11.8	7.5	9.6	5.3	3.8	4.6
9	20.9	19.9	20.3	15.1	14.6	14.9	12.8	8.6	11.4	7.6	4.2	5.4
10	20.8	19.3	20.1	15.2	14.4	14.7	9.2	6.1	7.6	7.9	4.0	5.4
11	21.9	19.9	20.8	16.6	14.7	15.7	9.0	5.3	6.9	7.7	3.8	5.4
12	21.5	20.5	20.9	18.4	16.5	17.4	7.4	5.2	6.1	8.1	4.4	6.2
13	21.4	20.0	20.6	17.4	14.0	15.5	7.2	6.0	6.6	8.6	6.6	7.7
14	20.9	19.0	20.2	14.7	13.4	13.9	8.7	6.1	6.8	10.6	8.0	9.0
15	20.1	17.7	18.9	14.9	13.4	14.2	9.8	6.2	7.9	11.0	8.3	9.3
16	20.7	18.2	19.4	17.5	14.9	15.9	9.0	5.9	7.6	9.5	8.5	8.9
17	20.4	18.8	19.6	18.1	16.6	17.4	8.4	5.0	6.2	10.4	8.9	9.8
18	20.7	18.0	19.2	18.6	14.9	17.1	7.7	5.0	6.0	10.7	7.2	9.7
19	21.1	18.6	19.8	16.7	13.6	14.8	7.8	4.7	5.8	8.1	4.9	6.2
20	21.5	18.9	20.0	15.8	12.2	13.8	8.0	4.4	5.8	7.2	3.7	4.9
21	22.0	19.2	20.3	16.0	12.2	13.8	8.7	4.7	6.6	7.4	3.1	4.8
22	21.5	19.4	20.4	17.0	13.9	15.4	9.6	7.2	8.7	8.2	3.9	5.5
23	21.4	19.4	20.5	16.6	11.3	14.7	9.7	7.5	8.7	8.6	4.3	6.3
24	21.4	19.5	20.5	12.3	9.1	10.4	9.4	6.5	7.4	8.8	7.6	8.3
25	21.1	19.9	20.5	10.8	7.2	8.9	8.3	5.2	6.4	11.9	8.7	10.0
26	19.9	17.9	18.8	12.4	9.2	10.7	8.7	5.9	7.0	10.5	4.8	8.6
27	18.3	16.1	17.2	13.9	10.4	12.4	10.3	7.7	9.1	7.1	2.6	4.6
28	17.8	16.1	16.9	11.4	8.6	9.9	10.7	9.8	10.2	7.6	3.1	4.7
29	17.5	15.8	16.8	10.7	7.2	8.7	10.2	7.3	8.9	5.8	3.4	4.7
30	18.0	16.4	17.2	11.4	7.2	8.9	9.1	5.7	7.0	6.3	3.6	4.7
31	19.1	17.8	18.3	---	---	---	8.9	5.1	6.7	6.5	2.2	4.1
MONTH	22.0	15.8	19.4	21.1	7.2	15.0	12.8	4.4	7.9	14.3	2.2	7.1

07338905 MOUNTAIN FORK AT HIGHWAY 259A NEAR BROKEN BOW, OK—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	8.2	3.2	5.4	14.6	8.7	11.4	18.4	16.1	17.3	19.2	17.1	18.5
2	6.1	3.9	5.5	14.3	9.6	11.9	18.9	16.5	17.8	19.1	15.9	17.3
3	8.3	2.7	5.1	13.6	12.7	13.1	19.7	17.1	18.4	18.7	16.5	17.7
4	5.6	4.3	4.9	14.1	13.2	13.6	19.3	17.5	18.4	20.6	16.9	18.6
5	7.0	5.6	6.4	15.1	13.3	14.1	18.9	17.2	18.0	21.0	18.4	19.7
6	6.6	4.1	5.8	15.2	12.9	14.1	18.5	16.5	17.5	22.1	19.5	20.8
7	6.5	2.5	4.1	15.4	13.2	14.2	18.4	17.2	17.8	22.9	20.6	21.7
8	7.0	2.2	4.3	14.7	12.5	13.7	18.9	16.8	17.9	22.9	21.8	22.4
9	5.9	4.8	5.2	14.8	12.7	13.7	19.8	17.7	18.8	23.4	21.8	22.6
10	8.8	4.3	6.0	14.5	12.3	13.6	19.7	18.4	18.9	23.6	21.8	22.7
11	6.3	5.8	6.1	14.2	12.4	13.2	18.4	16.4	17.1	23.1	22.0	22.6
12	8.0	5.1	6.2	14.3	12.5	13.3	16.4	15.7	16.0	22.6	21.4	22.0
13	7.5	4.2	5.6	13.4	12.2	12.6	16.6	14.4	15.4	21.4	19.7	20.9
14	5.9	2.7	4.3	14.3	11.9	12.9	16.7	13.4	15.1	19.7	18.0	18.7
15	7.8	3.1	5.0	13.9	13.0	13.3	17.2	14.2	15.7	19.3	17.9	18.6
16	8.6	4.3	6.1	13.7	12.3	13.0	18.0	16.0	16.8	20.8	19.3	19.9
17	10.4	5.4	7.4	16.0	12.0	13.7	19.7	16.8	18.2	21.1	20.3	20.7
18	10.7	5.8	8.1	15.1	14.4	14.6	19.9	18.4	19.1	21.6	20.6	21.0
19	12.2	7.3	9.2	16.4	14.4	15.2	19.6	18.9	19.2	22.3	21.1	21.7
20	12.7	9.6	10.8	17.8	15.9	16.8	19.2	18.4	18.7	22.9	21.5	22.2
21	13.2	8.5	10.3	18.1	15.7	16.9	18.5	17.8	18.1	24.1	22.1	23.0
22	13.0	8.7	10.4	17.4	15.4	16.5	19.5	17.8	18.5	24.7	23.0	23.8
23	13.5	9.6	11.1	17.9	15.1	16.4	19.3	18.7	18.9	24.3	23.3	23.7
24	13.0	10.4	11.7	17.2	16.2	16.3	19.3	17.8	18.7	23.7	22.9	23.3
25	11.6	9.2	10.1	17.0	16.0	16.4	18.4	17.0	17.6	22.9	20.0	21.4
26	12.3	7.6	9.5	18.1	16.7	17.2	19.1	16.9	18.0	20.0	18.3	19.1
27	13.1	7.4	9.6	18.4	17.2	17.8	20.5	17.3	18.7	19.0	17.8	18.3
28	12.0	8.0	9.8	18.5	17.9	18.2	20.1	18.5	19.4	19.1	17.5	18.4
29	10.5	9.3	9.8	19.7	16.8	18.1	19.8	18.7	19.0	20.9	19.1	20.1
30	---	---	---	19.5	17.5	18.4	19.5	18.2	18.7	20.7	19.4	19.9
31	---	---	---	18.7	16.3	17.5	---	---	---	19.8	18.2	19.1
MONTH	13.5	2.2	7.4	19.7	8.7	14.9	20.5	13.4	17.9	24.7	15.9	20.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.7	18.4	19.6	19.4	18.0	18.6	23.4	21.7	22.6	22.4	20.9	21.7
2	22.4	20.0	21.0	20.1	18.8	19.2	23.5	22.0	22.6	22.3	20.9	21.5
3	21.4	18.9	20.3	21.5	18.8	20.0	24.0	22.1	22.9	21.7	20.7	21.2
4	21.4	20.1	20.7	23.0	20.5	21.6	23.7	22.0	22.7	22.2	20.3	21.2
5	20.7	19.1	19.6	22.6	21.0	21.9	23.5	21.7	22.5	22.2	21.3	21.7
6	19.3	18.1	18.4	22.2	21.0	21.7	24.0	22.1	22.9	22.0	20.5	21.2
7	19.5	17.7	18.6	21.7	19.8	20.7	23.3	21.3	22.2	22.5	20.0	21.1
8	19.4	18.7	19.1	21.8	19.8	20.7	23.0	21.0	21.9	23.2	20.7	21.7
9	19.2	18.2	18.6	22.5	21.3	21.9	23.2	21.6	22.3	21.9	19.9	20.9
10	19.1	18.1	18.6	22.7	20.9	21.8	23.2	21.3	22.2	21.7	19.9	20.9
11	20.4	18.1	19.0	23.7	21.4	22.4	22.4	20.5	22.0	22.2	20.2	21.1
12	21.9	19.0	20.3	24.6	21.8	23.1	21.4	18.9	20.1	22.2	20.6	21.4
13	21.8	20.4	21.1	25.2	22.3	23.6	22.2	19.7	20.7	22.2	20.7	21.5
14	22.1	20.2	21.1	24.1	22.8	23.4	22.1	19.8	20.8	22.6	20.9	21.7
15	21.4	20.0	20.4	24.8	23.0	23.9	21.3	19.6	20.5	22.7	21.7	22.2
16	20.9	17.4	19.6	24.5	23.0	23.7	21.8	19.7	20.7	22.9	21.3	21.9
17	21.2	20.5	20.8	23.5	21.5	22.6	22.5	19.8	21.0	23.4	21.8	22.5
18	21.4	20.5	20.9	23.9	21.9	22.8	23.0	20.7	21.7	23.3	22.1	22.7
19	20.9	19.7	20.4	23.0	21.2	22.0	21.9	20.3	21.3	22.5	21.0	21.9
20	21.1	19.3	20.2	23.1	21.1	21.9	20.3	19.3	19.8	22.3	20.6	21.4
21	20.7	18.6	19.6	23.2	21.4	22.2	21.2	19.1	20.0	22.4	20.7	21.4
22	19.2	17.8	18.4	23.1	21.3	22.1	22.5	20.9	21.5	21.9	20.7	21.2
23	20.5	19.2	19.8	23.8	21.5	22.4	22.8	21.0	21.7	21.5	20.0	20.8
24	20.5	19.4	19.9	23.3	21.7	22.4	23.3	21.3	22.1	21.2	20.4	20.8
25	20.7	19.2	19.8	22.4	20.5	21.3	23.9	22.1	22.8	21.0	19.6	20.3
26	21.0	19.5	20.1	21.1	19.7	20.3	23.7	22.1	22.8	22.0	20.1	21.0
27	20.1	18.8	19.4	20.7	18.8	19.8	24.2	22.3	23.1	22.2	20.5	21.3
28	18.9	18.1	18.6	20.8	19.8	20.2	23.8	22.4	22.9	21.8	20.1	20.8
29	19.7	18.5	19.1	20.3	19.4	19.8	23.0	21.3	22.1	21.2	19.2	20.2
30	19.4	18.5	18.8	21.5	19.2	20.2	23.4	21.4	22.2	21.5	19.8	20.6
31	---	---	---	22.3	20.2	21.2	22.7	21.0	21.8	---	---	---
MONTH	22.4	17.4	19.7	25.2	18.0	21.6	24.2	18.9	21.8	23.4	19.2	21.3

07338960 MOUNTAIN FORK AT PRESBYTERIAN FALLS NEAR EAGLETOWN, OK

LOCATION.--Lat 34°04'21", long 94°37'42", in NE 1/4 NW 1/4 sec.31, T.5 S., R.26 E., McCurtain County, Hydrologic Unit 11140108, on right downstream bank, 4.0 mi northwest of Eagletown, 9.7 mi downstream from Broken Bow Dam, and at mile 11.3.

PERIOD OF RECORD.--July 1996 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum 27.7°C Aug. 30, 2003; minimum 2.9°C Jan. 1, 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 27.3°C July 20; minimum 5.7°C Feb. 13.

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	21.9	19.8	20.8	20.9	18.9	19.7	12.9	11.3	12.2	10.6	9.7	10.1
2	21.7	20.2	20.7	20.6	19.0	19.7	12.3	10.4	11.4	11.5	10.3	11.0
3	21.9	19.8	20.6	20.9	18.2	19.5	13.5	12.3	13.2	12.6	10.6	11.7
4	22.1	19.6	20.6	20.9	19.4	20.2	13.7	12.4	13.1	12.5	10.7	11.8
5	21.0	20.0	20.4	20.7	18.9	19.8	13.3	12.4	12.9	10.7	9.4	9.9
6	20.6	19.7	20.2	20.7	18.9	19.9	13.3	11.7	12.5	10.5	8.2	9.3
7	22.1	20.2	20.9	19.0	18.1	18.6	12.4	11.1	11.7	9.0	8.1	8.4
8	21.5	20.2	20.7	18.2	17.7	18.0	13.3	11.3	12.1	8.5	8.0	8.3
9	21.0	20.2	20.7	17.9	17.2	17.5	13.1	12.0	12.7	9.2	7.7	8.4
10	22.3	20.0	20.8	17.3	16.6	17.0	12.0	11.1	11.6	9.0	7.5	8.2
11	22.4	20.7	21.2	18.7	16.7	17.6	11.8	10.7	11.2	8.7	6.5	7.8
12	22.1	20.9	21.4	18.7	17.2	17.9	11.3	10.4	11.0	8.6	6.8	7.7
13	22.0	20.2	21.0	17.8	16.4	16.9	10.4	10.1	10.3	9.0	8.0	8.5
14	22.5	20.6	21.4	16.4	15.9	16.2	10.3	9.6	10.0	10.5	8.5	9.2
15	22.3	19.7	20.8	16.4	15.9	16.1	11.8	9.2	10.2	10.3	8.4	9.3
16	21.9	19.8	20.7	17.5	16.3	16.8	11.5	8.8	10.0	9.2	8.8	9.1
17	21.0	19.3	20.2	17.3	16.3	16.8	10.1	8.1	9.1	10.6	9.2	10.0
18	21.6	19.4	20.4	18.4	16.7	17.4	9.5	8.0	8.8	10.6	9.2	10.2
19	21.9	19.6	20.5	17.5	16.2	16.8	9.1	7.5	8.5	9.6	7.8	8.8
20	21.9	18.7	20.2	17.6	16.0	16.7	8.9	7.3	8.3	9.8	7.6	8.7
21	22.4	19.5	20.8	17.3	14.9	16.2	9.6	7.2	8.4	9.4	7.1	8.3
22	21.8	19.1	20.4	17.5	15.6	16.6	10.1	8.8	9.3	9.7	7.2	8.4
23	22.3	19.4	20.8	17.3	14.1	16.1	10.0	8.9	9.4	9.9	7.2	8.7
24	22.4	19.3	20.9	14.1	12.6	13.6	9.7	7.7	8.7	9.7	8.8	9.1
25	22.3	19.8	21.0	14.2	13.0	13.6	9.2	7.8	8.5	11.1	9.0	10.0
26	20.9	18.5	19.9	14.3	13.3	13.7	9.5	8.1	8.7	10.2	8.4	9.3
27	19.5	17.4	18.4	14.6	12.6	13.9	10.6	9.1	9.7	8.8	7.1	8.1
28	20.2	18.0	19.0	12.7	11.5	12.2	10.8	9.9	10.3	9.2	7.5	8.3
29	19.5	17.2	18.4	12.7	10.8	11.8	10.4	9.2	9.8	8.1	7.1	7.6
30	20.0	17.6	18.8	13.0	10.6	11.9	9.7	7.8	8.9	8.2	7.1	7.7
31	20.2	18.6	19.3	---	---	---	10.1	7.8	9.1	7.8	6.5	7.3
MONTH	22.5	17.2	20.4	20.9	10.6	16.6	13.7	7.2	10.4	12.6	6.5	9.0

07338960 MOUNTAIN FORK AT PRESBYTERIAN FALLS NEAR EAGLETOWN, OK—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	8.6	6.8	7.7	13.2	9.5	11.3	14.2	13.2	13.6	16.5	15.4	16.1
2	8.5	6.8	7.6	13.6	10.0	11.8	15.7	13.2	14.2	19.4	14.4	16.8
3	8.0	5.7	7.0	12.6	11.3	11.8	16.4	13.5	14.8	18.8	14.6	16.6
4	8.7	7.8	8.3	12.2	11.1	11.7	16.6	12.7	14.6	17.5	16.2	16.8
5	8.6	8.1	8.3	12.9	10.8	11.7	16.1	12.7	14.6	17.1	16.0	16.5
6	8.7	8.0	8.3	13.9	10.3	12.0	15.9	12.9	14.5	17.8	16.1	16.8
7	8.9	7.2	7.9	13.2	9.7	11.8	17.3	14.3	15.8	18.0	16.0	16.8
8	8.5	6.9	7.7	13.7	11.0	12.4	18.8	14.6	16.4	18.0	16.6	17.2
9	8.0	7.3	7.6	12.3	11.1	11.6	18.2	15.5	16.8	17.5	16.1	16.7
10	8.5	7.5	8.0	12.0	10.9	11.3	16.6	15.3	15.8	18.4	16.1	17.1
11	8.6	8.1	8.4	11.9	10.8	11.4	15.8	15.0	15.3	17.4	16.3	16.9
12	8.6	7.9	8.2	12.9	10.9	11.8	15.9	14.6	15.2	17.3	16.2	16.9
13	8.7	7.7	8.1	11.6	10.8	11.2	17.9	14.4	15.9	17.8	16.5	17.3
14	7.8	6.8	7.3	14.4	10.9	12.6	19.0	13.8	16.3	19.2	16.8	17.9
15	9.4	6.6	8.0	13.2	11.7	12.3	19.0	13.5	16.4	20.3	17.9	19.0
16	9.0	6.8	7.8	12.9	11.2	12.0	19.1	14.6	16.8	21.8	17.2	19.3
17	8.9	7.0	8.1	12.3	11.0	11.7	20.9	15.1	18.0	21.0	17.8	19.3
18	9.5	7.8	8.5	12.9	11.8	12.3	20.1	16.3	18.3	22.2	18.4	20.2
19	9.6	7.8	8.7	12.6	11.8	12.1	19.4	17.1	18.4	24.7	19.5	21.3
20	11.0	9.1	9.9	14.6	11.7	13.1	19.2	17.8	18.6	21.2	18.7	19.9
21	11.5	9.0	10.2	15.1	12.0	13.6	19.2	16.9	17.9	19.4	17.9	18.6
22	12.4	9.1	10.8	15.4	12.5	13.8	21.3	17.7	19.4	18.8	17.5	18.1
23	11.4	9.6	10.6	14.5	12.0	13.6	20.2	18.0	18.8	19.7	17.4	18.4
24	10.6	9.4	9.9	13.0	12.2	12.7	20.1	18.2	19.4	20.4	17.4	18.7
25	9.6	9.0	9.3	13.9	12.1	12.7	21.4	18.9	20.0	20.7	18.6	19.9
26	10.1	9.1	9.6	13.7	12.8	13.3	19.4	16.0	17.6	21.0	18.0	19.3
27	10.8	8.5	9.4	14.6	12.5	13.5	16.9	14.9	16.1	21.6	20.4	20.9
28	10.6	8.3	9.5	14.4	12.7	13.5	16.6	14.9	15.8	23.2	18.9	20.9
29	10.6	9.6	9.9	16.9	12.9	14.8	16.1	14.4	15.1	22.6	20.4	22.1
30	---	---	---	16.6	13.1	14.6	16.1	14.4	15.2	21.5	19.9	20.5
31	---	---	---	15.0	13.6	14.3	---	---	---	24.6	20.5	22.8
MONTH	12.4	5.7	8.6	16.9	9.5	12.5	21.4	12.7	16.5	24.7	14.4	18.6
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.0	21.2	22.9	20.9	20.4	20.7	25.2	21.2	22.8	24.0	21.6	22.7
2	24.1	19.6	21.6	21.0	19.9	20.7	25.7	21.4	23.7	24.8	21.9	23.1
3	25.3	22.6	23.8	22.5	20.6	21.2	25.5	22.1	23.4	24.8	22.4	23.4
4	23.7	20.7	22.2	22.1	20.9	21.4	25.4	22.4	24.2	25.0	22.4	23.4
5	23.8	21.5	22.6	21.4	20.6	20.9	24.6	21.7	23.1	25.2	22.8	23.8
6	22.1	19.6	20.8	21.4	20.4	20.9	24.6	22.2	23.4	24.5	22.8	23.4
7	23.5	19.7	21.4	22.2	20.3	21.2	24.0	21.8	22.6	24.6	22.2	23.4
8	24.3	21.5	23.1	22.3	21.2	21.7	24.5	21.3	22.4	24.4	21.8	22.8
9	21.5	19.4	20.1	21.7	21.1	21.4	25.5	22.2	23.3	23.8	21.0	22.2
10	22.1	20.2	21.3	22.4	21.3	21.6	25.5	22.8	23.9	24.0	21.4	22.1
11	23.4	18.8	20.7	22.4	21.2	21.7	24.0	22.4	23.3	23.7	20.6	21.8
12	23.6	21.2	22.4	22.3	21.3	21.9	24.3	21.3	22.7	23.6	20.5	21.6
13	21.9	19.0	20.6	23.5	21.6	22.2	23.7	21.0	22.1	23.3	20.4	21.7
14	24.2	18.5	21.1	22.9	21.3	21.9	23.6	20.6	21.7	23.7	21.4	22.4
15	24.6	21.2	23.3	23.6	21.2	22.1	22.7	20.5	21.6	24.6	22.2	23.0
16	24.4	20.1	22.4	22.7	21.6	21.9	21.6	19.5	20.3	25.5	22.7	24.0
17	24.6	22.6	23.4	24.1	21.5	22.7	23.3	20.3	21.3	26.3	23.1	24.1
18	23.5	19.0	21.8	25.4	22.5	23.8	23.9	20.8	22.2	24.2	21.6	22.9
19	21.6	18.9	20.2	25.9	21.3	23.4	22.5	20.9	21.9	23.4	21.1	22.3
20	23.6	20.0	21.4	27.3	23.2	24.9	22.2	20.9	21.4	23.1	21.0	21.8
21	22.8	19.6	21.0	25.0	22.2	23.7	22.6	20.1	21.2	23.4	20.9	21.8
22	21.9	19.8	20.7	23.9	21.4	22.4	22.9	20.2	21.4	23.6	21.2	22.2
23	21.2	19.7	20.3	24.5	21.6	22.6	23.4	20.9	21.8	24.4	21.6	22.5
24	20.2	19.3	19.9	25.6	21.6	23.0	24.2	21.0	22.4	22.7	21.2	22.2
25	20.6	19.4	20.0	24.6	22.7	23.6	23.6	20.8	22.1	23.1	20.7	21.8
26	21.9	19.7	20.4	23.7	22.2	22.7	24.7	22.0	23.2	23.4	20.6	21.6
27	20.1	18.7	19.6	24.0	21.1	22.2	24.7	22.4	23.4	23.2	20.4	21.6
28	20.7	19.1	20.0	22.5	20.5	21.4	24.9	22.7	23.6	22.4	20.4	21.2
29	21.0	20.4	20.6	21.7	20.2	20.9	25.7	23.4	24.2	22.7	20.2	21.1
30	20.8	20.1	20.6	23.4	20.5	22.0	25.1	22.9	23.7	22.6	20.1	21.1
31	---	---	---	24.5	20.4	21.9	24.6	21.7	23.1	---	---	---
MONTH	25.3	18.5	21.3	27.3	19.9	22.1	25.7	19.5	22.6	26.3	20.1	22.4

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK

LOCATION.--Lat 34°02'30", long 94°37'11", in SE ¼ SE ¼ sec.7, T.6 S., R.26 E., McCurtain County, Hydrologic Unit 11140108, on right downstream bank on U.S. Highway 70, 2.0 mi west of Eagletown, 10.7 mi downstream from Broken Bow Dam, and at mile 8.9.

DRAINAGE AREA.--787 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1924 to December 1925, October 1929 to current year. Published as Mountain Fork River near Broken Bow 1924-25 and as Mountain Fork River near Eagletown 1929-60. Monthly discharge only for some periods, pub- lished in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1241: 1924-26, 1930 (M), 1936-37 (M), 1938, 1939 (M) 1942 (M).

GAGE.--Water-stage recorder. Datum of gage is 333.87 ft above sea level. See WSP 1920 for history of changes prior to July 23, 1950.

REMARKS.--No estimated daily discharge. Records good. Flow completely regulated except for 33 mi^2 intervening area, since October 1968 by Broken Bow Lake (station 07338900). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 18-19, 1915, reached a stage of 26.4 ft, from information provided by local resident, discharge, 92,500 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	133	277	110	87	95	86	2,270	1,050	240	5,490	301	1,090
2	243	263	477	84	93	120	917	188	153	5,010	506	921
3	264	162	1,510	80	547	302	387	1,270	371	3,560	731	879
4	270	272	984	74	1,490	788	103	2,940	211	2,960	812	618
5	241	178	1,860	67	2,400	633	90	2,820	299	3,980	1,040	344
6	149	400	822	267	1,320	167	85	2,480	184	3,650	523	309
7	293	171	151	526	471	109	311	3,220	161	5,160	596	391
8	353	152	656	161	307	468	242	2,600	481	4,700	372	654
9	388	148	809	105	616	1,620	283	3,070	667	4,720	273	606
10	170	141	515	209	1,300	1,490	104	3,080	343	4,550	286	865
11	458	134	918	100	1,610	771	89	3,140	226	4,630	294	568
12	321	127	562	104	1,740	396	82	3,030	336	4,200	293	551
13	145	123	142	268	1,240	98	160	1,990	133	3,490	345	909
14	217	118	116	104	264	113	102	1,550	147	2,040	341	1,010
15	133	115	115	131	156	107	86	516	222	3,030	689	646
16	288	99	112	278	296	1,070	80	143	553	3,510	598	349
17	170	90	203	179	617	1,620	77	98	722	1,770	498	430
18	266	277	139	170	994	1,140	72	101	1,040	417	463	471
19	310	603	113	126	818	737	69	493	815	211	459	471
20	164	534	109	299	316	218	78	1,340	388	462	542	644
21	257	161	103	234	294	91	82	2,110	407	882	896	605
22	161	141	100	130	103	138	96	1,160	1,470	1,160	673	526
23	150	135	111	100	708	879	93	217	3,060	897	408	552
24	145	154	109	101	1,410	654	417	116	3,960	332	657	488
25	164	667	105	172	1,810	341	731	183	4,250	346	822	376
26	240	213	101	151	1,470	821	1,320	136	2,540	344	1,080	327
27	150	133	97	144	354	339	1,230	188	3,040	374	1,570	422
28	185	124	95	416	129	110	1,400	669	3,740	381	969	584
29	149	121	89	139	91	96	1,760	493	4,710	323	457	483
30	182	114	94	119	---	1,400	2,120	184	5,040	558	411	487
31	295	---	92	105	---	2,350	---	351	---	346	656	---
TOTAL	7,054	6,347	11,519	5,230	23,059	19,272	14,936	40,926	39,909	73,483	18,561	17,576
MEAN	228	212	372	169	795	622	498	1,320	1,330	2,370	599	586
MAX	458	667	1,860	526	2,400	2,350	2,270	3,220	5,040	5,490	1,570	1,090
MIN	133	90	89	67	91	86	69	98	133	211	273	309
AC-FT	13,990	12,590	22,850	10,370	45,740	38,230	29,630	81,180	79,160	145,800	36,820	34,860

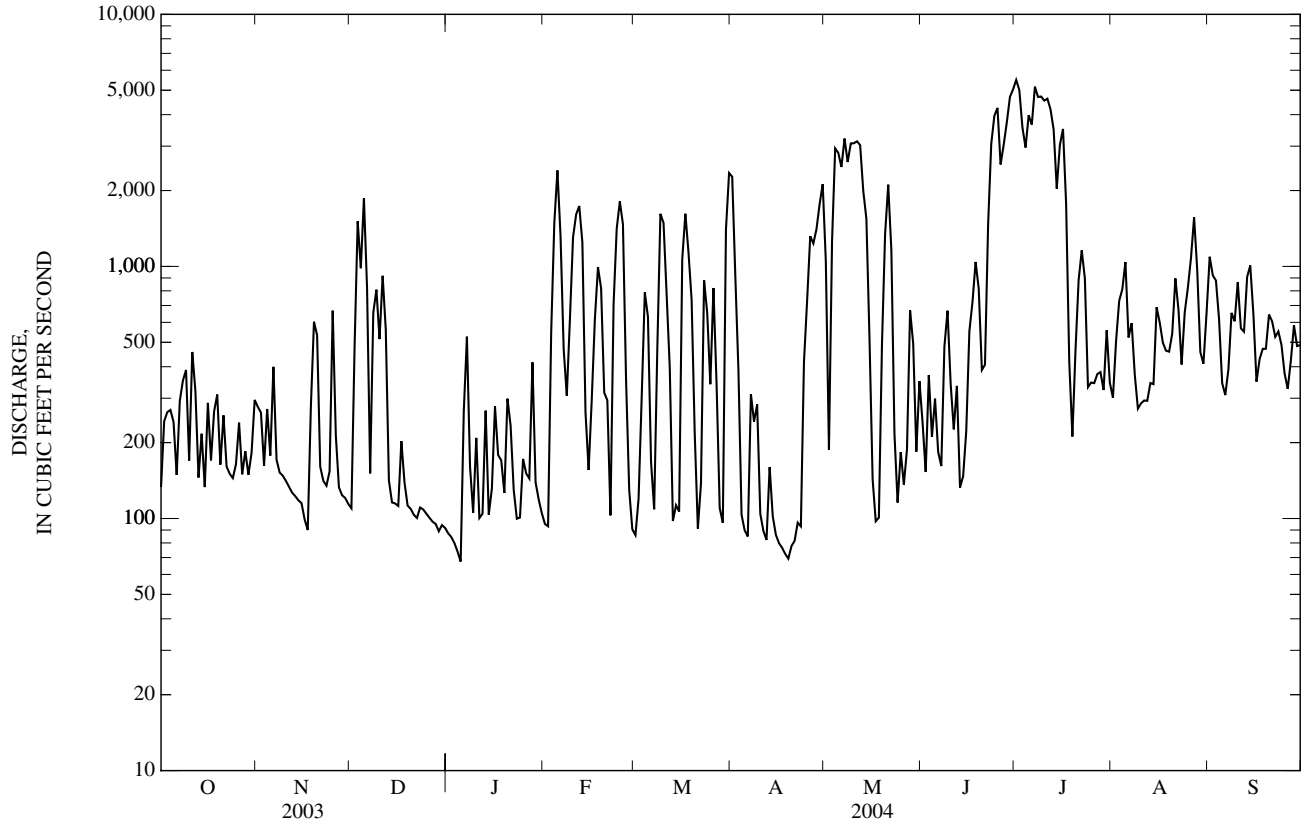
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	648	1,173	1,977	1,741	1,814	2,154	2,016	1,969	1,547	1,019	777	614
MAX	2,638	6,897	5,286	5,121	4,159	5,623	4,976	7,264	6,061	3,371	1,515	2,300
(WY)	(1994)	(1985)	(1997)	(1988)	(1989)	(1997)	(1979)	(1991)	(1990)	(1999)	(1983)	(1992)
MIN	136	110	154	166	292	348	306	313	219	155	238	155
(WY)	(1989)	(1996)	(1990)	(2000)	(1981)	(1996)	(1980)	(2003)	(1988)	(1988)	(1985)	(1989)

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	220,881		277,872			
ANNUAL MEAN	605		759		a1,453	
HIGHEST ANNUAL MEAN					2,468	1973
LOWEST ANNUAL MEAN					450	1996
HIGHEST DAILY MEAN	5,010	Jan 24	5,490	Jul 1	11,500	May 19, 1991
LOWEST DAILY MEAN	89	Dec 29	67	Jan 5	b16	Dec 12, 1971
ANNUAL SEVEN-DAY MINIMUM	96	Dec 25	78	Apr 15	68	Jan 12, 1996
MAXIMUM PEAK FLOW			8,590	Jun 29	c18,200	Jun 2, 1990
MAXIMUM PEAK STAGE			7.86	Jun 29	d11.58	Jun 2, 1990
ANNUAL RUNOFF (AC-FT)	438,100		551,200		1,052,000	
10 PERCENT EXCEEDS	1,730		2,110		3,970	
50 PERCENT EXCEEDS	297		344		657	
90 PERCENT EXCEEDS	126		101		154	

a Prior to regulation by Broken Bow Lake, 1925, 1930-68, 1,291 ft^3/s.
b No flow in several years prior to regulation by Broken Bow Lake.
c Maximum discharge for period of record, 101,000 ft^3/s May 20, 1960, from rating curve extended above 65,000 ft^3/s.
d Maximum gage-height for period of record, 26.73 ft May 20, 1960.



07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948, 1955, 1961-1963, October 1992 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1947 to September 1948, November 1960 to September 1963.
WATER TEMPERATURE: October 1947 to September 1948, March to September 1955, November 1960 to September 1963, October 1992 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 128 microsiemens Nov. 19, 1947; minimum daily, 21 microsiemens Jan. 1, 1948.
WATER TEMPERATURE: Maximum daily, 34.5°C July 29, 1955; minimum daily, 0.0°C several days in winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 26.4°C July 20; minimum 5.3°C Feb. 3.

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	20.3	18.7	19.4	19.7	17.3	18.5	12.5	10.0	11.0	10.1	8.1	9.0
2	20.2	17.8	19.0	19.4	17.1	18.1	10.9	9.9	10.4	11.6	9.5	10.6
3	20.0	17.4	18.7	20.1	17.9	18.6	12.4	10.1	11.6	12.9	10.6	11.6
4	20.0	17.3	18.7	19.7	17.6	18.6	12.6	10.9	11.8	13.2	10.5	12.1
5	19.9	18.3	18.9	20.2	18.4	19.2	12.4	10.9	11.6	10.5	7.9	9.4
6	20.2	18.5	19.1	18.7	17.5	18.1	12.1	10.4	11.2	9.0	6.5	7.8
7	21.3	18.0	19.4	17.7	16.0	16.8	11.3	9.7	10.5	8.4	6.9	7.4
8	20.2	18.3	19.3	16.4	15.4	15.8	12.3	9.8	10.9	7.4	6.9	7.2
9	20.0	18.4	19.0	16.0	14.9	15.5	12.0	10.7	11.4	8.4	6.6	7.4
10	21.1	18.9	19.8	16.4	15.0	15.5	10.9	9.3	10.1	8.2	6.3	7.2
11	21.0	18.5	19.6	17.7	15.1	16.2	10.9	9.0	9.9	8.4	6.0	7.1
12	20.3	19.1	19.7	17.9	16.4	17.1	10.1	9.3	9.6	8.0	5.9	7.0
13	21.5	19.6	20.2	16.6	14.7	15.6	9.4	8.5	9.1	8.1	7.1	7.6
14	20.5	18.4	19.5	14.9	14.1	14.5	10.0	8.1	8.7	10.1	7.7	8.5
15	20.6	18.0	19.0	14.9	14.1	14.5	10.2	8.0	9.0	9.6	7.7	8.5
16	20.1	17.4	18.8	16.9	14.5	15.5	9.7	8.1	9.1	8.8	8.1	8.4
17	20.3	18.5	19.4	17.2	15.5	16.4	8.4	6.7	7.8	9.6	8.2	9.0
18	19.6	17.3	18.5	17.3	15.7	16.4	9.1	7.4	8.0	10.1	8.6	9.6
19	19.7	17.2	18.6	16.0	14.3	15.2	8.8	6.7	7.6	9.2	7.1	8.0
20	20.4	18.1	19.1	16.1	14.3	15.2	8.8	6.2	7.3	8.4	6.3	7.4
21	20.2	17.6	19.0	16.2	14.1	15.0	8.8	6.2	7.4	8.0	6.4	7.4
22	20.8	18.8	19.6	16.6	14.4	15.5	9.2	7.7	8.5	8.9	6.6	7.6
23	20.8	18.1	19.2	16.4	13.4	15.5	9.8	8.0	8.8	9.4	6.5	7.8
24	21.8	18.1	19.6	13.7	10.7	12.0	9.5	7.1	8.0	9.2	8.0	8.7
25	21.1	19.0	19.6	13.0	10.9	12.1	8.5	6.7	7.4	11.1	8.7	9.7
26	19.3	16.7	18.4	12.9	11.8	12.3	8.6	6.9	7.7	10.1	7.7	9.2
27	17.5	15.5	16.4	13.8	11.5	12.9	9.7	7.9	8.8	8.0	5.9	6.8
28	18.3	15.7	16.8	12.0	9.6	11.0	10.1	9.4	9.7	8.4	6.3	7.3
29	19.0	16.5	17.4	11.1	8.9	10	10.2	8.2	9.3	7.4	6.4	6.9
30	18.7	16.6	17.6	12.1	9.0	10.3	9.2	7.1	8.0	7.4	6.2	6.7
31	19.2	17.4	18.3	---	---	---	9.3	6.5	7.8	7.1	5.8	6.4
MONTH	21.8	15.5	18.9	20.2	8.9	15.3	12.6	6.2	9.3	13.2	5.8	8.2

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK—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	7.9	5.8	6.8	12.5	8.8	10.3	13.8	12.1	12.8	15.4	14.2	14.8
2	7.7	6.2	7.2	12.8	9.7	11.1	15.8	12.4	13.9	17.8	13.6	15.3
3	7.2	5.3	6.2	12.2	11.0	11.8	15.6	12.5	14.1	18.7	15.4	16.5
4	7.5	6.3	7.0	11.6	10.2	11.2	17.6	13.8	15.2	16.9	14.9	15.7
5	7.7	6.9	7.3	12.1	10.0	11.0	16.4	13.8	15.0	16.2	14.6	15.3
6	7.7	6.8	7.3	13.3	10.0	11.5	16.4	13.2	14.7	17.8	14.9	15.8
7	7.8	6.1	6.9	13.5	10.8	11.8	16.4	14.3	15.4	17.2	14.6	15.7
8	7.3	5.7	6.6	13.0	9.9	11.4	17.5	14.1	15.9	17.3	15.5	16.2
9	7.2	6.4	6.9	11.9	9.8	10.9	18.3	14.9	16.6	16.9	14.9	15.6
10	7.9	6.2	7.0	11.6	9.5	10.4	17.4	15.5	16.8	17.5	14.9	15.9
11	7.8	7.0	7.4	11.3	9.5	10.4	15.6	14.3	14.8	16.6	14.8	15.9
12	8.4	6.9	7.4	11.9	10.0	10.9	15.3	13.7	14.3	16.2	14.8	15.5
13	7.9	6.4	7.1	11.6	10.2	11.0	15.9	13.3	14.5	17.0	15.1	16.0
14	7.3	5.8	6.5	13.0	10.1	11.4	17.5	13.7	15.5	18.1	15.3	16.6
15	8.3	5.4	6.7	12.9	11.7	12.3	18.9	14.7	16.4	20.5	16.3	18.2
16	8.4	6.6	7.4	12.3	10.8	11.4	19.7	15.7	17.2	21.8	18.3	19.7
17	8.5	6.3	7.5	12.0	10.0	10.9	20.7	16.1	18.1	22.2	18.8	19.9
18	9.4	6.6	7.9	12.1	10.8	11.4	20.7	17.5	18.9	22.8	18.9	20.4
19	9.5	7.1	8.1	12.1	10.9	11.6	19.5	17.9	18.6	24.1	19.8	21.3
20	10.1	8.3	9.2	13.5	11.0	12.3	18.6	17.4	18.0	21.2	17.9	19.1
21	10.3	8.0	9.2	15.1	12.2	13.6	20.3	17.7	18.8	18.7	16.6	17.6
22	12.1	8.7	10.1	15.8	12.4	13.8	21.8	18.5	19.9	18.9	16.2	17.4
23	10.9	9.5	10.3	14.4	12.0	13.2	20.9	19.3	20.1	19.1	16.6	17.7
24	9.7	8.4	9.2	12.2	11.2	11.8	20.0	18.0	18.7	21.1	18.3	19.3
25	9.3	8.1	8.5	14.1	11.8	12.8	20.3	18.1	19.0	19.6	17.9	19.0
26	10.0	7.9	8.8	14.1	11.8	12.8	19.1	15.6	17.2	22.1	19.1	20.1
27	10.4	7.5	9.0	14.7	12.0	13.3	16.6	14.0	15.3	21.0	18.9	20.0
28	9.7	7.8	8.7	15.5	13.8	14.6	16.2	13.8	14.9	22.0	19.7	20.6
29	9.7	8.5	9.2	16.5	12.8	14.5	14.9	13.4	14.4	22.6	19.9	21.2
30	---	---	---	15.9	12.8	14.4	15.2	13.3	14.1	22.0	20.2	21.2
31	---	---	---	14.8	12.5	13.4	---	---	---	---	---	---
MONTH	12.1	5.3	7.8	16.5	8.8	12.0	21.8	12.1	16.3	24.1	13.6	17.8
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	19.8	19.3	19.6	24.4	20.7	22.6	23.7	21.1	22.2
2	---	---	---	19.9	19.0	19.6	25.2	21.4	23.3	24.1	21.5	22.5
3	---	---	---	21.6	19.4	20.2	24.9	21.9	23.3	24.1	22.0	22.8
4	---	---	---	21.8	19.9	20.6	25.0	22.0	23.4	24.7	22.4	23.4
5	---	---	---	20.8	19.8	20.2	24.2	21.2	22.6	24.8	22.3	23.5
6	---	---	---	20.9	19.9	20.2	24.4	22.2	23.3	24.3	22.5	23.4
7	---	---	---	21.2	19.7	20.2	24.2	21.8	22.8	24.4	22.2	23.2
8	---	---	---	21.5	20.1	20.7	23.8	20.9	22.4	23.9	21.5	22.7
9	---	---	---	21.0	20.2	20.5	24.6	21.4	23.0	23.4	20.9	22.1
10	---	---	---	22.0	20.3	20.8	25.4	22.0	23.7	23.3	20.6	21.7
11	---	---	---	21.8	20.4	20.9	24.7	22.7	23.2	23.2	20.4	21.7
12	---	---	---	22.0	20.4	21.1	23.9	21.5	22.6	23.4	20.1	21.4
13	---	---	---	22.9	20.6	21.4	23.7	21.2	22.4	22.6	20.1	21.0
14	---	---	---	21.3	20.5	20.9	22.8	20.3	21.6	23.2	20.7	21.7
15	---	---	---	22.8	20.5	21.3	22.7	20.5	21.4	23.9	21.9	22.7
16	---	---	---	22.2	20.6	21.2	21.9	19.8	20.7	24.3	21.9	23.1
17	---	---	---	23.7	20.7	21.9	22.8	19.3	20.9	25.2	23.0	24.0
18	---	---	---	24.1	21.9	23.0	23.9	20.2	21.8	24.3	22.2	23.2
19	---	---	---	25.6	23.1	24.1	22.1	20.7	21.5	23.8	21.3	22.3
20	---	---	---	26.4	22.5	24.3	21.8	20.6	21.1	23.3	20.5	21.6
21	---	---	---	24.9	22.3	23.7	22.2	20.2	21.0	23.0	20.6	21.6
22	---	---	---	24.2	21.0	22.2	22.7	20.4	21.4	23.4	20.6	21.9
23	20.4	19.2	19.6	24.5	21.0	22.5	22.8	20.2	21.5	23.7	20.8	22.1
24	19.8	18.9	19.3	23.7	21.2	22.5	24.1	20.8	22.2	22.1	21.2	21.7
25	20.1	18.9	19.3	24.3	22.0	23.1	23.4	20.6	21.9	22.0	20.6	21.4
26	20.9	19.1	19.7	23.3	22.1	22.6	24.6	21.2	22.5	22.8	20.4	21.6
27	19.3	18.1	18.9	23.6	21.0	22.2	24.4	21.6	22.5	22.2	20.0	21.2
28	20.0	18.1	19.1	22.2	20.4	21.3	24.0	22.2	23.0	21.7	20.3	21.1
29	20.0	19.3	19.6	21.9	20.2	20.9	25.1	22.3	23.5	21.9	19.4	20.6
30	19.8	19.2	19.5	22.9	20.1	21.5	24.9	22.4	23.6	21.8	19.6	20.7
31	---	---	---	23.7	20.6	22.2	24.5	21.8	22.9	---	---	---
MONTH	20.9	18.1	19.4	26.4	19.0	21.5	25.4	19.3	22.4	25.2	19.4	22.1

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COMANCHE COUNTY

WELL-IDENTIFICATION NUMBER.--343540098342001. Local number 01N-13W-04 BAA 1.

LOCATION.--Lat 34°35'36", long 098°34'22", Hydrologic Unit 11130203, 4.0 mi southeast of Cache.

GEOLOGIC UNIT.--Arbuckle Group.

WELL CHARACTERISTICS.--Test well, diameter 6 in., depth 997 ft.

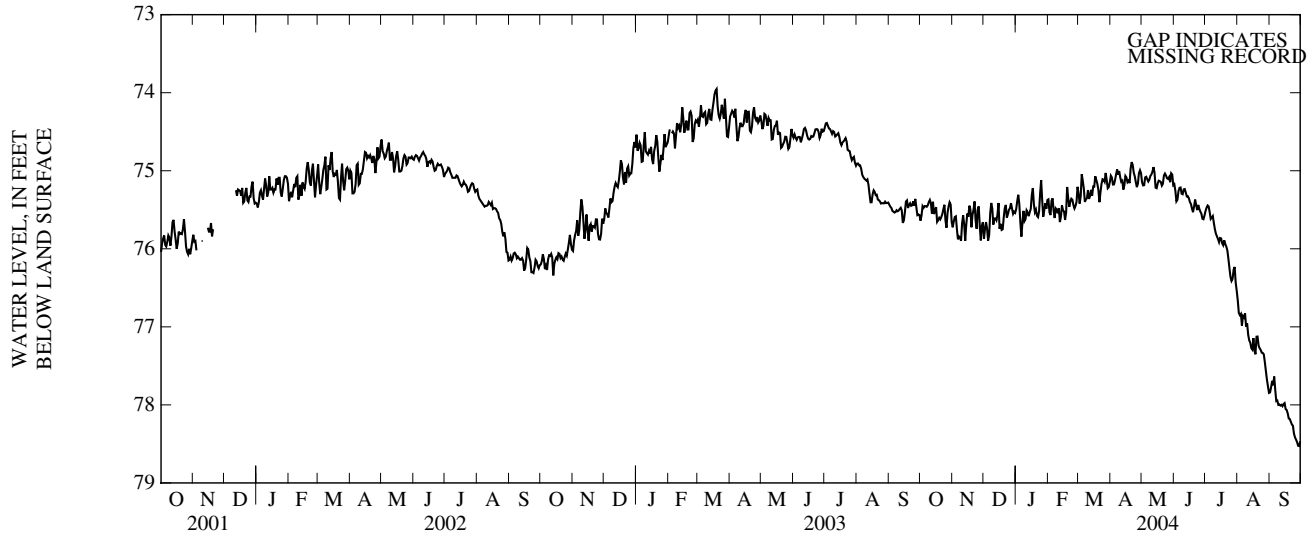
DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: top of casing 1.8 ft above land-surface datum.

PERIOD OF RECORD.--1972 to September 1995, October 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.33 ft below land-surface datum, June 1, 1993; lowest water level, 88.62 ft below land-surface datum, May 10, 1972.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75.64	75.72	75.87	75.49	75.37	75.30	75.06	75.15	75.17	75.52	76.66	77.84
2	75.57	75.65	75.75	75.39	75.53	75.42	75.09	75.19	75.26	75.47	76.82	77.78
3	75.45	75.59	75.66	75.31	75.57	75.33	75.18	75.18	75.39	75.45	76.85	77.69
4	75.47	75.58	75.74	75.43	75.38	75.04	75.18	75.09	75.37	75.46	76.83	77.75
5	75.45	75.75	75.89	75.66	75.35	75.13	75.12	75.08	75.26	75.53	76.98	77.64
6	75.45	75.88	75.82	75.84	75.51	75.23	75.05	75.11	75.22	75.62	76.86	77.81
7	75.46	75.84	75.55	75.66	75.61	75.40	74.98	75.14	75.21	75.60	76.88	77.95
8	75.44	75.86	75.41	75.51	75.48	75.37	75.05	75.11	75.29	75.58	76.83	77.95
9	75.40	75.90	75.48	75.64	75.50	75.35	75.00	75.07	75.30	75.67	77.00	78.00
10	75.37	75.67	75.69	75.62	75.54	75.25	75.08	75.05	75.24	75.75	76.96	77.99
11	75.42	75.57	75.61	75.51	75.48	75.36	75.14	75.01	75.23	75.81	77.10	78.01
12	75.55	75.69	75.61	75.53	75.66	75.32	75.13	74.95	75.28	75.84	77.17	78.00
13	75.40	75.90	75.64	75.58	75.59	75.24	75.24	75.03	75.33	75.88	77.20	78.02
14	75.55	75.69	75.56	75.53	75.44	75.32	75.18	75.22	75.33	75.92	77.27	77.99
15	75.51	75.55	75.41	75.49	75.51	75.20	75.07	75.22	75.35	75.86	77.29	77.98
16	75.47	75.59	75.74	75.31	75.52	75.20	75.09	75.17	75.40	75.87	77.14	78.05
17	75.65	75.45	75.68	75.22	75.63	75.07	75.15	75.13	75.43	75.93	77.29	78.07
18	75.63	75.50	75.76	75.43	75.54	75.12	75.13	75.13	75.49	75.95	77.35	78.11
19	75.60	75.72	75.75	75.53	75.21	75.17	75.16	75.14	75.53	75.89	77.13	78.17
20	75.62	75.56	75.60	75.50	75.35	75.24	74.97	75.19	75.45	75.94	77.12	78.18
21	75.59	75.50	75.48	75.58	75.46	75.40	74.89	75.17	75.37	75.97	77.24	78.22
22	75.56	75.39	75.44	75.59	75.40	75.28	74.92	75.06	75.44	76.02	77.27	78.25
23	75.49	75.64	75.60	75.52	75.36	75.17	75.03	75.04	75.50	76.13	77.30	78.27
24	75.44	75.74	75.56	75.29	75.37	75.11	75.07	75.06	75.44	76.25	77.33	78.37
25	75.63	75.50	75.50	75.12	75.44	75.12	75.15	75.10	75.49	76.36	77.33	78.42
26	75.73	75.46	75.48	75.38	75.48	75.14	75.21	75.10	75.52	76.41	77.35	78.44
27	75.54	75.71	75.42	75.59	75.45	75.03	75.17	75.08	75.55	76.39	77.45	78.48
28	75.46	75.89	75.49	75.50	75.40	75.12	75.03	75.15	75.61	76.27	77.57	78.52
29	75.40	75.70	75.55	75.42	75.21	75.22	74.99	75.03	75.62	76.23	77.68	78.53
30	75.43	75.66	75.53	75.49	---	75.21	75.03	75.05	75.57	76.43	77.76	78.47
31	75.66	---	75.54	75.37	---	75.15	---	75.19	---	76.54	77.85	---
MAX	75.73	75.90	75.89	75.84	75.66	75.42	75.24	75.22	75.62	76.54	77.85	78.53
MIN	75.37	75.39	75.41	75.12	75.21	75.03	74.89	74.95	75.17	75.45	76.66	77.64



OTTAWA COUNTY

WELL-IDENTIFICATION NUMBER.--365732094513201. Local number, 29N-23E-30 CDD 1.

LOCATION.--Lat 36°57'34", long 094°51'27", Hydrologic Unit 11070206, 2.2 mi southeast of Picher.

AQUIFER.-Boone Formation. Formerly published as Roubidoux Formation.

WELL CHARACTERISTICS.--Abandoned mine air shaft, diameter 8 in., depth 289 ft.

INSTRUMENTATION.--Submersible transducer interfaced to a data logger with a 30 min. update interval.

DATUM.-- Datum of gage is NAVD of 1988. Measuring point is top of casing, elevation 827.35 ft, top of casing is 1.0 ft above land surface.

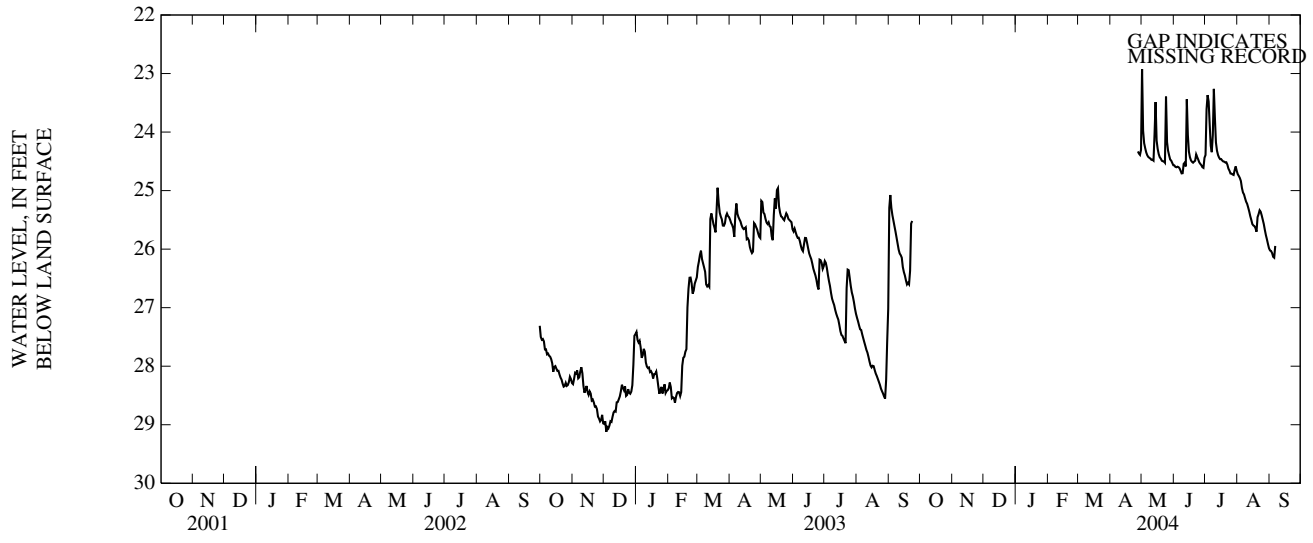
REMARKS.--Prior to 2002, records were published on land surface datum of 820 ft (from topo map). October 2002 to September 2003 records were published as water levels above NAVD 1988.

PERIOD OF RECORD.--September 1975 to September 1997, October 2002 to September 2003, April 2004 to current year. Mean daily water levels published April 1979 to September 1994, October 2002 to September 2003, April 2004 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 18.23 ft below land surface datum, Sept. 25, 1993; lowest, 170.70 ft below land surface datum, Sept. 9, 1975.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	22.91	24.57	24.39	24.72	26.02
2	---	---	---	---	---	---	---	23.98	24.59	23.61	24.75	26.03
3	---	---	---	---	---	---	---	24.19	24.60	23.37	24.79	26.07
4	---	---	---	---	---	---	---	24.27	24.59	23.48	24.84	26.13
5	---	---	---	---	---	---	---	24.35	24.60	23.87	24.96	26.15
6	---	---	---	---	---	---	---	24.40	24.62	24.23	25.03	25.95
7	---	---	---	---	---	---	---	24.43	24.66	24.34	25.07	---
8	---	---	---	---	---	---	---	24.44	24.71	24.05	25.13	---
9	---	---	---	---	---	---	---	24.45	24.70	23.26	25.19	---
10	---	---	---	---	---	---	---	24.47	24.54	23.75	25.23	---
11	---	---	---	---	---	---	---	24.47	24.52	24.18	25.29	---
12	---	---	---	---	---	---	---	24.49	24.59	24.32	25.36	---
13	---	---	---	---	---	---	---	24.04	23.44	24.39	25.43	---
14	---	---	---	---	---	---	---	23.49	24.05	24.43	25.50	---
15	---	---	---	---	---	---	---	24.15	24.33	24.46	25.57	---
16	---	---	---	---	---	---	---	24.29	24.43	24.46	25.60	---
17	---	---	---	---	---	---	---	24.38	24.48	24.48	25.61	---
18	---	---	---	---	---	---	---	24.43	24.51	24.50	25.64	---
19	---	---	---	---	---	---	---	24.45	24.52	24.51	25.70	---
20	---	---	---	---	---	---	---	24.49	24.50	24.52	25.45	---
21	---	---	---	---	---	---	---	24.50	24.49	24.52	25.40	---
22	---	---	---	---	---	---	---	24.50	24.38	24.56	25.34	---
23	---	---	---	---	---	---	---	24.52	24.43	24.62	25.36	---
24	---	---	---	---	---	---	---	23.39	24.47	24.66	25.42	---
25	---	---	---	---	---	---	---	24.17	24.52	24.71	25.50	---
26	---	---	---	---	---	---	---	24.32	24.54	24.71	25.57	---
27	---	---	---	---	---	---	24.33	24.40	24.57	24.72	25.67	---
28	---	---	---	---	---	---	24.37	24.47	24.60	24.73	25.76	---
29	---	---	---	---	---	---	24.39	24.49	24.61	24.65	25.83	---
30	---	---	---	---	---	---	24.30	24.53	24.44	24.59	25.91	---
31	---	---	---	---	---	---	---	24.57	---	24.66	25.98	---



PONTOTOC COUNTY

WELL-IDENTIFICATION NUMBER.--343457096404501. Local number 01N-06E-04 CAD 1.

LOCATION.--Lat 34°34'57", long 096°40'45", Hydrologic Unit 11140102, 3.3 mi southwest of Fittstown.

GEOLOGIC UNIT.--Arbuckle Group.

WELL CHARACTERISTICS.--Drilled oil test well, diameter 14 in., depth 396 ft.

DATUM.--Altitude of land-surface datum is 1,155 ft. Measuring point: base of recorder shelter 1.10 ft above land-surface datum.

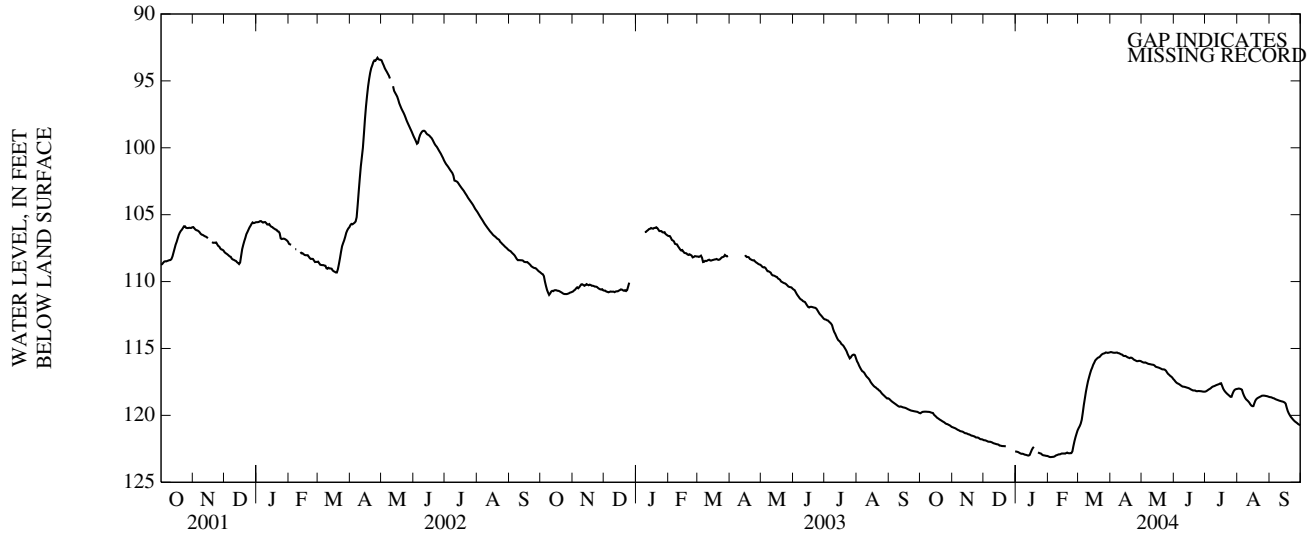
REMARKS.--Well originally 1,707 ft deep.

PERIOD OF RECORD.--December 1958 to August 1997, October 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest observed water level, 70.19 ft below land-surface datum, May 17, 1990; lowest water level, 128.23 ft below land-surface datum, Apr. 10, 1967.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119.84	120.89	121.86	122.71	123.07	120.95	115.27	116.00	117.36	118.22	118.02	118.64
2	119.78	120.92	121.86	122.72	123.11	120.81	115.29	116.04	117.47	118.18	118.00	118.65
3	119.74	120.95	121.89	122.75	123.12	120.62	115.31	116.06	117.55	118.12	118.01	118.68
4	119.73	120.99	121.92	122.80	123.11	120.33	115.32	116.04	117.61	118.07	118.04	118.71
5	119.72	121.04	121.96	122.84	123.10	119.80	115.32	116.07	117.64	118.02	118.08	118.73
6	119.72	121.09	121.97	122.87	123.09	119.22	115.31	116.11	117.69	117.97	118.33	118.78
7	119.73	121.12	121.97	122.87	123.06	118.73	115.31	116.15	117.75	117.90	118.53	118.82
8	119.74	121.17	122.00	122.89	123.00	118.24	115.35	116.16	117.81	117.85	118.68	118.84
9	119.74	121.19	122.03	122.93	122.98	117.83	115.36	116.18	117.85	117.82	118.80	118.87
10	119.75	121.21	122.08	122.95	122.94	117.45	115.40	116.20	117.86	117.79	118.87	118.90
11	119.78	121.24	122.10	122.96	122.91	117.16	115.44	116.21	117.87	117.75	118.95	118.93
12	119.81	121.29	122.12	123.00	122.92	116.88	115.47	116.23	117.90	117.72	119.04	118.95
13	119.83	121.33	122.15	123.00	122.88	116.62	115.55	116.27	117.92	117.69	119.16	118.97
14	119.95	121.34	122.17	122.96	122.85	116.44	115.56	116.36	117.94	117.66	119.26	119.00
15	120.03	121.37	122.19	122.77	122.86	116.22	115.56	116.39	117.97	117.62	119.31	119.04
16	120.10	121.42	122.25	122.58	122.85	116.07	115.60	116.41	118.02	117.60	119.31	119.12
17	120.18	121.43	122.26	122.44	122.86	115.89	115.66	116.43	118.06	117.80	119.08	119.41
18	120.23	121.47	122.29	122.35	122.82	115.81	115.69	116.47	118.10	118.00	118.88	119.67
19	120.29	121.52	122.30	---	122.78	115.73	115.72	116.50	118.14	118.14	118.77	119.85
20	120.34	121.52	122.30	---	122.82	115.67	115.69	116.55	118.14	118.24	118.71	119.99
21	120.38	121.56	122.30	---	122.83	115.65	115.70	116.57	118.14	118.33	118.67	120.11
22	120.44	121.58	122.32	122.77	122.83	115.55	115.75	116.56	118.19	118.40	118.62	120.21
23	120.48	121.64	---	122.81	122.82	115.47	115.83	116.60	118.20	118.47	118.59	120.30
24	120.53	121.66	---	122.84	122.69	115.41	115.87	116.67	118.18	118.54	118.54	120.39
25	120.60	121.66	---	122.86	122.30	115.38	115.91	116.80	118.18	118.61	118.53	120.46
26	120.64	121.69	---	122.94	121.93	115.36	115.95	116.90	118.19	118.61	118.52	120.52
27	120.66	121.75	---	122.98	121.64	115.30	115.95	116.97	118.20	118.38	118.54	120.58
28	120.71	121.78	---	122.99	121.37	115.31	115.92	117.05	118.22	118.20	118.55	120.65
29	120.74	121.79	---	123.01	121.13	115.33	115.93	117.10	118.23	118.09	118.56	120.69
30	120.80	121.82	---	123.03	---	115.31	115.95	117.17	118.23	118.05	118.59	120.74
31	120.86	---	122.69	123.04	---	115.29	---	117.29	---	118.03	118.62	---
MAX	120.86	121.82	---	---	123.12	120.95	115.95	117.29	118.23	118.61	119.31	120.74
MIN	119.72	120.89	---	---	121.13	115.29	115.27	116.00	117.36	117.60	118.00	118.64



WOODWARD COUNTY

WELL-IDENTIFICATION NUMBER.--361714099315101. Local number 21N-22W-23 BBB 1.

LOCATION.--Lat 36°17'25", long 99°31'58", Hydrologic Unit 11100203, 11.0 mi west of Sharon.

GEOLOGIC UNIT.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled test hole, diameter 6 in., depth 322 ft.

DATUM.--Altitude of land-surface datum is 2,335 ft. Measuring point: top of shelf 3 ft above land-surface datum.

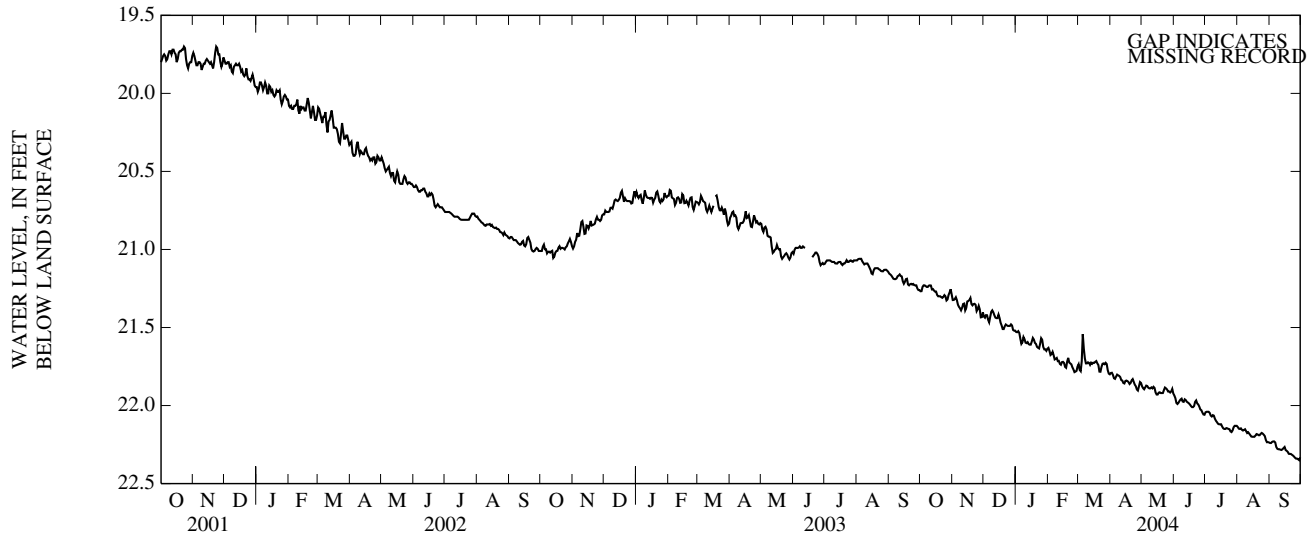
REMARKS.--Digital recorder installed Sept. 30, 1982, mean-daily water levels published thereafter, except Oct. 5, 1993 to Apr. 17, 1994 when bimonthly measurements were made. Satellite telemeter at station since July 10, 2000.

PERIOD OF RECORD.--1957 to 1963, 1965 to September 1995, July 2000 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest daily water level, 19.70 ft below land-surface datum, Oct. 21, 2001; lowest water level, 32.64 ft below land-surface datum, May 19, 1971.

DEPTH TO WATER LEVEL, FEET BELOW LAND SURFACE
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.27	21.32	21.43	21.53	21.63	21.74	21.79	21.88	21.94	22.04	22.14	22.24
2	21.27	21.32	21.44	21.53	21.65	21.77	21.79	21.89	21.95	22.04	22.15	22.24
3	21.24	21.32	21.42	21.52	21.68	21.78	21.80	21.90	21.98	22.04	22.15	22.23
4	21.23	21.31	21.42	21.54	21.67	21.72	21.83	21.88	21.99	22.04	22.15	22.23
5	21.23	21.32	21.45	21.57	21.66	21.54	21.83	21.87	21.98	22.05	22.16	22.23
6	21.23	21.35	21.47	21.60	21.68	21.64	21.81	21.87	21.97	22.06	22.16	22.24
7	21.24	21.37	21.43	21.59	21.70	21.70	21.80	21.89	21.96	22.07	22.16	22.27
8	21.24	21.38	21.40	21.56	21.70	21.73	21.81	21.89	21.96	22.06	22.15	22.28
9	21.23	21.39	21.39	21.57	21.70	21.73	21.81	21.89	21.97	22.06	22.16	22.28
10	21.23	21.37	21.40	21.60	21.72	21.72	21.82	21.88	21.98	22.08	22.18	22.28
11	21.23	21.35	21.42	21.60	21.71	21.73	21.84	21.89	21.96	22.10	22.17	22.28
12	21.26	21.35	21.44	21.59	21.73	21.74	21.84	21.88	21.97	22.11	22.18	22.28
13	21.25	21.39	21.44	21.61	21.74	21.73	21.86	21.89	21.98	22.12	22.19	22.28
14	21.26	21.37	21.44	21.61	21.72	21.73	21.86	21.92	21.98	22.12	22.20	22.27
15	21.27	21.33	21.42	21.61	21.72	21.73	21.84	21.93	21.99	22.12	22.20	22.27
16	21.27	21.33	21.44	21.59	21.73	21.73	21.84	21.93	21.99	22.12	22.20	22.29
17	21.29	21.32	21.47	21.57	21.75	21.72	21.84	21.92	22.00	22.13	22.20	22.29
18	21.30	21.31	21.49	21.58	21.76	21.71	21.85	21.91	22.01	22.15	22.19	22.30
19	21.30	21.35	21.51	21.60	21.72	21.73	21.86	21.92	22.01	22.15	22.18	22.31
20	21.30	21.36	21.51	21.61	21.69	21.74	21.86	21.92	22.00	22.15	22.18	22.31
21	21.31	21.35	21.49	21.62	21.72	21.78	21.84	21.92	21.98	22.14	22.19	22.31
22	21.31	21.35	21.48	21.63	21.73	21.78	21.83	21.90	21.97	22.15	22.19	22.32
23	21.30	21.35	21.49	21.63	21.74	21.75	21.85	21.88	21.99	22.15	22.18	22.32
24	21.29	21.40	21.49	21.60	21.75	21.73	21.87	21.89	21.99	22.15	22.18	22.33
25	21.30	21.38	21.49	21.57	21.77	21.73	21.88	21.90	22.01	22.17	22.18	22.33
26	21.33	21.36	21.49	21.58	21.79	21.73	21.90	21.91	22.02	22.17	22.19	22.34
27	21.32	21.38	21.48	21.62	21.78	21.73	21.90	21.91	22.03	22.16	22.20	22.34
28	21.29	21.43	21.49	21.64	21.78	21.73	21.88	21.92	22.05	22.14	22.22	22.34
29	21.27	21.43	21.52	21.64	21.75	21.77	21.85	21.91	22.06	22.13	22.23	22.35
30	21.25	21.40	21.52	21.65	---	21.80	21.86	21.89	22.06	22.13	22.23	22.33
31	21.29	---	21.52	21.64	---	21.80	---	21.92	---	22.13	22.24	---
MEAN	21.27	21.36	21.46	21.59	21.72	21.73	21.84	21.90	21.99	22.11	22.18	22.29
MAX	21.33	21.43	21.52	21.65	21.79	21.80	21.90	21.93	22.06	22.17	22.24	22.35
MIN	21.23	21.31	21.39	21.52	21.63	21.54	21.79	21.87	21.94	22.04	22.14	22.23



MISCELLANEOUS STATION WATER QUALITY ANALYSES

The following table contains data from the project "Reconnaissance Investigation of Pesticides and PCB's in Selected Fish Species from Lake Texoma, Oklahoma" conducted during the 2004 water year.

MISCELLANEOUS STATION ANALYSES

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Turbidity, NTU (00076)	Barometric pressure, mm Hg (00025)	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)	Aldrin, biota whl org wet wgt ug/kg (49353)	alpha-HCH, biota whl org wet wgt ug/kg (49366)	alpha-HCH-d6, surrog, biota whl org pct rcv (49261)	beta-HCH, biota whl org wet wgt ug/kg (49365)
340058096334501 06S-07E-22 CDA 1 (LAT 34 00 58N LONG 096 33 45W)													
MAY 2004													
24...	0801	1028	80020	7.2	769	110	8.0	1,420	24.9	<5	<5	110	<5
24...	0802	1028	80020	7.2	769	110	8.0	1,420	24.9	<5	<5	110	<5
24...	0803	1028	80020	7.2	769	110	8.0	1,420	24.9	<5	<5	89	<5
335612096332401 07S-07E-26 BAA 1 (LAT 33 56 12N LONG 096 33 24W)													
MAY 2004													
24...	1101	1028	80020	4.6	771	113	8.4	1,750	24.6	<5	<5	110	<5
24...	1102	1028	80020	4.6	771	113	8.4	1,750	24.6	<5	<5	96	<5
24...	1103	1028	80020	4.6	771	113	8.4	1,750	24.6	<5	<5	97	<5
335547096405501 07S-05E-21 CAD 1 (LAT 33 55 47N LONG 096 40 55W)													
MAY 2004													
25...	0701	1028	80020	8.5	766	108	8.3	1,870	24.8	<5	<5	85	<5
25...	0702	1028	80020	8.5	766	108	8.3	1,870	24.8	<5	<5	100	<5
25...	0703	1028	80020	8.5	766	108	8.3	1,870	24.8	<5	<5	87	<5
335303096471801 07S-05E-32 ACC 1 (LAT 33 53 03N LONG 096 47 18W)													
MAY 2004													
25...	1101	1028	80020	5.2	769	118	8.3	2,320	24.7	<5	<5	100	<5
25...	1102	1028	80020	5.2	769	118	8.3	2,320	24.7	<5	<5	110	<5
25...	1103	1028	80020	5.2	769	118	8.3	2,320	24.7	<5	<5	100	<5

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	cis-Chlordane, biota whl org wet wgt ug/kg (49380)	cis-Nonachlor, biota whl org wet wgt ug/kg (49359)	DCPA, biota whl org wet wgt ug/kg (49378)	delta-HCH, biota whl org wet wgt ug/kg (49364)	Dieldrin, biota whl org wet wgt ug/kg (49371)	Endrin, biota whl org wet wgt ug/kg (49370)	Heptachlor epoxide biota whl org wet wgt ug/kg (49368)	Heptachlor, biota whl org wet wgt ug/kg (49369)	Hexachlorobenzene biota whl org wet wgt ug/kg (49367)	Lindane biota whl org wet wgt ug/kg (49363)	Lipids biota whl org wet wgt percent (49289)	Mirex, biota whl org wet wgt ug/kg (49360)	o,p-' DDD, biota whl org wet wgt ug/kg (49374)
340058096334501 06S-07E-22 CDA 1 (LAT 34 00 58N LONG 096 33 45W)													
MAY 2004													
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.6	<5	<5
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	8.1	<5	<5
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	3.3	<5	<5
335612096332401 07S-07E-26 BAA 1 (LAT 33 56 12N LONG 096 33 24W)													
MAY 2004													
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1.3	<5	<5
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.8	<5	<5
24...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	4.6	<5	<5
335547096405501 07S-05E-21 CAD 1 (LAT 33 55 47N LONG 096 40 55W)													
MAY 2004													
25...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.4	<5	<5
25...	E4	E5	<5	<5	<5	<5	<5	<5	<5	<5	6.9	<5	<5
25...	E3	<5	<5	<5	<5	<5	<5	<5	<5	<5	3.3	<5	<5
335303096471801 07S-05E-32 ACC 1 (LAT 33 53 03N LONG 096 47 18W)													
MAY 2004													
25...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1.9	<5	<5
25...	E4	E4	<5	<5	<5	<5	<5	<5	<5	<5	7.5	<5	<5
25...	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	4.6	<5	<5

MISCELLANEOUS STATION WATER QUALITY ANALYSES—Continued

MISCELLANEOUS STATION ANALYSES—CONTINUED

Date	o,p-' DDE, biota whl org wet wgt ug/kg (49373)	o,p-' DDT, biota whl org wet wgt ug/kg (49377)	o,p-' Methoxychlor, biota whl org wet wgt ug/kg (49362)	Oxychlordane, biota whl org wet wgt ug/kg (49357)	p,p-' DDD, biota whl org wet wgt ug/kg (49375)	p,p-' DDE, biota whl org wet wgt ug/kg (49372)	p,p-' DDT, biota whl org wet wgt ug/kg (49376)	p,p-' Methoxychlor, biota whl org wet wgt ug/kg (49361)	PCBs, biota whl org wet wgt ug/kg (49354)	Pentachloroanisole biota whl org wet wgt ug/kg (49356)	Toxaphene, biota whl org wet wgt ug/kg (49355)	trans-Chlordane, biota whl org wet wgt ug/kg (49379)	trans-Nonachlor, biota whl org wet wgt ug/kg (49358)
340058096334501 06S-07E-22 CDA 1 (LAT 34 00 58N LONG 096 33 45W)													
MAY 2004													
24...	<5	<5	<5	<5	<5	23	<5	<5	<50	<5	<200	<5	<5
24...	<5	<5	<5	<5	E4	89	<5	<5	<50	<5	<200	<5	7
24...	<5	<5	<5	<5	<5	11	<5	<5	<50	<5	<200	<5	<5
335612096332401 07S-07E-26 BAA 1 (LAT 33 56 12N LONG 096 33 24W)													
MAY 2004													
24...	<5	<5	<5	<5	<5	14	<5	<5	<50	<5	<200	<5	<5
24...	<5	<5	<5	<5	<5	21	<5	<5	<50	<5	<200	<5	<5
24...	<5	<5	<5	<5	<5	11	<5	<5	<50	<5	<200	<5	<5
335547096405501 07S-05E-21 CAD 1 (LAT 33 55 47N LONG 096 40 55W)													
MAY 2004													
25...	<5	<5	<5	<5	<5	70	<5	<5	<50	<5	<200	<5	E4
25...	<5	<5	<5	<5	6	270	<5	<5	<50	<5	<200	<5	11
25...	<5	<5	<5	<5	<5	25	<5	<5	<50	<5	<200	<5	6
335303096471801 07S-05E-32 ACC 1 (LAT 33 53 03N LONG 096 47 18W)													
MAY 2004													
25...	<5	<5	<5	<5	<5	72	<5	<5	<50	<5	<200	<5	E4
25...	<5	<5	<5	<5	6	260	<5	<5	<50	<5	<200	<5	9
25...	<5	<5	<5	<5	<5	56	<5	<5	<50	<5	<200	<5	<5

Conversion Factors

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter (mm)
	2.54×10^{-2}	meter (m)
foot (ft)	3.048×10^{-1}	meter (m)
mile (mi)	1.609×10^{0}	kilometer (km)
	Area	
acre	4.047×10^{3}	square meter (m^2)
	4.047×10^{-1}	square hectometer (hm^2)
	4.047×10^{-3}	square kilometer (km^2)
square mile (mi^2)	2.590×10^{0}	square kilometer (km^2)
	Volume	
gallon (gal)	3.785×10^{0}	liter (L)
	3.785×10^{-3}	cubic meter (m^3)
	3.785×10^{0}	cubic decimeter (dm^3)
million gallons (Mgal)	3.785×10^{3}	cubic meter (m^3)
	3.785×10^{-3}	cubic hectometer (hm^3)
cubic foot (ft^3)	2.832×10^{-2}	cubic meter (m^3)
	2.832×10^{1}	cubic decimeter (dm^3)
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter (m^3)
	2.447×10^{-3}	cubic hectometer (hm^3)
acre-foot (acre-ft)	1.233×10^{3}	cubic meter (m^3)
	1.233×10^{-3}	cubic hectometer (hm^3)
	1.233×10^{-6}	cubic kilometer (km^3)
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second (L/s)
	2.832×10^{-2}	cubic meter per second (m^3/s)
	2.832×10^{1}	cubic decimeter per second (dm^3/s)
gallon per minute (gal/min)	6.309×10^{-2}	liter per second (L/s)
	6.309×10^{-5}	cubic meter per second (m^3/s)
	6.309×10^{-2}	cubic decimeter per second (dm^3/s)
million gallons per day (Mgal/d)	4.381×10^{-2}	cubic meter per second (m^3/s)
	4.381×10^{1}	cubic decimeter per second (dm^3/s)
	Mass	
ton (short)	9.072×10^{-1}	megagram (Mg) or metric ton

Temperature in degrees Celsius (°C) may be converted to degrees Fahrenheit (°F) as follows:

°F = (1.8 x °C) + 32