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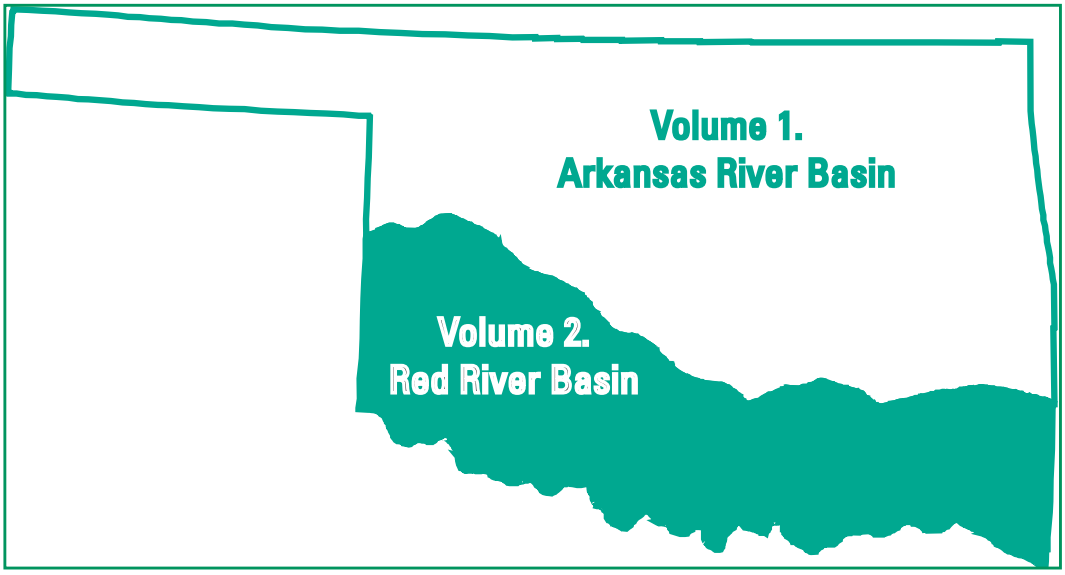
Water Resources Data Oklahoma Water Year 2005

Volume 2. Red River Basin



Water-Data Report OK-05-2

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

Calendar for Water Year 2005

2004

October

S	M	T	W	T	F	S
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2005

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August

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September

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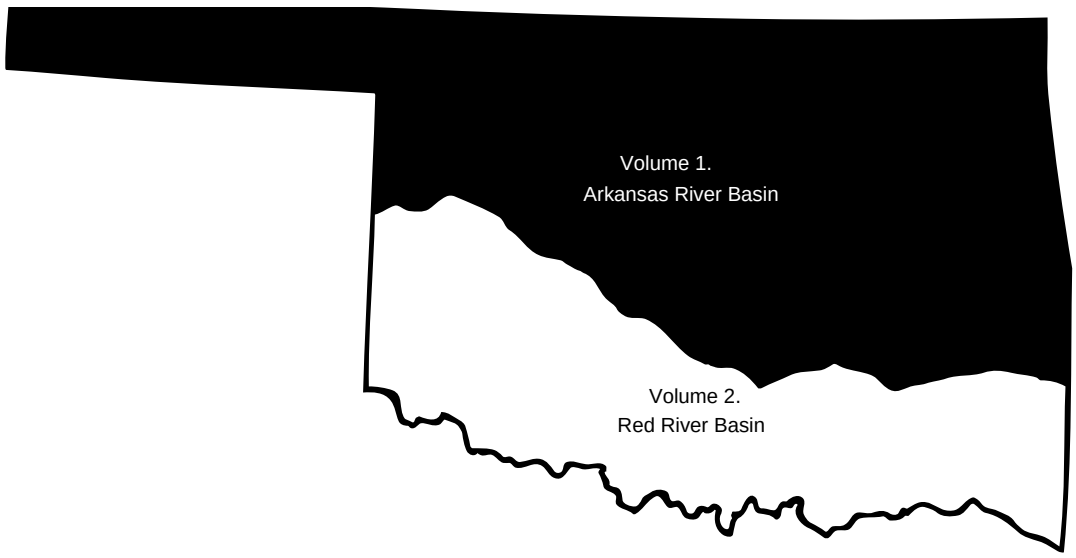
Water Resources Data Oklahoma

Water Year 2005

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-05-2



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
P. Patrick Leahy, Acting Director

2006

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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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L.A. Alf assembled the text of the report.

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 2005 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 143 gaging stations; stage and contents for 16 lakes or reservoirs and 2 gage height stations; water quality for 55 gaging stations; 22 partial-record or miscellaneous streamflow stations and 3 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			
Sugar Creek near Gracemont, OK	07327000	208	1956-74
Spring Creek near Gracemont	07327050	34.4	1991-94
Little Washita River Tributary near Cyril	073274408	1.10	1995-2004
Chetonia Creek Tributary below Cyril, OK	07327445	3.35	1990-91
Little Washita River Tributary near Cement	073274458	6.5	1995-2004
Boggy Creek near Ninnekah	07327483	1.66	1996-2004
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
Tenmile Creek near Miller, OK	07336000	68	1956-70
Kiamichi River near Belzoni, OK	07336500	1,423	1926-72
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 143 streamflow-gaging stations, and 22 partial-record or miscellaneous streamflow stations, (2) stage and content records for 16 lakes , reservoirs and gage height records for 2 stations; (3) water-quality records for 55 streamflow-gaging stations; (4) water-level records for 3 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-05-2" 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://ny.cf.er.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 five 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 provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from 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 for collaboration 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/*.

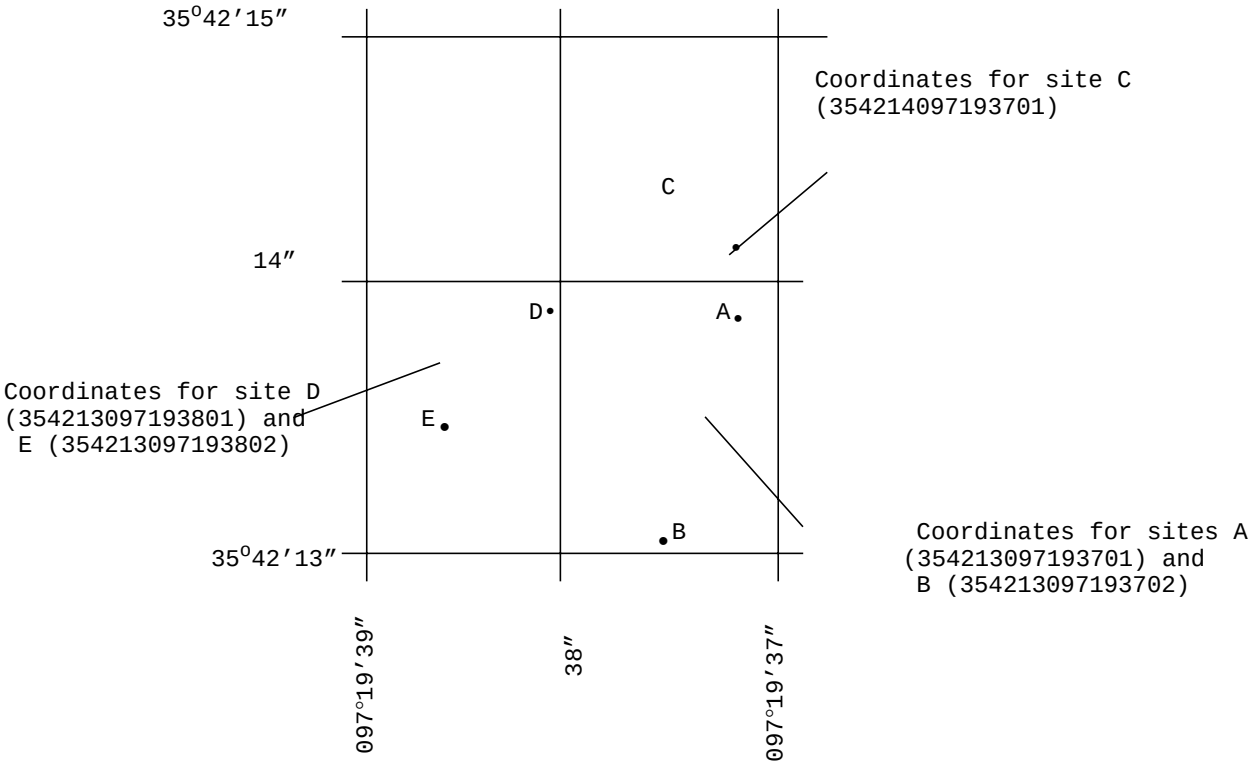

Fig.1: System for numbering miscellaneous and ground-water sites (latitude and longitude)

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 2005 water year that began Oct. 1, 2004 and ended Sept. 30, 2005. 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 that are 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, the stage-discharge relation is affected by changing stage. At these stations, the rate of change in stage is used as a factor in computing discharge.

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 USGS Water Science Center (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 three 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 USGS Water Science Center. 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 USGS Water Science Center (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 are 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.

Accuracy of the Records

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

Arrangement of Records

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

Onsite 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 onsite when the samples are collected. 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 onsite 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 Water Science Center (see address that is shown on the back of title page in this report).

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 field parameter	Ratings of accuracy (Based on combined fouling and calibration drift corrections applied to the record)			
	Excellent	Good	Fair	Poor
Water temperature	≤ ± 0.2 °C	> ± 0.2 – 0.5 °C	> ± 0.5 – 0.8 °C	> ± 0.8 °C
Specific conductance	≤ ± 3%	> ± 3 – 10%	> ± 10 – 15%	> ± 15%
Dissolved oxygen	≤ ± 0.3 mg/L or ≤ ± 5%, whichever is greater	> ± 0.3 – 0.5 mg/L or > ± 5 – 10%, whichever is greater	> ± 0.5 – 0.8 mg/L or > ± 10 – 15%, whichever is greater	> ± 0.8 mg/L or > ± 15%, whichever is greater
pH	≤ ± 0.2 units	> ± 0.2 – 0.5 units	> ± 0.5 – 0.8 units	> ± 0.8 units
Turbidity	≤ ± 0.5 turbidity units or ≤ ± 5%, whichever is greater	> ± 0.5 – 1.0 turbidity units or > ± 5 – 10%, whichever is greater	> ± 1.0 – 1.5 turbidity units or > ± 10 – 15%, whichever is greater	> ± 1.5 turbidity units or > ± 15%, whichever is greater

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 USGS Water Science Center.

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 are 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 nondetection 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 either was 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 USGS Water Science Center 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 USGS Water Science Center.

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 by this USGS Water Science Center 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 Onsite 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 onsite 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 and each well is identified by its local well or county well number on a map in this report (fig. 4).

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 affect 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 onsite 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 Water Science Center (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 onsite. 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 USGS Water Science Center. (See address that is shown on the back of the title page of this report.)

DEFINITION OF TERMS

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, nec-

essary for the decomposition of organic matter by microorganisms, such as bacteria.

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

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

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

Bottom material (See "Bed material")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

ceded by a less than sign (<). For bacteriological data, concentrations are reported as estimated when results are based on non-ideal colony counts.

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

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

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

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

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

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

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

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is exceeded. For example, the 90th percentile of river flow is the streamflow exceeded 90 percent of the time in the period of interest.

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

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

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

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

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

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

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

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

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

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

High tide is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA Web site: *http://www.csc.noaa.gov/text/glossary.html* (see "High water")

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

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

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

Horizontal datum (See "Datum")

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

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

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

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

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

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

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

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

Latent heat flux (often used interchangeably with latent heat-flux density) is the amount of heat energy that converts water from liquid to vapor (evaporation) or from vapor to liquid (condensation) across a specified cross-

sectional area per unit time. Usually expressed in watts per square meter.

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

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

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

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

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

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

Low tide is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA Website: *http://www.csc.noaa.gov/text/glossary.html* (see "Low water")

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

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

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

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

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

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

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

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

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

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

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

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

Methylene blue active substances (MBAS) indicate the presence of detergents (anionic surfactants). The determination depends on the formation of a blue color when

methylene blue dye reacts with synthetic anionic detergent compounds.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Periodic-record station is a site where stage, discharge, sediment, chemical, physical, or other hydrologic measure-

ments are made one or more times during a year but at a frequency insufficient to develop a daily record.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Return period (See "Recurrence interval")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Stage (See "Gage height")

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

Suspended is the amount (concentration) of undissolved material in a water-sediment mixture. Most commonly refers to that material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer filter has been extracted or digested. Complete recovery is not achieved by the extraction or digestion procedures and thus the determination represents less than 95 percent of the constituent present in the sample. To achieve comparability of analytical data, equivalent extraction or digestion procedures are required of all laboratories performing such analyses because different proce-

dures are likely to produce different analytical results. (See also "Suspended")

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Tons per day (T/DAY, tons/d) is a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream

section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric ton per day.

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

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

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

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

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

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

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

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

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

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

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

Turbidity is an expression of the optical properties of a liquid that causes light rays to be scattered and absorbed rather than transmitted in straight lines through water. Turbidity, which can make water appear cloudy or muddy, is caused by the presence of suspended and dissolved matter, such as clay, silt, finely divided organic matter, plankton and other microscopic organisms, organic acids, and dyes (ASTM International, 2003, D1889–00 Standard test method for turbidity of water, *in* ASTM International,

Annual Book of ASTM Standards, Water and Environmental Technology, v. 11.01: West Conshohocken, Pennsylvania, 6 p.). The color of water, whether resulting from dissolved compounds or suspended particles, can affect a turbidity measurement. To ensure that USGS turbidity data can be understood and interpreted properly within the context of the instrument used and site conditions encountered, data from each instrument type are stored and reported in the National Water Information System (NWIS) using parameter codes and measurement reporting units that are specific to the instrument type, with specific instruments designated by the method code. The respective measurement units, many of which also are in use internationally, fall into two categories: (1) the designations NTU, NTRU, BU, AU, and NTMU signify the use of a broad spectrum incident light in the wavelength range of 400-680 nanometers (nm), but having different light detection configurations; (2) The designations FNU, FNRU, FBU, FAU, and FNMU generally signify an incident light in the range between 780-900 nm, also with varying light detection configurations. These reporting units are equivalent when measuring a calibration solution (for example, formazin or polymer beads), but their respective instruments may not produce equivalent results for environmental samples. Specific reporting units are as follows:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Vertical datum (See “Datum”)

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

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

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

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

Watershed (See "Drainage basin")

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

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

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

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

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

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

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.

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

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

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

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

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

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

Section B. Ground-Water Techniques

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.

Section C. Sedimentation and Erosion Techniques

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

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

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

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

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

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

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

Section B. Surface Water

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

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

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

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis

Section A. Water Analysis

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

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

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

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

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

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

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

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

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

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

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

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

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

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

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

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

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

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

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

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

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

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

9–A1. *National field manual for the collection of water-quality data: Preparations for water sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

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

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

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

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

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

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

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

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

Figure 2.--Locations of continuous surface-water stations for water-year 2005

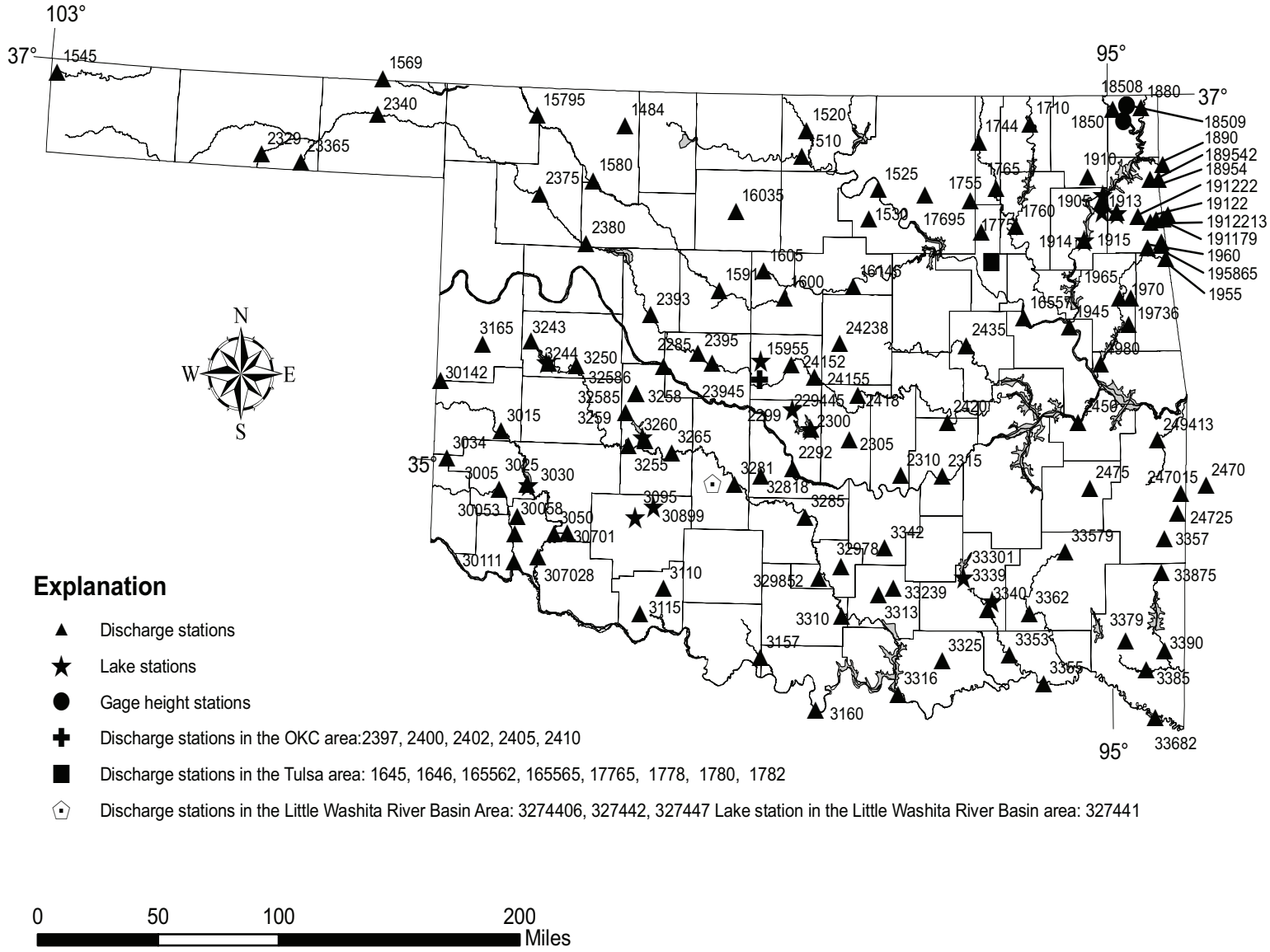
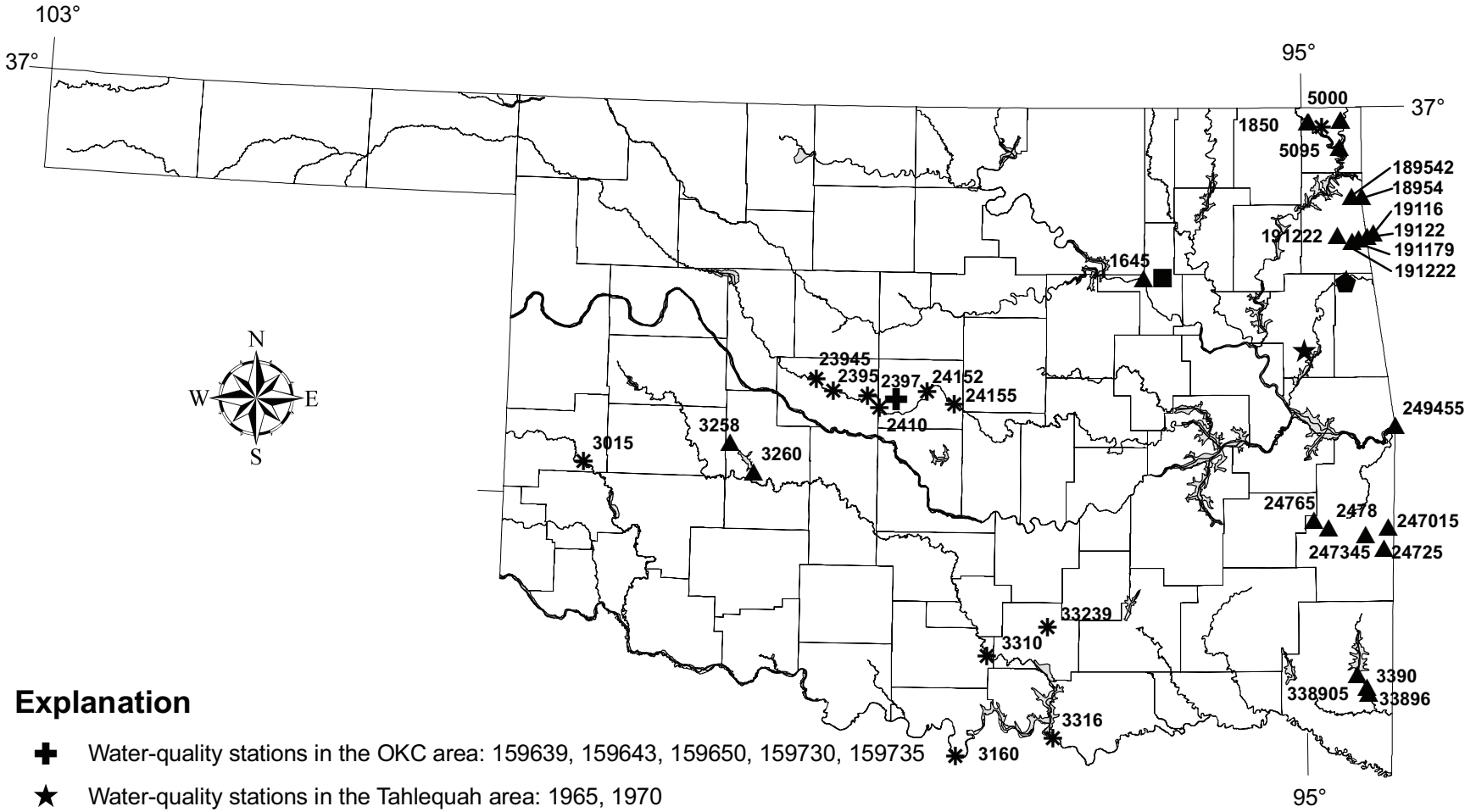


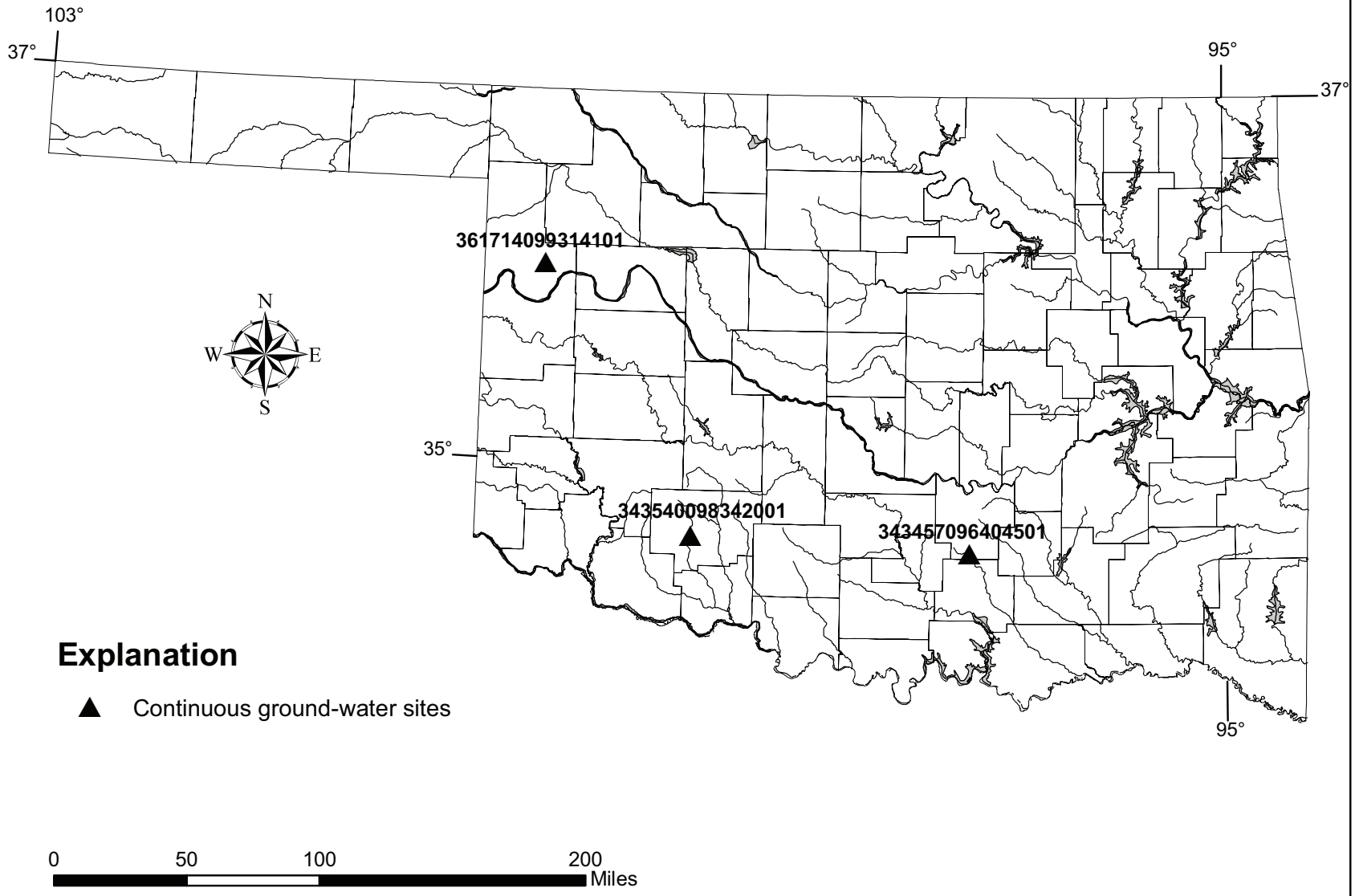
Figure 3.--Locations of water-quality stations for water-year 2005.



Explanation

- ✚ Water-quality stations in the OKC area: 159639, 159643, 159650, 159730, 159735
- ★ Water-quality stations in the Tahlequah area: 1965, 1970
- ⬟ Water-quality stations in the Watts area: 1955, 195855, 195865, 1960, 19609
- ■ Water-quality stations in the Tulsa area: 1775, 1780, 1782
- ▲ Active water-quality stations
- ✱ Active water-quality stations equipped with a monitor

Figure 4.--Locations of ground-water wells for water-year 2005.



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 NGVD of 1929 (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)
May 13	2200	*979	*7.06				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	14	91	65	89	49	34	26	24	e1.2	0.00	0.02
2	0.00	13	85	63	87	48	31	28	20	e2.0	0.00	0.00
3	0.00	22	82	61	79	46	31	34	23	e1.6	0.00	0.00
4	0.00	35	80	62	73	44	31	42	24	e1.0	0.00	0.00
5	0.00	61	79	210	70	42	29	68	23	e1.3	0.00	0.00
6	0.00	47	79	e168	80	43	28	72	18	e2.3	0.00	0.00
7	33	38	88	e112	83	44	28	66	18	e2.6	0.00	0.00
8	77	32	82	e102	102	41	28	56	13	e3.5	0.00	0.00
9	134	29	87	100	98	40	27	46	11	13	0.00	0.00
10	69	27	79	95	90	37	26	39	22	e8.0	0.00	0.00
11	42	23	72	89	80	35	24	32	20	e4.0	0.00	0.00
12	31	22	67	83	77	34	23	26	74	0.26	0.00	0.01
13	e26	25	61	79	72	30	22	213	147	0.00	0.00	0.08
14	e22	28	60	77	70	31	23	179	154	0.00	0.00	3.3
15	e19	99	57	e69	68	33	23	63	91	0.00	38	77
16	e17	302	55	e63	64	40	23	43	87	0.00	56	21
17	e16	281	53	e64	59	72	23	32	56	0.00	22	5.7
18	e15	274	54	e62	56	86	24	26	37	0.00	12	4.3
19	e14	220	55	62	56	92	28	20	26	0.00	11	3.5
20	e14	167	56	64	60	88	94	17	17	0.00	9.7	2.4
21	e13	189	57	71	60	79	104	13	e10	0.00	7.5	1.6
22	e12	179	58	65	56	69	78	e9.0	e8.0	0.00	44	1.1
23	e12	145	e52	62	52	63	58	e7.0	e6.8	0.00	e16	0.83
24	e11	141	e43	58	48	57	45	e6.0	e5.6	0.00	e9.0	0.57
25	e10	182	e44	56	50	53	42	e6.0	e4.5	0.00	e5.0	0.35
26	e9.0	161	e50	53	52	50	37	e14	e3.4	0.00	e2.5	0.26
27	e19	136	66	53	50	50	33	16	e2.4	0.00	e1.5	0.21
28	e17	119	66	64	51	46	32	12	e1.7	0.00	e0.70	0.16
29	15	103	74	66	---	41	30	11	e1.4	0.00	e0.30	0.07
30	14	94	70	89	---	39	28	e9.0	e1.3	0.00	0.04	0.12
31	13	---	67	97	---	36	---	e21	---	0.00	0.01	---
TOTAL	674.00	3,208	2,069	2,484	1,932	1,558	1,087	1,252.0	950.1	40.76	235.25	122.58
MEAN	21.7	107	66.7	80.1	69.0	50.3	36.2	40.4	31.7	1.31	7.59	4.09
MAX	134	302	91	210	102	92	104	213	154	13	56	77
MIN	0.00	13	43	53	48	30	22	6.0	1.3	0.00	0.00	0.00
AC-FT	1,340	6,360	4,100	4,930	3,830	3,090	2,160	2,480	1,880	81	467	243

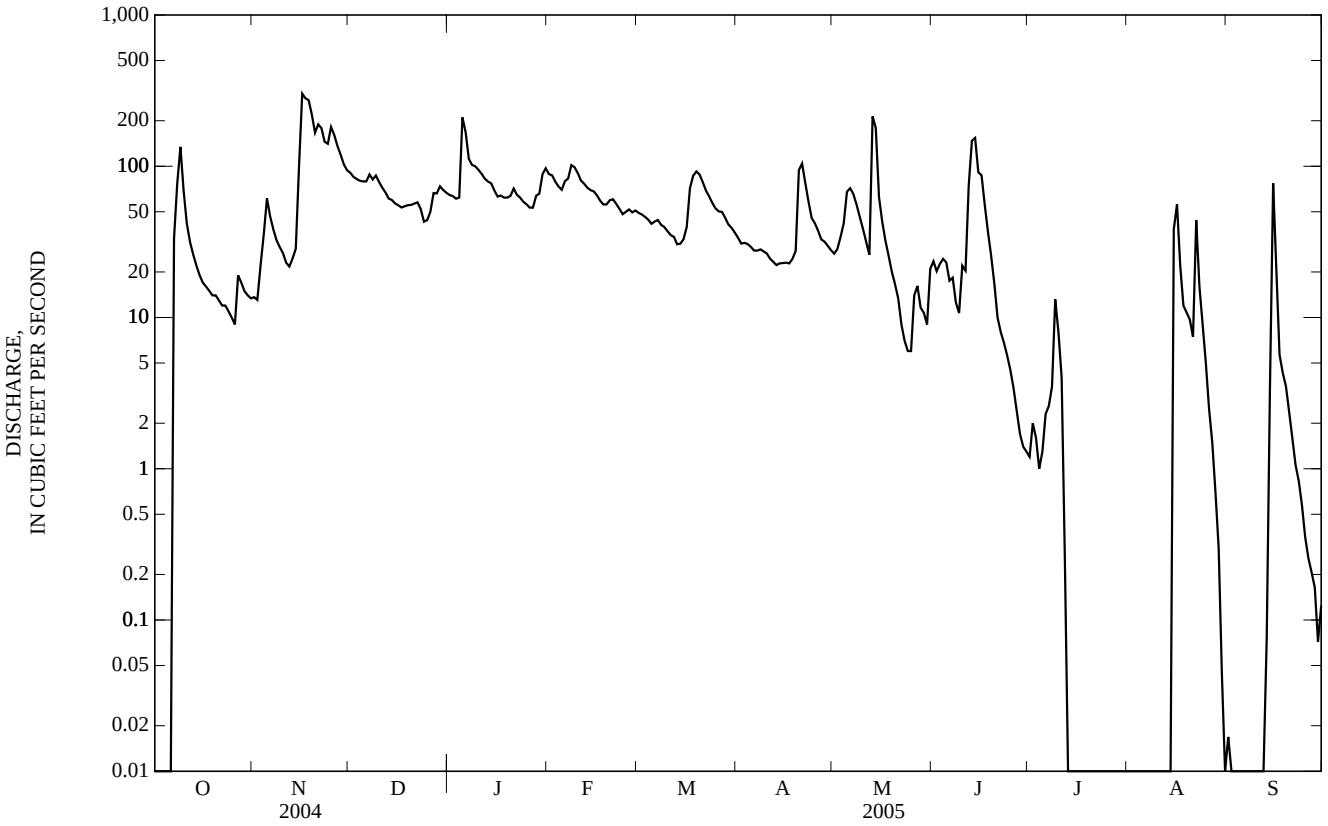
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	73.6	33.2	38.6	47.5	56.8	57.3	102	246	224	61.9	37.4	48.9
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	17,857.09		15,612.69			
ANNUAL MEAN	48.8		42.8		85.6	
HIGHEST ANNUAL MEAN					277	1941
LOWEST ANNUAL MEAN					12.3	1940
HIGHEST DAILY MEAN	1,080	Mar 4	302	Nov 16	22,600	May 28, 1978
LOWEST DAILY MEAN	0.00	at times	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 4	0.00	Jul 13	0.00	Aug 14, 1938
MAXIMUM PEAK FLOW			979	May 13	72,000	May 16, 1957
MAXIMUM PEAK STAGE			7.06	May 13	14.70	Jun 16, 1938
ANNUAL RUNOFF (AC-FT)	35,420		30,970		62,050	
10 PERCENT EXCEEDS	110		89		125	
50 PERCENT EXCEEDS	31		31		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 September 2005 (discontinued).

REVISED RECORDS.--WDR OK-00-2: 1999 (M). WDR OK-04-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,347.52 ft above NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.8	13	7.7	8.3	7.4	4.3	2.6	2.9	2.0	9.3	16
2	2.3	3.0	12	7.7	8.4	7.2	4.3	2.6	2.5	7.4	8.9	13
3	2.0	9.0	12	7.4	8.1	7.2	4.5	3.3	2.3	5.0	11	10
4	2.5	6.8	12	8.1	8.2	7.0	4.3	3.3	2.5	3.8	8.0	9.7
5	1.6	4.5	12	39	7.7	6.8	4.2	3.5	2.3	165	6.1	8.3
6	1.6	3.6	17	e27	20	7.0	3.8	3.5	14	48	9.3	5.2
7	85	3.5	38	e10	26	7.0	4.0	2.9	8.3	13	10	3.6
8	269	3.9	19	e10	12	6.6	3.8	2.8	4.1	9.0	13	7.2
9	19	3.0	17	9.9	9.7	6.6	4.2	2.5	2.7	6.7	8.1	8.8
10	9.5	3.0	14	9.6	8.7	6.6	4.3	2.4	98	5.2	6.2	8.0
11	7.4	2.3	12	9.4	8.5	6.5	3.8	2.2	16	0.52	5.5	9.0
12	6.1	2.1	12	9.2	8.7	6.8	3.8	2.1	5.8	e1.9	5.7	45
13	5.0	3.0	11	8.7	8.8	6.5	4.8	28	4.2	e1.8	56	16
14	4.7	4.0	11	8.3	8.9	6.1	4.7	172	3.0	16	330	63
15	4.4	189	11	e6.4	8.8	6.4	4.3	14	2.7	5.7	37	2,190
16	4.0	618	12	e6.7	8.3	7.0	4.0	6.3	14	9.3	19	631
17	4.9	362	11	e7.1	8.1	7.1	4.3	4.9	14	14	15	43
18	3.6	400	11	e7.6	8.2	6.4	4.2	4.2	4.1	14	10	25
19	3.2	44	10	8.2	8.6	6.1	4.5	3.6	2.6	13	11	18
20	3.2	52	10	8.1	8.7	6.6	4.1	3.1	2.1	11	8.0	15
21	3.2	149	10	7.9	7.9	7.5	7.3	2.7	1.9	12	7.3	14
22	3.1	48	10	8.6	7.7	6.3	4.7	2.4	1.8	11	106	13
23	3.3	39	e8.1	7.1	7.7	5.9	3.4	2.2	1.7	14	48	12
24	2.5	41	e7.5	7.3	7.5	5.8	3.0	2.1	1.6	15	9.9	11
25	2.2	23	e8.2	7.4	7.4	5.3	3.3	1.9	1.5	9.0	9.2	11
26	2.2	20	e8.5	7.5	7.5	5.2	3.1	3.0	1.3	8.9	7.1	10
27	3.6	17	8.9	7.2	7.8	5.2	2.9	3.9	0.67	9.6	11	9.8
28	2.4	15	8.8	9.4	7.7	5.1	2.7	2.7	0.41	9.2	17	9.5
29	2.2	16	8.7	9.9	---	5.1	2.6	2.6	0.43	9.5	24	8.8
30	2.3	14	8.8	8.8	---	5.0	2.6	2.6	4.3	8.8	21	9.2
31	2.6	---	8.0	8.8	---	4.7	---	2.5	---	13	15	---
TOTAL	471.1	2,101.5	372.5	306.0	263.9	196.0	119.8	298.4	223.71	472.32	862.6	3,253.1
MEAN	15.2	70.0	12.0	9.87	9.43	6.32	3.99	9.63	7.46	15.2	27.8	108
MAX	269	618	38	39	26	7.5	7.3	172	98	165	330	2,190
MIN	1.6	2.1	7.5	6.4	7.4	4.7	2.6	1.9	0.41	0.52	5.5	3.6
AC-FT	934	4,170	739	607	523	389	238	592	444	937	1,710	6,450

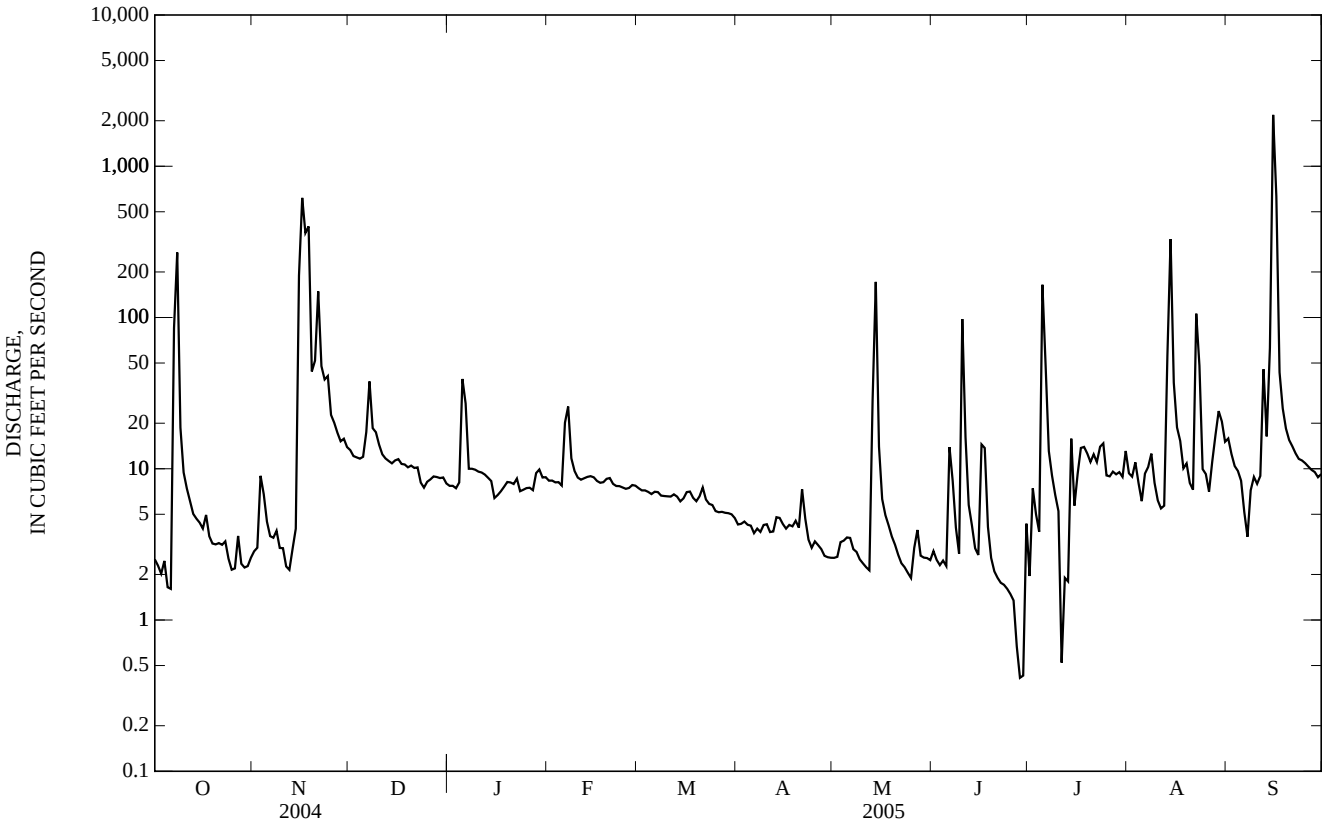
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2005, BY WATER YEAR (WY)

MEAN	6.27	14.5	5.70	6.17	8.18	17.9	15.1	27.0	20.3	15.5	20.3	21.3
MAX	15.2	70.0	12.0	9.89	23.4	55.5	46.3	78.2	82.6	22.8	27.8	108
(WY)	(2005)	(2005)	(2005)	(2002)	(2001)	(2000)	(2002)	(2001)	(1999)	(2001)	(2005)	(2005)
MIN	2.55	1.87	1.72	2.92	3.10	3.24	3.99	1.61	7.02	5.13	7.11	5.48
(WY)	(2004)	(2004)	(2004)	(2000)	(2004)	(2003)	(2005)	(2004)	(2002)	(2002)	(2004)	(2003)

e Estimated

07300530 BITTER CREEK NEAR MARTHA, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	5,750.65		8,940.93			
ANNUAL MEAN	15.7		24.5		14.9	
HIGHEST ANNUAL MEAN					24.5	2005
LOWEST ANNUAL MEAN					6.86	2003
HIGHEST DAILY MEAN	618	Nov 16	2,190	Sep 15	2,190	Sep 15, 2005
LOWEST DAILY MEAN	0.34	Jun 17	0.41	Jun 28	0.34	Jun 17, 2004
ANNUAL SEVEN-DAY MINIMUM	0.54	Jun 12	1.1	Jun 23	0.54	Jun 12, 2004
MAXIMUM PEAK FLOW			5,600	Sep 15	5,600	Sep 15, 2005
MAXIMUM PEAK STAGE			15.00	Sep 15	15.00	Sep 15, 2005
ANNUAL RUNOFF (AC-FT)	11,410		17,730		10,830	
10 PERCENT EXCEEDS	17		20		22	
50 PERCENT EXCEEDS	4.0		7.5		4.9	
90 PERCENT EXCEEDS	1.1		2.5		2.2	



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 September 2005 (discontinued).

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

GAGE.--Water-stage recorder. Datum of gage is 1,347.47 ft above NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	8.3	e23	e9.6	13	11	7.6	4.6	13	7.0	15	16
2	2.2	9.1	e22	e9.5	13	11	7.4	4.5	12	9.9	12	10
3	2.3	18	e22	e9.3	13	11	7.4	5.2	10	15	15	9.8
4	2.4	16	e22	e9.5	12	11	6.4	5.7	11	15	21	12
5	3.7	12	e21	57	12	10	8.2	5.7	10	206	17	17
6	2.3	9.9	e21	e69	22	10	6.9	5.4	24	133	7.6	10
7	18	9.3	e38	e22	40	10	6.6	4.9	23	49	14	11
8	200	9.1	e28	e16	21	9.7	6.6	4.6	13	18	28	11
9	49	9.1	e24	16	16	9.6	6.7	4.3	10	11	12	20
10	13	8.5	e22	15	14	9.6	6.6	4.1	100	8.6	12	17
11	9.4	8.0	e20	15	14	9.6	6.2	3.9	42	6.4	11	13
12	6.2	7.5	e19	15	14	10	5.6	3.6	11	4.4	8.8	48
13	6.9	7.8	e18	14	14	9.9	5.8	122	8.1	4.1	19	33
14	5.5	10	e17	13	14	9.5	6.5	207	6.4	16	236	71
15	6.4	e157	e16	e10	14	9.9	6.4	35	5.3	13	81	706
16	7.1	e685	e15	e10	13	10	6.8	12	19	5.3	23	1,920
17	8.5	e700	e14	e11	13	11	5.0	8.8	22	11	18	209
18	7.4	e482	e13	e12	13	11	5.4	7.5	9.1	15	15	41
19	5.4	e216	e13	13	14	9.9	5.2	6.8	5.4	14	11	30
20	5.8	e69	e12	13	14	9.7	7.0	6.1	4.3	15	10	24
21	6.5	e464	e12	12	13	11	13	5.6	3.8	17	7.5	21
22	6.9	e171	e11	12	12	9.9	6.9	5.4	3.9	11	44	19
23	6.9	e62	e10	11	12	9.3	5.3	5.7	3.4	14	100	18
24	7.1	e60	e9.0	11	12	9.3	4.7	6.4	3.3	23	23	17
25	5.1	e39	e10	11	12	9.2	4.8	8.7	2.9	17	18	17
26	5.5	e35	e11	11	11	9.2	4.8	12	2.6	15	16	16
27	6.4	e32	e12	11	12	9.0	4.7	14	2.1	15	15	16
28	7.6	e29	e12	13	12	8.9	3.8	13	0.50	9.8	21	17
29	5.8	e26	e11	15	---	8.7	4.1	12	0.30	12	29	16
30	5.0	e25	e11	14	---	8.5	4.2	12	0.26	12	20	17
31	7.0	---	e10	13	---	8.2	---	14	---	14	22	---
TOTAL	433.7	3,394.6	519.0	492.9	409	304.6	186.6	570.5	381.66	736.5	901.9	3,402.8
MEAN	14.0	113	16.7	15.9	14.6	9.83	6.22	18.4	12.7	23.8	29.1	113
MAX	200	700	38	69	40	11	13	207	100	206	236	1,920
MIN	2.2	7.5	9.0	9.3	11	8.2	3.8	3.6	0.26	4.1	7.5	9.8
AC-FT	860	6,730	1,030	978	811	604	370	1,130	757	1,460	1,790	6,750

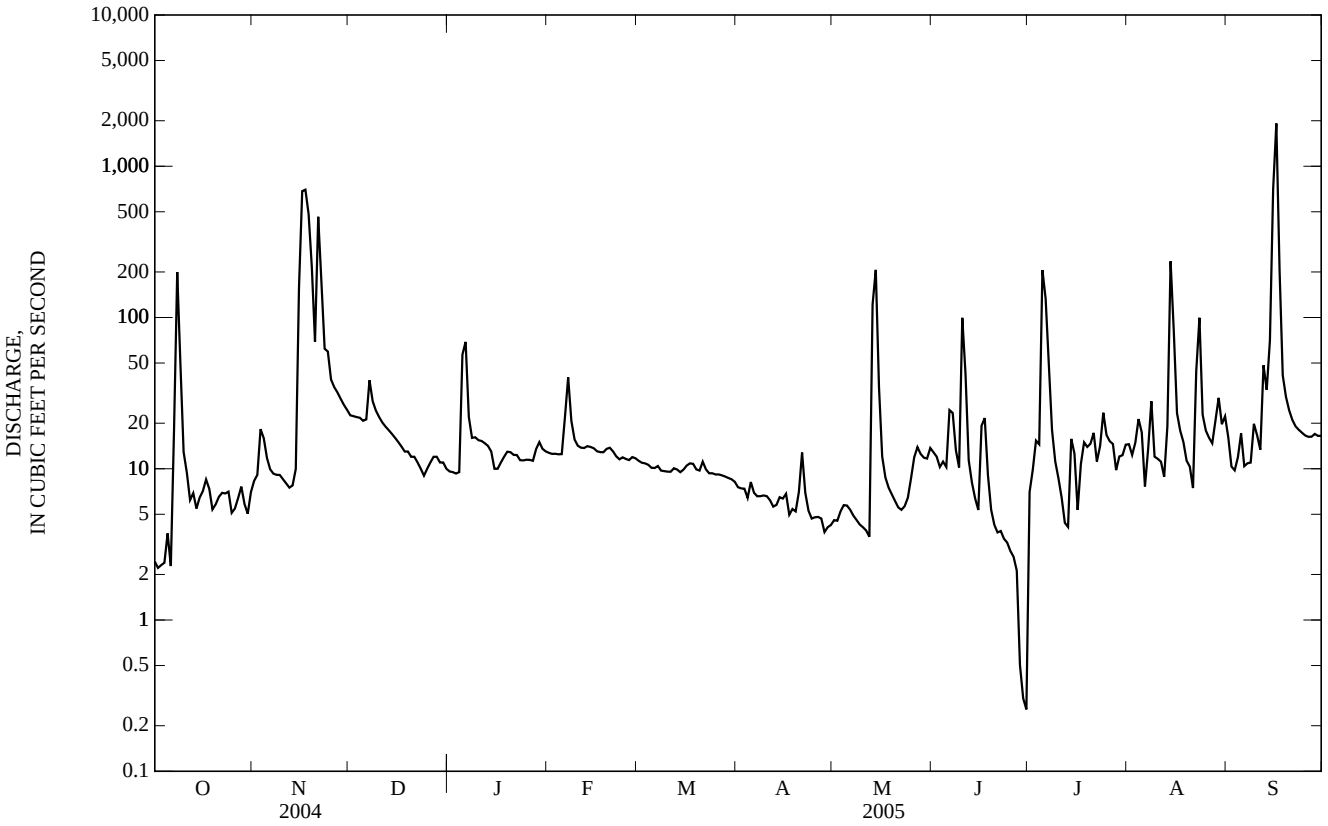
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2005, BY WATER YEAR (WY)

MEAN	9.41	23.8	9.61	10.8	13.7	32.2	21.3	50.5	36.4	22.0	27.5	26.1
MAX	17.8	113	16.7	15.9	40.6	106	68.7	148	132	31.4	40.4	113
(WY)	(2001)	(2005)	(2005)	(2005)	(2001)	(2000)	(2002)	(1999)	(1999)	(2001)	(1999)	(2005)
MIN	4.36	3.19	2.86	3.59	6.38	5.42	6.22	3.14	12.7	4.13	9.30	10.1
(WY)	(2004)	(2004)	(2004)	(2000)	(2004)	(2003)	(2005)	(2004)	(2005)	(2003)	(2002)	(1998)

e Estimated

07300580 BITTER CREEK WEST OF ALTUS, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1998 - 2005	
ANNUAL TOTAL	9,804.27		11,733.76			
ANNUAL MEAN	26.8		32.1		24.2	
HIGHEST ANNUAL MEAN					36.2	1999
LOWEST ANNUAL MEAN					13.5	2003
HIGHEST DAILY MEAN	1,390	Mar 5	1,920	Sep 16	2,100	May 20, 2001
LOWEST DAILY MEAN	0.94	May 27	0.26	Jun 30	0.26	Jun 30, 2005
ANNUAL SEVEN-DAY MINIMUM	1.0	May 18	1.7	Jun 24	1.0	May 18, 2004
MAXIMUM PEAK FLOW			3,620	Sep 16	3,620	Sep 16, 2005
MAXIMUM PEAK STAGE			16.43	Sep 16	16.43	Sep 16, 2005
ANNUAL RUNOFF (AC-FT)	19,450		23,270		17,520	
10 PERCENT EXCEEDS	33		34		31	
50 PERCENT EXCEEDS	8.5		11		8.9	
90 PERCENT EXCEEDS	2.2		5.1		3.6	



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 NGVD of 1929.

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)
Sept. 16	2115	*5,310	*7.42				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	14	168	115	129	98	74	52	49	17	31	43
2	10	16	158	115	124	98	70	55	54	30	24	39
3	9.5	26	140	115	122	97	68	59	50	33	16	39
4	9.6	34	137	117	116	97	69	62	48	26	16	21
5	9.3	29	136	220	112	95	65	67	49	113	35	27
6	9.5	38	137	441	128	95	62	80	224	391	42	30
7	12	43	146	280	146	94	63	91	65	142	32	40
8	77	37	159	192	142	93	63	87	51	90	54	37
9	152	33	147	162	139	91	61	79	44	45	53	38
10	64	30	146	146	138	91	60	70	201	33	19	60
11	53	27	138	138	130	87	59	62	151	28	15	56
12	40	26	133	132	124	84	55	57	69	24	19	55
13	29	25	131	125	120	82	51	750	50	37	22	70
14	24	28	127	116	115	78	48	645	110	38	170	115
15	21	198	126	113	110	79	48	398	130	29	340	1,330
16	20	2,100	125	100	109	82	47	154	112	31	105	3,630
17	18	2,500	124	100	103	85	47	106	112	18	104	2,410
18	17	1,800	123	101	100	98	48	80	87	21	55	303
19	16	1,460	124	101	100	123	49	66	61	30	39	166
20	15	584	125	100	100	122	53	59	49	26	45	114
21	14	2,100	126	97	101	118	114	54	42	24	50	90
22	14	2,040	126	100	102	111	126	48	35	28	54	73
23	14	789	e114	98	103	101	103	45	29	31	118	61
24	13	568	e109	95	101	95	87	41	23	23	110	54
25	13	409	e105	94	99	90	79	39	18	33	52	51
26	13	330	e109	93	96	86	73	41	15	28	43	48
27	12	280	124	92	102	84	66	40	12	39	47	45
28	12	244	129	98	100	83	59	45	20	31	45	38
29	13	214	133	109	---	82	56	47	39	24	52	35
30	12	189	121	112	---	79	53	44	25	30	58	35
31	13	---	119	121	---	78	---	47	---	36	47	---
TOTAL	761.9	16,211	4,065	4,138	3,211	2,876	1,976	3,570	2,024	1,529	1,912	9,153
MEAN	24.6	540	131	133	115	92.8	65.9	115	67.5	49.3	61.7	305
MAX	152	2,500	168	441	146	123	126	750	224	391	340	3,630
MIN	9.3	14	105	92	96	78	47	39	12	17	15	21
AC-FT	1,510	32,150	8,060	8,210	6,370	5,700	3,920	7,080	4,010	3,030	3,790	18,150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2005, BY WATER YEAR (WY)

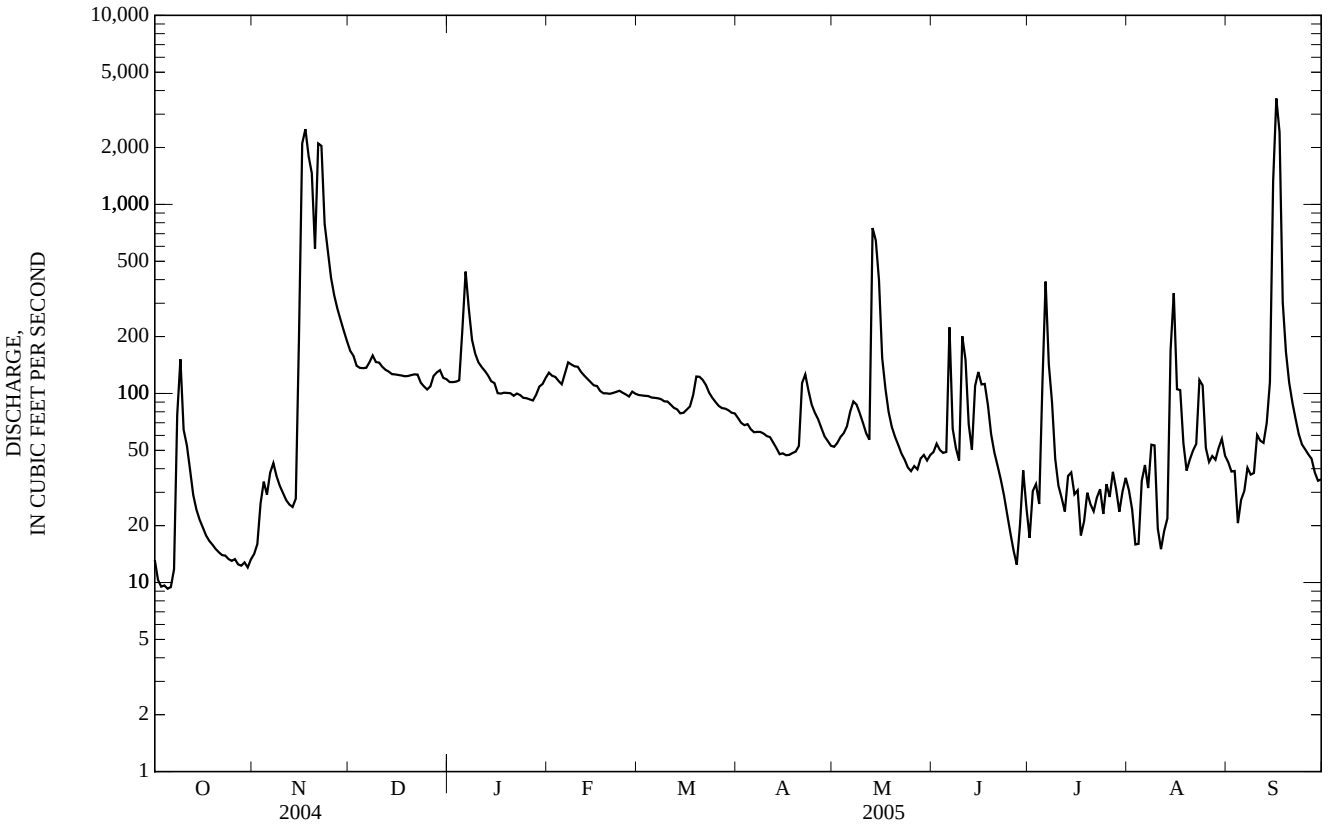
MEAN	208	135	121	117	157	201	246	480	560	166	240	186
MAX	1,828	680	701	362	697	1,100	2,108	2,566	2,836	641	1,681	950
(WY)	(1987)	(1987)	(1992)	(1993)	(1997)	(1998)	(1997)	(1980)	(1995)	(1993)	(1995)	(1986)
MIN	3.79	4.72	11.3	13.3	13.7	21.1	13.9	7.51	35.3	9.25	4.19	7.90
(WY)	(1985)	(1985)	(2004)	(1981)	(1981)	(1982)	(1982)	(1984)	(2002)	(1981)	(1981)	(1981)

e Estimated

07301110 SALT FORK RED RIVER NEAR ELMER, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1980 - 2005	
ANNUAL TOTAL	49,092.5		51,426.9			
ANNUAL MEAN	134		141		235	
HIGHEST ANNUAL MEAN					594	1997
LOWEST ANNUAL MEAN					59.2	2002
HIGHEST DAILY MEAN	4,090	Mar 5	3,630	Sep 16	28,200	Aug 3, 1995
LOWEST DAILY MEAN	4.5	Jun 1	9.3	Oct 5	0.08	Sep 4, 1981
ANNUAL SEVEN-DAY MINIMUM	5.9	May 27	10	Oct 1	0.12	Aug 30, 1981
MAXIMUM PEAK FLOW			5,310	Sep 16	44,900	Oct 20, 1983
MAXIMUM PEAK STAGE			7.42	Sep 16	a16.06	May 29, 1987
ANNUAL RUNOFF (AC-FT)	97,370		102,000		170,100	
10 PERCENT EXCEEDS	197		158		401	
50 PERCENT EXCEEDS	43		73		76	
90 PERCENT EXCEEDS	13		21		14	

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 NGVD of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	11	24	22	34	26	24	17	17	7.4	e0.76	2.1
2	3.2	12	23	22	32	25	25	21	16	10	e0.74	1.4
3	3.0	13	23	22	30	25	24	36	14	12	e0.72	1.0
4	2.9	14	23	25	29	25	23	37	13	11	e0.71	0.78
5	3.2	14	24	51	28	24	23	34	12	9.2	e0.93	0.61
6	6.6	13	25	e46	31	25	22	31	10	12	e0.81	0.49
7	19	13	26	e41	36	25	21	28	9.5	14	e0.70	0.46
8	34	14	26	38	34	24	21	26	8.8	11	e0.93	0.43
9	27	14	25	37	32	23	21	24	8.3	9.6	1.00	0.40
10	19	17	23	35	31	23	21	21	11	8.4	e0.72	0.37
11	18	18	22	32	29	22	20	20	67	7.5	e0.60	0.39
12	18	16	22	30	29	22	19	18	68	6.7	e0.50	0.47
13	15	16	21	29	29	22	20	19	135	6.1	1.1	0.42
14	13	19	21	26	28	21	19	19	95	5.6	2.6	0.56
15	12	31	21	e23	27	23	19	18	84	5.5	2.5	0.46
16	11	e43	21	e22	25	31	19	18	51	5.3	2.6	0.41
17	11	e49	22	e22	25	41	19	17	38	4.7	2.6	0.42
18	10	63	22	e23	25	43	21	17	30	4.1	2.0	0.39
19	9.6	49	21	25	26	37	23	16	25	3.5	1.3	0.34
20	9.5	38	21	26	27	33	22	14	23	2.8	0.83	0.34
21	9.4	40	21	26	28	31	21	13	21	2.4	1.1	0.33
22	9.0	41	21	25	26	28	19	12	18	1.8	4.3	0.32
23	9.5	38	e20	23	27	27	18	11	16	1.4	3.4	0.31
24	9.9	40	e18	23	27	27	17	9.6	14	1.2	2.2	0.32
25	9.5	43	e21	24	27	26	18	8.5	13	e0.90	1.7	0.31
26	10	37	e23	24	27	25	18	9.4	12	e0.82	1.5	0.30
27	11	31	24	23	27	25	17	11	11	e0.86	2.6	0.32
28	11	27	24	26	27	25	17	11	9.6	e1.4	4.6	0.32
29	11	26	24	31	---	25	17	10	8.6	e0.90	5.1	0.33
30	11	24	23	34	---	24	17	10	7.5	e0.82	3.9	0.39
31	11	---	23	35	---	24	---	12	---	e0.79	3.0	---
TOTAL	360.8	824	698	891	803	827	605	568.5	866.3	169.69	58.05	15.49
MEAN	11.6	27.5	22.5	28.7	28.7	26.7	20.2	18.3	28.9	5.47	1.87	0.52
MAX	34	63	26	51	36	43	25	37	135	14	5.1	2.1
MIN	2.9	11	18	22	25	21	17	8.5	7.5	0.79	0.50	0.30
AC-FT	716	1,630	1,380	1,770	1,590	1,640	1,200	1,130	1,720	337	115	31

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2005, BY WATER YEAR (WY)

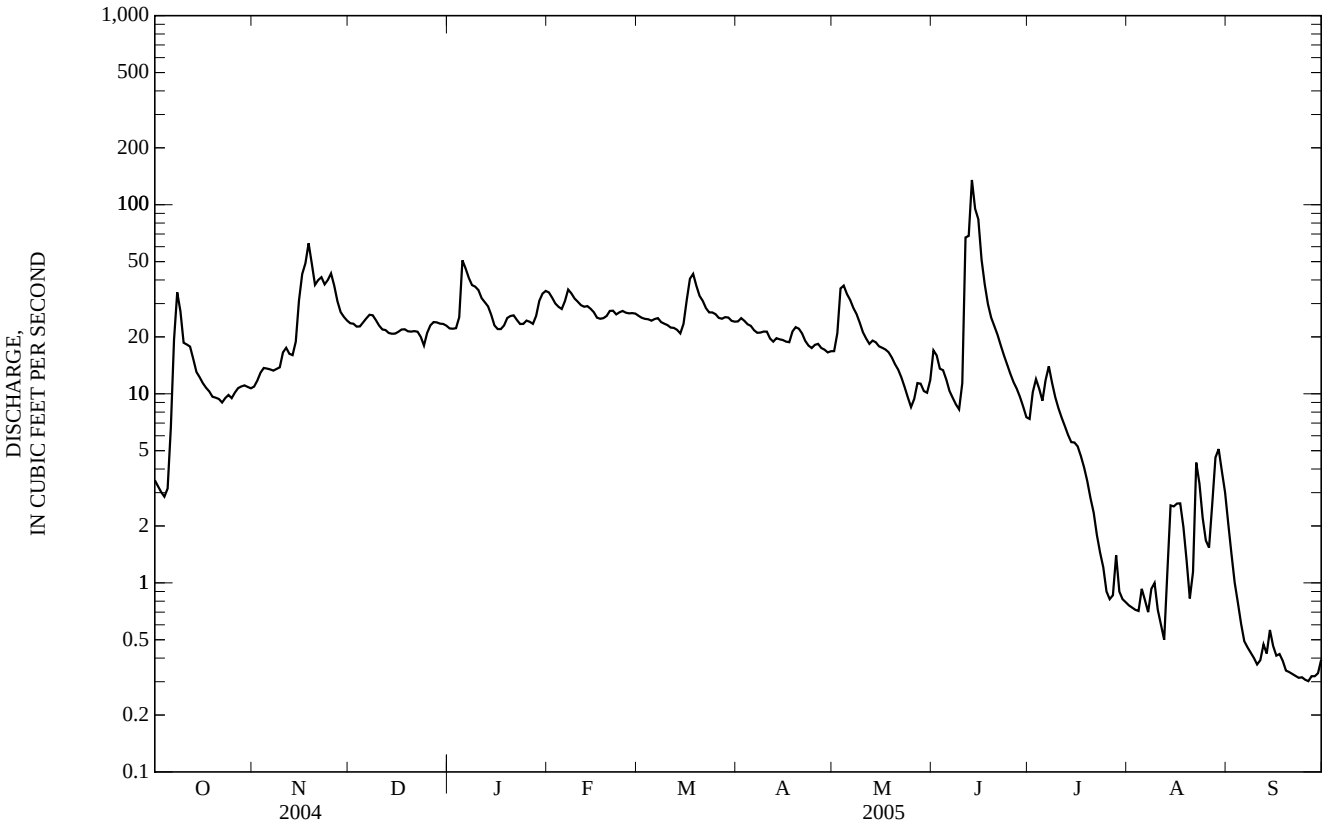
MEAN	17.3	22.1	24.9	28.3	30.4	37.7	36.1	39.6	36.0	11.8	6.60	9.40
MAX	72.2	61.1	51.5	53.7	53.6	85.6	126	150	115	31.6	38.7	51.6
(WY)	(1987)	(1987)	(1998)	(1998)	(2001)	(1998)	(1997)	(1997)	(1995)	(1997)	(1995)	(1988)
MIN	0.20	5.23	6.73	11.2	15.2	17.9	16.2	9.99	6.68	0.97	0.08	0.08
(WY)	(1995)	(1995)	(1995)	(1995)	(1995)	(1991)	(1991)	(2004)	(2004)	(1994)	(1994)	(1994)

e Estimated

07301420 SWEETWATER CREEK NEAR SWEETWATER, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1986 - 2005	
ANNUAL TOTAL	6,167.9		6,686.83			
ANNUAL MEAN	16.9		18.3		25.1	
HIGHEST ANNUAL MEAN					53.0	1997
LOWEST ANNUAL MEAN					10.9	1994
HIGHEST DAILY MEAN	128	Mar 5	135	Jun 13	755	May 25, 1997
LOWEST DAILY MEAN	1.6	Jun 16	0.30	Sep 26	a0.00	Aug 27, 1994
ANNUAL SEVEN-DAY MINIMUM	2.1	Sep 15	0.31	Sep 22	0.00	Sep 28, 1994
MAXIMUM PEAK FLOW			151	Jun 13	1,940	Jun 3, 1995
MAXIMUM PEAK STAGE			9.52	Jun 13	15.89	Jun 3, 1995
INSTANTANEOUS LOW FLOW					0.00	Aug 27, 1994
ANNUAL RUNOFF (AC-FT)	12,230		13,260		18,190	
10 PERCENT EXCEEDS	31		33		47	
50 PERCENT EXCEEDS	16		19		20	
90 PERCENT EXCEEDS	3.1		0.80		2.1	

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 NGVD of 1929.

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)
June 13	1430	*1,340	*5.22				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	30	165	126	191	127	111	73	67	35	0.68	62
2	3.7	30	156	125	191	125	106	82	e65	42	0.21	53
3	3.5	49	148	123	176	121	104	97	e62	52	0.03	48
4	4.4	57	143	127	167	119	105	125	e60	47	0.28	43
5	4.1	60	142	300	158	118	101	153	e56	39	1.7	39
6	5.1	55	148	e308	165	117	99	149	e53	47	1.1	34
7	22	50	157	e210	179	116	95	141	49	43	2.4	29
8	40	46	162	e207	191	110	91	130	44	43	2.0	26
9	87	43	159	188	192	106	89	116	40	37	1.9	23
10	81	42	151	171	179	102	88	103	48	33	1.2	20
11	75	42	143	159	172	97	88	92	476	29	0.14	18
12	65	42	138	160	162	93	84	83	781	26	0.47	20
13	60	46	130	156	160	92	89	184	843	24	30	19
14	55	55	130	148	151	90	92	206	855	22	619	27
15	49	78	121	e134	145	98	90	180	390	19	317	26
16	44	127	121	e126	140	120	87	129	255	18	133	26
17	39	193	121	e122	133	163	83	108	229	15	70	20
18	36	261	122	e124	133	200	91	97	180	11	44	16
19	33	287	121	131	134	206	98	89	e137	8.6	29	13
20	32	348	122	141	140	188	105	80	e117	7.1	23	11
21	30	553	127	146	144	170	103	71	e105	5.9	554	9.5
22	28	400	122	144	142	161	117	63	98	5.0	501	8.4
23	27	322	e117	136	140	147	100	56	90	4.2	280	7.8
24	25	303	e109	132	137	134	90	51	81	3.4	140	7.2
25	26	309	e101	130	137	125	87	46	71	2.7	111	6.8
26	27	279	e108	125	136	120	84	47	62	2.3	105	6.5
27	31	247	117	121	131	116	80	53	54	2.2	90	6.1
28	36	219	134	137	129	112	78	57	48	2.1	94	5.9
29	33	202	138	157	---	111	76	64	41	1.8	123	5.4
30	30	177	132	179	---	107	73	59	38	1.5	88	5.9
31	28	---	130	191	---	106	---	62	---	1.1	73	---
TOTAL	1,064.4	4,952	4,135	4,884	4,355	3,917	2,784	3,046	5,495	629.9	3,436.11	642.5
MEAN	34.3	165	133	158	156	126	92.8	98.3	183	20.3	111	21.4
MAX	87	553	165	308	192	206	117	206	855	52	619	62
MIN	3.5	30	101	121	129	90	73	46	38	1.1	0.03	5.4
AC-FT	2,110	9,820	8,200	9,690	8,640	7,770	5,520	6,040	10,900	1,250	6,820	1,270

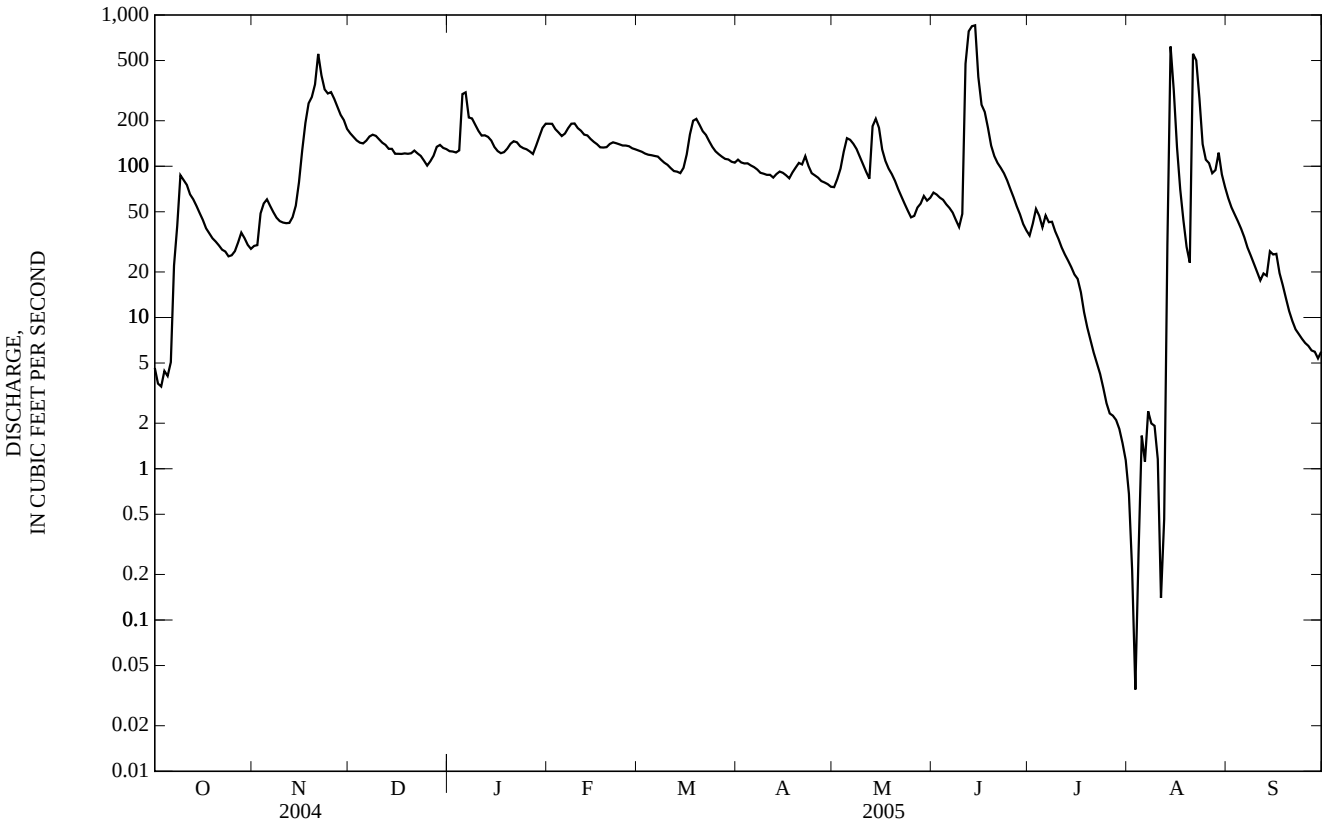
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	89.0	62.2	69.3	82.1	105	118	150	391	275	71.9	46.7	55.0
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	34,757.8		39,340.91			
ANNUAL MEAN	95.0		108		127	
HIGHEST ANNUAL MEAN					356	1987
LOWEST ANNUAL MEAN					12.9	1981
HIGHEST DAILY MEAN	1,390	Mar 5	855	Jun 14	20,700	May 26, 1959
LOWEST DAILY MEAN	2.6	Sep 20,22	0.03	Aug 3	0.00	most years
ANNUAL SEVEN-DAY MINIMUM	3.5	Sep 16	0.73	Jul 31	0.00	May 24, 1945
MAXIMUM PEAK FLOW			1,340	Jun 13	53,400	May 26, 1959
MAXIMUM PEAK STAGE			5.22	Jun 13	15.08	Jun 4, 1995
ANNUAL RUNOFF (AC-FT)	68,940		78,030		91,670	
10 PERCENT EXCEEDS	194		191		224	
50 PERCENT EXCEEDS	63		93		40	
90 PERCENT EXCEEDS	6.2		7.2		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 2002 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, 4,070 microsiemens July 24; minimum, 596 microsiemens Aug. 22.
WATER TEMPERATURE: Maximum, 37.4°C July 22; minimum, -0.3°C several days during winter period.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MIN	MIN	MEAN	MIN	MIN	MEAN	MIN	MIN	MEAN	MIN	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	2,720	2,720	2,840	2,890	2,890	2,930	2,380	2,380	2,400	2,460	2,460	2,470
2	3,020	3,020	3,050	2,790	2,790	2,910	2,410	2,410	2,450	2,470	2,470	2,480
3	3,060	3,060	3,100	2,420	2,420	2,530	2,460	2,460	2,490	2,470	2,470	2,480
4	3,040	3,040	3,080	2,370	2,370	2,410	2,480	2,480	2,500	2,290	2,290	2,460
5	3,010	3,010	3,040	2,440	2,440	2,530	2,500	2,500	2,510	1,760	1,760	2,080
6	2,860	2,860	2,940	2,610	2,610	2,680	2,470	2,470	2,500	1,740	1,740	1,890
7	1,490	1,490	2,290	2,600	2,600	2,630	2,460	2,460	2,480	2,020	2,020	2,090
8	1,690	1,690	1,940	2,650	2,650	2,690	2,490	2,490	2,500	2,090	2,090	2,140
9	1,970	1,970	2,300	2,750	2,750	2,790	2,480	2,480	2,500	2,160	2,160	2,190
10	1,830	1,830	2,150	2,840	2,840	2,870	2,500	2,500	2,520	2,220	2,220	2,270
11	1,830	1,830	1,850	2,750	2,750	2,840	2,530	2,530	2,540	2,290	2,290	2,330
12	1,820	1,820	1,870	2,740	2,740	2,800	2,530	2,530	2,550	2,320	2,320	2,370
13	1,980	1,980	2,100	2,590	2,590	2,740	2,560	2,560	2,580	2,390	2,390	2,430
14	2,160	2,160	2,190	2,450	2,450	2,620	2,430	2,430	2,530	2,460	2,460	2,490
15	2,190	2,190	2,220	2,150	2,150	2,260	2,590	2,590	2,600	2,500	2,500	2,520
16	2,240	2,240	2,280	---	---	---	2,580	2,580	2,590	2,520	2,520	2,570
17	2,340	2,340	2,380	---	---	---	2,610	2,610	2,620	2,590	2,590	2,640
18	2,430	2,430	2,460	---	---	---	2,600	2,600	2,610	2,620	2,620	2,660
19	2,500	2,500	2,510	---	---	---	2,570	2,570	2,590	2,540	2,540	2,620
20	2,540	2,540	2,570	1,350	1,350	2,170	2,550	2,550	2,570	2,550	2,550	2,600
21	2,580	2,580	2,610	1,140	1,140	1,350	2,200	2,200	2,500	2,510	2,510	2,550
22	2,640	2,640	2,670	1,490	1,490	1,710	2,540	2,540	2,550	2,420	2,420	2,460
23	2,690	2,690	2,710	1,960	1,960	2,040	2,550	2,550	2,590	2,480	2,480	2,520
24	2,700	2,700	2,760	2,040	2,040	2,100	2,600	2,600	2,670	2,530	2,530	2,550
25	2,730	2,730	2,800	2,170	2,170	2,280	2,510	2,510	2,650	2,560	2,560	2,580
26	2,740	2,740	2,790	2,290	2,290	2,310	2,520	2,520	2,590	2,600	2,600	2,620
27	2,640	2,640	2,700	2,300	2,300	2,320	2,620	2,620	2,690	2,580	2,580	2,610
28	---	---	---	2,300	2,300	2,320	2,550	2,550	2,670	---	---	---
29	---	---	---	2,320	2,320	2,340	2,380	2,380	2,420	---	---	---
30	2,760	2,760	2,830	2,350	2,350	2,370	2,360	2,360	2,380	---	---	---
31	2,870	2,870	2,880	---	---	---	2,410	2,410	2,430	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MIN	MIN	MEAN	MIN	MIN	MEAN	MIN	MIN	MEAN	MIN	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	2,510	2,510	2,530	2,450	2,450	2,540	2,860	2,860	2,890
2	2,450	2,450	2,510	2,500	2,500	2,530	2,510	2,510	2,550	2,630	2,630	2,720
3	2,420	2,420	2,460	2,530	2,530	2,540	2,570	2,570	2,590	2,540	2,540	2,580
4	2,410	2,410	2,440	2,540	2,540	2,560	2,580	2,580	2,590	2,520	2,520	2,570
5	2,470	2,470	2,480	2,570	2,570	2,590	2,480	2,480	2,590	2,430	2,430	2,560
6	2,430	2,430	2,470	2,560	2,560	2,570	2,620	2,620	2,640	2,380	2,380	2,410
7	2,400	2,400	2,440	2,560	2,560	2,570	---	---	---	2,340	2,340	2,370
8	2,480	2,480	2,550	2,570	2,570	2,590	---	---	---	2,330	2,330	2,390
9	2,500	2,500	2,540	2,590	2,590	2,610	2,710	2,710	2,720	2,360	2,360	2,440
10	2,490	2,490	2,510	2,610	2,610	2,620	2,730	2,730	2,760	2,500	2,500	2,530
11	2,480	2,480	2,500	2,610	2,610	2,650	2,770	2,770	2,790	2,580	2,580	2,600
12	2,480	2,480	2,490	2,700	2,700	2,700	2,790	2,790	2,800	2,380	2,380	2,650
13	2,480	2,480	2,500	2,710	2,710	2,720	2,800	2,800	2,820	1,130	1,130	1,930
14	2,510	2,510	2,540	2,720	2,720	2,750	2,760	2,760	2,850	1,400	1,400	1,780
15	2,550	2,550	2,560	2,590	2,590	2,660	2,600	2,600	2,710	1,710	1,710	1,890
16	2,540	2,540	2,550	2,470	2,470	2,520	2,600	2,600	2,620	2,010	2,010	2,200
17	2,550	2,550	2,570	2,460	2,460	2,540	2,660	2,660	2,680	2,290	2,290	2,400
18	2,570	2,570	2,580	---	---	---	2,550	2,550	2,590	2,510	2,510	2,570
19	2,580	2,580	2,590	2,560	2,560	2,580	2,520	2,520	2,570	2,590	2,590	2,670
20	2,570	2,570	2,580	2,410	2,410	2,490	2,510	2,510	2,590	---	---	---
21	2,560	2,560	2,570	2,360	2,360	2,380	2,600	2,600	2,650	---	---	---
22	2,500	2,500	2,550	2,370	2,370	2,400	2,500	2,500	2,600	---	---	---
23	2,440	2,440	2,510	2,410	2,410	2,440	2,440	2,440	2,530	---	---	---
24	2,490	2,490	2,510	2,460	2,460	2,490	2,680	2,680	2,740	---	---	---
25	2,520	2,520	2,540	2,500	2,500	2,520	2,750	2,750	2,770	3,160	3,160	3,190
26	2,510	2,510	2,520	2,540	2,540	2,560	2,770	2,770	2,810	3,070	3,070	3,150
27	2,510	2,510	2,520	2,540	2,540	2,560	2,840	2,840	2,870	2,820	2,820	2,950
28	2,510	2,510	2,530	2,540	2,540	2,570	2,880	2,880	2,890	2,780	2,780	2,850
29	---	---	---	2,580	2,580	2,600	2,850	2,850	2,880	2,940	2,940	3,080
30	---	---	---	2,600	2,600	2,610	2,840	2,840	2,870	2,870	2,870	2,960
31	---	---	---	2,570	2,570	2,610	---	---	---	2,640	2,640	2,750
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2,600	2,600	2,690	3,210	3,210	3,230	---	---	---	2,330	2,330	2,380
2	---	---	---	2,710	2,710	2,990	---	---	---	2,480	2,480	2,540
3	---	---	---	2,400	2,400	2,580	---	---	---	2,610	2,610	2,680
4	---	---	---	2,430	2,430	2,760	---	---	---	2,750	2,750	2,810
5	---	---	---	2,790	2,790	2,860	---	---	---	2,850	2,850	2,890
6	---	---	---	2,420	2,420	2,630	---	---	---	2,930	2,930	2,960
7	---	---	---	2,800	2,800	2,860	---	---	---	2,980	2,980	3,000
8	---	---	---	2,730	2,730	2,800	---	---	---	3,010	3,010	3,030
9	---	---	---	2,750	2,750	2,800	---	---	---	3,030	3,030	3,050
10	2,580	2,580	2,820	2,880	2,880	2,950	---	---	---	3,060	3,060	3,080
11	742	742	1,770	2,970	2,970	3,010	---	---	---	3,020	3,020	3,070
12	656	656	997	2,980	2,980	3,040	---	---	---	2,930	2,930	2,970
13	1,160	1,160	1,330	3,100	3,100	3,150	---	---	---	2,820	2,820	2,940
14	1,360	1,360	1,540	3,220	3,220	3,260	---	---	---	2,240	2,240	2,760
15	1,240	1,240	1,290	---	---	---	---	---	---	2,140	2,140	2,470
16	1,340	1,340	1,390	3,190	3,190	3,320	---	---	---	2,760	2,760	2,820
17	1,430	1,430	1,520	3,440	3,440	3,490	---	---	---	2,480	2,480	2,620
18	---	---	---	3,490	3,490	3,540	1,860	1,860	2,120	2,610	2,610	2,760
19	---	---	---	3,640	3,640	3,680	2,300	2,300	2,470	2,720	2,720	2,840
20	---	---	---	3,730	3,730	3,770	1,980	1,980	2,640	2,920	2,920	2,950
21	---	---	---	3,770	3,770	3,790	606	606	1,350	2,980	2,980	3,000
22	---	---	---	3,770	3,770	3,810	596	596	680	3,010	3,010	3,030
23	2,290	2,290	2,360	3,790	3,790	3,850	---	---	---	3,030	3,030	3,040
24	2,400	2,400	2,470	3,880	3,880	3,950	1,130	1,130	1,360	3,030	3,030	3,050
25	2,510	2,510	2,580	---	---	---	1,590	1,590	1,780	3,050	3,050	3,050
26	2,620	2,620	2,700	---	---	---	1,890	1,890	2,080	3,020	3,020	3,050
27	2,750	2,750	2,810	---	---	---	1,690	1,690	1,840	3,060	3,060	3,070
28	---	---	---	---	---	---	1,810	1,810	2,030	3,060	3,060	3,080
29	---	---	---	---	---	---	---	---	---	3,100	3,100	3,120
30	---	---	---	---	---	---	---	---	---	2,600	2,600	3,010
31	---	---	---	---	---	---	---	---	---	---	---	---

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	28.5	17.9	21.4	17.0	10.7	14.7	7.1	1.7	4.3	12.8	9.1	10.9
2	25.3	11.9	17.8	10.7	8.1	8.9	7.4	2.4	4.7	11.6	8.8	10.5
3	25.2	12.6	18.6	10.3	7.1	8.4	7.5	2.2	4.6	9.0	7.3	8.2
4	27.7	17.8	21.7	14.1	4.7	9.1	6.9	2.2	4.6	7.3	4.3	5.9
5	23.1	16.4	19.7	15.7	7.1	11.2	10.9	5.4	7.8	4.3	0.5	2.2
6	26.7	18.1	21.0	17.4	8.3	12.6	8.4	7.2	7.8	0.5	-0.2	-0.2
7	25.2	18.1	20.9	18.0	9.8	13.5	10.0	5.1	7.4	2.1	-0.2	0.6
8	27.2	17.6	21.9	18.8	11.0	14.3	10.5	6.2	8.0	4.3	-0.3	1.9
9	24.3	17.8	20.8	16.5	12.1	14.0	10.9	5.4	8.0	6.6	2.9	4.5
10	20.9	16.9	19.0	17.7	12.4	14.3	10.3	5.9	8.0	7.6	4.8	6.1
11	17.5	15.6	16.6	12.9	7.8	10.2	10.3	5.2	7.6	7.1	5.2	5.8
12	21.4	13.4	17.1	10.1	7.8	8.7	11.0	5.6	8.0	9.2	5.0	6.5
13	21.1	14.5	17.2	8.2	7.2	7.5	8.3	4.4	6.1	7.7	3.4	5.4
14	19.3	11.0	15.0	8.9	7.1	8.0	6.5	1.8	4.0	4.6	0.8	3.0
15	22.3	12.3	16.4	10.4	8.4	9.4	5.9	1.0	3.2	0.8	-0.3	-0.1
16	20.6	11.2	15.3	13.5	10.4	12.0	7.9	1.6	4.3	1.3	-0.3	0.1
17	20.2	12.3	15.8	14.4	13.5	13.9	8.5	2.5	5.3	2.5	-0.2	0.6
18	23.1	13.1	17.6	14.8	13.4	13.9	9.3	3.9	6.3	4.2	-0.3	1.5
19	19.7	14.0	16.6	15.2	12.5	13.5	8.0	3.2	5.5	7.9	1.4	4.3
20	22.5	14.7	17.7	13.1	11.6	12.2	9.3	2.8	5.8	10.3	3.4	6.5
21	23.4	13.2	18.2	11.6	10.4	10.9	7.4	3.7	5.5	10.0	5.5	7.8
22	20.8	18.1	19.6	11.6	10.1	10.7	4.6	0.4	2.5	8.3	4.2	6.6
23	22.5	13.6	17.7	11.6	9.7	11.0	0.4	-0.3	-0.1	6.5	1.4	3.8
24	20.2	11.6	15.9	10.0	7.2	8.6	0.1	-0.2	-0.1	8.7	1.8	5.1
25	19.9	12.9	16.3	10.1	6.4	8.2	1.4	-0.3	0.2	12.1	4.9	8.2
26	24.0	17.6	20.2	11.4	7.7	9.4	5.1	-0.3	2.0	10.6	6.6	8.6
27	21.5	19.2	20.2	11.0	7.4	9.2	6.3	1.6	3.9	8.4	6.1	7.1
28	25.0	19.1	21.3	8.8	6.9	8.0	9.5	3.5	6.2	6.1	3.3	4.5
29	23.1	15.7	19.9	8.1	4.2	6.4	8.4	4.8	6.8	9.3	3.7	5.9
30	18.1	11.3	14.9	6.8	2.6	4.5	13.1	7.1	9.6	6.4	4.6	5.3
31	16.0	12.7	14.3	---	---	---	12.4	7.4	9.8	6.2	4.1	5.0
		FEBRUARY			MARCH			APRIL			MAY	
1	5.2	4.2	4.8	12.3	6.2	9.1	18.1	9.4	13.4	19.0	13.0	15.4
2	8.1	3.6	5.4	14.8	5.9	9.9	20.7	9.5	14.7	15.0	10.6	12.5
3	9.5	2.9	5.9	15.3	8.0	11.3	20.6	11.6	15.4	12.6	11.3	11.9
4	9.8	3.9	6.7	19.1	10.4	14.2	23.0	12.3	17.1	12.8	10.9	11.7
5	8.9	5.0	7.0	15.6	10.4	13.2	20.8	14.9	17.5	16.0	11.8	13.5
6	9.4	7.4	8.2	16.0	12.1	13.7	15.5	11.9	13.0	23.6	13.9	18.2
7	10.2	5.5	7.5	17.2	11.7	13.8	20.6	9.4	14.5	19.5	17.1	18.4
8	7.2	5.0	6.2	15.7	8.4	12.0	20.7	11.4	15.9	26.9	17.3	21.4
9	8.7	2.8	5.6	16.2	8.7	12.2	23.7	13.3	17.7	29.0	17.6	22.9
10	9.2	3.5	6.2	16.7	8.8	12.3	23.4	16.1	19.0	30.4	20.3	24.7
11	9.4	5.8	7.5	17.6	8.7	12.9	18.7	11.8	15.1	26.8	21.6	23.7
12	10.1	7.7	8.9	20.3	9.8	14.6	20.8	9.9	14.9	25.5	20.4	22.4
13	14.5	8.2	10.9	14.7	7.5	11.2	22.4	11.4	16.5	21.7	17.7	19.8
14	14.3	8.2	11.2	13.5	9.2	10.8	24.3	13.0	18.1	26.5	17.7	21.6
15	15.1	9.2	11.8	9.9	6.1	7.1	25.1	14.8	19.4	22.6	18.0	19.6
16	10.9	7.5	9.1	13.6	5.8	9.0	24.8	15.9	19.9	25.4	16.1	20.0
17	11.2	6.5	8.5	14.2	6.2	10	24.7	16.0	19.8	26.9	17.5	21.9
18	8.6	7.1	7.9	16.2	8.8	12.2	24.1	16.6	19.8	30.2	19.2	24.1
19	9.6	7.1	8.1	15.5	9.6	12.5	25.2	16.9	20.2	34.0	22.0	27.6
20	16.5	8.4	12.0	17.9	10.1	13.8	27.9	18.3	22.1	35.1	23.3	28.9
21	16.5	9.7	12.8	16.7	12.2	14.4	27.6	19.6	23.0	32.8	22.9	27.8
22	14.8	10.4	12.0	14.1	9.0	11.2	22.7	15.6	19.4	34.2	22.6	27.8
23	10.9	7.5	9.3	14.9	8.4	11.1	22.7	13.4	17.6	32.6	22.1	26.9
24	13.6	6.0	9.2	16.5	9.4	12.5	19.1	12.7	15.7	34.5	21.8	27.7
25	13.0	6.7	9.7	17.3	9.6	12.8	22.0	11.5	16.3	31.8	21.4	26.2
26	12.4	9.2	10.6	12.1	7.6	9.6	---	---	---	25.5	17.9	20.8
27	11.7	9.0	10.1	16.6	6.3	11.0	24.8	13.6	19.0	23.7	19.3	20.9
28	14.4	6.9	10.1	19.2	8.5	13.6	23.4	15.5	19.0	26.3	17.7	21.9
29	---	---	---	18.4	12.3	14.7	17.4	11.7	14.0	25.2	20.4	22.4
30	---	---	---	20.9	10.5	15.3	22.6	9.0	15.0	28.7	19.4	23.4
31	---	---	---	22.0	12.0	15.7	---	---	---	29.4	20.5	23.9

07301500 NORTH FORK RED RIVER NEAR CARTER, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	31.0	19.7	24.4	30.2	22.1	26.0	---	---	---	33.5	23.2	27.9
2	---	---	---	34.6	21.6	27.5	---	---	---	32.4	22.6	27.1
3	---	---	---	34.5	24.4	28.9	---	---	---	33.1	22.5	27.3
4	---	---	---	33.2	21.5	26.9	---	---	---	32.2	22.7	27.0
5	---	---	---	34.3	22.8	28.1	---	---	---	31.3	22.3	26.2
6	---	---	---	35.1	23.3	28.6	---	---	---	31.8	20.5	25.6
7	---	---	---	34.5	24.3	28.5	---	---	---	31.9	22.3	26.5
8	---	---	---	35.0	23.4	28.8	---	---	---	31.8	21.7	26.1
9	---	---	---	34.7	24.0	28.8	---	---	---	30.4	20.2	25.0
10	25.8	21.2	23.8	35.1	23.3	28.7	---	---	---	30.0	20.3	24.6
11	25.2	19.9	21.9	36.0	24.2	29.3	---	---	---	30.5	21.5	24.8
12	24.2	21.1	22.3	37.1	24.7	30.0	---	---	---	30.8	21.2	25.3
13	25.4	21.3	23.2	37.1	24.0	29.6	---	---	---	33.9	22.3	27.0
14	26.3	23.2	24.5	35.6	24.7	29.5	---	---	---	25.9	22.2	23.9
15	29.6	23.5	26.2	---	---	---	---	---	---	30.2	21.1	24.8
16	31.2	24.9	27.8	37.0	24.4	29.9	---	---	---	30.0	18.1	23.5
17	---	---	---	34.6	24.0	28.9	---	---	---	29.2	18.6	23.4
18	---	---	---	35.7	23.7	28.7	34.3	25.0	29.0	32.4	21.8	26.2
19	---	---	---	35.3	24.0	28.8	34.0	25.0	28.9	32.9	22.0	26.7
20	---	---	---	35.2	22.8	28.3	34.5	25.1	29.1	35.2	22.9	28.1
21	---	---	---	35.5	23.2	28.9	26.5	23.6	25.2	33.5	22.3	27.3
22	---	---	---	37.4	24.0	30.2	27.9	24.7	26.2	32.3	20.5	26.0
23	33.5	25.0	28.7	35.5	24.5	29.7	31.7	25.1	28.0	32.7	20.7	26.1
24	32.6	23.7	27.7	34.5	23.6	28.6	33.4	26.5	29.4	33.1	21.0	26.2
25	32.4	23.6	27.7	---	---	---	33.7	25.8	29.2	33.6	20.9	26.6
26	32.9	23.1	27.8	---	---	---	35.0	26.1	30.0	28.3	19.5	23.4
27	32.9	23.6	27.7	---	---	---	30.3	25.3	27.2	30.9	16.9	23.2
28	---	---	---	---	---	---	30.5	22.7	26.2	28.9	16.7	22.9
29	---	---	---	---	---	---	30.5	22.6	26.2	25.7	13.8	18.6
30	---	---	---	---	---	---	32.4	23.0	27.2	24.8	15.8	19.3
31	---	---	---	---	---	---	33.3	23.2	27.8	---	---	---

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 NGVD of 1929 (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 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, 105,200 acre-ft, June 23, elevation 1,553.96 ft; minimum, 24,920 acre-ft, Oct, 6, 7, elevation, 1,532.07 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

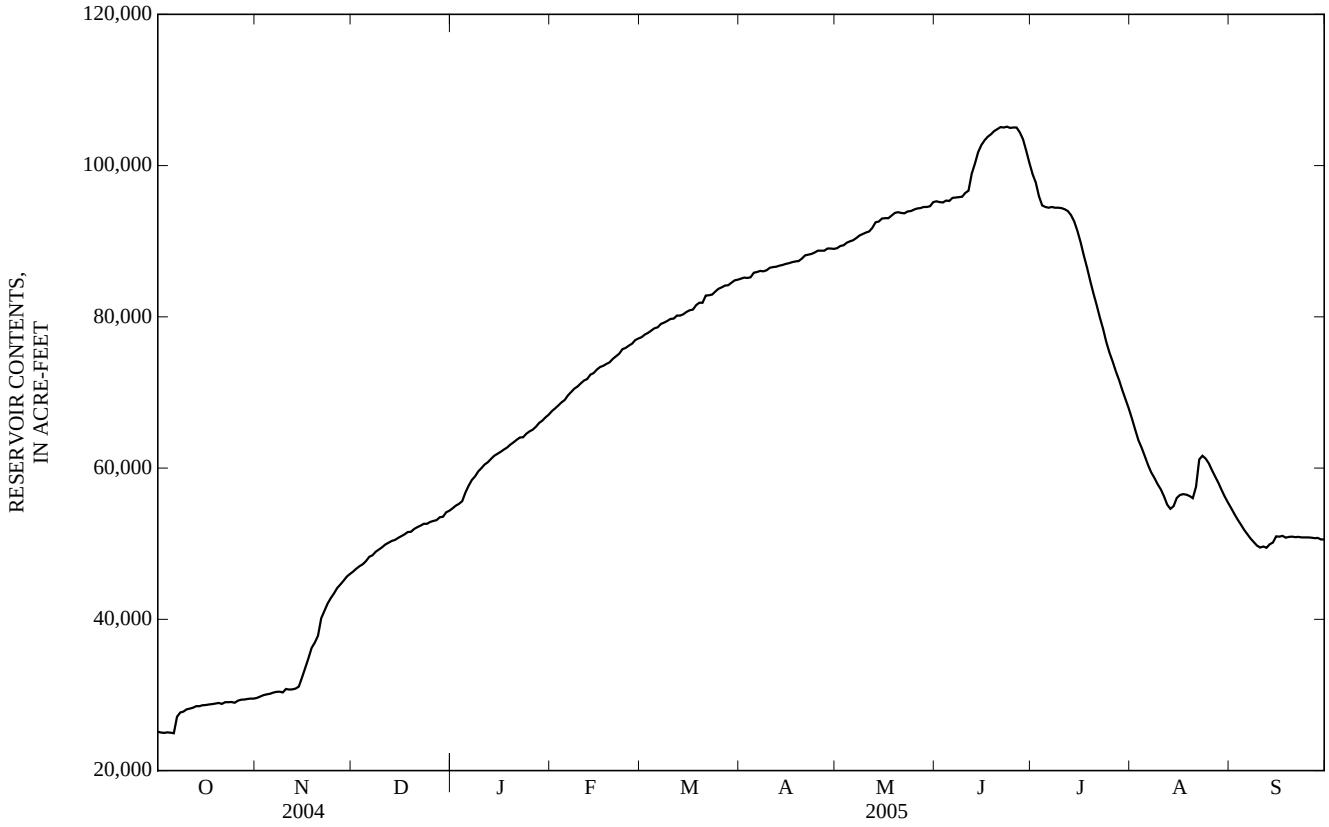
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25,130	29,620	46,330	54,680	67,540	77,320	85,050	89,080	95,270	98,870	66,550	54,680
2	25,030	29,800	46,720	55,030	67,890	77,660	85,190	89,370	95,170	97,740	65,120	53,910
3	24,990	29,980	47,040	55,280	68,290	77,880	85,140	89,460	95,120	95,930	63,700	53,180
4	25,060	30,080	47,300	55,630	68,690	78,180	85,230	89,800	95,370	94,730	62,720	52,530
5	25,010	30,160	47,720	56,770	69,010	78,490	85,830	89,990	95,320	94,530	61,590	51,850
6	24,940	30,310	48,270	57,670	69,620	78,620	85,930	90,130	95,730	94,430	60,440	51,270
7	27,120	30,410	48,470	58,420	70,060	79,060	86,070	90,420	95,780	94,530	59,450	50,700
8	27,680	30,440	48,930	58,900	70,510	79,240	86,020	90,760	95,830	94,430	58,710	50,230
9	27,800	30,330	49,230	59,560	70,790	79,460	86,160	90,950	95,880	94,430	57,880	49,760
10	28,100	30,790	49,530	60,000	71,200	79,720	86,490	91,150	96,380	94,380	57,200	49,500
11	28,200	30,720	49,890	60,470	71,570	79,770	86,580	91,290	96,680	94,230	56,270	49,630
12	28,320	30,740	50,130	60,770	71,780	80,160	86,630	91,780	98,920	93,980	55,170	49,460
13	28,520	30,840	50,360	61,220	72,350	80,160	86,770	92,500	100,300	93,440	54,610	49,930
14	28,520	31,100	50,500	61,630	72,560	80,340	86,860	92,600	101,800	92,600	54,960	50,160
15	28,640	32,300	50,770	61,890	73,020	80,650	87,000	93,000	102,700	91,340	56,060	50,970
16	28,670	33,570	51,000	62,150	73,360	80,870	87,090	93,050	103,300	89,840	56,450	50,940
17	28,740	34,840	51,240	62,450	73,520	80,960	87,230	93,050	103,800	88,080	56,550	51,040
18	28,790	36,220	51,540	62,720	73,770	81,550	87,330	93,390	104,100	86,490	56,480	50,800
19	28,870	36,930	51,580	63,090	73,980	81,860	87,380	93,740	104,600	84,730	56,310	50,900
20	28,940	37,840	51,950	63,400	74,440	81,860	87,700	93,840	104,800	83,080	56,020	50,940
21	28,820	40,140	52,190	63,740	74,780	82,810	88,130	93,740	105,100	81,550	57,520	50,870
22	29,050	41,120	52,400	64,040	75,130	82,850	88,220	93,690	105,000	79,900	61,140	50,900
23	29,050	e42,090	52,640	64,080	75,720	82,940	88,320	93,940	105,100	78,400	61,630	50,830
24	29,070	e42,820	52,640	64,540	75,890	83,350	88,510	93,980	105,000	76,660	61,260	50,830
25	28,970	e43,440	52,880	64,850	76,190	83,720	88,750	94,180	105,000	75,250	60,620	50,830
26	29,250	e44,150	53,010	65,080	76,450	83,900	88,750	94,330	105,000	74,070	59,700	50,800
27	29,370	e44,620	53,120	65,470	76,920	84,130	88,750	94,380	104,400	72,770	58,860	50,730
28	29,400	e45,120	53,490	65,970	77,140	84,180	89,030	94,530	103,500	71,610	58,030	50,770
29	29,470	e45,660	53,560	66,280	---	84,500	89,030	94,530	102,000	70,300	57,090	50,560
30	29,520	46,010	54,160	66,710	---	84,820	88,990	94,630	100,400	69,090	56,200	50,560
31	29,520	---	54,370	67,070	---	84,910	---	95,170	---	67,890	55,420	---
MAX	29,520	46,010	54,370	67,070	77,140	84,910	89,030	95,170	105,100	98,870	66,550	54,680
MIN	24,940	29,620	46,330	54,680	67,540	77,320	85,050	89,080	95,120	67,890	54,610	49,460
(‡)	1533.96	1539.76	1542.26	1545.69	1548.13	1549.87	1550.74	1552.01	1553.04	1545.90	1542.56	1541.15
(‡‡)	+4370	+16490	+8360	+12700	+10070	+7770	+4080	+6180	+5230	-32510	-12470	-4860

CAL YR 2004 MAX 69900 MIN 23500 (‡‡) +31030
WTR YR 2005 MAX 105100 MIN 24940 (‡‡) +25410

e Estimated
(‡) 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 $^1/_4$ 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 NGVD of 1929. 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.--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, 88 ft^3/s, Oct. 7, gage height 5.95 ft; minimum daily discharge, no flow June 25, Aug. 4, 5.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.35	0.26	0.20	0.14	0.09	0.48	0.13	0.81	0.48	0.07	0.28
2	0.09	0.28	0.37	0.40	0.22	0.09	0.10	0.45	0.12	1.7	0.06	0.68
3	0.09	1.1	0.42	0.25	0.12	0.09	0.10	0.37	0.26	1.3	0.05	1.1
4	0.09	0.59	0.42	0.48	0.12	0.10	0.12	0.35	0.35	1.3	0.00	1.2
5	0.12	0.22	0.44	1.2	0.13	0.09	0.12	0.10	0.49	1.4	0.00	1.1
6	0.48	0.09	0.70	0.64	0.56	0.09	0.09	0.11	0.85	0.79	0.07	0.33
7	10	0.09	0.64	0.42	0.43	0.10	0.09	0.24	0.97	0.50	0.10	0.10
8	1.1	0.10	0.42	0.41	0.30	0.10	0.10	0.31	0.44	0.10	0.45	0.09
9	0.65	0.11	0.42	0.41	0.18	0.10	0.11	0.31	0.33	0.09	0.14	0.11
10	0.69	0.13	0.35	0.42	0.13	0.12	0.14	0.22	0.81	0.09	0.10	0.37
11	0.56	0.09	0.42	0.30	0.16	0.15	0.16	0.10	0.70	0.10	0.09	0.48
12	0.43	0.08	0.28	0.31	0.20	0.17	0.09	0.09	0.36	0.09	0.10	1.1
13	0.44	0.08	0.14	0.16	0.24	0.37	0.09	0.09	0.10	0.09	1.4	1.3
14	0.44	0.09	0.16	0.15	0.20	0.59	0.08	0.10	0.10	0.09	1.5	2.0
15	0.38	2.8	0.16	0.11	0.17	0.91	0.09	0.16	0.10	0.08	0.23	5.7
16	0.29	1.8	0.28	0.10	0.12	1.0	0.09	0.56	0.13	0.08	0.11	1.4
17	0.44	0.77	0.38	0.10	0.11	0.97	0.09	0.12	0.10	0.09	0.10	1.2
18	0.57	0.64	0.24	0.11	0.10	0.86	0.09	0.16	0.09	0.10	0.10	1.1
19	0.74	0.70	0.15	0.12	0.10	0.78	0.10	0.10	0.09	0.15	0.09	1.00
20	0.78	0.92	0.15	0.12	0.10	0.74	0.23	0.08	0.10	0.12	0.09	0.99
21	0.59	1.1	0.20	0.10	0.10	0.61	0.75	0.07	0.09	0.09	1.5	0.59
22	0.77	0.61	0.17	0.10	0.10	0.36	0.56	0.07	0.09	0.09	7.1	0.30
23	0.90	0.49	e0.15	0.10	0.10	0.09	0.25	0.08	0.07	0.09	1.7	0.32
24	0.71	0.51	e0.13	0.10	0.11	0.10	0.23	0.06	0.04	0.08	0.95	0.80
25	0.69	0.42	e0.15	0.10	0.10	0.28	0.39	0.03	0.00	0.08	1.4	0.89
26	1.3	0.46	0.37	0.10	0.09	0.53	0.40	0.07	0.02	0.07	0.60	0.80
27	1.3	0.43	0.40	0.10	0.09	0.50	0.23	0.09	0.08	0.07	0.66	0.28
28	1.2	0.25	0.17	0.47	0.09	0.53	0.15	0.09	0.43	0.07	0.58	0.62
29	0.89	0.35	0.09	0.34	---	0.45	0.16	0.10	0.75	0.06	0.37	0.35
30	0.74	0.39	0.09	0.27	---	0.43	0.14	0.18	0.62	0.02	0.21	0.90
31	0.51	---	0.10	0.20	---	0.52	---	1.0	---	0.06	0.24	---
TOTAL	28.06	16.04	8.82	8.39	4.61	11.91	5.82	5.99	9.49	9.52	20.16	27.48
MEAN	0.91	0.53	0.28	0.27	0.16	0.38	0.19	0.19	0.32	0.31	0.65	0.92
MAX	10	2.8	0.70	1.2	0.56	1.0	0.75	1.0	0.97	1.7	7.1	5.7
MIN	0.08	0.08	0.09	0.10	0.09	0.09	0.08	0.03	0.00	0.02	0.00	0.09
AC-FT	56	32	17	17	9.1	24	12	12	19	19	40	55

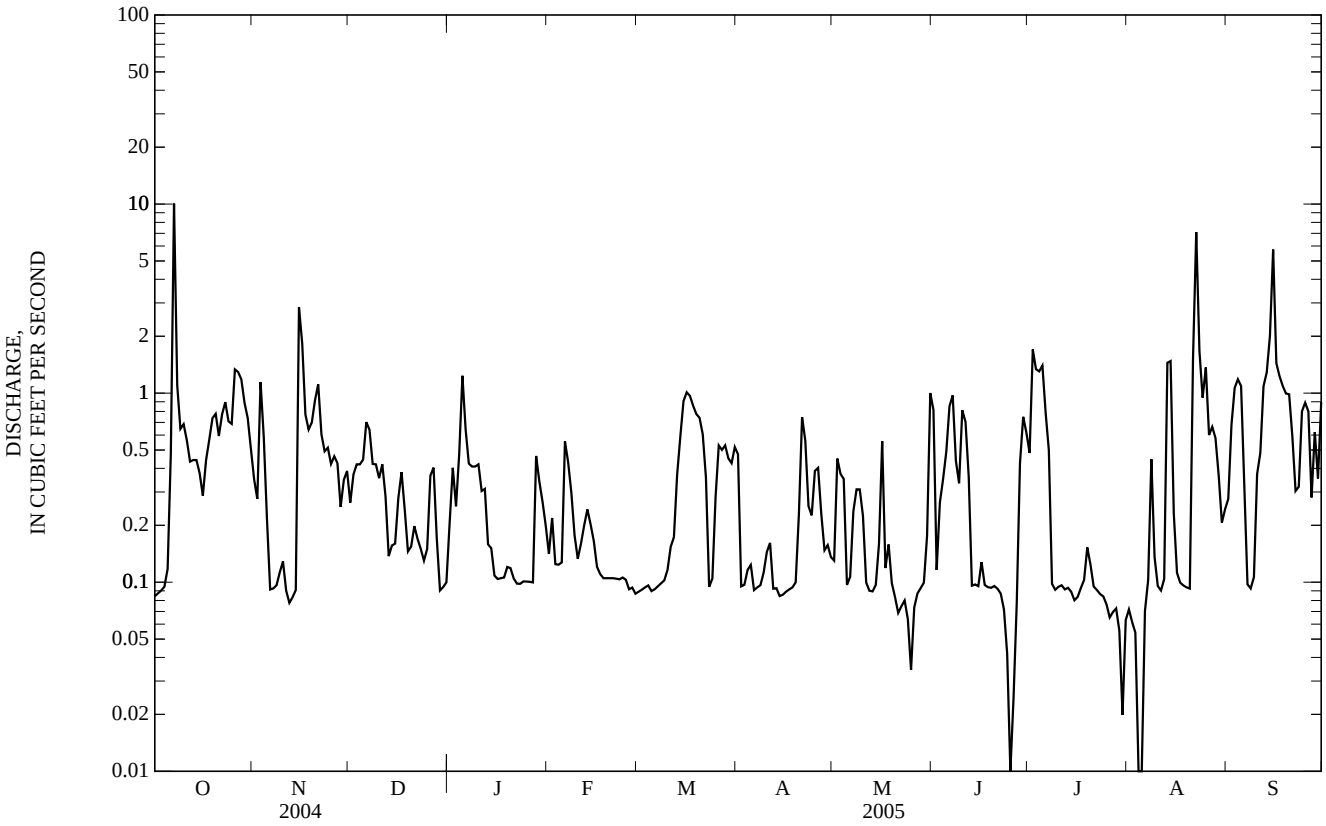
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2005, BY WATER YEAR (WY)

MEAN	5.63	36.2	34.5	34.7	56.4	87.7	110	167	152	9.88	20.2	0.56
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 2004 TOTAL 75.13 MEAN 0.21 MAX 10 MIN 0.00 AC-FT 149
WTR YR 2005 TOTAL 156.29 MEAN 0.43 MAX 10 MIN 0.00 AC-FT 310

e Estimated

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 NGVD of 1929, 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)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 14	0800	*794	*3.27				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	12	30	22	29	24	20	15	30	10	0.94	10
2	6.4	16	29	22	28	24	19	18	20	13	0.87	8.5
3	7.2	26	28	22	27	24	19	19	17	12	0.86	7.7
4	9.5	26	28	23	26	23	19	20	17	11	1.6	7.4
5	8.5	22	27	118	26	23	19	19	15	16	6.4	6.6
6	11	18	27	e86	30	23	19	18	14	16	2.1	5.8
7	31	16	28	e51	32	23	18	17	38	21	1.4	5.7
8	55	15	28	44	30	23	18	16	30	e12	1.6	5.4
9	33	14	27	40	28	22	18	16	20	e7.6	1.6	5.1
10	24	14	25	37	27	22	17	15	35	e6.6	1.9	4.3
11	21	14	24	35	26	22	17	14	220	e6.0	1.2	4.7
12	19	14	25	33	26	22	17	14	62	5.3	1.0	6.0
13	18	15	24	32	27	22	16	21	37	5.5	6.3	5.5
14	18	17	24	31	26	21	17	26	30	4.2	317	6.5
15	17	42	24	e28	25	24	16	19	27	3.5	75	15
16	15	55	24	e27	24	28	16	17	184	3.1	26	7.0
17	15	74	24	e27	24	29	16	16	43	2.7	18	6.1
18	14	49	24	e28	24	26	20	15	29	2.1	15	6.3
19	14	36	24	30	25	24	24	14	25	2.0	14	5.7
20	13	68	24	29	25	23	22	13	22	1.7	12	5.3
21	13	88	25	29	25	22	24	11	20	1.5	12	5.1
22	13	55	25	29	24	22	19	11	18	1.4	17	4.6
23	13	60	e21	27	24	21	17	10	16	1.9	13	4.3
24	12	51	e19	27	25	21	17	9.2	16	1.2	13	4.0
25	12	43	e21	27	24	21	17	10	15	1.1	23	3.8
26	13	40	e23	27	24	22	17	17	14	1.1	e14	3.7
27	14	36	25	26	24	21	16	16	14	1.2	e11	3.1
28	20	33	24	30	24	21	16	15	13	1.0	e15	3.6
29	15	32	24	31	---	21	16	14	12	0.98	18	3.1
30	13	31	23	31	---	20	16	14	11	0.96	13	3.1
31	13	---	23	30	---	20	---	24	---	0.96	11	---
TOTAL	507.3	1,032	771	1,079	729	704	542	493.2	1,064	174.60	664.77	173.0
MEAN	16.4	34.4	24.9	34.8	26.0	22.7	18.1	15.9	35.5	5.63	21.4	5.77
MAX	55	88	30	118	32	29	24	26	220	21	317	15
MIN	6.4	12	19	22	24	20	16	9.2	11	0.96	0.86	3.1
AC-FT	1,010	2,050	1,530	2,140	1,450	1,400	1,080	978	2,110	346	1,320	343

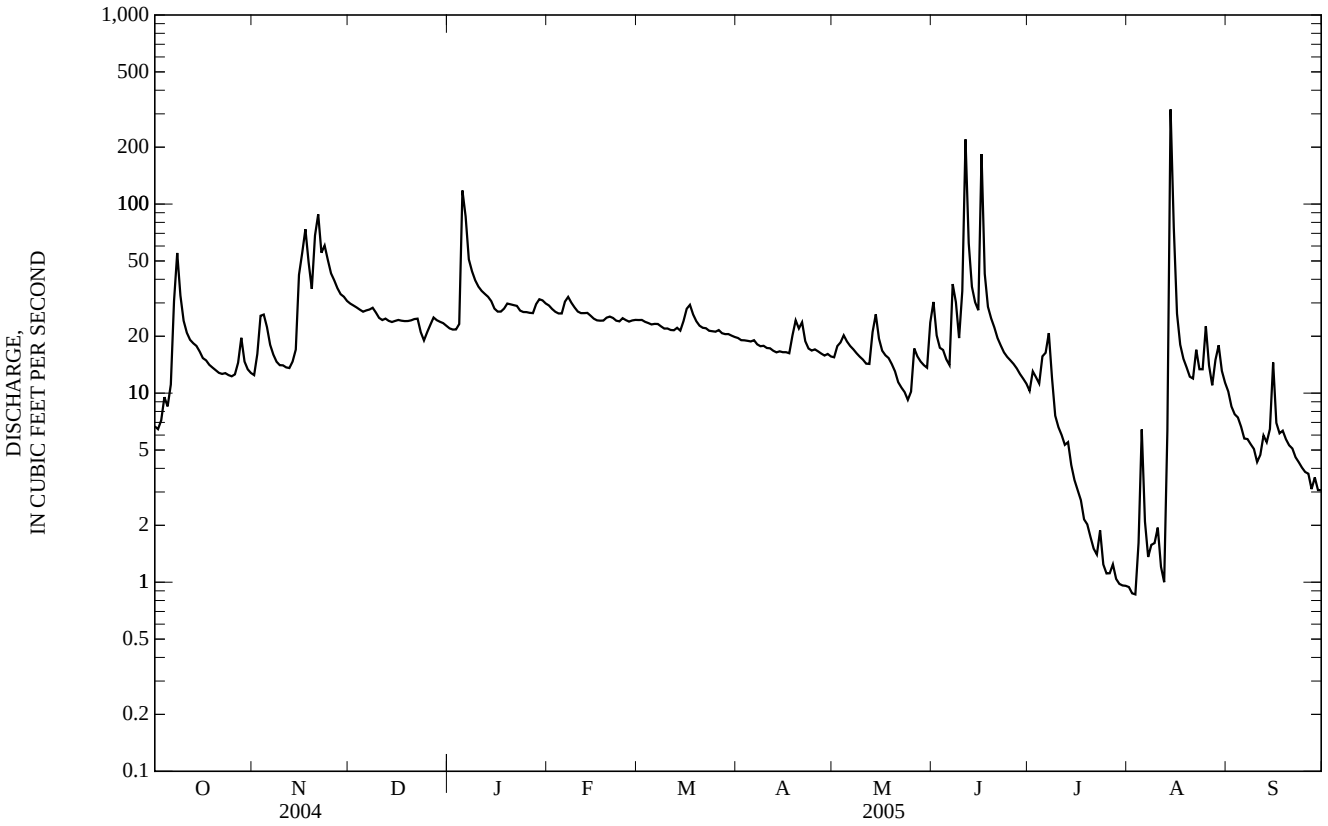
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

MEAN	35.2	28.5	22.6	22.1	25.1	33.6	58.9	89.3	97.6	26.2	34.1	48.9
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1960 - 2005	
ANNUAL TOTAL	8,138.6		7,933.87			
ANNUAL MEAN	22.2		21.7		43.5	
HIGHEST ANNUAL MEAN					107	1995
LOWEST ANNUAL MEAN					10.6	1970
HIGHEST DAILY MEAN	503	Aug 30	317	Aug 14	17,100	Jun 3, 1995
LOWEST DAILY MEAN	1.8	Sep 20	0.86	Aug 3	0.02	Jul 17, 1971
ANNUAL SEVEN-DAY MINIMUM	2.1	Sep 16	0.94	Jul 28	0.02	Jul 16, 1971
MAXIMUM PEAK FLOW			794	Aug 14	62,300	Jun 3, 1995
MAXIMUM PEAK STAGE			3.27	Aug 14	18.80	Jun 3, 1995
ANNUAL RUNOFF (AC-FT)	16,140		15,740		31,490	
10 PERCENT EXCEEDS	36		31		60	
50 PERCENT EXCEEDS	14		19		17	
90 PERCENT EXCEEDS	5.5		4.3		5.3	



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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	46	274	124	216	150	92	71	74	30	15	205
2	30	48	243	133	214	145	88	79	103	40	14	149
3	27	61	232	136	204	137	88	85	104	37	13	123
4	26	202	228	146	194	130	84	87	111	31	13	107
5	25	275	210	213	178	129	84	89	128	77	14	97
6	25	167	200	1,270	188	119	90	91	268	215	16	88
7	286	129	216	1,190	248	120	91	79	135	210	22	80
8	7,630	101	278	510	279	116	86	83	99	193	24	73
9	1,760	80	229	348	252	125	79	78	105	97	23	67
10	605	72	210	308	222	109	77	69	114	71	23	60
11	348	71	192	286	198	105	83	64	116	57	19	56
12	261	66	183	264	173	108	85	60	90	48	16	62
13	191	69	166	241	171	101	86	109	128	44	22	65
14	213	77	171	226	161	106	81	134	1,060	39	32	83
15	140	116	149	205	165	122	77	368	257	37	39	1,600
16	111	3,880	139	192	152	115	76	331	151	32	142	2,400
17	84	2,480	136	182	150	107	72	211	108	29	291	397
18	78	2,230	139	156	145	117	68	151	250	27	136	200
19	66	1,300	140	164	136	130	68	130	209	26	79	189
20	65	459	138	164	144	118	75	106	129	24	59	123
21	62	1,530	143	166	147	116	92	84	98	24	61	101
22	58	3,150	148	163	147	112	97	71	80	22	2,620	91
23	59	1,050	e144	156	248	109	89	63	67	20	6,230	84
24	53	641	e131	170	206	110	85	62	56	18	1,590	73
25	52	505	e132	155	234	109	91	59	49	16	553	66
26	53	371	e134	149	183	106	87	63	45	16	336	65
27	51	284	136	148	171	109	75	65	39	19	248	65
28	48	378	133	156	160	99	76	72	35	18	400	66
29	44	311	133	168	---	97	76	76	32	16	662	68
30	44	283	126	188	---	99	75	85	30	15	184	61
31	45	---	127	211	---	96	---	72	---	15	137	---
TOTAL	12,574	20,432	5,360	8,288	5,286	3,571	2,473	3,247	4,270	1,563	14,033	6,964
MEAN	406	681	173	267	189	115	82.4	105	142	50.4	453	232
MAX	7,630	3,880	278	1,270	279	150	97	368	1,060	215	6,230	2,400
MIN	25	46	126	124	136	96	68	59	30	15	13	56
AC-FT	24,940	40,530	10,630	16,440	10,480	7,080	4,910	6,440	8,470	3,100	27,830	13,810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

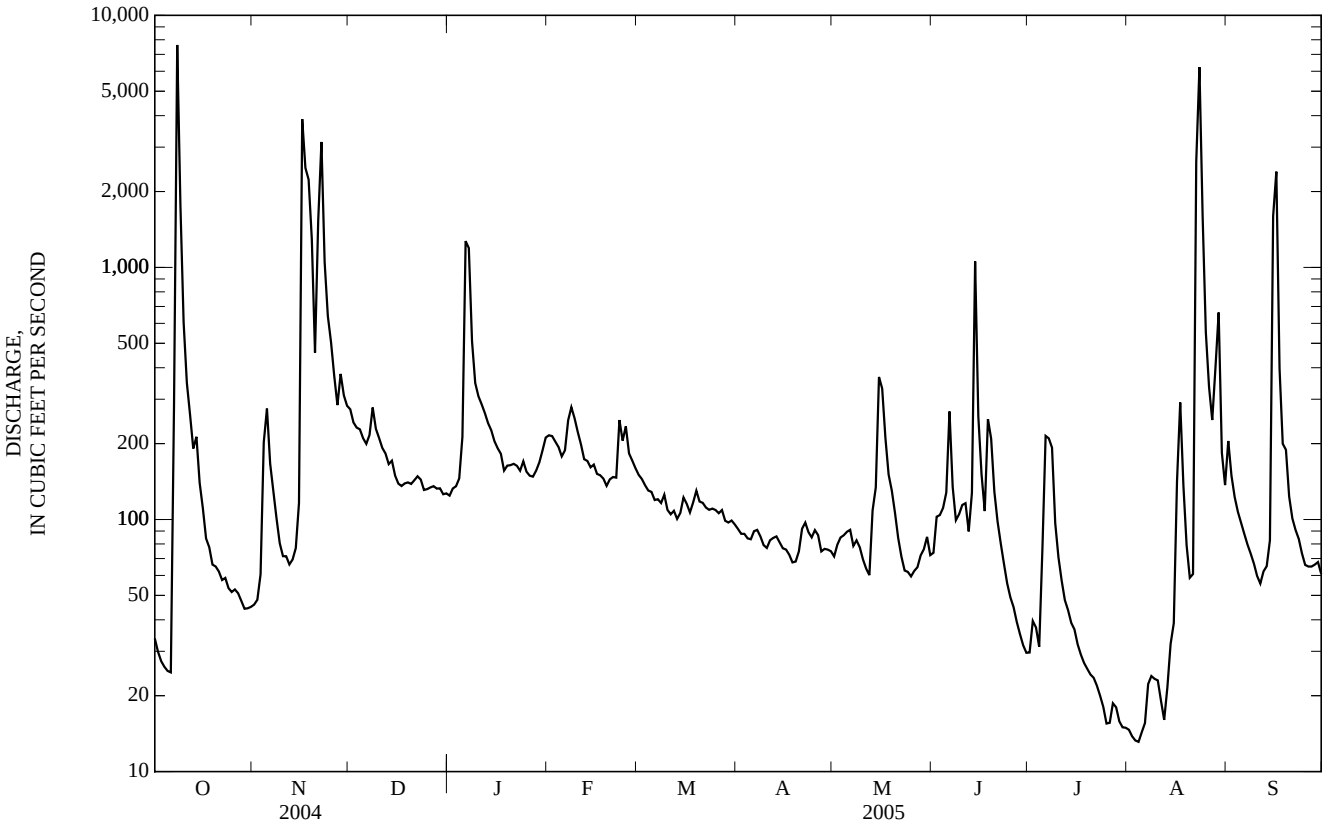
MEAN	344	162	135	118	171	249	330	958	768	231	174	259
MAX	5,608	1,743	984	793	1,375	2,785	5,366	6,104	4,659	2,016	2,522	1,675
(WY)	(1987)	(1987)	(1998)	(1998)	(1997)	(1998)	(1997)	(1977)	(1995)	(1950)	(1995)	(1965)
MIN	0.00	0.00	0.20	0.84	4.06	4.27	0.64	0.31	10.3	0.25	0.00	0.00
(WY)	(1953)	(1953)	(1955)	(1953)	(1953)	(1955)	(1971)	(1953)	(1966)	(1970)	(1952)	(1952)

e Estimated

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	85,367		88,061			
ANNUAL MEAN	233		241		a326	
HIGHEST ANNUAL MEAN					1,562	1987
LOWEST ANNUAL MEAN					50.0	1970
HIGHEST DAILY MEAN	8,160	Mar 5	7,630	Oct 8	41,600	May 10, 1993
LOWEST DAILY MEAN	13	Sep 21,22	13	Aug 3,4	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	15	Sep 16	14	Jul 30	0.00	Aug 2, 1946
MAXIMUM PEAK FLOW			9,740	Oct 8	59,000	Oct 4, 1986
MAXIMUM PEAK STAGE			15.64	Oct 8	19.07	Oct 4, 1986
ANNUAL RUNOFF (AC-FT)	169,300		174,700		235,900	
10 PERCENT EXCEEDS	312		288		563	
50 PERCENT EXCEEDS	64		109		63	
90 PERCENT EXCEEDS	26		32		7.5	

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 NGVD of 1929.

REMARKS.--Records poor. Flow partially regulated by Tom Steed Reservoir (07305400), 8 mi upstream on West Otter Creek. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.43	4.5	3.7	1.0	e2.2	e0.50	e0.00	0.00	0.00	0.00	0.00
2	0.00	3.2	4.3	3.5	0.98	e2.0	e0.52	e0.00	0.00	0.00	0.00	0.00
3	0.00	14	4.1	3.2	0.90	e1.8	e0.55	e0.00	0.00	0.00	0.00	0.00
4	0.00	1.9	3.7	1.8	0.94	e1.5	0.53	e0.20	0.00	0.00	0.00	0.00
5	0.00	0.03	3.7	21	0.87	e1.3	0.52	e0.30	0.06	4.8	0.00	0.00
6	0.00	0.38	3.8	e58	3.3	e1.4	0.44	e0.24	61	5.9	0.00	0.00
7	0.00	0.05	3.7	e22	12	e1.2	0.52	e0.20	3.9	0.20	0.00	0.00
8	0.00	0.00	3.4	e8.0	9.4	e1.0	1.7	e0.10	0.26	0.15	0.00	0.00
9	0.00	0.00	3.7	6.1	5.8	e1.0	e2.0	0.00	0.04	0.01	0.00	0.00
10	0.00	0.00	3.6	4.8	4.3	e0.90	e1.5	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	3.5	3.7	3.4	e0.90	e1.0	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	3.4	3.4	3.5	e0.95	e0.90	0.00	0.02	0.00	0.00	0.00
13	0.00	0.00	3.4	2.6	e3.7	e1.0	e0.80	e2.0	0.10	0.00	0.18	0.00
14	0.00	0.00	3.5	2.1	e3.6	e0.85	e0.62	e12	0.07	0.00	4.2	0.00
15	0.00	59	3.7	e1.2	e3.4	e0.90	e0.35	e3.0	0.05	0.00	8.5	633
16	0.00	620	3.3	e0.80	e3.2	e0.91	e0.17	e0.91	0.08	0.00	9.2	373
17	0.00	445	3.2	e0.90	e3.0	e0.80	e0.15	e0.70	0.00	0.00	8.9	28
18	0.00	316	3.3	e1.0	e3.3	e0.80	e0.14	e0.40	0.00	0.00	6.4	9.9
19	0.00	67	3.3	1.1	e3.4	e0.61	e0.13	e0.36	0.00	0.00	4.2	5.5
20	0.00	25	3.4	1.1	e3.3	e0.61	e0.12	e0.11	0.00	0.00	2.5	2.7
21	0.00	276	3.1	1.1	e3.1	e0.39	e0.40	e0.00	0.00	0.00	1.3	0.95
22	0.00	100	3.0	0.72	2.9	0.27	e0.56	e0.00	0.00	0.00	0.57	0.41
23	0.00	45	e2.2	0.47	2.9	0.19	e0.20	e0.00	0.00	0.00	0.06	0.10
24	0.00	54	e1.8	0.59	2.4	0.11	e0.10	e0.00	0.00	0.00	0.00	0.00
25	0.00	23	e2.4	0.62	e2.3	e0.16	e0.00	e0.00	0.00	0.00	0.00	0.00
26	0.00	13	e2.7	0.40	e2.3	e0.18	e0.00	e0.00	0.00	0.00	0.00	0.00
27	0.00	9.0	2.9	0.26	e2.5	e0.50	e0.00	e0.00	0.00	0.00	0.00	0.00
28	0.00	7.2	3.7	0.55	e2.4	e0.50	e0.00	e0.00	0.00	0.00	0.00	0.00
29	0.00	6.0	3.7	0.78	---	e0.40	e0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	5.3	3.7	1.1	---	e0.32	e0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	3.3	1.1	---	e0.43	---	0.00	---	0.00	0.00	---
TOTAL	0.00	2,090.49	105.0	157.69	94.09	26.08	14.42	20.52	65.58	11.06	46.01	1,053.56
MEAN	0.00	69.7	3.39	5.09	3.36	0.84	0.48	0.66	2.19	0.36	1.48	35.1
MAX	0.00	620	4.5	58	12	2.2	2.0	12	61	5.9	9.2	633
MIN	0.00	0.00	1.8	0.26	0.87	0.11	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	4,150	208	313	187	52	29	41	130	22	91	2,090

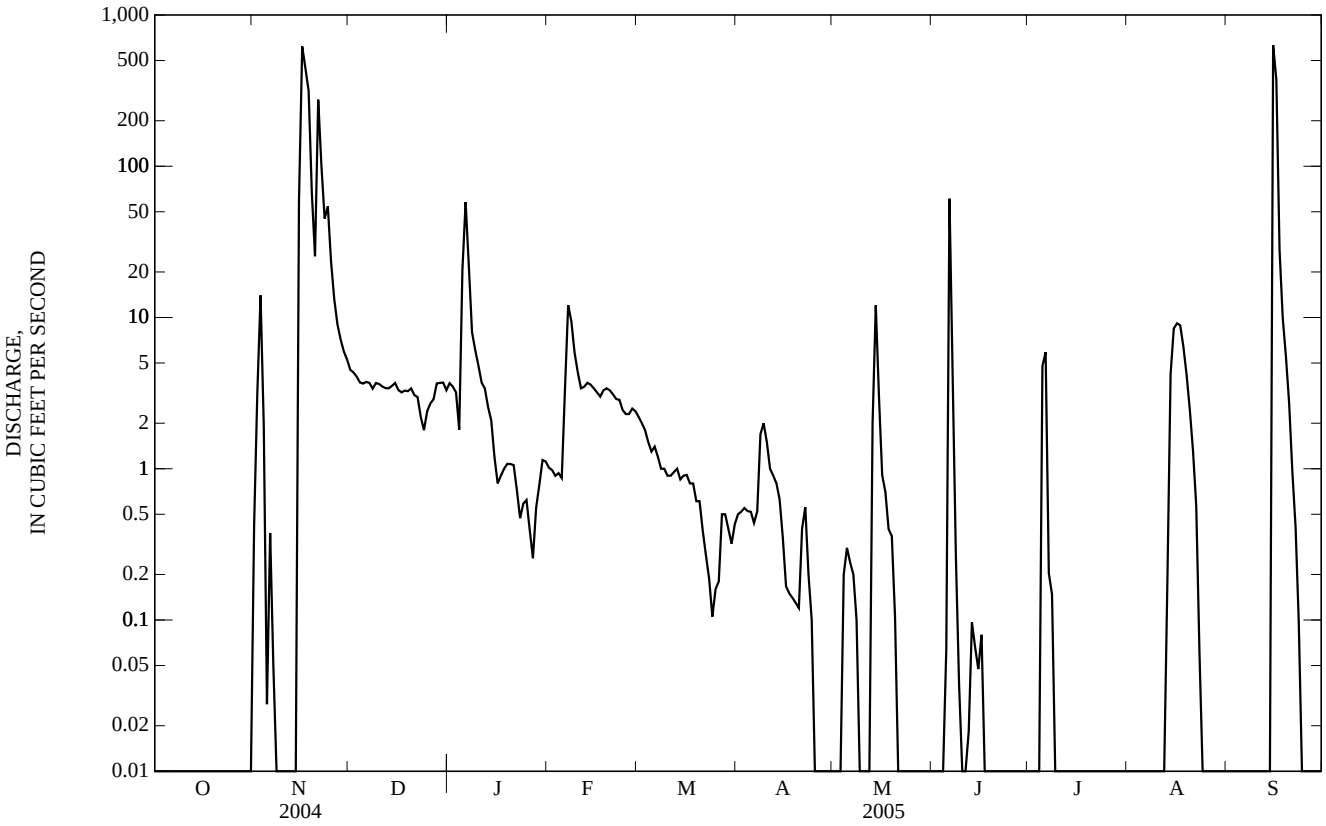
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2005, BY WATER YEAR (WY)

MEAN	61.9	21.1	5.60	10.6	11.1	12.5	5.26	49.1	24.0	3.74	1.28	6.95
MAX	288	69.7	13.6	44.7	48.2	34.8	15.1	238	79.5	11.3	3.02	35.1
(WY)	(2001)	(2005)	(2001)	(2001)	(2001)	(2004)	(2002)	(2001)	(2003)	(2004)	(2001)	(2005)
MIN	0.00	0.00	1.15	0.14	0.92	0.64	0.41	0.21	0.45	0.36	0.00	0.00
(WY)	(2004)	(2004)	(2004)	(2004)	(2003)	(2003)	(2003)	(2004)	(2004)	(2005)	(2000)	(2002)

e Estimated

07307010 OTTER CREEK NEAR SNYDER, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2000 - 2005	
ANNUAL TOTAL	3,788.49		3,684.50			
ANNUAL MEAN	10.4		10.1		18.0	
HIGHEST ANNUAL MEAN					61.8	2001
LOWEST ANNUAL MEAN					4.45	2004
HIGHEST DAILY MEAN	634	Mar 5	633	Sep 15	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	Jan 5	0.00	Oct 1	0.00	Aug 2, 2000
MAXIMUM PEAK FLOW			1,220	Sep 15	4,720	Oct 23, 2000
MAXIMUM PEAK STAGE			12.95	Sep 15	14.70	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	7,510		7,310		13,030	
10 PERCENT EXCEEDS	6.0		5.4		18	
50 PERCENT EXCEEDS	0.11		0.27		1.1	
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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	77	330	129	216	171	101	68	84	65	51	185
2	35	79	303	128	215	169	100	74	80	104	51	217
3	31	150	268	128	206	167	98	91	109	88	52	171
4	30	109	256	147	198	161	102	90	115	75	58	157
5	29	311	246	611	191	156	101	92	111	489	57	139
6	27	224	240	682	253	152	e104	91	602	230	56	124
7	48	173	245	1,450	226	148	e104	93	457	308	101	112
8	5,000	140	290	855	274	145	e99	86	208	229	202	109
9	4,120	117	291	508	276	142	96	80	152	155	68	103
10	922	101	243	396	246	147	90	77	415	112	56	95
11	521	90	223	334	224	133	86	74	153	93	50	88
12	366	82	211	293	209	132	88	70	139	80	52	115
13	293	79	196	265	198	129	89	568	122	77	76	89
14	236	87	189	237	191	121	86	458	528	79	366	187
15	261	432	191	228	186	127	82	199	508	75	161	1,410
16	194	3,810	174	210	181	138	81	396	218	77	113	3,530
17	168	5,750	166	202	171	129	86	283	145	73	237	1,260
18	146	3,250	161	189	174	126	84	198	129	73	195	395
19	133	2,640	161	179	170	132	87	160	256	73	127	244
20	120	918	154	178	163	139	86	136	e169	68	98	231
21	110	1,960	152	177	158	133	110	116	e115	65	88	175
22	105	4,200	149	172	157	127	e104	101	e97	63	342	141
23	100	2,150	e145	171	204	123	e95	91	88	59	5,260	119
24	93	1,050	e133	176	249	120	e93	84	79	59	2,720	110
25	88	806	e134	173	231	124	e96	78	70	60	820	98
26	93	610	e138	162	219	119	e90	81	62	59	445	89
27	92	462	142	156	200	116	79	80	58	64	330	84
28	85	426	139	183	184	118	74	75	54	67	280	80
29	81	438	141	182	---	117	70	79	51	62	670	74
30	77	359	138	184	---	112	68	82	57	60	341	75
31	77	---	133	200	---	107	---	92	---	50	221	---
TOTAL	13,721	31,080	6,082	9,285	5,770	4,180	2,729	4,343	5,431	3,291	13,744	10,006
MEAN	443	1,036	196	300	206	135	91.0	140	181	106	443	334
MAX	5,000	5,750	330	1,450	276	171	110	568	602	489	5,260	3,530
MIN	27	77	133	128	157	107	68	68	51	50	50	74
AC-FT	27,220	61,650	12,060	18,420	11,440	8,290	5,410	8,610	10,770	6,530	27,260	19,850

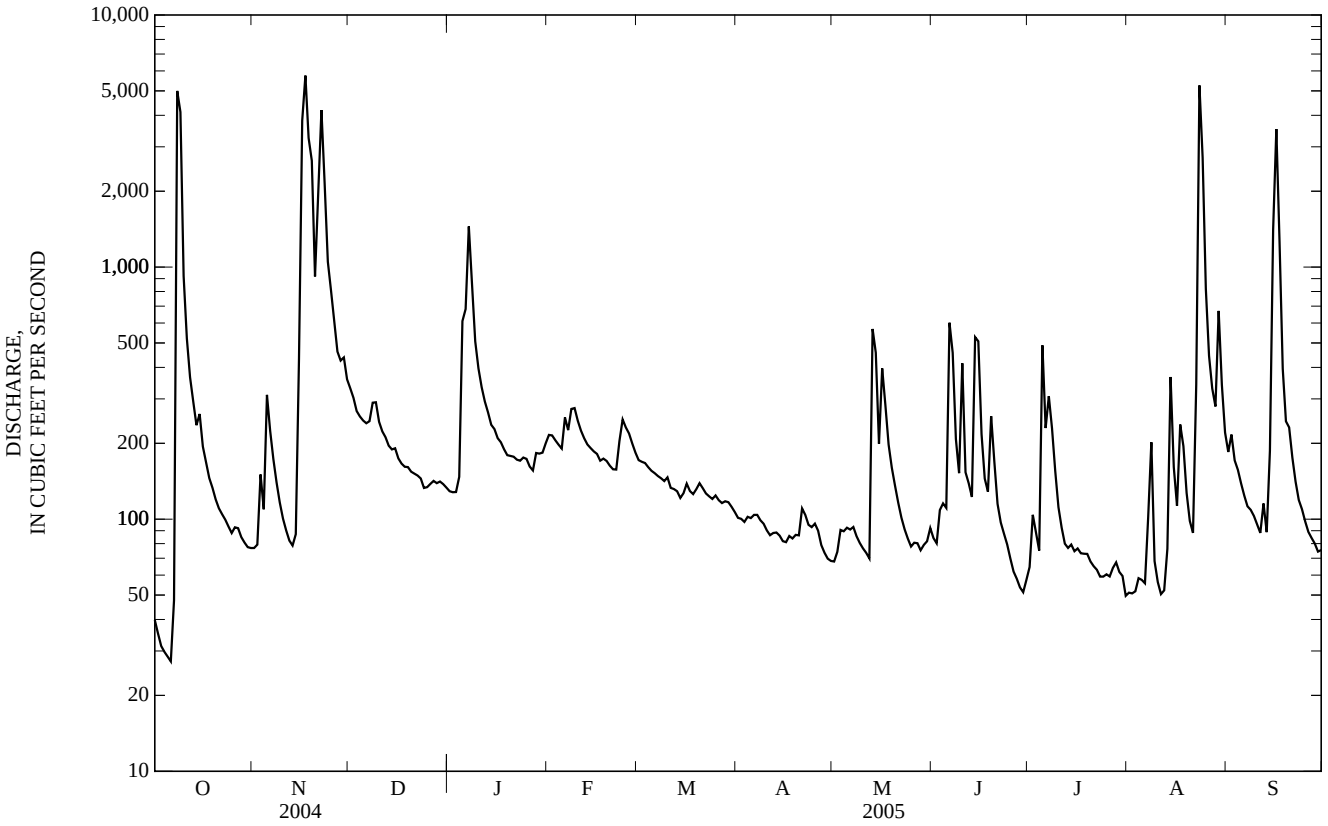
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	627	392	340	268	369	625	593	1,060	1,254	296	437	500
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	108,817		109,662			
ANNUAL MEAN	297		300		564	
HIGHEST ANNUAL MEAN					1,987	1987
LOWEST ANNUAL MEAN					92.4	2002
HIGHEST DAILY MEAN	8,360	Mar 6	5,750	Nov 17	39,100	May 30, 1987
LOWEST DAILY MEAN	17	Jan 6	27	Oct 6	3.7	Sep 7, 1985
ANNUAL SEVEN-DAY MINIMUM	23	Sep 16	34	Oct 1	4.7	Sep 6, 1985
MAXIMUM PEAK FLOW			10,200	Oct 8	57,200	Oct 5, 1986
MAXIMUM PEAK STAGE			13.90	Oct 8	19.18	May 10, 1993
ANNUAL RUNOFF (AC-FT)	215,800		217,500		408,300	
10 PERCENT EXCEEDS	412		441		1,090	
50 PERCENT EXCEEDS	96		136		150	
90 PERCENT EXCEEDS	36		68		48	



07308990 LAKE ELLSWORTH NEAR ELGIN, OK

LOCATION.--Lat 34°47'40", long 98°22'07", in NW ¼ NW ¼ 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 NAVD of 1988 (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 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,Oct. 1, 2004, gage height, 1,219.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 47,750 acre-ft, Mar. 13, gage height 1,230.25 ft; minimum, 8,630 acre-ft, Oct. 1, 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

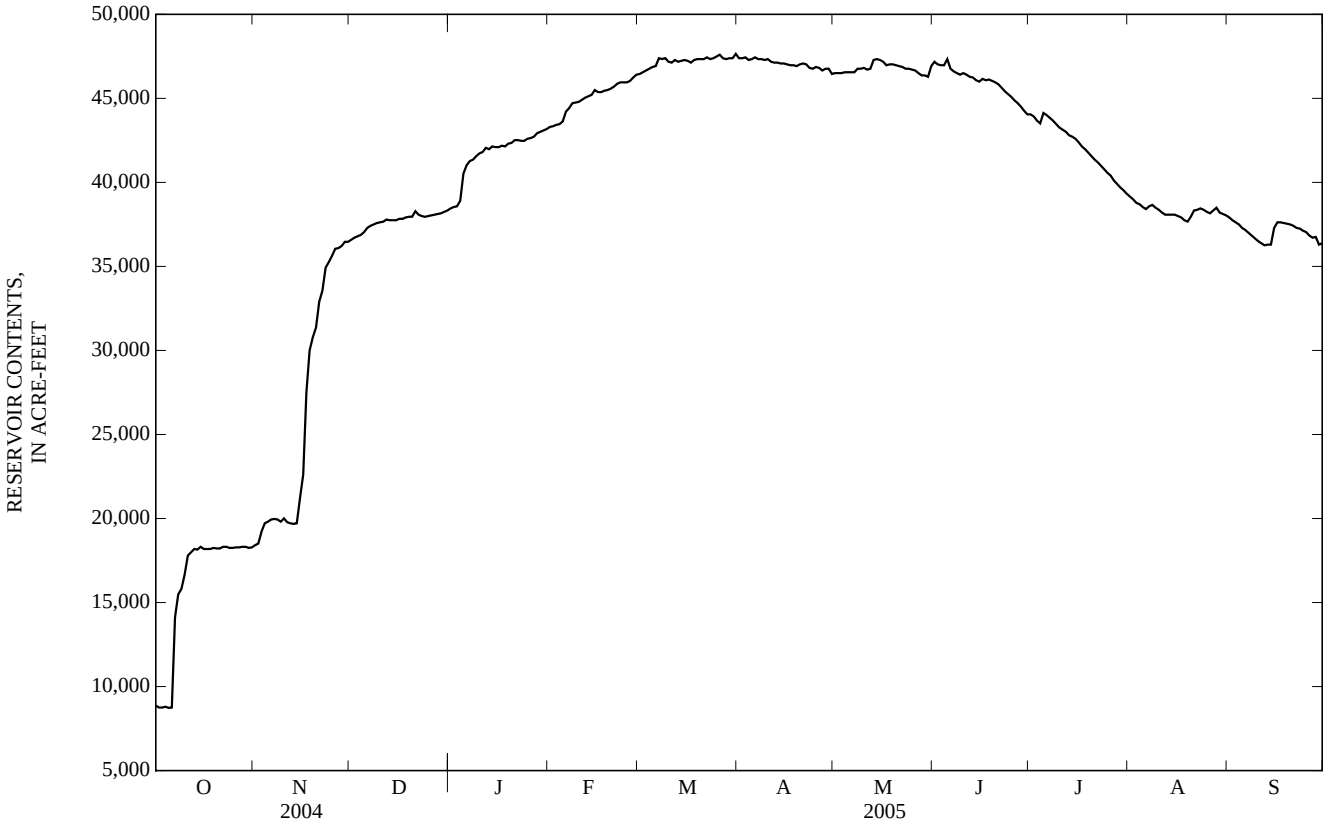
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8,870	18,410	36,590	38,450	43,300	46,450	47,390	46,500	47,180	44,050	39,160	37,910
2	8,750	18,510	36,710	38,530	43,340	46,550	47,390	46,500	47,020	43,920	38,990	37,750
3	8,750	19,230	36,790	38,580	43,420	46,660	47,440	46,500	46,970	43,670	38,780	37,620
4	8,800	19,710	36,880	38,910	43,470	46,760	47,280	46,550	46,970	43,510	38,700	37,500
5	8,730	19,810	37,040	40,520	43,630	46,870	47,340	46,550	47,340	44,130	38,530	37,290
6	8,750	19,940	37,290	41,020	44,210	46,920	47,440	46,550	46,760	44,010	38,410	37,170
7	14,120	19,970	37,420	41,270	44,420	e47,390	47,340	46,550	46,610	43,840	38,580	37,000
8	15,490	19,940	37,500	41,350	44,710	e47,340	47,340	46,760	46,500	43,670	38,660	36,840
9	15,810	19,810	37,580	41,560	44,750	e47,390	47,280	46,760	46,410	43,470	38,490	36,670
10	16,660	20,010	37,620	41,730	44,790	47,180	47,340	46,810	46,500	43,260	38,370	36,500
11	17,800	19,780	37,660	41,810	44,920	47,130	47,180	46,710	46,410	43,130	38,200	36,380
12	17,990	19,710	37,790	42,060	45,040	47,280	47,130	46,760	46,280	43,010	38,080	36,260
13	18,190	19,680	37,750	41,970	45,120	47,180	47,130	47,280	46,240	42,800	38,080	36,300
14	18,150	19,710	37,750	42,140	45,210	47,230	47,070	47,340	46,080	42,720	38,080	36,300
15	18,320	21,210	37,750	42,100	45,500	47,280	47,070	47,280	45,990	42,600	38,080	37,290
16	18,190	22,610	37,830	42,100	45,370	47,230	47,020	47,180	46,160	42,390	38,000	37,620
17	18,190	27,510	37,830	42,180	45,370	47,130	46,970	46,970	e46,080	42,140	37,910	37,620
18	18,190	30,000	37,910	42,140	45,460	47,280	46,970	47,020	e46,120	41,970	37,750	37,580
19	18,250	30,790	37,950	42,310	45,500	47,340	46,920	47,020	e46,040	41,770	37,660	37,540
20	18,220	31,370	37,950	42,350	45,580	47,340	47,020	46,970	e45,950	41,560	37,950	37,500
21	18,220	32,900	38,290	42,510	45,700	47,340	47,070	46,920	45,830	41,350	38,330	37,420
22	18,320	33,560	38,080	42,510	45,870	47,440	47,020	46,870	45,620	41,190	38,370	37,290
23	18,320	34,930	38,000	42,470	45,950	47,340	46,810	46,760	45,410	40,980	38,450	37,250
24	18,250	35,260	37,950	42,470	45,950	47,390	46,760	46,760	45,250	40,770	38,370	37,130
25	18,250	35,630	38,000	42,600	45,950	47,490	46,870	46,710	45,080	40,570	38,240	37,040
26	18,280	36,050	38,040	42,640	46,040	47,600	46,810	46,660	44,880	40,400	38,160	36,840
27	18,280	36,090	38,080	42,720	46,240	47,390	46,660	46,500	44,710	40,110	38,330	36,710
28	18,320	36,210	38,120	42,930	46,410	47,340	46,760	46,370	44,500	39,900	38,490	36,750
29	18,320	36,460	38,160	43,010	---	47,390	46,760	46,370	44,250	39,700	38,200	36,300
30	18,250	36,460	38,240	43,090	---	47,390	46,450	46,280	44,050	39,530	38,120	36,380
31	18,280	---	38,330	43,180	---	47,650	---	46,920	---	39,320	38,040	---
MEAN	16,040	26,380	37,710	41,720	45,040	47,220	47,070	46,760	45,970	42,110	38,310	37,060
MAX	18,320	36,460	38,330	43,180	46,410	47,650	47,440	47,340	47,340	44,130	39,160	37,910
MIN	8,730	18,410	36,590	38,450	43,300	46,450	46,450	46,280	44,050	39,320	37,660	36,260
(‡)	1222.71	1227.59	1228.04	1229.21	1229.99	1230.23	1230.00	1230.09	1229.42	1228.28	1227.97	1227.57
(‡‡)	+9560	+18180	+1870	+4850	+3230	+1240	-1200	+470	-2870	-4730	-1280	-1660

CAL YR 2004 MAX 38330 MIN 8700 (‡‡) +23850
WTR YR 2005 MAX 47650 MIN 8730 (‡‡) +27660

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 NGVD of 1929.

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 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, 55,030 acre-ft, Feb. 7, elevation 1,343.50 ft; minimum, 45,000 acre-ft, Sept. 14, elevation, 1,338.76 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

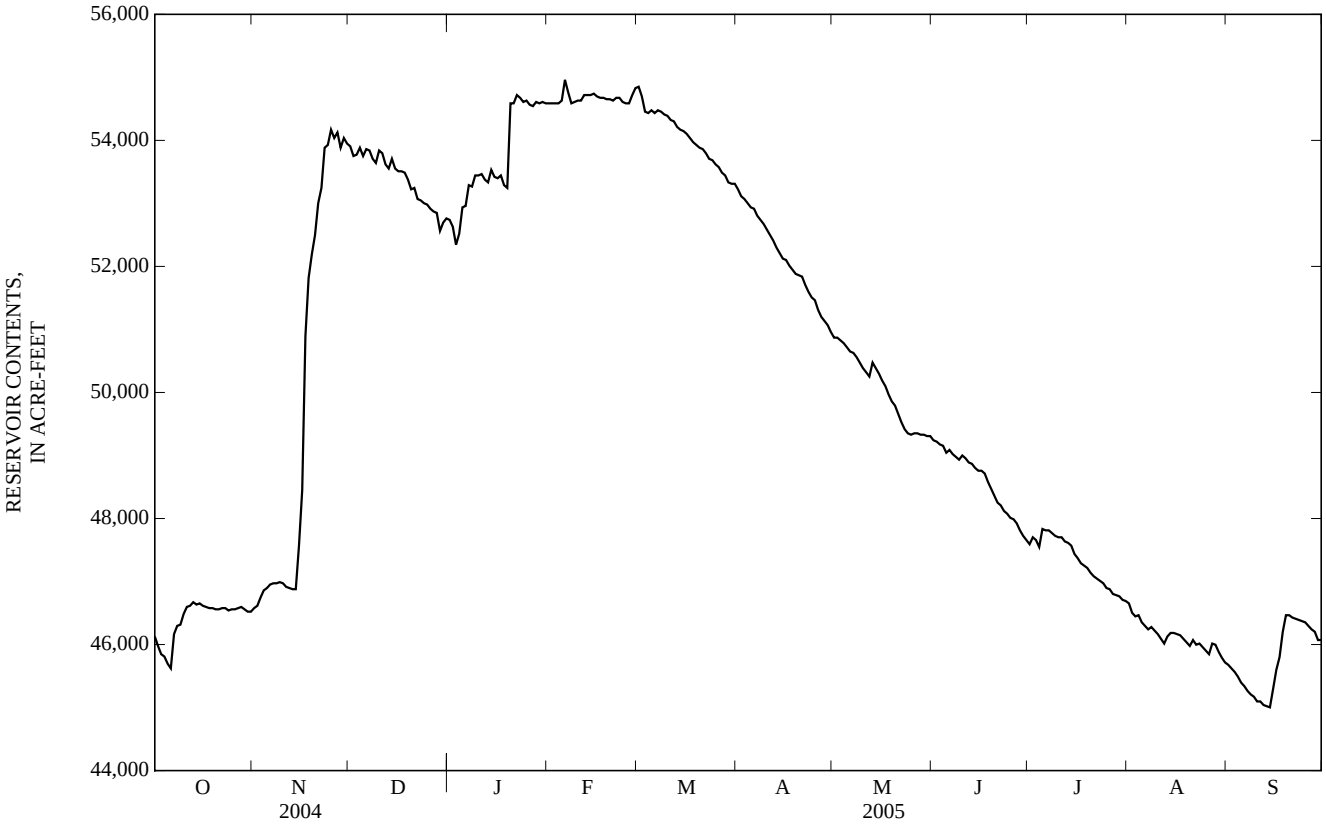
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46,130	46,580	53,910	52,740	54,590	54,850	53,220	50,870	49,240	47,590	46,650	45,680
2	45,980	46,620	53,750	52,630	54,590	54,700	53,110	50,870	49,220	47,700	46,500	45,620
3	45,850	46,750	53,770	52,340	54,590	54,460	53,070	50,830	49,180	47,660	46,450	45,570
4	45,810	46,860	53,880	52,520	54,590	54,430	53,000	50,780	49,150	47,550	46,470	45,490
5	45,700	46,900	53,750	52,940	54,630	54,480	52,940	50,720	49,040	47,830	46,350	45,400
6	45,620	46,950	53,860	52,960	54,960	54,430	52,920	50,650	49,090	47,810	46,300	45,340
7	46,170	46,970	53,840	53,290	54,760	54,480	52,810	50,630	49,020	47,810	46,240	45,270
8	46,300	46,970	53,710	53,270	54,590	54,460	52,740	50,560	48,980	47,770	46,280	45,210
9	46,320	46,990	53,640	53,440	54,610	54,410	52,670	50,470	48,930	47,720	46,220	45,170
10	46,480	46,970	53,840	53,440	54,630	54,390	52,590	50,390	49,000	47,700	46,170	45,100
11	46,600	46,920	53,800	53,470	54,630	54,320	52,500	50,320	48,960	47,700	46,090	45,100
12	46,620	46,900	53,620	53,380	54,720	54,300	52,410	50,250	48,890	47,640	46,020	45,040
13	46,670	46,880	53,550	53,330	54,720	54,210	52,300	50,470	48,870	47,610	46,130	45,020
14	46,630	46,880	53,710	53,530	54,720	54,170	52,210	50,390	48,800	47,570	46,180	45,000
15	46,650	47,570	53,550	53,420	54,740	54,150	52,120	50,300	48,760	47,440	46,180	e45,300
16	46,620	48,450	53,510	53,400	54,700	54,100	52,100	50,190	48,760	47,370	46,170	e45,600
17	46,600	50,890	53,510	53,440	54,680	54,040	52,010	50,100	48,710	47,290	46,150	e45,800
18	46,580	51,820	53,490	53,290	54,680	53,970	51,950	49,970	48,580	47,250	46,090	e46,200
19	46,580	52,190	53,380	53,250	54,650	53,930	51,880	49,860	48,470	47,220	46,030	46,470
20	46,560	52,500	53,220	54,590	54,650	53,880	51,860	49,790	48,360	47,140	45,980	46,470
21	46,560	53,000	53,250	54,590	54,630	53,860	51,840	49,660	48,250	47,080	46,070	46,430
22	46,580	53,250	53,070	54,720	54,680	53,800	51,710	49,530	48,210	47,050	46,000	46,410
23	46,580	53,880	53,050	54,680	54,680	53,710	51,600	49,420	48,120	47,010	46,020	46,390
24	46,540	53,930	53,000	54,610	54,610	53,690	51,510	49,350	48,080	46,970	45,960	46,370
25	46,560	54,170	52,980	54,630	54,590	53,620	51,460	49,330	48,010	46,900	45,900	46,350
26	46,560	54,040	52,920	54,570	54,590	53,580	51,310	49,350	47,990	46,880	45,850	46,300
27	46,580	54,130	52,870	54,540	54,720	53,490	51,200	49,350	47,920	46,800	46,020	46,240
28	46,600	53,880	52,850	54,610	54,830	53,440	51,130	49,330	47,810	46,780	46,000	46,200
29	46,560	54,040	52,560	54,590	---	53,330	51,070	49,330	47,720	46,770	45,880	46,070
30	46,520	53,950	52,700	54,610	---	53,310	50,960	49,310	47,660	46,710	45,790	46,070
31	46,520	---	52,760	54,590	---	53,310	---	49,310	---	46,690	45,720	---
MEAN	46,410	49,930	53,400	53,720	54,670	54,040	52,140	50,050	48,590	47,320	46,120	45,760
MAX	46,670	54,170	53,910	54,720	54,960	54,850	53,220	50,870	49,240	47,830	46,650	46,470
MIN	45,620	46,580	52,560	52,340	54,590	53,310	50,960	49,310	47,660	46,690	45,720	45,000
(‡)	1339.57	1343.01	1342.47	1343.30	1343.41	1342.72	1341.65	1340.90	1340.15	1339.66	1339.14	1339.33
(‡‡)	+170	+7430	-1190	+1830	+240	-1520	-2350	-1650	-1650	-970	-970	+350

CAL YR 2004 MAX 54170 MIN 44670 (‡‡) +8110
WTR YR 2005 MAX 54960 MIN 45000 (‡‡) -280

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 NGVD of 1929 (Oklahoma State Highway Department). Prior to Jan. 8, 1939, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	104	182	97	132	141	75	48	101	25	18	23
2	35	547	166	98	121	118	71	46	100	20	19	21
3	32	1,640	152	98	150	108	71	58	53	18	19	19
4	27	1,230	144	98	134	194	70	73	44	19	12	13
5	254	303	139	358	121	165	71	72	41	18	12	11
6	126	163	156	938	435	112	70	65	91	63	12	16
7	79	119	276	441	1,160	104	70	57	72	42	12	18
8	342	99	223	254	483	98	68	55	46	23	14	18
9	166	87	158	199	432	94	69	52	37	19	19	19
10	134	85	130	173	249	93	69	46	37	18	20	18
11	501	81	120	161	186	92	67	43	43	22	22	18
12	267	77	117	151	153	94	62	42	35	22	21	17
13	128	76	118	135	137	89	53	73	36	24	21	18
14	91	73	112	130	136	79	50	291	86	22	29	19
15	86	300	113	124	129	73	48	142	37	24	146	44
16	81	2,310	109	117	118	72	48	66	26	22	92	488
17	74	2,480	107	111	107	71	50	46	22	21	108	167
18	75	3,730	107	103	93	71	49	42	27	15	78	61
19	71	1,730	107	103	89	72	59	40	35	13	33	39
20	62	468	106	100	92	69	59	38	29	18	24	33
21	53	565	107	96	97	68	59	35	28	15	21	30
22	53	1,650	104	100	103	69	71	27	28	11	23	28
23	53	968	103	103	107	79	59	23	26	11	32	26
24	55	1,740	105	104	106	82	53	26	19	12	26	25
25	56	739	100	103	104	80	54	33	22	11	26	25
26	53	364	99	104	99	69	55	48	27	11	24	26
27	60	279	98	114	98	69	56	57	26	12	22	25
28	90	233	97	115	150	78	55	40	27	55	30	24
29	86	234	96	138	---	82	50	33	26	30	82	22
30	74	199	99	136	---	77	49	93	27	23	34	23
31	74	---	98	128	---	75	---	132	---	20	25	---
TOTAL	3,354	22,673	3,948	5,230	5,521	2,837	1,810	1,942	1,254	679	1,076	1,334
MEAN	108	756	127	169	197	91.5	60.3	62.6	41.8	21.9	34.7	44.5
MAX	501	3,730	276	938	1,160	194	75	291	101	63	146	488
MIN	16	73	96	96	89	68	48	23	19	11	12	11
AC-FT	6,650	44,970	7,830	10,370	10,950	5,630	3,590	3,850	2,490	1,350	2,130	2,650

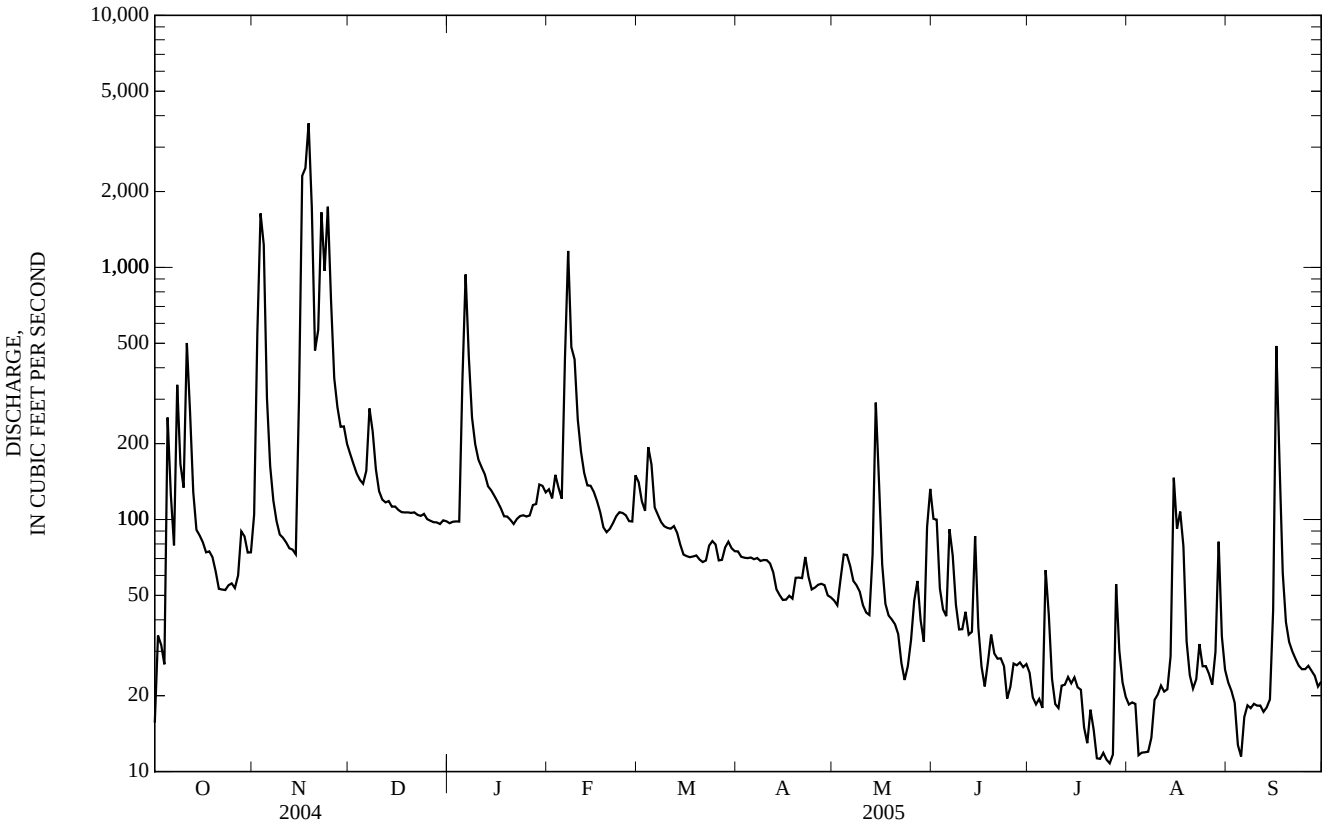
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2005, BY WATER YEAR (WY)

MEAN	244	126	131	110	163	263	239	556	434	98.3	59.1	142
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)

07311000 EAST CACHE CREEK NEAR WALTERS, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1938 - 2005	
ANNUAL TOTAL	46,203		51,658			
ANNUAL MEAN	126		142		215	
HIGHEST ANNUAL MEAN					911	1987
LOWEST ANNUAL MEAN					12.6	1939
HIGHEST DAILY MEAN	3,730	Nov 18	3,730	Nov 18	34,600	Oct 21, 1983
LOWEST DAILY MEAN	11	Sep 21	11	several days	a0.00	Jul 24, 1939
ANNUAL SEVEN-DAY MINIMUM	12	Sep 17	12	Jul 21	0.00	Aug 1, 1939
MAXIMUM PEAK FLOW			4,120	Nov 18	50,900	Oct 21, 1983
MAXIMUM PEAK STAGE			24.17	Nov 18	30.66	Oct 21, 1983
ANNUAL RUNOFF (AC-FT)	91,640		102,500		155,700	
10 PERCENT EXCEEDS	183		209		414	
50 PERCENT EXCEEDS	38		71		37	
90 PERCENT EXCEEDS	21		19		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 NGVD of 1929 (Oklahoma State Highway Department). Prior to Nov. 10, 1949, nonrecording gage at same site and datum.

REMARKS.--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)
Nov 3	2145	2,070	17.09	Nov 24	1345	2,430	18.43
Nov 18	0645	*4,350	*22.05	Jun 8	1130	2,190	17.55

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	12	35	6.5	15	43	7.0	e3.2	75	1.1	1.9	1.6
2	67	604	29	6.6	18	37	6.4	e3.1	343	1.2	1.3	1.5
3	33	1,460	24	8.6	32	30	6.0	3.1	20	1.1	0.83	1.2
4	20	1,200	21	6.6	26	27	5.6	3.4	5.3	1.0	0.30	0.90
5	143	131	21	293	20	24	5.6	3.2	2.6	1.8	0.07	0.72
6	38	47	28	1,050	286	21	5.3	3.3	55	1.6	0.04	0.60
7	264	24	128	451	1,150	20	4.6	3.6	1,240	1.6	0.61	0.55
8	101	14	90	112	424	18	4.9	3.7	1,690	1.8	1.4	0.48
9	35	8.5	56	61	144	17	4.9	3.6	72	1.8	21	0.42
10	15	6.4	39	43	87	16	4.9	3.6	24	2.0	11	0.33
11	9.4	4.4	28	33	66	17	5.4	3.3	37	1.8	4.3	0.50
12	6.5	3.2	23	27	59	16	5.2	2.9	29	1.6	2.6	0.70
13	8.0	3.2	19	24	54	14	e4.7	4.9	12	1.4	4.5	0.47
14	7.1	2.6	16	18	49	13	e4.6	171	6.2	1.3	243	0.65
15	5.2	355	14	14	42	12	e4.5	89	4.0	1.3	1,040	7.4
16	3.2	2,650	13	11	43	11	e4.3	37	3.2	1.3	745	134
17	2.1	3,630	12	9.1	36	11	e4.2	18	2.9	1.2	1,080	92
18	1.4	4,070	11	8.1	28	12	e4.1	10	3.1	1.1	235	23
19	0.88	1,880	10	7.8	26	12	e4.0	6.8	2.9	0.95	25	10
20	0.65	299	8.8	7.9	27	12	e3.9	5.1	2.8	0.86	6.4	7.0
21	1.2	294	8.4	8.1	28	11	e3.9	4.0	2.8	1.3	3.0	5.0
22	2.3	1,210	8.8	7.8	25	10	e3.8	3.1	2.6	1.5	2.5	3.5
23	2.8	1,130	8.5	8.0	23	9.2	e3.8	2.4	2.4	1.3	4.5	2.3
24	2.5	2,280	7.2	7.2	22	8.8	e3.7	1.9	2.2	0.99	3.8	1.5
25	2.6	1,620	6.6	7.1	23	8.3	e3.6	1.6	2.0	0.67	6.4	1.4
26	3.8	343	7.0	6.6	23	8.3	e3.5	1.3	1.8	0.30	5.6	1.3
27	6.4	117	7.8	6.3	28	8.8	e3.4	1.1	1.5	8.2	4.3	1.0
28	5.8	71	8.1	7.0	35	14	e3.3	1.3	1.4	6.1	3.7	0.80
29	6.6	53	8.6	9.3	---	14	e3.3	1.8	1.2	10	3.0	0.65
30	7.9	43	8.4	15	---	11	e3.2	2.2	1.2	5.1	2.2	0.29
31	12	---	6.9	14	---	8.6	---	2.5	---	3.0	1.8	---
TOTAL	817.43	23,565.3	712.1	2,294.6	2,839	495.0	135.6	405.0	3,649.1	66.27	3,465.05	301.76
MEAN	26.4	786	23.0	74.0	101	16.0	4.52	13.1	122	2.14	112	10.1
MAX	264	4,070	128	1,050	1,150	43	7.0	171	1,690	10	1,080	134
MIN	0.65	2.6	6.6	6.3	15	8.3	3.2	1.1	1.2	0.30	0.04	0.29
AC-FT	1,620	46,740	1,410	4,550	5,630	982	269	803	7,240	131	6,870	599

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2005, BY WATER YEAR (WY)

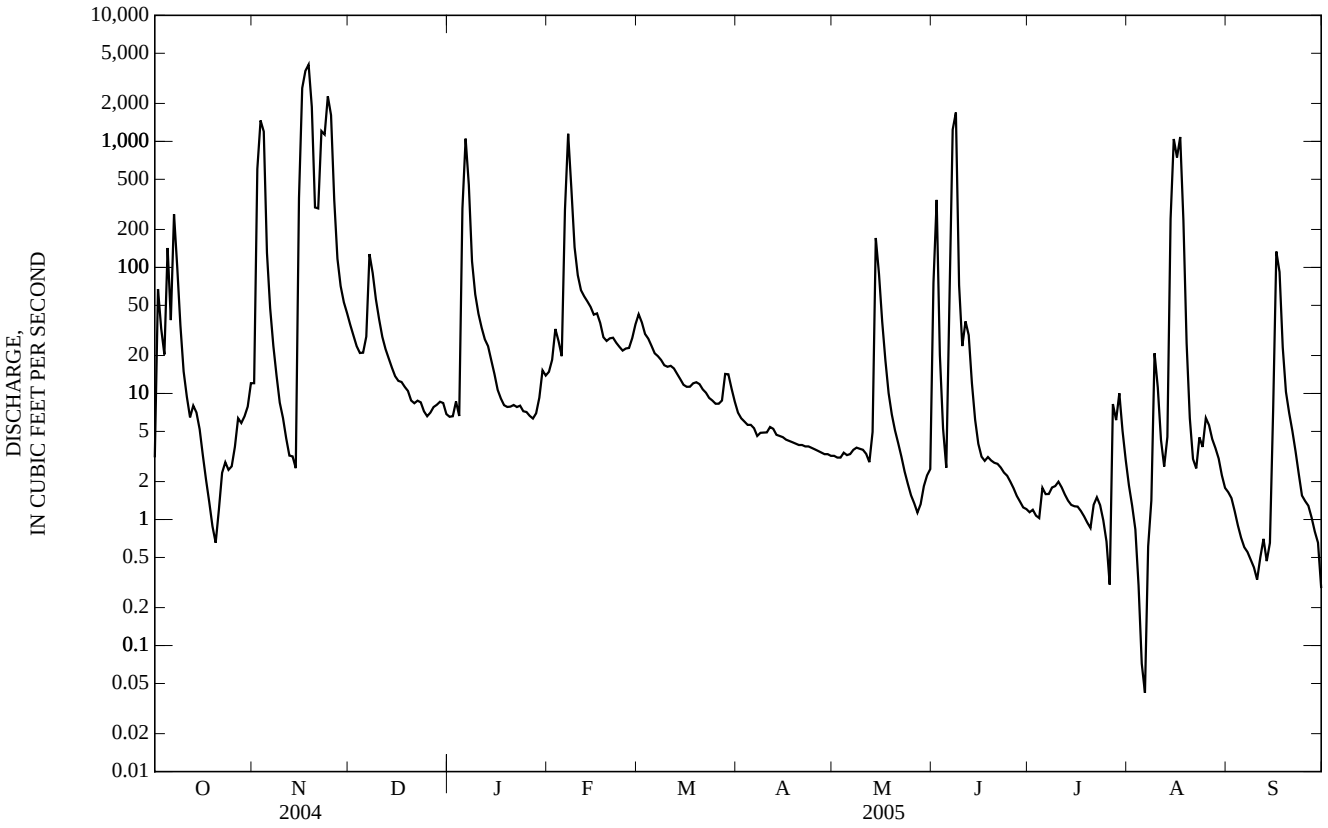
MEAN	254	109	68.3	60.2	83.9	136	135	439	410	57.3	65.0	167
MAX	3,345	994	1,493	568	1,020	1,540	1,398	2,800	4,654	795	1,109	1,453
(WY)	(1984)	(1987)	(1992)	(1998)	(1987)	(1998)	(1990)	(1987)	(1995)	(1991)	(1995)	(1969)
MIN	0.00	0.00	0.00	0.00	0.02	0.10	0.00	0.06	0.00	0.00	0.00	0.00
(WY)	(1953)	(1955)	(1955)	(1953)	(1981)	(1980)	(1955)	(1971)	(1966)	(1964)	(1952)	(1952)

e Estimated

07311500 DEEP RED CREEK NEAR RANDLETT, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1950 - 2005	
ANNUAL TOTAL	37,448.44		38,746.21			
ANNUAL MEAN	102		106		165	
HIGHEST ANNUAL MEAN					904	1987
LOWEST ANNUAL MEAN					15.1	2000
HIGHEST DAILY MEAN	4,070	Nov 18	4,070	Nov 18	46,300	Oct 20, 1983
LOWEST DAILY MEAN	0.00	Jan 1	0.04	Aug 6	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.49	Sep 7	0.00	Oct 3, 1951
MAXIMUM PEAK FLOW			4,350	Nov 18	72,300	Oct 20, 1983
MAXIMUM PEAK STAGE			22.05	Nov 18	a29.58	May 29, 1987
ANNUAL RUNOFF (AC-FT)	74,280		76,850		119,800	
10 PERCENT EXCEEDS	142		121		179	
50 PERCENT EXCEEDS	3.2		7.0		4.7	
90 PERCENT EXCEEDS	0.00		1.2		0.00	

a Due to backwater from West Cache Creek.



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 NGVD of 1929. 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)
Nov 4	0800	2,980	23.97	Jan 5	0900	6,520	26.08
Nov 18	2000	4,690	25.23	Feb 8	1100	1,430	20.80
Nov 26	2200	2,280	23.05	Aug 17	1300	*9,680	*27.10

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

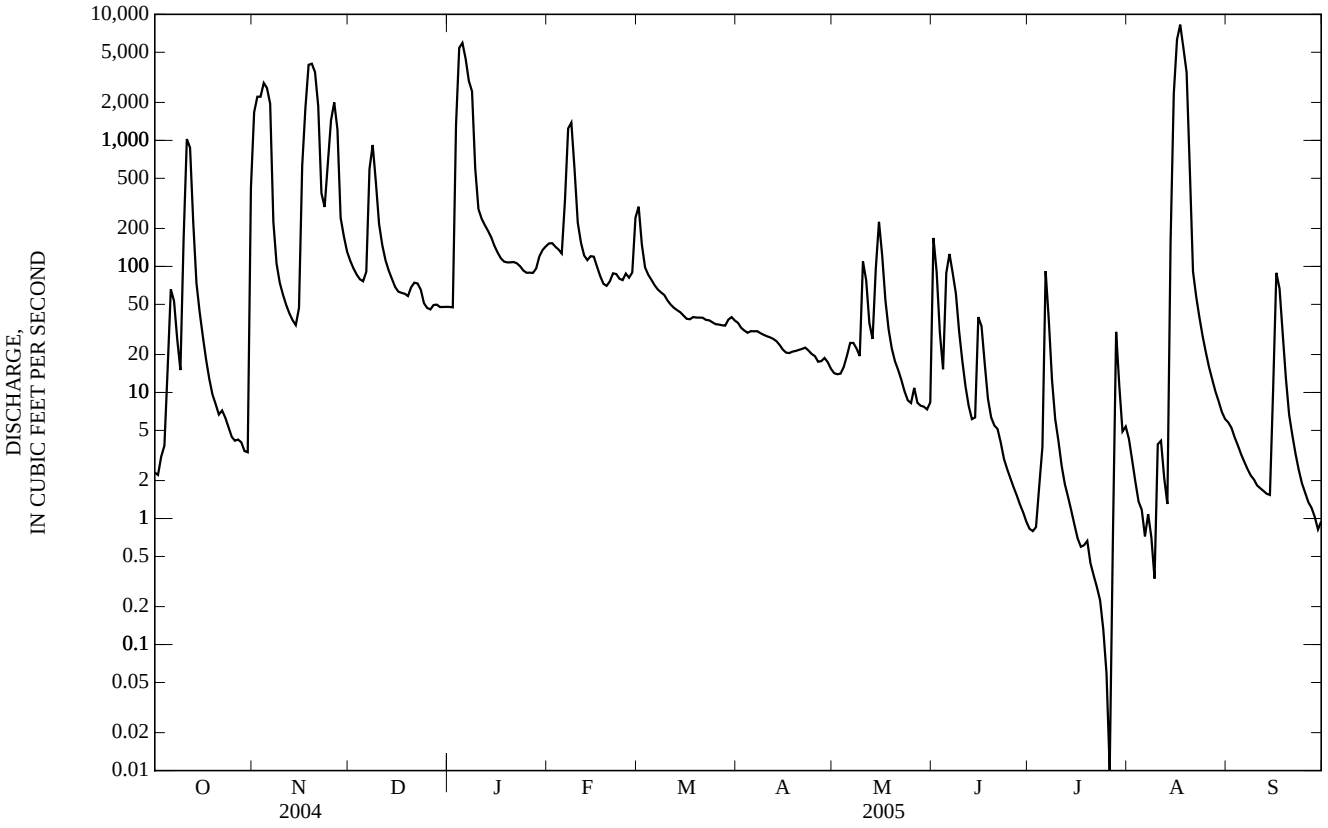
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	1,670	111	48	152	298	36	14	168	0.83	4.3	5.8
2	2.2	2,220	96	47	153	149	33	14	90	0.79	2.9	5.2
3	3.1	2,220	86	1,330	143	98	31	14	30	0.85	2.0	4.4
4	3.8	2,850	79	5,420	136	86	30	16	15	1.8	1.4	3.8
5	15	2,600	76	5,930	127	78	31	20	89	3.7	1.2	3.2
6	66	1,950	91	4,450	333	71	31	25	126	92	0.72	2.8
7	53	226	594	2,970	1,240	66	31	25	89	37	1.1	2.5
8	26	105	919	2,450	1,380	62	30	22	61	13	0.71	2.2
9	15	74	464	600	583	59	29	19	31	6.1	0.33	2.0
10	167	60	216	285	222	54	28	110	18	4.1	3.9	1.8
11	1,020	50	147	239	154	50	27	78	11	2.6	4.1	1.7
12	875	42	112	212	122	47	27	35	7.8	1.9	2.1	1.7
13	223	37	93	191	112	45	26	27	6.1	1.5	1.3	1.6
14	74	34	80	170	121	43	24	96	6.3	1.2	158	1.5
15	43	47	69	146	120	41	22	226	40	0.89	2,340	11
16	28	631	63	129	100	38	21	122	33	0.69	6,310	89
17	18	1,810	62	116	84	38	21	54	17	0.60	8,280	67
18	13	3,980	61	109	73	40	21	32	8.9	0.61	5,400	29
19	9.6	4,060	58	108	70	39	21	22	6.3	0.66	3,460	13
20	8.1	3,480	68	108	76	39	22	18	5.5	0.44	589	6.6
21	6.7	1,880	74	108	88	39	22	15	5.1	0.35	91	4.6
22	7.2	381	73	106	87	38	23	13	4.0	0.29	57	3.2
23	6.3	296	65	100	80	37	22	10	3.0	0.22	39	2.4
24	5.3	658	51	93	78	36	20	8.7	2.5	0.13	28	1.9
25	4.5	1,450	47	89	88	35	19	8.2	2.1	0.06	21	1.6
26	4.1	2,000	46	89	81	35	18	11	1.8	0.00	16	1.3
27	4.2	1,220	49	89	90	34	18	8.3	1.5	0.70	13	1.2
28	4.0	243	50	96	244	34	19	7.9	1.3	30	10	1.0
29	3.4	173	48	120	---	38	17	7.7	1.1	11	8.5	0.82
30	3.4	131	48	135	---	40	15	7.3	0.94	4.9	7.0	0.95
31	420	---	48	144	---	37	---	8.3	---	5.4	6.2	---
TOTAL	3,134.2	36,578	4,144	26,227	6,337	1,844	735	1,094.4	882.24	224.31	26,859.76	274.77
MEAN	101	1,219	134	846	226	59.5	24.5	35.3	29.4	7.24	866	9.16
MAX	1,020	4,060	919	5,930	1,380	298	36	226	168	92	8,280	89
MIN	2.2	34	46	47	70	34	15	7.3	0.94	0.00	0.33	0.82
AC-FT	6,220	72,550	8,220	52,020	12,570	3,660	1,460	2,170	1,750	445	53,280	545

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2005, BY WATER YEAR (WY)

MEAN	102	145	148	116	177	271	281	476	335	44.3	41.0	102
MAX	1,216	1,219	1,766	898	1,251	1,594	3,075	3,670	1,859	324	866	571
(WY)	(1982)	(2005)	(1992)	(1985)	(1997)	(1998)	(1990)	(1982)	(1989)	(2004)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1961 - 2005	
ANNUAL TOTAL	68,355.58		108,334.68			
ANNUAL MEAN	187		297		186	
HIGHEST ANNUAL MEAN					614	1990
LOWEST ANNUAL MEAN					1.68	2000
HIGHEST DAILY MEAN	4,060	Nov 19	8,280	Aug 17	37,800	May 3, 1990
LOWEST DAILY MEAN	0.00	Jan 5	0.00	Jul 26	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 5	0.21	Jul 20	0.00	Jul 28, 1961
MAXIMUM PEAK FLOW			9,680	Aug 17	49,600	May 3, 1990
MAXIMUM PEAK STAGE			27.10	Aug 17	33.14	May 29, 1987
ANNUAL RUNOFF (AC-FT)	135,600		214,900		134,900	
10 PERCENT EXCEEDS	539		512		247	
50 PERCENT EXCEEDS	10		36		7.7	
90 PERCENT EXCEEDS	0.06		1.6		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 NGVD of 1929. Prior to Jan. 17, 1939, and Feb. 13, 1965 to Nov. 14, 1966, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records fair. 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)
Nov 5	1700	27,300	17.67	Jan 5	0300	26,200	17.51
Nov 19	1800	*43,100	*20.35	Aug 18	0300	42,300	20.22

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

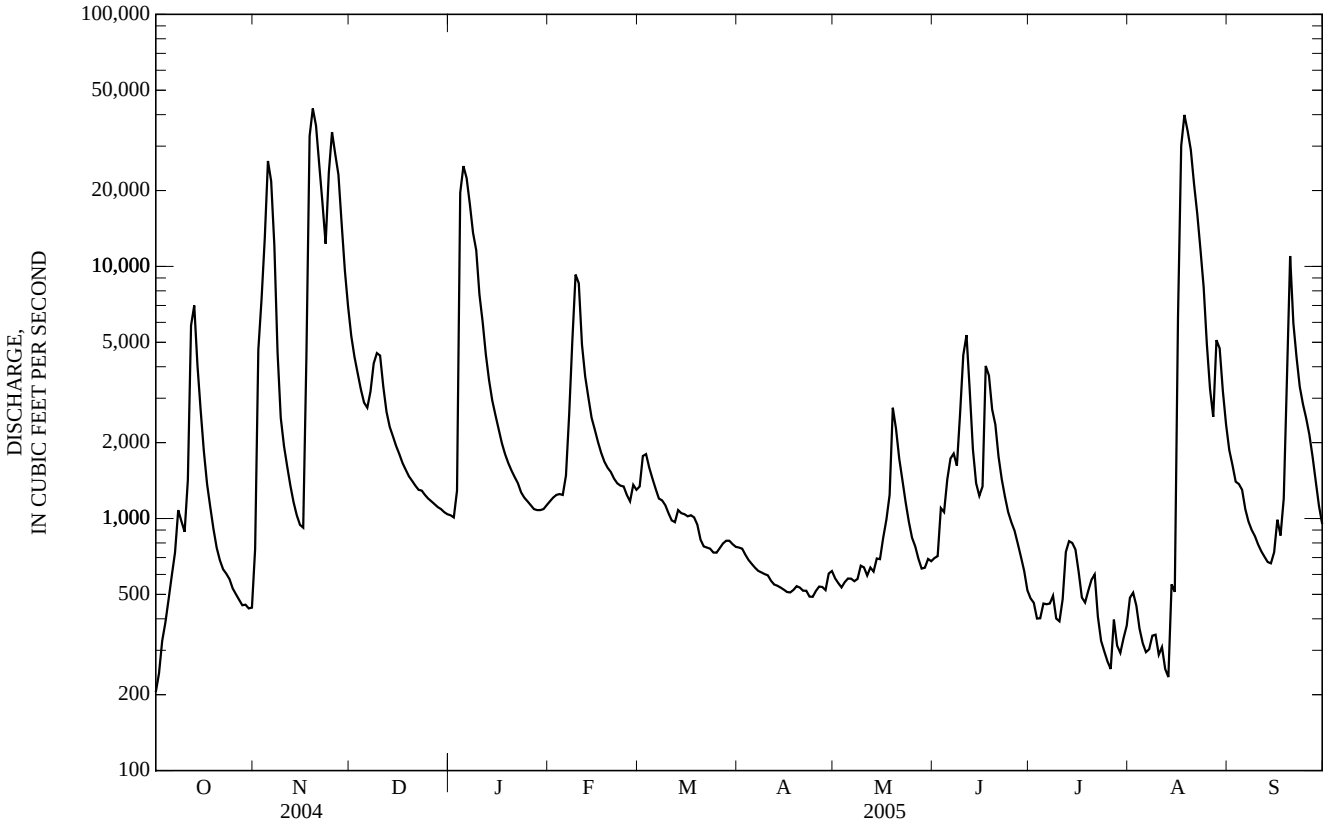
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	757	5,300	1,030	1,170	1,340	767	579	697	482	485	1,870
2	243	4,670	4,380	1,010	1,210	1,770	759	554	709	463	508	1,630
3	327	7,420	3,770	1,290	1,240	1,800	718	533	1,100	401	451	1,400
4	387	12,900	3,250	19,600	1,250	1,590	684	559	1,060	402	365	1,370
5	479	26,200	2,880	25,000	1,240	1,440	660	578	1,430	460	320	1,300
6	595	21,800	2,750	22,400	1,480	1,310	638	577	1,730	457	295	1,090
7	733	12,100	3,190	17,700	2,580	1,200	620	564	1,810	460	303	972
8	1,080	4,560	4,120	13,600	5,090	1,180	611	576	1,620	494	343	901
9	975	2,510	4,530	11,600	9,280	1,130	602	650	2,610	401	346	851
10	886	1,940	4,430	7,730	8,570	1,050	595	640	4,450	391	288	789
11	1,420	1,610	3,330	6,020	4,890	983	566	594	5,340	478	309	741
12	5,830	1,350	2,650	4,470	3,660	967	547	639	3,230	737	253	705
13	7,000	1,160	2,310	3,540	3,020	1,080	541	616	1,880	813	235	672
14	4,060	1,030	2,120	2,940	2,510	1,050	532	694	1,380	800	548	664
15	2,690	944	1,940	2,570	2,250	1,040	522	690	1,230	753	512	735
16	1,850	920	1,800	2,260	2,010	1,020	511	838	1,340	614	6,330	989
17	1,370	4,400	1,660	1,990	1,820	1,030	509	991	4,030	486	30,100	856
18	1,110	32,900	1,560	1,800	1,680	1,010	521	1,240	3,690	464	39,900	1,200
19	908	42,300	1,470	1,660	1,590	945	539	2,750	2,710	517	34,500	3,590
20	766	36,200	1,410	1,550	1,530	824	532	2,270	2,360	571	29,000	11,000
21	683	25,400	1,350	1,460	1,440	775	517	1,730	1,760	600	21,300	5,950
22	629	17,900	1,300	1,380	1,380	767	517	1,420	1,430	408	16,200	4,350
23	604	12,300	1,290	1,270	1,350	759	490	1,160	1,220	327	11,700	3,330
24	575	23,600	1,240	1,210	1,340	733	489	971	1,060	297	8,290	2,840
25	528	34,100	1,200	1,170	1,240	732	516	839	966	271	4,930	2,500
26	501	27,900	1,170	1,130	1,170	763	537	775	894	253	3,260	2,150
27	476	23,100	1,140	1,090	1,360	796	535	692	795	397	2,530	1,760
28	453	14,800	1,110	1,080	1,300	816	520	633	704	313	5,100	1,400
29	455	9,640	1,090	1,080	---	816	605	638	619	293	4,730	1,120
30	440	6,940	1,060	1,090	---	791	619	691	519	335	3,200	952
31	443	---	1,040	1,130	---	772	---	677	---	376	2,360	---
TOTAL	38,701	413,351	71,840	162,850	68,650	32,279	17,319	27,358	54,373	14,514	228,991	59,677
MEAN	1,248	13,780	2,317	5,253	2,452	1,041	577	883	1,812	468	7,387	1,989
MAX	7,000	42,300	5,300	25,000	9,280	1,800	767	2,750	5,340	813	39,900	11,000
MIN	205	757	1,040	1,010	1,170	732	489	533	519	253	235	664
AC-FT	76,760	819,900	142,500	323,000	136,200	64,030	34,350	54,260	107,800	28,790	454,200	118,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2005, BY WATER YEAR (WY)

MEAN	3,585	2,183	1,599	1,323	1,925	2,859	3,460	7,616	7,903	2,151	1,625	2,366
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)

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1937 - 2005	
ANNUAL TOTAL	981,079		1,189,903			
ANNUAL MEAN	2,681		3,260		3,218	
HIGHEST ANNUAL MEAN					11,890	1987
LOWEST ANNUAL MEAN					651	1953
HIGHEST DAILY MEAN	42,300	Nov 19	42,300	Nov 19	232,000	May 31, 1987
LOWEST DAILY MEAN	94	Jan 6	205	Oct 1	48	Jan 18, 1940
ANNUAL SEVEN-DAY MINIMUM	102	Jan 3	297	Aug 7	48	Jan 18, 1940
MAXIMUM PEAK FLOW			43,100	Nov 19	265,000	May 31, 1987
MAXIMUM PEAK STAGE			20.35	Nov 19	40.08	May 31, 1987
ANNUAL RUNOFF (AC-FT)	1,946,000		2,360,000		2,331,000	
10 PERCENT EXCEEDS	6,020		6,960		7,150	
50 PERCENT EXCEEDS	815		1,100		844	
90 PERCENT EXCEEDS	265		462		216	



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, 98 microsiemens Aug. 17, 2005.
WATER TEMPERATURE: Maximum, 36.5°C July 15, 1998; minimum , -0.5°C Jan. 4, 5, 1999.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 8,720 microsiemens June 18; minimum, 98 microsiemens Aug. 17.
WATER TEMPERATURE: Maximum, 35.3°C July 22; minimum, 0.8°C Dec. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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)	Hardness, water, mg/L as CaCO3 (00900)
OCT													
06...	0905	1028	80020	9.32	610	753	7.6	86	7.7	3,490	17.9	20.6	590
NOV													
01...	1200	1028	80020	9.18	509	741	8.3	95	8.0	4,420	18.4	19.6	690
DEC													
07...	1230	1028	80020	11.62	3,030	751	11.2	104	7.7	3,480	13.2	10.8	580
JAN													
19...	1130	1028	80020	10.71	1,600	754	11.9	98	7.9	4,300	15.1	5.8	830
FEB													
07...	1730	1028	80020	11.61	3,080	747	11.8	111	8.2	4,440	4.1	11.2	820
MAR													
14...	1300	1028	80020	10.09	980	749	12.2	123	8.1	4,700	17.7	14.3	880
APR													
27...	1345	1028	80020	9.14	525	748	8.8	105	8.1	5,370	26.5	22.4	960
MAY													
23...	1415	1028	80020	9.81	1,040	742	7.2	97	7.9	6,060	34.5	28.8	930
JUN													
13...	1800	1028	80020	10.55	1,890	745	7.8	117	7.9	3,560	38.9	35.4	590
JUL													
12...	1600	1028	80020	9.47	845	750	8.8	129	7.8	6,710	42.7	34.0	1,100
AUG													
09...	1430	1028	80020	8.62	346	750	9.8	136	8.2	3,920	37.5	30.9	670
SEP													
07...	1400	1028	80020	9.69	972	750	9.4	128	8.4	3,380	37.5	29.6	630

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
06...	500	150	52.2	7.47	8	468	63	85	102	.0	801	.4	3.3
NOV													
01...	570	178	58.9	8.55	11	687	68	114	137	.0	1,150	.4	6.7
DEC													
07...	420	159	45.3	7.56	9	502	65	159	191	1	798	.3	13.0
JAN													
19...	640	219	69.5	7.95	10	662	63	194	234	1	1,090	.4	10.7
FEB													
07...	630	213	70.7	6.95	10	656	63	193	232	1	1,070	.4	7.6
MAR													
14...	750	213	85.2	6.95	10	672	62	134	E161	E1	1,100	.4	.7
APR													
27...	820	228	95.4	8.27	11	802	64	146	173	3	1,270	.4	2.5
MAY													
23...	810	252	71.7	11.6	15	1,040	71	112	E136	E.0	1,510	.5	10.3
JUN													
13...	450	159	46.3	11.1	10	558	67	136	E164	E1	880	.4	10.3
JUL													
12...	980	277	104	11.6	14	1,040	67	141	E172	E.0	1,780	.5	7.0
AUG													
09...	580	164	63.3	8.13	9	553	64	95	E115	E.0	936	.4	5.2
SEP													
07...	500	169	50.8	8.82	8	451	60	134	E157	E3	760	.4	11.9

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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 (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													
06...	496	2,030	2.76	3,340	37	1.2	--	E.007	--	--	<.016	--	<.002
NOV													
01...	495	2,650	3.60	3,640	80	.82	.02	.012	--	--	.018	--	E.001
DEC													
07...	382	2,010	2.73	16,400	230	.85	.07	.053	2.66	.60	.608	.026	.008
JAN													
19...	534	2,710	3.69	11,700	80	.66	.08	.062	3.85	.87	.878	.030	.009
FEB													
07...	522	2,660	3.62	22,100	161	.92	.02	.015	1.26	.28	.292	.023	.007
MAR													
14...	558	2,720	3.70	7,200	112	1.0	.02	.013	--	--	<.016	--	<.002
APR													
27...	659	3,160	4.29	4,470	59	.96	.03	.020	--	--	<.016	--	E.001
MAY													
23...	764	3,730	5.08	10,500	557	1.6	.13	.098	2.78	.63	.664	.122	.037
JUN													
13...	392	2,140	2.91	10,900	792	1.9	.03	.023	3.12	.70	.723	.062	.019
JUL													
12...	861	4,170	5.68	9,520	120	1.6	.04	.030	--	--	<.016	--	E.001
AUG													
09...	488	2,280	3.09	2,130	94	1.1	.01	.010	--	--	<.016	--	<.002
SEP													
07...	415	1,950	2.65	5,110	62	.99	.02	.012	--	--	<.016	--	E.001

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Organic nitro-gen, water, unfltrd mg/L (00605)	Total nitro-gen, water, unfltrd mg/L (00600)	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)	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 06...	--	--	.034	.011	.025	.168	2.2	3	119	141	<.08	E.04	<.8
NOV 01...	.81	.84	.018	.006	.017	.154	1.8	4	140	158	.10	.16	<.8
DEC 07...	.79	1.5	.196	.064	.081	.20	3.3	4	173	233	<.08	.08	<.8
JAN 19...	.60	1.5	.261	.085	.135	.194	2.7	3	150	181	.09	.08	<.8
FEB 07...	.91	1.2	.058	.019	.031	.181	2.0	3	135	182	E.05	E.06	<.8
MAR 14...	1.0	--	--	<.006	.012	.18	2.0	2	136	152	<.08	E.06	<.8
APR 27...	.94	--	--	<.006	.014	.196	1.0	3	138	127	<.12	<.12	<.8
MAY 23...	1.5	2.3	.212	.069	.093	.42	5.0	6	139	238	E.07	.12	E.6
JUN 13...	1.8	2.6	.346	.113	.142	.57	4.8	7	155	295	<.08	.13	<.8
JUL 12...	1.5	--	--	<.006	.017	.20	4.8	4	162	182	<.12	E.09	E.7
AUG 09...	1.1	--	--	E.003	.015	.101	2.8	4	116	139	E.05	E.05	<.8
SEP 07...	.98	--	.205	.067	.090	.22	6.8	6.5	206	210	.14	E.04	.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	Nickel, water, unfltrd recover-able, ug/L (01067)
OCT 06...	E.7	6.2	6.7	<18	550	<.16	.82	7.2	100	<.01	<.01	5.68	6.33
NOV 01...	1.3	6.4	16.0	<18	780	E.11	3.14	6.4	115	<.01	E.01	.69	9.39
DEC 07...	4.2	2.8	13.7	<18	3,140	<.16	4.00	5.0	140	<.01	E.01	6.95	9.53
JAN 19...	1.7	4.8	14.5	<18	1,160	.32	2.87	12.1	53	.01	.02	4.57	8.06
FEB 07...	2.3	3.4	8.8	<18	1,670	E.13	2.20	12.8	112	<.01	E.01	4.73	8.14
MAR 14...	1.4	84.1	10.5	19	900	1.27	1.30	12.7	131	<.01	E.01	5.35	6.90
APR 27...	E.6	2.2	8.2	<30	400	<.24	.75	13.5	97	E.01	E.01	<.18	7.69
MAY 23...	7.1	5.8	20.9	E15	6,520	.29	8.50	2.0	399	<.01	E.01	13.6	18.0
JUN 13...	9.1	4.5	17.0	<18	8,310	<.16	11.2	.6	456	<.01	.01	11.4	20.7
JUL 12...	1.6	5.7	5.2	<30	880	<.24	1.42	2.8	235	E.01	<.01	11.6	10.5
AUG 09...	2.3	1.8	3.7	<18	1,160	E.11	1.61	2.0	168	<.01	<.01	6.38	6.91
SEP 07...	.84	--	5.7	<18	720	E.05	.83	1.8	76	E.01	E.01	--	5.43

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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 06...	1	1	<.4	<.32	4.0	5	--	--	--	--	--	--	--
NOV 01...	<1	<1	<.4	<.32	12.1	38	--	--	--	--	--	--	--
DEC 07...	1	2	<.4	<.32	2.0	22	<.04	<.1	<.03	20.9	<.1	<1	<.1
JAN 19...	3.0	3.8	<.4	<.32	5.8	18	--	--	--	--	--	--	--
FEB 07...	2	2	<.4	<.32	3.4	9	--	--	--	--	--	--	--
MAR 14...	2.7	4.9	<.4	<.32	5.0	8	--	--	--	--	--	--	--
APR 27...	E.9	4.6	<.6	<.48	4.1	8	--	--	--	--	--	--	--
MAY 23...	8.1	3.6	<.6	<.48	5.1	34	<.20	<.5	<.15	110	<.5	<5	<.5
JUN 13...	--	3.1	<.4	<.32	1.6	33	<.04	<.1	<.03	56.6	<.1	<1	<.1
JUL 12...	<1	<1	<.6	<.48	4.3	8	--	--	--	--	--	--	--
AUG 09...	<1	<1	<.4	<.32	1.5	8	--	--	--	--	--	--	--
SEP 07...	1.1	2.1	<.2	<.32	1.2	9	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endosulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlordane, technical, water, unfltrd ug/L (39350)	cis-Chlordane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Dieldrin, water, unfltrd ug/L (39380)	Endosulfan sulfate water unfltrd ug/L (34351)	Endrin aldehyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Heptachlor epoxide water unfltrd ug/L (39420)
OCT 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JAN 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 23...	<.5	<.5	<.5	<.20	<.15	<.5	<.5	<.45	<.10	<3.0	<1.0	<.30	<4.0
JUN 13...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	--	--	--	--	--	--	--	--	--	--	--	--	--

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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									
06...	--	--	--	--	--	--	--	--	--
NOV									
01...	--	--	--	--	--	--	--	--	--
DEC									
07...	<.03	21.0	<.03	<.1	<.04	<.1	23.9	<2	<.1
JAN									
19...	--	--	--	--	--	--	--	--	--
FEB									
07...	--	--	--	--	--	--	--	--	--
MAR									
14...	--	--	--	--	--	--	--	--	--
APR									
27...	--	--	--	--	--	--	--	--	--
MAY									
23...	<.15	84.7	<.15	<.5	<.20	<.5	94.5	<10	<.5
JUN									
13...	<.03	33.1	<.03	<.1	<.04	<.1	67.2	<2	<.1
JUL									
12...	--	--	--	--	--	--	--	--	--
AUG									
09...	--	--	--	--	--	--	--	--	--
SEP									
07...	--	--	--	--	--	--	--	--	--

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5,080	4,360	4,750	4,680	2,770	4,270	3,600	2,590	3,120	5,350	5,280	5,320
2	4,640	4,460	4,530	3,450	1,270	2,180	3,870	3,600	3,780	5,380	5,340	5,370
3	4,770	4,590	4,690	1,270	837	972	3,850	3,810	3,820	5,380	4,760	5,140
4	4,760	4,130	4,480	1,240	853	987	3,900	3,770	3,810	4,760	988	1,780
5	4,980	3,900	4,610	853	685	793	3,970	3,900	3,950	1,150	616	827
6	---	---	---	685	496	575	4,020	3,670	3,940	791	616	674
7	---	---	---	505	475	485	3,770	3,430	3,610	966	791	883
8	---	---	---	774	505	619	3,640	3,120	3,420	1,950	966	1,400
9	---	---	---	1,040	774	908	3,120	2,780	2,900	1,670	1,410	1,470
10	---	---	---	1,330	1,040	1,170	3,560	2,810	3,140	3,070	1,470	2,100
11	---	---	---	2,350	1,330	1,760	3,560	3,010	3,220	4,860	3,070	3,780
12	---	---	---	3,500	2,350	2,900	3,300	3,020	3,170	---	---	---
13	---	---	---	6,210	3,500	4,900	3,750	3,300	3,490	---	---	---
14	---	---	---	6,460	5,950	6,270	4,290	3,750	4,010	---	---	---
15	2,880	2,760	2,840	5,950	5,400	5,670	5,030	4,290	4,650	---	---	---
16	2,930	2,830	2,860	5,400	4,740	5,110	5,310	5,030	5,170	---	---	---
17	3,330	2,930	3,110	4,740	1,910	3,960	5,490	5,310	5,450	---	---	---
18	3,870	3,330	3,610	1,920	1,120	1,570	5,540	5,490	5,520	4,150	3,980	3,940
19	4,160	3,870	4,030	1,680	1,420	1,510	5,520	5,450	5,480	---	---	---
20	4,340	4,160	4,240	1,640	1,420	1,540	5,460	5,410	5,430	---	---	---
21	4,660	4,340	4,480	1,610	1,510	1,550	5,430	5,290	5,340	---	---	---
22	4,720	4,630	4,680	2,280	1,580	1,880	5,320	5,200	5,260	---	---	---
23	4,780	4,680	4,720	2,450	2,230	2,360	5,210	5,150	5,180	---	---	---
24	4,800	4,700	4,740	2,490	2,080	2,270	5,220	5,120	5,160	---	---	---
25	4,740	4,520	4,640	2,390	1,040	1,590	5,240	5,170	5,200	---	---	---
26	4,660	4,530	4,580	1,040	919	953	5,260	5,160	5,210	---	---	---
27	4,700	4,580	4,640	1,280	993	1,120	5,290	5,250	5,270	---	---	---
28	4,670	4,550	4,590	1,760	1,280	1,490	5,340	5,260	5,290	---	---	---
29	5,000	4,670	4,840	1,880	1,760	1,840	5,360	5,330	5,340	---	---	---
30	5,060	4,880	5,000	2,590	1,880	2,190	5,370	5,310	5,340	---	---	---
31	4,960	4,580	4,880	---	---	---	5,310	5,250	5,270	---	---	---

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5,680	5,640	5,660	4,870	4,300	4,650	6,710	6,480	6,590	6,430	5,940	6,270
2	5,710	5,620	5,680	4,880	4,550	4,700	6,550	6,360	6,480	6,820	5,970	6,220
3	5,620	5,520	5,560	4,560	4,450	4,520	6,410	6,230	6,330	7,100	6,820	7,050
4	5,660	5,550	5,600	4,450	4,130	4,230	6,270	6,040	6,170	7,090	6,010	6,490
5	5,640	5,570	5,610	4,240	4,080	4,190	6,040	5,890	5,950	6,010	5,880	5,920
6	5,620	5,050	5,330	4,100	4,030	4,050	6,120	6,020	6,070	5,940	5,830	5,910
7	5,380	4,970	5,180	4,160	3,930	4,050	6,210	6,020	6,110	5,830	5,690	5,750
8	5,210	3,580	4,250	4,470	4,160	4,280	6,360	6,210	6,270	5,700	5,600	5,650
9	4,400	3,020	3,900	4,810	4,470	4,670	6,360	6,210	6,280	5,620	5,430	5,530
10	3,020	2,380	2,550	4,750	4,360	4,480	6,330	6,000	6,210	5,490	5,390	5,460
11	2,760	2,400	2,580	4,780	4,360	4,600	6,160	5,940	6,060	5,390	5,150	5,250
12	3,520	2,760	3,090	5,010	4,740	4,920	5,940	5,880	5,900	5,570	5,050	5,420
13	3,930	3,520	3,770	5,360	5,000	5,200	5,910	5,850	5,870	5,050	4,720	4,790
14	4,480	3,930	4,210	5,130	4,600	4,740	5,990	5,910	5,950	5,080	4,730	4,890
15	5,210	4,480	4,820	4,620	4,580	4,590	6,030	5,860	5,960	5,260	4,960	5,110
16	5,420	5,210	5,350	4,650	4,600	4,620	5,950	5,820	5,880	5,840	5,180	5,540
17	5,720	5,420	5,540	4,710	4,620	4,660	5,820	5,650	5,720	5,720	5,080	5,240
18	5,790	5,610	5,740	4,730	4,680	4,700	5,660	5,620	5,640	5,830	4,730	5,220
19	5,610	5,280	5,400	4,730	4,570	4,650	5,790	5,610	5,690	6,320	3,720	5,080
20	5,280	4,980	5,140	4,650	4,560	4,590	5,910	5,770	5,850	6,670	5,600	6,110
21	5,080	4,970	5,030	5,280	4,630	4,950	5,790	5,630	5,680	6,740	6,300	6,580
22	5,120	5,040	5,090	5,490	5,280	5,400	5,770	5,700	5,750	6,300	5,960	6,090
23	5,110	5,040	5,080	5,720	5,490	5,620	5,810	5,720	5,780	5,960	5,900	5,940
24	5,040	4,890	4,980	5,550	5,300	5,400	5,730	5,580	5,680	6,310	5,770	6,130
25	4,890	4,800	4,830	5,500	5,350	5,430	5,590	5,290	5,480	6,220	5,550	5,840
26	4,960	4,720	4,780	5,560	5,450	5,520	5,340	5,250	5,300	5,550	5,250	5,400
27	5,340	4,960	5,220	5,760	5,510	5,570	5,280	5,000	5,150	5,250	5,020	5,130
28	5,310	4,500	4,880	6,150	5,760	6,000	5,140	5,000	5,080	5,480	5,150	5,320
29	---	---	---	7,270	6,080	6,480	5,360	5,060	5,170	5,300	5,150	5,240
30	---	---	---	7,800	7,270	7,620	5,940	5,340	5,560	5,190	4,640	4,960
31	---	---	---	7,440	6,710	7,030	---	---	---	5,420	5,000	5,270
		JUNE			JULY			AUGUST			SEPTEMBER	
1	5,430	5,090	5,270	6,950	6,740	6,870	4,880	4,490	4,610	1,490	1,330	1,410
2	5,160	4,340	4,700	6,940	6,750	6,850	4,640	4,210	4,440	2,250	1,490	1,680
3	4,590	3,570	4,150	6,770	6,490	6,590	4,210	3,290	3,820	2,440	2,250	2,320
4	3,750	3,270	3,420	6,600	6,050	6,280	3,450	3,240	3,330	2,790	2,440	2,600
5	3,980	2,990	3,490	---	---	---	3,480	3,410	3,450	3,170	2,790	3,000
6	3,150	1,920	2,620	6,000	5,710	5,830	3,620	3,440	3,520	3,450	3,170	3,330
7	2,540	1,920	2,240	5,860	5,470	5,670	3,820	3,570	3,630	3,450	3,190	3,330
8	2,880	2,100	2,380	5,740	5,440	5,630	4,050	2,440	3,580	3,190	2,850	3,020
9	7,060	2,880	4,830	5,440	4,820	5,010	3,780	3,270	3,600	2,850	2,750	2,790
10	7,000	3,600	5,420	5,570	4,880	5,230	4,000	3,610	3,790	2,980	2,820	2,890
11	3,600	2,460	2,910	6,030	5,570	5,880	4,320	3,790	4,040	3,140	2,980	3,060
12	2,460	2,140	2,250	6,450	6,030	6,170	4,430	4,320	4,400	3,330	3,140	3,250
13	3,550	2,440	3,150	6,470	5,460	6,020	4,520	4,290	4,440	3,590	3,330	3,480
14	3,550	3,000	3,290	5,460	3,760	4,510	4,290	768	2,600	3,920	3,580	3,760
15	3,080	2,960	2,990	3,760	3,430	3,570	3,030	1,390	2,680	3,990	3,450	3,830
16	3,520	3,080	3,250	3,890	3,670	3,800	3,160	878	1,800	3,480	3,280	3,380
17	7,880	3,520	4,790	4,280	3,880	4,010	882	98	726	3,410	3,300	3,360
18	8,270	7,700	8,030	4,690	4,280	4,490	610	519	549	3,410	2,920	3,280
19	8,080	7,570	7,730	4,790	4,550	4,660	660	534	598	2,920	2,560	2,820
20	8,230	8,080	8,150	4,960	4,440	4,710	1,010	660	864	3,760	1,520	2,820
21	8,120	7,320	7,820	4,470	3,100	4,050	1,040	985	1,020	1,520	1,180	1,370
22	7,320	6,410	6,820	3,330	2,810	2,970	985	911	936	1,180	1,120	1,140
23	6,410	6,190	6,330	4,490	3,330	4,010	1,150	940	1,040	1,120	1,070	1,100
24	6,270	6,180	6,230	5,200	4,490	4,770	1,310	1,150	1,240	1,130	1,080	1,100
25	6,180	6,040	6,080	5,850	5,200	5,580	1,380	1,310	1,360	1,180	1,130	1,150
26	6,140	6,060	6,100	6,000	5,850	5,930	1,380	1,360	1,370	1,240	1,180	1,210
27	6,390	6,140	6,270	5,860	3,810	5,070	1,500	1,380	1,440	1,320	1,240	1,280
28	6,540	6,380	6,470	5,040	3,810	4,560	3,560	1,500	2,400	1,420	1,320	1,370
29	6,450	6,350	6,390	5,150	5,000	5,080	3,560	1,460	2,320	1,550	1,420	1,480
30	6,740	6,450	6,590	5,220	4,830	5,050	1,460	1,330	1,390	2,500	1,550	2,220
31	---	---	---	5,130	4,850	5,020	1,330	1,300	1,320	---	---	---

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.6	20.5	22.7	20.2	19.3	19.7	9.1	7.8	8.5	16.5	14.8	15.7
2	23.8	20.1	21.6	19.3	16.2	17.7	9.2	7.7	8.5	16.7	15.8	16.2
3	21.5	18.8	20.3	16.2	14.8	15.6	9.0	7.3	8.2	17.2	16.0	16.8
4	21.5	19.3	20.2	14.8	13.7	14.2	8.3	7.1	7.8	16.0	14.7	15.1
5	24.1	19.6	21.6	14.0	13.1	13.4	9.6	8.1	8.8	14.8	10.7	13.0
6	---	---	---	13.5	12.5	13.1	11.3	9.5	10.3	10.7	7.1	8.6
7	---	---	---	14.3	13.4	13.8	11.7	10.2	11.0	7.1	6.1	6.5
8	---	---	---	15.9	13.8	14.8	11.2	9.9	10.6	6.3	5.6	5.9
9	---	---	---	16.0	14.2	15.1	11.7	10.1	10.9	6.8	5.3	6.0
10	---	---	---	15.0	14.0	14.5	11.4	10.3	10.9	9.5	6.7	8.0
11	---	---	---	14.4	12.2	13.3	10.8	9.3	10.2	11.9	9.5	10.8
12	---	---	---	12.4	11.4	11.9	11.4	9.2	10.3	---	---	---
13	---	---	---	12.1	11.6	11.8	10.7	8.7	9.4	---	---	---
14	---	---	---	11.6	11.1	11.3	8.7	7.0	7.8	---	---	---
15	19.4	16.4	17.9	12.6	11.4	11.9	7.2	5.5	6.3	---	---	---
16	19.2	16.6	18.0	14.9	12.6	13.7	7.7	5.8	6.7	---	---	---
17	19.7	16.3	18.1	15.6	14.8	15.2	8.3	6.0	7.2	---	---	---
18	22.3	19.1	20.5	15.1	14.4	14.7	8.8	6.8	7.8	5.6	4.3	5.0
19	22.1	18.9	20.6	15.5	15.0	15.3	8.7	7.0	7.9	---	---	---
20	22.7	18.8	20.7	15.6	15.3	15.4	9.3	6.6	8.0	9.0	5.8	7.3
21	25.0	20.7	22.7	15.4	15.0	15.2	10.1	7.9	8.9	10.6	7.9	9.2
22	23.8	22.1	23.0	15.0	14.3	14.6	9.2	3.8	6.2	---	---	---
23	23.3	20.7	21.8	15.0	14.2	14.6	3.8	2.3	3.1	---	---	---
24	22.1	18.2	20.3	14.8	12.7	13.6	3.0	1.2	2.1	---	---	---
25	23.1	20.9	21.9	12.7	11.7	12.1	3.2	0.8	2.1	---	---	---
26	22.7	21.3	22.0	12.3	11.2	11.8	5.0	2.1	3.5	---	---	---
27	24.5	21.9	23.0	12.3	11.6	12.0	6.3	3.9	5.1	---	---	---
28	25.1	22.4	23.6	11.6	10.7	10.9	8.4	5.5	6.9	---	---	---
29	24.5	22.0	23.3	11.0	10.7	10.9	11.7	7.9	9.8	---	---	---
30	23.3	20.1	21.5	10.7	9.0	9.9	14.4	11.7	13.0	---	---	---
31	21.3	19.6	20.5	---	---	---	15.5	13.0	14.2	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	6.9	6.5	6.7	12.6	10.5	11.3	16.8	14.2	15.7	21.6	16.0	18.7
2	6.7	6.2	6.5	11.2	9.8	10.6	18.3	12.9	15.6	20.2	14.8	17.0
3	8.6	5.5	7.0	14.2	11.1	12.4	19.4	15.0	17.1	14.9	14.0	14.4
4	9.1	6.4	7.9	15.4	12.6	13.9	20.3	16.0	17.9	14.8	13.5	14.2
5	10.2	7.8	9.0	15.5	13.4	14.5	21.2	17.7	19.3	18.2	14.4	15.9
6	11.7	9.7	10.6	15.9	13.9	14.9	19.7	16.4	17.5	22.7	16.4	19.3
7	11.6	10.4	11.1	17.0	14.6	15.6	20.0	15.0	17.3	21.6	19.6	20.7
8	10.4	9.4	9.7	16.2	12.8	14.6	21.2	16.7	19.0	23.9	19.3	21.1
9	9.4	8.5	8.9	15.9	13.7	14.8	22.2	18.0	20.0	25.2	19.5	22.3
10	9.0	7.7	8.4	16.3	12.4	14.3	20.7	18.5	19.5	27.7	22.2	24.8
11	9.3	8.1	8.7	16.7	13.4	15.1	21.6	17.8	19.7	27.7	23.8	25.8
12	9.8	8.8	9.2	18.3	13.6	15.9	20.9	16.3	18.8	25.8	23.4	24.2
13	13.2	9.8	11.4	17.0	14.5	15.7	21.4	16.4	18.9	24.3	21.7	23.0
14	14.2	11.2	12.7	15.3	12.5	14.0	23.2	17.3	20.2	26.4	21.3	23.7
15	15.2	12.2	13.7	14.2	11.0	12.3	22.1	18.3	20.3	24.8	21.5	23.4
16	14.4	12.2	13.0	11.0	9.7	10.4	23.1	18.1	20.6	26.1	21.4	23.6
17	12.2	10.5	11.1	12.8	8.4	10.6	23.1	19.2	21.2	26.0	21.7	23.8
18	11.4	9.8	10.7	15.2	10.1	12.5	21.6	19.6	20.2	25.2	22.3	23.8
19	11.3	10.5	10.8	16.1	12.8	14.5	20.7	18.6	19.6	27.1	23.2	25.0
20	15.6	11.3	13.5	18.2	14.2	16.2	23.2	19.2	21.0	30.4	25.0	27.5
21	17.0	13.9	15.4	19.2	16.1	17.5	25.2	21.2	22.9	32.2	27.2	29.6
22	17.8	14.2	16.0	17.5	13.3	15.0	24.3	21.0	22.8	32.0	28.1	30.1
23	17.3	14.6	15.9	15.6	11.8	13.5	22.0	16.9	19.5	30.2	27.3	28.4
24	14.6	12.4	13.6	17.9	13.0	15.4	20.7	16.2	18.5	29.4	25.2	27.1
25	14.0	11.1	12.7	18.1	15.1	16.7	20.4	16.3	18.3	28.5	25.9	26.6
26	13.4	12.2	12.6	16.7	12.3	14.1	22.2	16.8	19.5	26.4	24.3	25.4
27	12.3	11.4	11.9	13.4	10.9	12.2	22.9	17.9	20.4	26.7	23.0	24.8
28	13.7	10.2	11.9	16.5	10.8	13.7	24.2	17.8	21.1	25.3	22.7	23.5
29	---	---	---	17.2	14.1	15.7	22.8	18.1	20.7	24.3	22.2	23.2
30	---	---	---	20.5	15.6	17.9	20.2	15.2	17.6	26.0	22.3	24.2
31	---	---	---	18.7	16.8	17.6	---	---	---	27.6	23.5	25.4

07316000 RED RIVER NEAR GAINESVILLE, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	29.4	23.7	26.3	31.4	28.2	29.7	32.9	27.4	30.2	31.0	26.9	29.0
2	30.1	25.0	27.6	31.6	27.2	29.4	33.3	28.2	30.8	31.5	27.8	29.6
3	28.7	26.2	27.1	33.2	27.4	30.0	32.5	28.5	30.6	30.7	27.3	29.1
4	29.1	24.7	26.7	30.9	26.2	28.9	33.1	27.8	30.3	30.5	27.6	29.0
5	28.9	24.6	26.7	---	---	---	33.2	28.4	30.4	30.0	26.2	28.2
6	29.4	25.1	27.4	32.2	26.7	29.3	32.9	27.3	29.8	29.5	25.3	27.6
7	30.1	26.8	28.4	30.4	27.2	28.4	32.5	28.1	30.0	29.8	26.0	27.9
8	30.2	27.2	28.8	32.3	26.0	28.8	30.2	24.4	27.8	29.9	25.5	27.8
9	30.3	27.9	29.1	32.9	26.9	29.8	31.6	25.5	28.1	29.3	25.1	27.3
10	29.3	28.0	28.6	33.3	27.4	30.2	32.3	27.1	29.4	29.2	25.0	27.2
11	29.2	27.2	28.2	34.0	28.5	31.2	31.9	27.3	29.4	27.7	26.1	27.0
12	29.3	27.5	28.4	34.1	29.0	31.6	32.1	27.2	29.4	28.3	25.7	27.0
13	30.5	26.7	28.4	32.3	29.7	30.9	32.0	27.6	29.7	29.8	26.0	27.8
14	30.6	26.7	28.5	32.4	28.6	30.3	29.3	23.7	26.6	30.5	26.6	28.4
15	31.9	26.6	29.2	30.8	27.7	29.3	29.8	25.5	27.4	28.7	26.2	27.4
16	32.2	27.8	30.1	31.3	27.9	29.4	28.7	25.4	26.7	27.4	23.7	25.5
17	31.0	28.1	29.0	31.0	27.4	29.1	26.5	25.2	25.8	28.3	23.3	25.9
18	29.3	26.7	28.1	29.9	26.4	28.0	28.1	26.1	27.0	29.3	25.8	27.6
19	29.8	27.0	28.4	31.9	26.4	28.9	29.2	27.6	28.3	29.3	26.4	27.9
20	30.2	26.6	28.4	32.7	28.1	30.2	30.2	28.5	29.2	28.5	26.8	27.7
21	30.5	26.2	28.4	33.6	28.2	30.7	30.8	29.4	30.1	29.5	27.3	28.4
22	30.6	26.5	28.6	35.3	29.2	32.0	31.4	29.9	30.7	29.7	27.2	28.5
23	30.4	27.0	28.8	34.8	30.2	32.3	32.1	30.4	31.1	29.7	27.2	28.5
24	30.4	27.2	28.9	33.7	29.0	31.0	32.2	30.5	31.3	28.8	26.9	27.8
25	31.3	27.1	29.2	31.9	28.1	29.8	32.5	30.2	31.3	29.0	25.5	27.2
26	31.8	27.6	29.7	32.1	26.8	29.3	33.3	30.1	31.6	29.2	26.3	27.8
27	31.6	27.8	29.7	29.5	25.4	26.5	32.3	30.4	31.3	30.1	26.4	28.2
28	31.8	27.5	29.6	29.4	24.1	26.4	30.7	28.6	29.8	30.7	26.9	28.6
29	31.9	27.4	29.7	32.4	24.5	28.2	30.1	28.0	29.1	26.9	21.8	23.8
30	32.5	27.8	30.1	33.3	26.6	29.6	30.5	27.3	28.9	24.6	21.2	23.0
31	---	---	---	33.2	26.9	30.0	30.9	26.9	28.9	---	---	---

07316500 WASHITA RIVER NEAR CHEYENNE, OK

LOCATION.--Lat 35°37'35", long 99°40'05", in SE ¼ 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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	14	41	31	55	42	44	25	20	21	1.00	8.3
2	2.1	16	39	31	54	42	45	37	19	26	0.83	6.7
3	2.2	20	39	31	52	42	45	47	15	25	0.71	5.8
4	2.1	20	37	36	51	41	43	50	15	24	0.73	4.9
5	2.2	17	37	60	50	40	43	51	14	28	1.4	4.0
6	5.6	17	38	e56	53	39	43	48	13	26	1.2	3.4
7	11	16	38	e57	54	40	41	43	18	25	0.91	2.9
8	14	16	40	e54	54	39	40	38	19	23	0.78	2.8
9	12	16	39	57	52	38	39	33	15	20	0.67	2.4
10	16	18	36	56	51	41	38	29	17	19	0.48	2.0
11	23	18	34	55	49	37	36	26	70	17	0.41	1.9
12	24	18	34	55	50	36	34	26	193	16	0.44	2.2
13	23	17	32	54	49	35	31	27	303	15	2.1	2.2
14	21	20	31	52	49	34	31	26	209	15	9.3	2.3
15	19	31	31	e47	51	43	31	26	126	14	8.8	2.4
16	17	37	30	e45	46	51	32	28	115	12	7.2	2.4
17	16	49	30	e44	43	56	32	28	106	10	7.4	2.3
18	16	57	30	e45	42	58	38	26	85	8.5	6.1	1.7
19	15	55	29	50	43	56	38	24	71	7.0	4.9	1.5
20	15	53	30	50	46	52	38	22	63	5.8	3.8	1.3
21	14	58	29	50	45	51	35	19	55	4.9	12	1.2
22	14	56	29	48	46	49	28	16	50	4.6	18	1.1
23	14	59	e27	45	49	47	25	13	44	3.3	20	1.1
24	15	61	e22	44	49	44	26	12	40	2.4	17	1.0
25	14	60	e25	44	48	43	30	13	34	2.0	15	0.93
26	15	59	e28	42	46	42	28	17	30	2.1	12	0.96
27	14	56	32	42	44	41	27	23	27	2.8	13	0.91
28	14	51	32	47	43	42	26	25	24	2.6	15	0.87
29	15	48	32	52	---	41	26	23	21	2.0	13	0.87
30	14	43	32	55	---	40	25	22	19	1.5	12	1.0
31	14	---	32	56	---	40	---	20	---	1.2	10	---
TOTAL	415.5	1,076	1,015	1,491	1,364	1,342	1,038	863	1,850	386.7	216.16	73.34
MEAN	13.4	35.9	32.7	48.1	48.7	43.3	34.6	27.8	61.7	12.5	6.97	2.44
MAX	24	61	41	60	55	58	45	51	303	28	20	8.3
MIN	2.1	14	22	31	42	34	25	12	13	1.2	0.41	0.87
AC-FT	824	2,130	2,010	2,960	2,710	2,660	2,060	1,710	3,670	767	429	145

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

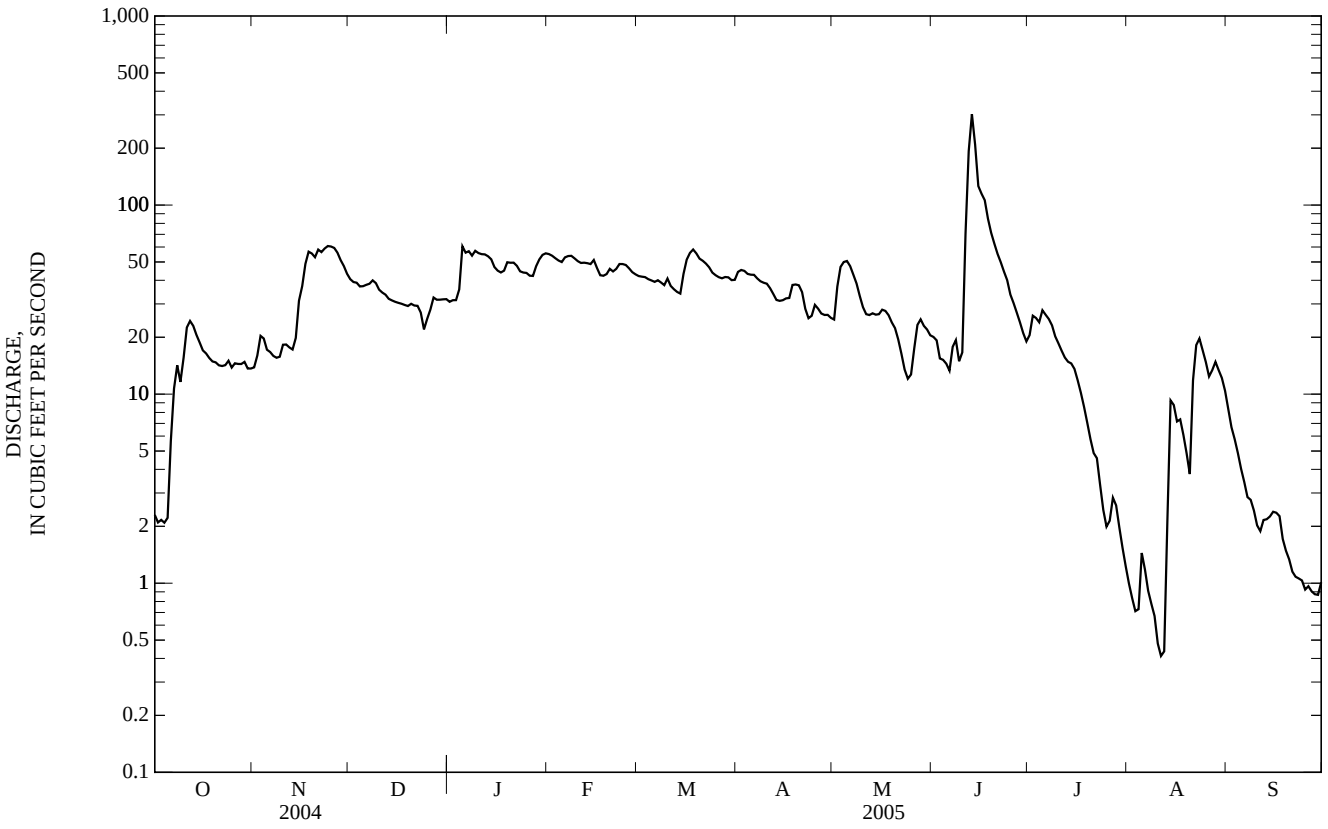
MEAN	10.5	11.7	13.7	17.4	21.7	28.8	33.5	48.4	40.9	9.24	5.44	5.66
MAX	82.5	64.3	67.7	80.7	71.0	138	146	348	203	61.7	32.8	44.7
(WY)	(2003)	(1987)	(1998)	(1998)	(2001)	(1998)	(1997)	(1977)	(1982)	(1982)	(1995)	(1997)
MIN	0.00	0.00	0.00	0.03	1.50	2.22	1.08	0.00	0.01	0.00	0.00	0.00
(WY)	(1964)	(1964)	(1964)	(1973)	(1973)	(1967)	(1971)	(1971)	(1970)	(1964)	(1963)	(1964)

e Estimated

07316500 WASHITA RIVER NEAR CHEYENNE, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	8,818.77		11,130.70			
ANNUAL MEAN	24.1		30.5		a20.6	
HIGHEST ANNUAL MEAN					64.0	1997
LOWEST ANNUAL MEAN					2.60	1972
HIGHEST DAILY MEAN	186	Jul 1	303	Jun 13	1,560	Apr 23, 1990
LOWEST DAILY MEAN	0.55	Aug 5	0.41	Aug 11	0.00	most years
ANNUAL SEVEN-DAY MINIMUM	0.93	Aug 1	0.70	Aug 6	0.00	Oct 1, 1961
MAXIMUM PEAK FLOW			561	Jun 12	b7,250	Apr 22, 1990
MAXIMUM PEAK STAGE			12.08	Jun 12	c16.60	Apr 22, 1990
ANNUAL RUNOFF (AC-FT)	17,490		22,080		14,890	
10 PERCENT EXCEEDS	49		54		46	
50 PERCENT EXCEEDS	21		28		8.7	
90 PERCENT EXCEEDS	2.0		2.2		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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	26	77	59	99	77	68	44	44	48	12	23
2	6.7	26	74	59	97	76	69	47	43	51	11	21
3	6.4	33	72	59	94	75	69	56	42	53	10	20
4	6.3	41	71	60	91	74	67	63	42	53	9.3	18
5	6.2	39	69	258	88	72	65	65	38	51	9.4	17
6	10	36	69	e190	89	72	65	66	36	49	9.4	16
7	14	33	71	e150	94	71	65	63	51	49	9.7	15
8	23	32	72	e132	97	71	64	62	43	47	9.9	14
9	17	31	71	114	97	70	62	58	40	44	8.8	14
10	24	30	68	109	93	69	59	54	40	41	8.1	13
11	38	30	66	104	89	68	57	50	76	38	7.6	13
12	33	31	64	100	86	67	56	48	240	36	7.8	12
13	31	31	63	95	86	65	54	48	674	34	18	12
14	30	32	62	90	84	64	52	57	600	35	94	14
15	28	38	61	e84	82	67	50	54	483	33	39	28
16	26	49	61	e80	82	79	48	50	348	31	35	19
17	25	57	61	e82	80	91	48	49	646	28	27	15
18	25	87	60	e84	77	93	50	46	455	26	24	14
19	24	100	59	85	77	92	53	44	312	24	21	12
20	23	86	60	84	78	91	55	41	234	22	18	11
21	23	164	59	84	79	88	54	39	185	21	30	9.9
22	23	107	58	82	78	86	53	36	151	19	132	8.9
23	23	103	e53	79	79	84	50	34	128	18	52	8.3
24	23	127	e45	77	85	80	47	31	109	17	43	8.1
25	23	115	e55	76	86	76	46	30	94	16	38	7.8
26	41	103	e58	75	83	74	47	39	85	15	33	7.4
27	39	95	60	73	82	73	46	57	75	15	30	7.0
28	35	88	61	78	79	72	45	49	68	15	29	6.9
29	29	84	60	89	---	71	44	48	60	14	28	6.6
30	26	80	60	96	---	70	44	47	52	14	28	6.5
31	26	---	58	99	---	71	---	44	---	13	26	---
TOTAL	714.8	1,934	1,958	2,986	2,411	2,349	1,652	1,519	5,494	970	858.0	398.4
MEAN	23.1	64.5	63.2	96.3	86.1	75.8	55.1	49.0	183	31.3	27.7	13.3
MAX	41	164	77	258	99	93	69	66	674	53	132	28
MIN	6.2	26	45	59	77	64	44	30	36	13	7.6	6.5
AC-FT	1,420	3,840	3,880	5,920	4,780	4,660	3,280	3,010	10,900	1,920	1,700	790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2005, BY WATER YEAR (WY)

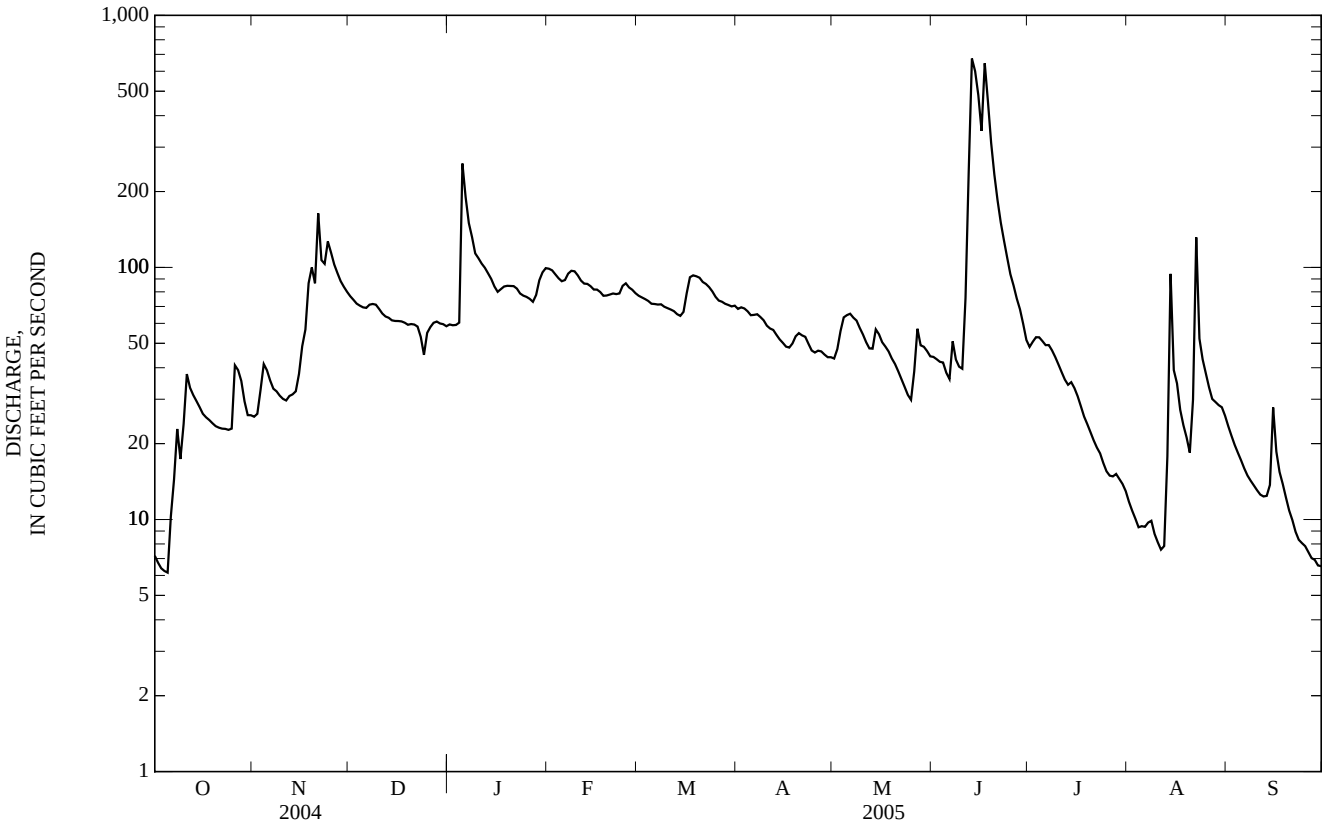
MEAN	38.2	42.9	37.8	46.6	54.2	78.1	93.3	152	130	37.1	27.9	33.7
MAX	384	253	258	342	299	548	528	755	502	158	170	450
(WY)	(1987)	(1987)	(1998)	(1998)	(1998)	(1998)	(1997)	(1982)	(1997)	(1997)	(1997)	(1997)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.00	0.00
(WY)	(1973)	(1972)	(1973)	(1973)	(1972)	(1972)	(1972)	(1971)	(1972)	(1970)	(1972)	(1976)

e Estimated

07324200 WASHITA RIVER NEAR HAMMON, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1970 - 2005	
ANNUAL TOTAL	15,792.7		23,244.2			
ANNUAL MEAN	43.1		63.7		64.3	
HIGHEST ANNUAL MEAN					262	1997
LOWEST ANNUAL MEAN					0.49	1972
HIGHEST DAILY MEAN	512	Mar 5	674	Jun 13	4,340	May 17, 1982
LOWEST DAILY MEAN	1.9	Jun 16	6.2	Oct 5	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	2.6	Aug 6	7.2	Sep 24	0.00	Jul 13, 1970
MAXIMUM PEAK FLOW			847	Jun 17	a6,000	May 17, 1982
MAXIMUM PEAK STAGE			13.43	Jun 17	23.44	May 17, 1982
ANNUAL RUNOFF (AC-FT)	31,320		46,100		46,580	
10 PERCENT EXCEEDS	78		95		143	
50 PERCENT EXCEEDS	37		53		24	
90 PERCENT EXCEEDS	6.1		14		0.18	

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 NGVD of 1929. 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, 181,600 acre-ft, June 20, 21, elevation, 1,642.54 ft; minimum, 163,500 acre-ft, Oct. 5, 6, elevation, 1,639.80 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1639.87	163,900	--	--
Oct. 31	1640.08	165,300	+1,400	171
Nov. 30	1640.89	170,500	+5,200	175
Dec. 31	1641.24	172,800	+2,300	176
CAL YR 04	--	--	+7,000	2,596
Jan. 31	1640.79	169,900	-2,900	184
Feb. 28	1640.06	165,100	-4,800	177
Mar. 31	1640.62	168,800	+3,700	186
Apr. 30	1640.81	170,000	+1,200	186
May 31	1641.32	173,400	+3,400	182
June 30	1641.65	175,600	+2,200	180
July 31	1641.24	172,800	-2,800	207
Aug. 31	1641.46	174,300	+1,500	200
Sept. 30	1640.62	168,800	-5,500	178
WTR YR 05	-	-	+4,900	2,202

*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 NGVD of 1929, from topographic map.

REMARKS.--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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	8.0	22	17	176	22	19	16	42	86	12	380
2	5.9	8.2	21	17	176	21	18	17	37	28	12	376
3	5.9	9.8	21	16	175	22	18	17	30	25	12	373
4	5.8	9.2	21	16	174	21	18	16	28	25	14	371
5	6.0	11	21	60	174	21	19	16	29	25	20	290
6	6.5	16	21	53	174	21	19	16	29	23	13	121
7	7.1	14	20	29	176	21	18	16	30	24	12	17
8	6.9	13	21	23	176	21	18	16	28	25	12	16
9	6.4	13	21	22	175	20	18	16	27	25	12	16
10	10	13	21	20	174	21	18	16	27	24	12	16
11	8.4	13	21	74	174	20	18	16	32	24	12	16
12	6.9	13	20	217	174	20	18	16	135	23	12	16
13	6.6	13	19	307	174	20	18	126	340	20	81	16
14	6.5	14	18	302	173	20	17	426	238	14	89	34
15	6.0	15	17	301	230	20	17	232	290	14	24	27
16	6.4	16	18	300	360	21	17	215	291	14	18	20
17	6.0	16	18	297	359	21	17	170	227	13	16	18
18	6.3	17	18	296	357	22	18	130	268	12	15	17
19	6.4	17	18	336	355	22	18	110	262	12	14	17
20	5.9	49	18	377	352	22	18	56	254	12	14	16
21	6.6	141	18	373	351	21	17	41	290	12	181	16
22	7.1	78	18	373	241	21	17	38	374	11	262	16
23	7.0	46	17	368	157	21	17	34	405	11	98	15
24	7.4	67	e15	367	82	21	17	32	387	10	153	14
25	7.6	47	e16	366	23	20	17	34	386	10	241	14
26	8.2	34	17	255	23	20	17	74	383	11	302	14
27	6.4	29	17	171	23	20	17	136	383	11	256	14
28	6.9	25	17	172	23	19	17	76	383	11	358	14
29	6.6	24	17	174	---	20	16	51	379	12	402	14
30	7.8	23	17	175	---	20	16	42	305	12	392	15
31	7.7	---	17	176	---	19	---	41	---	12	384	---
TOTAL	211.3	812.2	581	6,050	5,381	641	527	2,258	6,319	591	3,455	2,319
MEAN	6.82	27.1	18.7	195	192	20.7	17.6	72.8	211	19.1	111	77.3
MAX	10	141	22	377	360	22	19	426	405	86	402	380
MIN	5.8	8.0	15	16	23	19	16	16	27	10	12	14
AC-FT	419	1,610	1,150	12,000	10,670	1,270	1,050	4,480	12,530	1,170	6,850	4,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

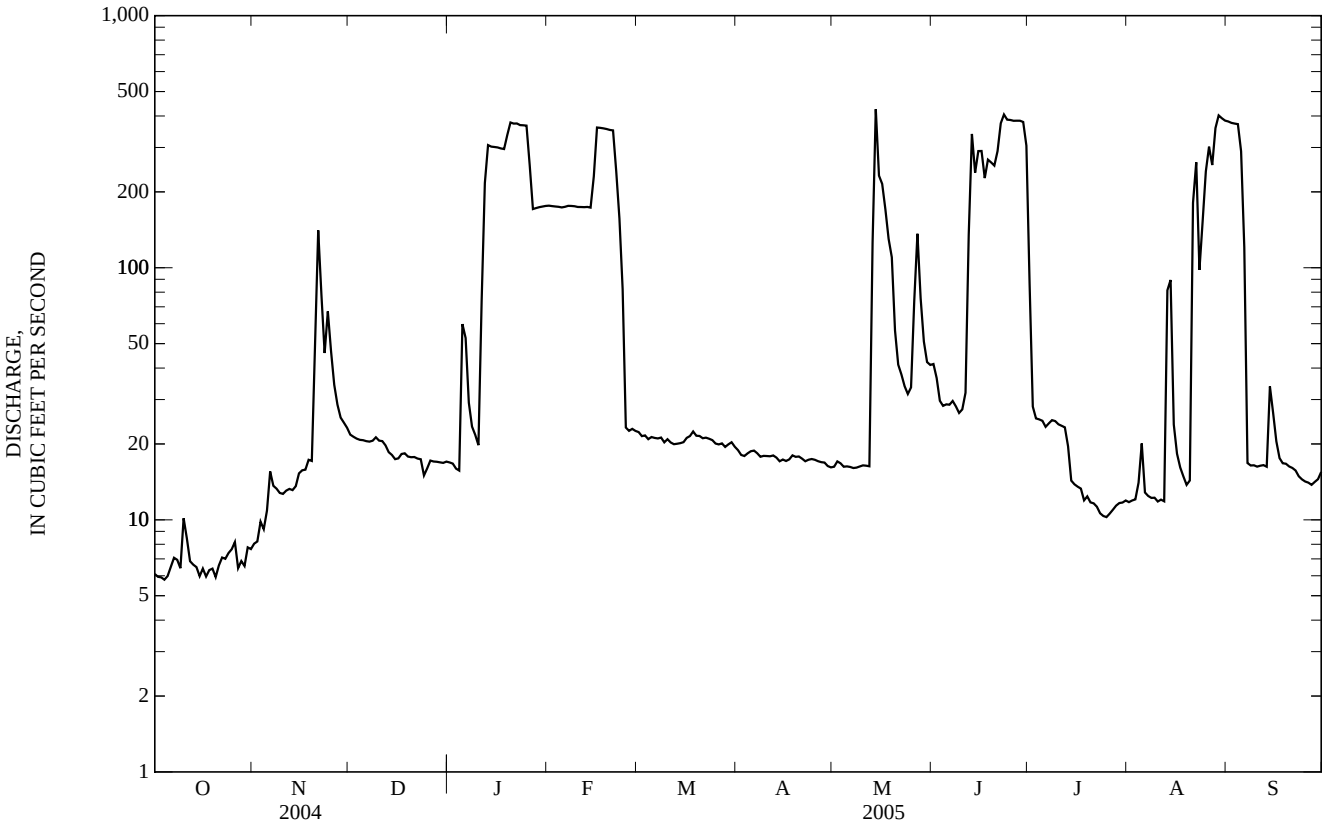
MEAN	49.0	26.2	25.7	47.5	46.0	50.3	72.3	101	141	53.8	51.2	30.6
MAX	598	278	298	633	342	297	607	622	763	385	579	444
(WY)	(1998)	(1999)	(1997)	(1998)	(1998)	(2000)	(1998)	(1997)	(1982)	(1997)	(1997)	(1996)
MIN	0.15	0.28	0.36	0.56	0.60	0.57	1.62	1.08	1.28	2.27	3.12	0.46
(WY)	(1968)	(1968)	(1968)	(1968)	(1968)	(1968)	(1967)	(1967)	(1966)	(1967)	(1973)	(1966)

e Estimated

07324400 WASHITA RIVER NEAR FOSS, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	9,439.3		29,145.5			
ANNUAL MEAN	25.8		79.9		57.9	
HIGHEST ANNUAL MEAN					373	1997
LOWEST ANNUAL MEAN					3.87	1963
HIGHEST DAILY MEAN	348	Jun 22	426	May 14	1,370	Sep 15, 1996
LOWEST DAILY MEAN	2.5	Jan 6	5.8	Oct 4	a0.06	Oct 2, 1967
ANNUAL SEVEN-DAY MINIMUM	3.3	Jan 1	6.2	Oct 1	0.08	Sep 28, 1967
MAXIMUM PEAK FLOW			988	May 14	b3,010	Aug 26, 1969
MAXIMUM PEAK STAGE			15.20	May 14	21.56	Oct 3, 1986
ANNUAL RUNOFF (AC-FT)	18,720		57,810		41,910	
10 PERCENT EXCEEDS	77		300		189	
50 PERCENT EXCEEDS	8.4		20		7.1	
90 PERCENT EXCEEDS	6.1		10		2.4	

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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	17	78	56	208	77	53	34	44	211	19	375
2	13	17	76	56	208	76	53	43	42	84	18	366
3	12	25	75	56	209	74	51	47	40	63	17	361
4	12	34	74	57	204	73	50	47	40	60	17	359
5	12	35	73	222	201	72	50	45	35	57	25	356
6	13	28	75	244	206	71	48	43	32	53	29	209
7	16	29	77	159	210	70	52	41	31	50	21	115
8	30	27	78	112	208	70	53	40	34	46	30	69
9	25	26	76	101	203	68	51	40	33	44	20	63
10	31	25	73	95	200	65	50	39	34	41	18	60
11	36	24	70	91	198	64	48	38	50	39	18	58
12	38	25	68	136	198	63	47	37	243	38	18	57
13	27	26	67	276	198	61	46	104	1,080	39	41	56
14	21	27	63	310	196	61	44	425	567	38	641	94
15	18	37	61	308	194	63	43	284	339	32	152	128
16	17	42	63	304	309	71	42	210	387	28	68	80
17	16	55	60	307	370	78	43	182	455	26	53	63
18	16	77	63	311	372	74	45	133	389	25	48	58
19	16	103	63	312	374	70	48	111	310	24	39	55
20	16	93	63	376	377	66	47	93	271	23	34	52
21	16	312	62	388	379	64	47	63	249	22	331	51
22	15	233	61	385	375	62	43	51	310	22	824	49
23	15	146	e54	381	212	63	42	45	387	21	630	45
24	16	144	e44	382	193	62	40	40	389	20	275	44
25	15	145	e53	383	109	61	40	38	384	20	328	43
26	17	115	e57	377	86	59	38	51	380	19	283	42
27	53	98	59	214	83	59	39	106	377	20	336	41
28	27	89	58	204	80	58	37	109	374	20	352	40
29	19	83	58	212	---	58	36	74	373	20	431	39
30	18	79	57	218	---	56	36	58	369	19	404	41
31	18	---	57	214	---	55	---	50	---	19	388	---
TOTAL	628	2,216	2,016	7,247	6,360	2,044	1,362	2,721	8,048	1,243	5,908	3,469
MEAN	20.3	73.9	65.0	234	227	65.9	45.4	87.8	268	40.1	191	116
MAX	53	312	78	388	379	78	53	425	1,080	211	824	375
MIN	12	17	44	56	80	55	36	34	31	19	17	39
AC-FT	1,250	4,400	4,000	14,370	12,620	4,050	2,700	5,400	15,960	2,470	11,720	6,880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

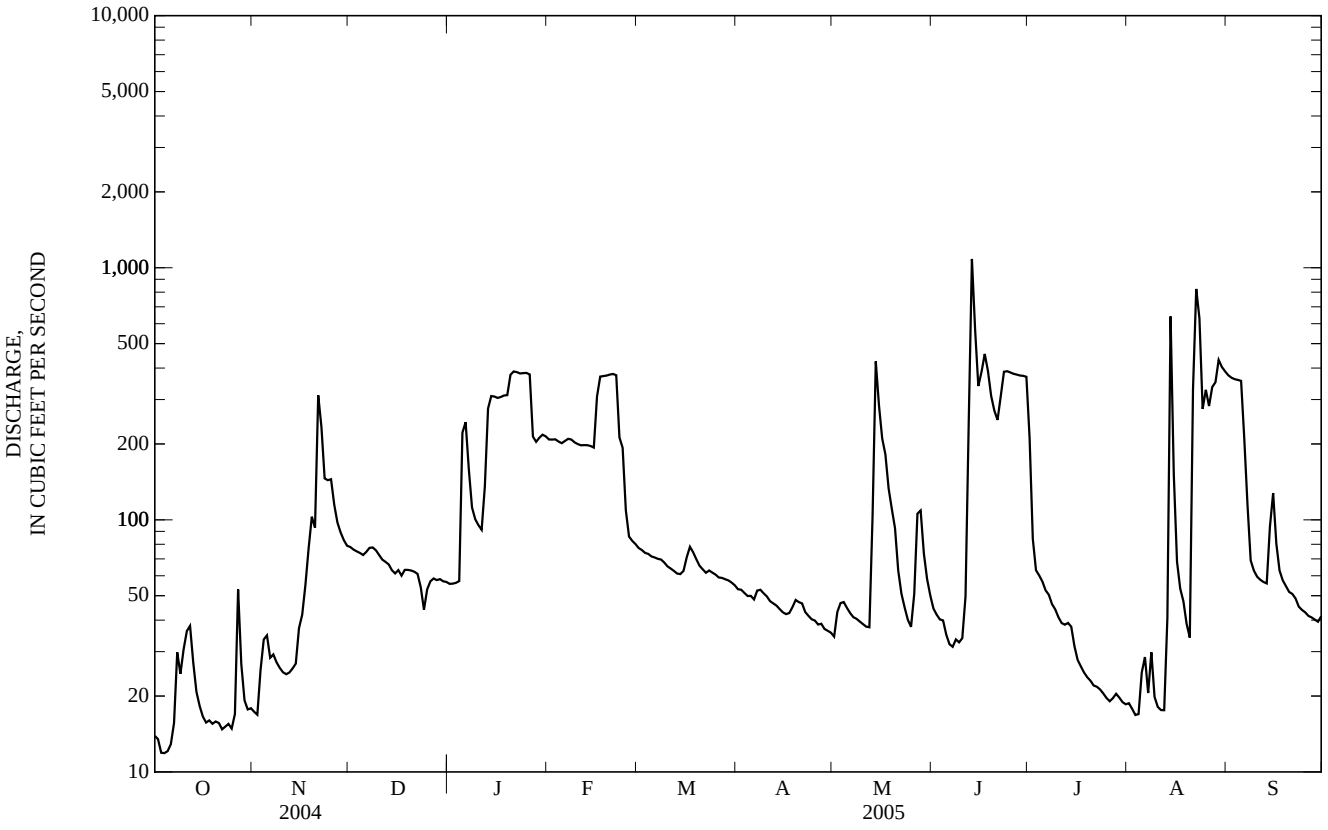
MEAN	109	76.0	63.0	81.6	93.2	111	138	223	256	109	108	115
MAX	1,477	494	504	742	574	654	1,112	1,256	1,190	705	1,061	1,519
(WY)	(1987)	(1987)	(1997)	(1998)	(1997)	(1998)	(1997)	(1997)	(1997)	(1989)	(1995)	(1996)
MIN	3.30	4.23	5.68	4.78	7.00	6.24	9.64	4.10	4.44	6.42	6.01	5.87
(WY)	(1967)	(1964)	(1964)	(1971)	(1967)	(1968)	(1971)	(1967)	(1966)	(1966)	(1965)	(1964)

e Estimated

07325000 WASHITA RIVER NEAR CLINTON, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	21,832.3		43,262			
ANNUAL MEAN	59.7		119		a124	
HIGHEST ANNUAL MEAN					696	1997
LOWEST ANNUAL MEAN					13.8	1967
HIGHEST DAILY MEAN	1,820	Jul 1	1,080	Jun 13	7,710	Oct 3, 1986
LOWEST DAILY MEAN	9.5	Jun 16	12	Oct 3-5	b0.00	Jul 26, 1964
ANNUAL SEVEN-DAY MINIMUM	11	Jun 11	13	Oct 1	0.04	Jul 23, 1964
MAXIMUM PEAK FLOW			1,400	Jun 13	c10,800	Sep 15, 1996
MAXIMUM PEAK STAGE			14.52	Jun 13	d26.24	Sep 15, 1996
ANNUAL RUNOFF (AC-FT)	43,300		85,810		89,500	
10 PERCENT EXCEEDS	149		360		360	
50 PERCENT EXCEEDS	25		58		32	
90 PERCENT EXCEEDS	14		20		8.8	

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 NGVD of 1929. 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.--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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	94	406	189	417	317	178	120	147	435	45	609
2	35	85	362	188	409	288	173	125	134	434	43	562
3	36	110	334	186	406	269	171	132	124	363	40	526
4	39	568	314	190	402	258	171	141	115	268	38	500
5	40	433	300	544	396	251	171	152	113	269	40	480
6	41	286	297	1,710	415	244	163	148	118	296	39	466
7	117	216	326	1,070	512	240	163	145	109	198	120	452
8	2,080	184	372	768	500	234	165	139	102	178	101	368
9	2,080	160	342	580	460	227	164	135	97	164	127	291
10	843	142	308	473	433	219	162	131	106	152	148	222
11	1,560	128	282	415	412	212	159	125	132	142	97	195
12	1,540	113	260	380	401	204	154	119	262	132	72	183
13	738	105	241	354	395	198	150	125	915	139	70	174
14	499	101	226	353	393	193	149	138	2,580	156	237	188
15	376	200	214	442	382	190	146	184	1,510	129	470	677
16	291	2,000	208	468	372	193	145	338	839	121	666	2,390
17	234	2,920	205	459	363	201	144	350	632	116	379	903
18	194	3,200	203	462	431	207	141	280	765	106	245	526
19	167	2,640	202	468	494	214	140	254	831	98	185	372
20	143	1,560	199	476	501	211	142	221	604	91	145	306
21	124	1,780	199	486	506	204	146	192	508	85	752	259
22	114	2,470	197	539	505	197	148	174	454	80	2,950	226
23	108	1,620	e185	542	604	193	145	151	418	77	4,670	205
24	103	1,280	e165	521	865	191	137	129	429	72	2,920	190
25	97	1,100	e152	518	508	188	134	117	469	67	1,640	180
26	93	857	e170	520	414	185	134	117	469	63	1,090	165
27	92	719	e178	518	355	182	131	129	461	59	925	151
28	94	609	199	518	337	179	129	157	454	58	909	142
29	103	519	194	433	---	178	125	158	447	55	964	133
30	111	460	191	424	---	178	123	187	440	52	743	130
31	105	---	190	421	---	180	---	167	---	47	682	---
TOTAL	12,232	26,659	7,621	15,615	12,588	6,625	4,503	5,180	14,784	4,702	21,552	12,171
MEAN	395	889	246	504	450	214	150	167	493	152	695	406
MAX	2,080	3,200	406	1,710	865	317	178	350	2,580	435	4,670	2,390
MIN	35	85	152	186	337	178	123	117	97	47	38	130
AC-FT	24,260	52,880	15,120	30,970	24,970	13,140	8,930	10,270	29,320	9,330	42,750	24,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

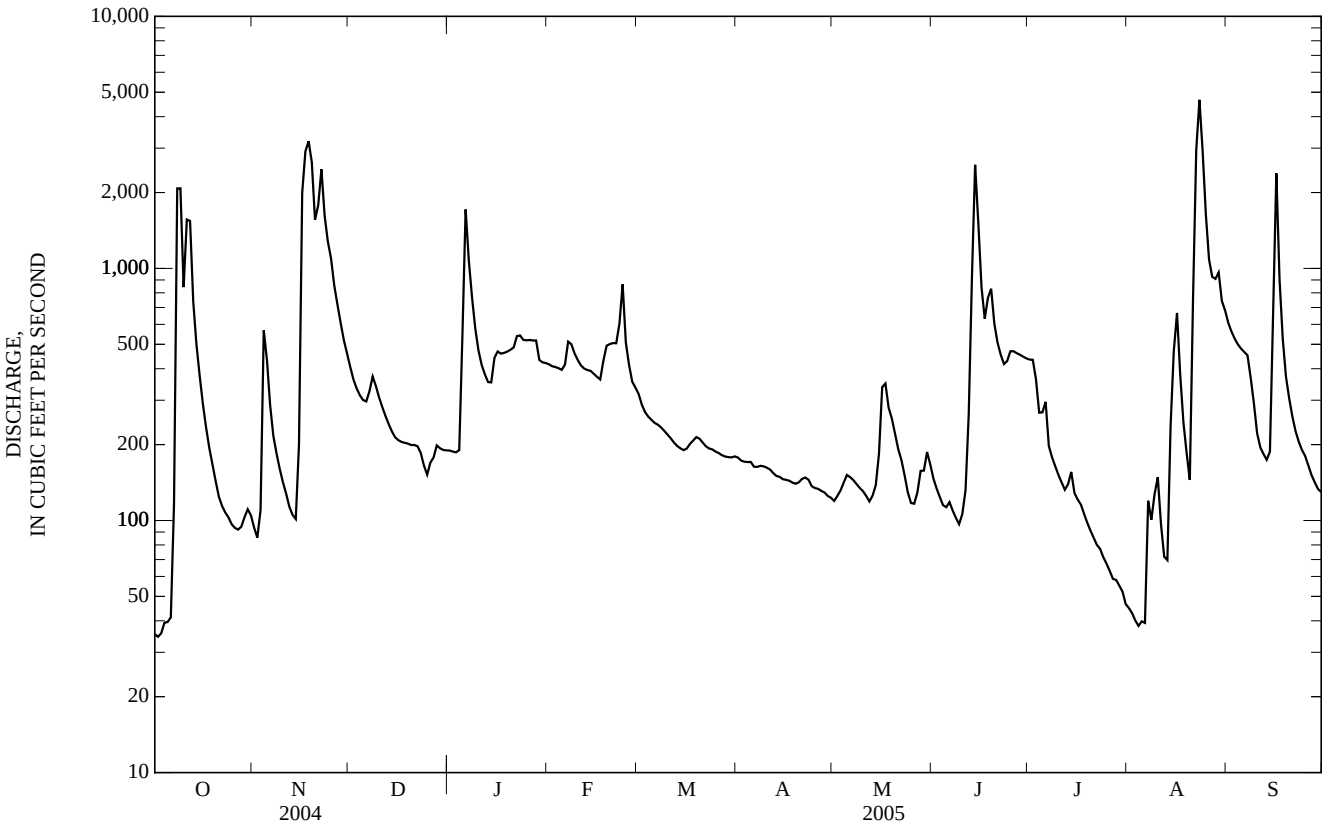
MEAN	409	297	224	222	247	394	393	797	820	286	258	349
MAX	5,311	1,471	1,032	1,100	1,127	2,255	2,832	5,356	4,994	1,150	1,760	2,468
(WY)	(1987)	(1987)	(1993)	(1998)	(1997)	(1998)	(1997)	(1993)	(1995)	(1975)	(1995)	(1996)
MIN	21.8	27.3	33.6	36.0	36.6	34.2	11.1	10.0	94.0	7.10	14.6	15.6
(WY)	(1973)	(1971)	(1964)	(1971)	(1971)	(1971)	(1971)	(1971)	(1984)	(1964)	(1972)	(1984)

e Estimated

07325500 WASHITA RIVER AT CARNEGIE, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	129,958		144,232			
ANNUAL MEAN	355		395		a391	
HIGHEST ANNUAL MEAN					1,432	1987
LOWEST ANNUAL MEAN					72.8	1967
HIGHEST DAILY MEAN	6,420	Mar 6	4,670	Aug 23	28,500	Jun 5, 1995
LOWEST DAILY MEAN	25	Sep 22	35	Oct 1,2	b0.00	Jul 20, 1964
ANNUAL SEVEN-DAY MINIMUM	30	Sep 16	42	Jul 31	0.00	Jul 20, 1964
MAXIMUM PEAK FLOW			5,030	Aug 23	c40,600	Oct 20, 1983
MAXIMUM PEAK STAGE			17.15	Aug 23	31.70	Oct 20, 1983
ANNUAL RUNOFF (AC-FT)	257,800		286,100		283,600	
10 PERCENT EXCEEDS	821		757		864	
50 PERCENT EXCEEDS	133		203		139	
90 PERCENT EXCEEDS	54		101		39	

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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	14	20	21	26	27	19	15	15	11	5.6	13
2	9.0	14	20	21	28	25	20	19	14	12	5.3	12
3	8.6	25	20	21	27	24	19	22	14	12	4.9	11
4	9.9	23	20	26	26	24	18	21	15	12	4.8	10
5	9.3	18	20	118	25	23	19	20	14	12	6.1	10
6	9.0	17	24	e41	33	24	19	19	13	12	6.1	9.7
7	25	16	30	34	32	23	21	18	13	11	6.4	9.1
8	17	16	24	30	28	23	19	19	12	11	6.3	8.8
9	12	15	22	28	27	22	18	18	12	10	6.2	8.6
10	24	15	21	26	25	22	18	17	42	10	5.8	8.4
11	26	15	21	25	25	21	18	16	161	9.4	5.4	8.6
12	16	16	20	28	25	21	19	15	510	9.2	5.6	9.5
13	14	15	20	25	25	21	17	25	1,810	9.2	6.9	9.2
14	14	15	19	22	24	21	17	26	315	9.7	21	13
15	13	48	19	22	23	21	17	24	134	8.8	9.4	574
16	12	43	19	e20	23	25	17	21	76	8.7	8.2	116
17	12	96	20	21	23	24	17	e19	97	8.5	9.9	54
18	12	127	19	22	22	23	17	e17	48	8.0	7.6	36
19	12	82	20	22	23	23	18	15	35	8.0	6.7	28
20	12	47	20	23	24	22	17	15	29	7.4	11	21
21	12	183	21	23	23	22	17	14	24	6.9	665	20
22	12	40	20	22	23	22	18	13	21	6.7	460	17
23	12	32	e18	22	44	23	17	13	19	6.6	128	15
24	12	33	e17	21	38	21	16	12	18	6.1	58	15
25	12	29	e18	22	30	21	16	12	17	6.0	33	14
26	13	25	20	22	27	21	16	14	16	5.6	21	14
27	14	23	22	22	32	21	16	16	14	6.0	16	14
28	15	22	19	27	30	20	15	16	13	6.3	15	13
29	14	21	20	32	---	20	16	16	12	6.2	47	13
30	14	21	21	29	---	21	16	15	11	5.9	21	13
31	14	---	21	28	---	20	---	15	---	5.7	16	---
TOTAL	419.7	1,106	635	866	761	691	527	537	3,544	267.9	1,629.2	1,117.9
MEAN	13.5	36.9	20.5	27.9	27.2	22.3	17.6	17.3	118	8.64	52.6	37.3
MAX	26	183	30	118	44	27	21	26	1,810	12	665	574
MIN	8.6	14	17	20	22	20	15	12	11	5.6	4.8	8.4
AC-FT	832	2,190	1,260	1,720	1,510	1,370	1,050	1,070	7,030	531	3,230	2,220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY)

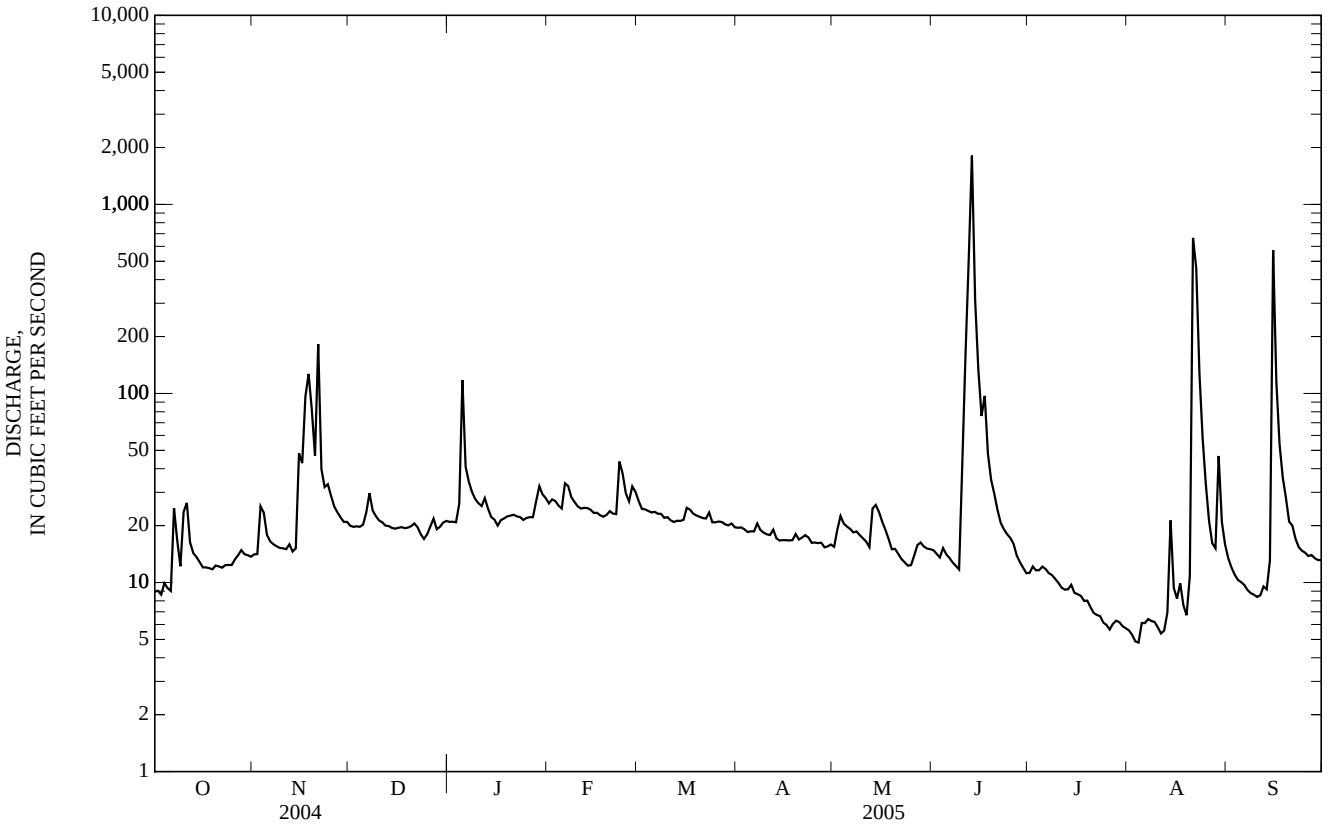
MEAN	28.1	26.8	24.4	21.1	21.8	34.5	28.5	58.1	52.8	15.5	18.4	20.4
MAX	317	104	84.9	50.2	55.1	138	140	303	291	85.1	86.0	161
(WY)	(1987)	(1993)	(1993)	(1993)	(1997)	(1998)	(1997)	(1993)	(1995)	(1975)	(1974)	(1986)
MIN	4.34	6.11	4.88	8.78	8.99	8.38	5.27	2.79	7.84	1.01	0.90	2.15
(WY)	(1973)	(1979)	(1979)	(1981)	(1981)	(1971)	(1971)	(1971)	(1984)	(1974)	(1972)	(1972)

e Estimated

07325800 COBB CREEK NEAR EAKLY, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1969 - 2005	
ANNUAL TOTAL	10,315.2		12,101.7			
ANNUAL MEAN	28.2		33.2		29.2	
HIGHEST ANNUAL MEAN					91.0	1987
LOWEST ANNUAL MEAN					10.1	1979
HIGHEST DAILY MEAN	1,610	Mar 4	1,810	Jun 13	3,750	Sep 29, 1986
LOWEST DAILY MEAN	5.9	Sep 20	4.8	Aug 4	a0.00	Aug 18, 1970
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 16	5.5	Jul 30	0.04	May 24, 1971
MAXIMUM PEAK FLOW			4,910	Jun 13	12,000	Jun 4, 1995
MAXIMUM PEAK STAGE			22.17	Jun 13	24.38	Sep 29, 1986
ANNUAL RUNOFF (AC-FT)	20,460		24,000		21,170	
10 PERCENT EXCEEDS	32		32		37	
50 PERCENT EXCEEDS	17		19		15	
90 PERCENT EXCEEDS	8.1		8.8		5.1	

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



07325800 COBB CREEK NEAR EAKLEY, 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,alkalinity, 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, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	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)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
OCT													
07...	2130	1028	80020	39	727	--	8.1	90	7.6	423	--	18.0	--
NOV													
17...	1405	1028	80020	130	735	7.8	8.8	90	7.6	507	--	14.8	161
DEC													
08...	1130	1028	80020	24	722	7.1	11.1	100	7.8	738	13.0	8.5	233
JAN													
19...	1130	1028	80020	22	733	2.4	12.6	101	8.3	786	11.5	4.3	245
MAR													
02...	1630	1028	80020	24	724	--	12.3	120	8.1	834	17.4	12.0	--
APR													
27...	1030	1028	80020	17	726	--	9.9	101	--	866	15.5	14.0	--
MAY													
02...	1830	1028	80020	22	730	--	11.5	116	7.9	810	16.0	13.5	--
JUN													
10...	1152	1028	80020	64	720	--	5.9	71	7.9	544	27.0	21.5	--
11...	1249	1028	80020	380	720	--	6.4	73	7.7	260	26.0	19.2	--
13...	0345	1028	80020	4,540	718	--	6.7	76	8.2	135	18.7	18.8	--
29...	1050	1028	80020	12	725	--	8.3	103	8.1	866	31.5	23.6	--
AUG													
21...	0710	1028	80020	1,670	728	--	6.3	76	8.1	157	22.6	22.2	--
SEP													
06...	1220	1028	80020	9.7	730	--	8.7	105	8.2	768	30.9	22.4	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Total nitrogen, water, unfltrd mg/L (00600)
OCT													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
17...	138	167	1	3.1	.18	.137	2.27	.51	.531	.062	.019	3.0	3.6
DEC													
08...	194	232	2	.48	.10	.081	5.18	1.17	1.19	.072	.022	.40	1.7
JAN													
19...	203	243	2	.26	.05	.039	6.41	1.45	1.46	.049	.015	.22	1.7
MAR													
02...	235	282	2	.35	.05	.036	5.63	1.27	1.29	.076	.023	.31	1.6
APR													
27...	234	280	2	.64	.22	.170	5.73	1.30	1.37	.260	.079	.47	2.0
MAY													
02...	233	279	2	.71	.16	.127	5.78	1.30	1.36	.184	.056	.58	2.1
JUN													
10...	69	83	.0	4.3	.35	.271	4.03	.91	.979	.223	.068	4.1	5.3
11...	65	78	.0	6.7	.31	.238	1.86	.42	.446	.082	.025	6.4	7.1
13...	37	44	.0	4.1	.10	.081	.730	.16	.173	.026	.008	4.0	4.3
29...	240	286	3	.42	.07	.055	5.79	1.31	1.34	.118	.036	.36	1.8
AUG													
21...	44	54	.0	9.0	.21	.160	2.42	.55	.568	.069	.021	8.9	9.6
SEP													
06...	203	244	2	.33	.02	.018	5.73	1.30	1.31	.049	.015	.31	1.6

07325800 COBB CREEK NEAR EAKLEY, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	2,4,5-T surrog, water, fltrd, percent recovry (99958)	2,4-D methyl ester, water, fltrd, ug/L (50470)	2,4-D water, fltrd, ug/L (39732)	2,4-DB water, fltrd 0.7u GF ug/L (38746)	2,6-Di-ethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	CEAT, water, fltrd, ug/L (04038)	OIET, water, fltrd, ug/L (50355)	3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)
OCT													
07...	--	--	--	--	100	<.016	<.04	<.02	<.006	<.006	<.08	<.032	<.008
NOV													
17...	.721	.235	.28	.81	--	--	--	--	--	--	--	--	--
DEC													
08...	.230	.075	.092	.122	--	--	--	--	--	--	--	--	--
JAN													
19...	.092	.030	.036	.058	--	--	--	--	--	--	--	--	--
MAR													
02...	.098	.032	.040	.074	--	--	--	--	--	--	--	--	--
APR													
27...	.242	.079	.100	.155	--	--	--	--	--	--	--	--	--
MAY													
02...	.190	.062	.083	.183	--	--	--	--	--	--	--	--	--
JUN													
10...	.754	.246	.28	1.21	--	--	--	--	--	--	--	--	--
11...	.570	.186	.21	1.62	--	--	--	--	--	--	--	--	--
13...	.233	.076	.123	1.39	--	--	--	--	--	--	--	--	--
29...	.337	.110	.135	.173	--	--	--	--	--	--	--	--	--
AUG													
21...	.491	.160	.008	1.69	--	--	--	--	--	--	--	--	--
SEP													
06...	.199	.065	.092	.120	--	--	--	--	--	--	--	--	--

Date	3-Keto-carbo-furan, water, fltrd, ug/L (50295)	Aceto-chlor, water, fltrd, ug/L (49260)	Aci-fluor-fen, water, fltrd 0.7u GF ug/L (49315)	Ala-chlor, water, fltrd, ug/L (46342)	Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313)	Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314)	Aldi-carb, water, fltrd 0.7u GF ug/L (49312)	alpha-HCH, water, fltrd, ug/L (34253)	alpha-HCH-d6, surrog, wat flt 0.7u GF percent recovry (91065)	Atra-zine, water, fltrd, ug/L (39632)	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Barban, surrog, Sched. 2060/ 9060, wat flt pct rcv (90640)	Bendio-carb, water, fltrd, ug/L (50299)
OCT													
07...	<.02	<.006	<.028	<.005	<.02	<.022	<.04	<.005	94.0	<.007	<.050	E53.3	<.02

Date	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benomyl water, fltrd, ug/L (50300)	Bensul-furon, water, fltrd, ug/L (61693)	Ben-tazon, water, fltrd 0.7u GF ug/L (38711)	Broma-cil, water, fltrd, ug/L (04029)	Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)	Butyl-ate, water, fltrd, ug/L (04028)	Caf-feine, water, fltrd, ug/L (50305)	Caf-feine-13C, surrog, wat flt percent recovry (99959)	Car-baryl, water, fltrd 0.7u GF ug/L (49310)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (49309)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)
OCT													
07...	<.010	<.022	<.02	<.01	<.02	<.03	<.004	<.018	73.7	<.02	<.041	<.016	<.020

Date	Chlor-amben methyl ester, water, fltrd, ug/L (61188)	Chlori-muron, water, fltrd, ug/L (50306)	Chloro-di-amino-s-tri-azine, wat flt ug/L (04039)	Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306)	Chlor-pyrifos water, fltrd, ug/L (38933)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)	Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)	Cyana-zine, water, fltrd, ug/L (04041)	Cyclo-ate, water, fltrd, ug/L (04031)	Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304)	DCPA, water fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)
OCT													
07...	<.02	<.032	<.04	<.04	<.005	<.006	<.02	<.018	<.01	<.03	<.003	<.012	<.005

07325800 COBB CREEK NEAR EAKLEY, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	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)	Desulfinylfipronil amide, wat flt ug/L (62169)
OCT 07...	101	<.04	<.03	<.009	<.04	<.01	<.02	<.01	<.004	<.009	<.005	<.02	<.029

Date	Fipronil sulfide water, fltrd, ug/L (62167)	Fipronil sulfone water, fltrd, ug/L (62168)	Fipronil, water, fltrd, ug/L (62166)	Flumetsulam, water, fltrd, ug/L (61694)	Fluometuron water fltrd 0.7u GF ug/L (38811)	Fonofos water, fltrd, ug/L (04095)	Imazaquin, water, fltrd, ug/L (50356)	Imazethapyr, water, fltrd, ug/L (50407)	Imidacloprid water, fltrd, ug/L (61695)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (38478)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)
OCT 07...	<.013	<.024	<.016	<.04	<.02	<.003	<.04	<.04	<.020	<.004	<.01	<.035	<.027

Date	MCPA, water, fltrd 0.7u GF ug/L (38482)	MCPB, water, fltrd 0.7u GF ug/L (38487)	Metalaxyl, water, fltrd, ug/L (50359)	Methiocarb, water, fltrd 0.7u GF ug/L (38501)	Methomyl, water, fltrd 0.7u GF ug/L (49296)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metolachlor, water, fltrd, ug/L (39415)	Metribuzin, water, fltrd, ug/L (82630)	Metsulfuron, water, fltrd, ug/L (61697)	Molinate, water, fltrd 0.7u GF ug/L (82671)	N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692)	Napropamide, water, fltrd 0.7u GF ug/L (82684)	Neburon water, fltrd 0.7u GF ug/L (49294)
OCT 07...	<.09	<.01	<.01	<.010	<.020	<.015	<.006	<.006	<.03	<.003	<.04	<.007	<.01

Date	Nicosulfuron, water, fltrd, ug/L (50364)	Norflurazon, water, fltrd 0.7u GF ug/L (49293)	Oryzalin, water, fltrd 0.7u GF ug/L (49292)	Oxamyl, water, fltrd 0.7u GF ug/L (38866)	p,p'-DDE, water, fltrd, ug/L (34653)	Parathion, water, fltrd, ug/L (39542)	Pebulate, water, fltrd 0.7u GF ug/L (82669)	Pendimethalin, water, fltrd 0.7u GF ug/L (82683)	Phorate water fltrd 0.7u GF ug/L (82664)	Picloram, water, fltrd 0.7u GF ug/L (49291)	Prometon, water, fltrd, ug/L (04037)	Propyzamide, water, fltrd 0.7u GF ug/L (82676)	Propachlor, water, fltrd, ug/L (04024)
OCT 07...	<.04	<.02	<.01	<.03	<.003	<.010	<.004	<.022	<.011	<.03	<.01	<.004	<.025

Date	Propanil, water, fltrd 0.7u GF ug/L (82679)	Propargite, water, fltrd 0.7u GF ug/L (82685)	Propham water fltrd 0.7u GF ug/L (49236)	Propiconazole, water, fltrd, ug/L (50471)	Propoxur, water, fltrd 0.7u GF ug/L (38538)	Siduron water, fltrd, ug/L (38548)	Simazine, water, fltrd, ug/L (04035)	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)
OCT 07...	<.011	<.02	<.030	<.01	<.008	<.02	<.005	<.038	<.02	<.034	<.016	<.02	<.010

07325800 COBB CREEK NEAR EAKLEY, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-clopyr, water, fltrd 0.7u GF ug/L (49235)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
OCT						
07...	<.006	<.15	<.009	--	--	--
NOV						
17...	--	--	--	88	704	247
DEC						
08...	--	--	--	63	215	14
JAN						
19...	--	--	--	55	61	3.6
MAR						
02...	--	--	--	33	114	7.4
APR						
27...	--	--	--	66	125	5.7
MAY						
02...	--	--	--	64	155	9.2
JUN						
10...	--	--	--	73	1,600	276
11...	--	--	--	59	3,720	3,820
13...	--	--	--	26	6,270	76,900
29...	--	--	--	70	216	7.0
AUG						
21...	--	--	--	68	5,540	25,000
SEP						
06...	--	--	--	32	226	5.9

07325850 LAKE CREEK NEAR EAKLY, OK

LOCATION.--Lat 35°17'27", long 98°31'44", in NE ¼ NW ¼ sec.1, T.9 N., R.13 W., Caddo County, Hydrologic Unit 11130302, on downstream side of bridge on State Highway 152, 2.0 mi southeast of Eakly, 2.7 mi upstream from Fort Cobb Reservoir, and at mile 4.2.

DRAINAGE AREA.--59.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to June 1978, December 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,364.89 ft NAVD of 1988. Prior to June 30, 1978, datum .58 ft higher.

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

AVERAGE DISCHARGE.--8 years 1970-77, 7.47 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 7,000 ft^3/s, May 20, 1977, gage height 13.22 ft, from rating curve extended above 1,700 ft^3/s. No flow at times each year except 1977.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period December 2004 to September 2005, 3,620 ft^3/s, June 13, gage height 15.93 ft; minimum daily discharge 1.5 ft^3/s, Aug. 3.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

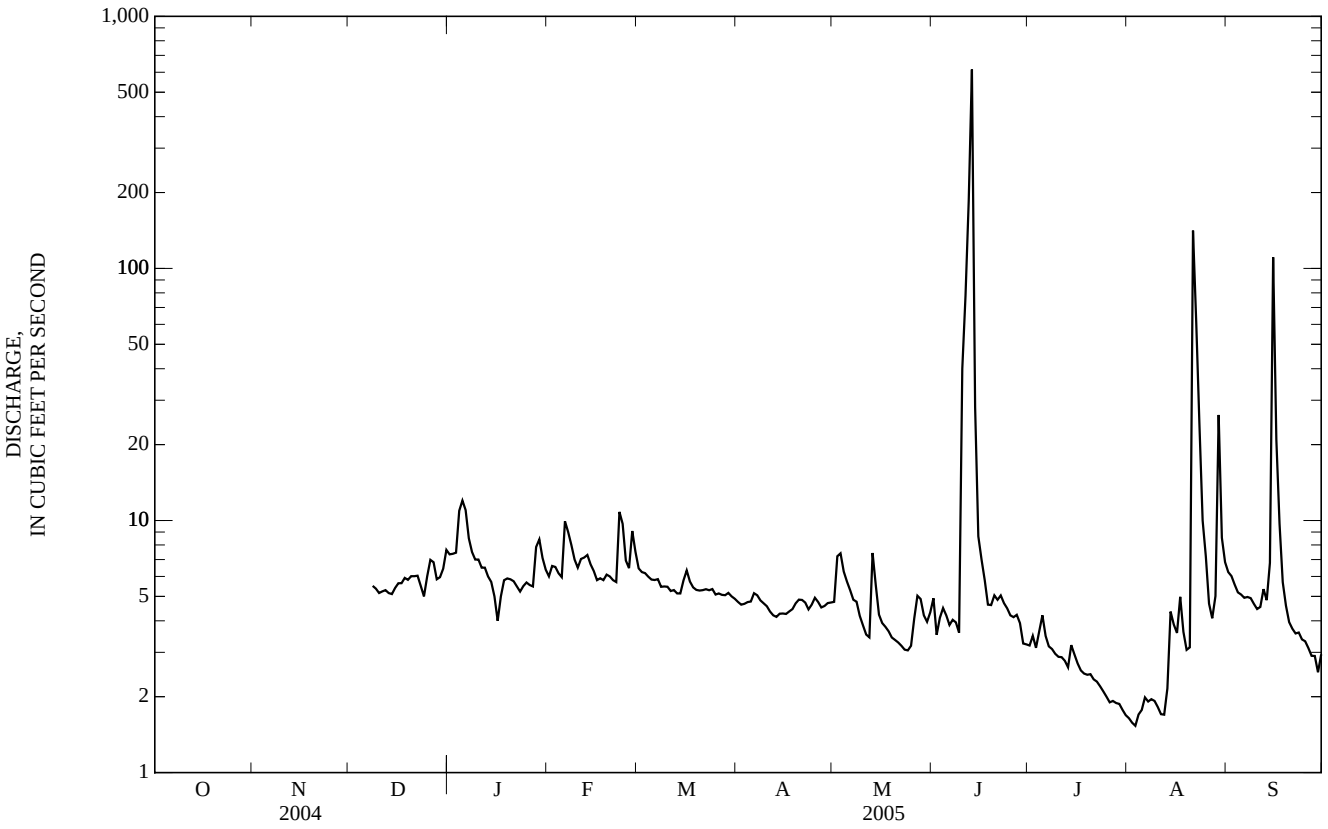
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	7.3	6.0	6.5	4.8	4.8	4.9	3.2	1.6	6.2
2	---	---	---	7.4	6.6	6.2	4.6	7.2	3.5	3.5	1.6	6.0
3	---	---	---	7.5	6.5	6.2	4.7	7.4	4.1	3.1	1.5	5.6
4	---	---	---	11	6.2	6.0	4.7	6.3	4.5	3.6	1.7	5.2
5	---	---	---	e12	6.0	5.8	4.8	5.7	4.2	4.2	1.8	5.1
6	---	---	---	e11	9.9	5.8	5.1	5.3	3.9	3.5	2.0	4.9
7	---	---	---	e8.5	e9.0	5.9	5.1	4.8	4.0	3.2	1.9	5.0
8	---	---	5.5	e7.5	e8.0	5.5	4.8	4.8	3.9	3.1	2.0	4.9
9	---	---	5.4	e7.0	e7.0	5.5	4.7	4.2	3.6	3.0	1.9	4.7
10	---	---	5.2	e7.0	6.5	5.5	4.6	3.8	40	2.9	1.8	4.5
11	---	---	5.2	e6.5	7.0	5.3	4.4	3.5	e78	2.9	1.7	4.5
12	---	---	5.3	e6.5	e7.1	5.3	4.2	3.4	e185	2.8	1.7	5.3
13	---	---	5.2	6.0	e7.3	5.1	4.1	7.4	615	2.6	2.2	4.8
14	---	---	5.1	5.7	e6.7	5.1	4.3	5.5	28	3.2	4.4	6.8
15	---	---	5.4	e5.0	e6.3	5.8	4.3	4.2	8.7	2.9	3.9	111
16	---	---	5.6	e4.0	e5.8	6.3	4.3	3.9	e7.0	2.7	3.6	21
17	---	---	5.6	e5.0	e5.9	5.7	4.4	3.8	5.8	2.5	5.0	9.7
18	---	---	5.9	5.8	e5.8	5.4	4.5	3.6	4.6	2.5	3.6	5.7
19	---	---	5.8	5.9	e6.1	5.3	4.7	3.4	4.6	2.4	3.1	4.6
20	---	---	6.0	5.8	e6.0	5.3	4.9	3.4	5.0	2.5	3.1	4.0
21	---	---	6.0	5.7	e5.8	5.3	4.8	3.3	4.8	2.3	141	3.7
22	---	---	6.0	5.5	e5.7	5.3	4.7	3.2	5.0	2.3	e61	3.6
23	---	---	e5.5	5.2	11	5.3	4.4	3.1	4.7	2.2	e24	3.6
24	---	---	e5.0	5.5	9.7	5.3	4.6	3.1	4.5	e2.1	e10	3.4
25	---	---	e6.0	5.7	6.9	5.1	4.9	3.2	4.2	e2.0	e7.2	3.3
26	---	---	7.0	5.5	6.5	5.1	4.8	4.1	4.1	1.9	4.7	3.1
27	---	---	6.8	5.5	9.1	5.1	4.5	5.0	4.2	1.9	4.1	2.9
28	---	---	5.8	7.9	7.5	5.1	4.6	4.9	3.9	1.9	5.0	2.9
29	---	---	6.0	8.4	---	5.2	4.7	4.2	3.3	1.9	26	2.5
30	---	---	6.4	7.1	---	5.0	4.7	4.0	3.2	1.8	8.5	2.9
31	---	---	7.6	6.4	---	4.9	---	4.3	---	1.7	6.8	---
TOTAL	---	---	---	210.8	197.9	170.2	138.7	138.8	1,060.2	82.3	348.4	261.4
MEAN	---	---	---	6.80	7.07	5.49	4.62	4.48	35.3	2.65	11.2	8.71
MAX	---	---	---	12	11	6.5	5.1	7.4	615	4.2	141	111
MIN	---	---	---	4.0	5.7	4.9	4.1	3.1	3.2	1.7	1.5	2.5
AC-FT	---	---	---	418	393	338	275	275	2,100	163	691	518

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2005, BY WATER YEAR (WY)

MEAN	2.29	6.29	4.63	5.09	6.14	8.59	7.32	23.2	11.3	5.97	4.03	2.26
MAX	6.94	33.8	12.1	10.8	14.3	36.9	20.0	139	35.3	41.2	18.5	8.71
(WY)	(1974)	(1975)	(1972)	(1975)	(1975)	(1973)	(1973)	(1977)	(2005)	(1975)	(1975)	(2005)
MIN	0.03	0.08	0.32	1.73	2.99	1.91	1.08	1.38	0.66	0.00	0.00	0.00
(WY)	(1971)	(1971)	(1971)	(1971)	(1971)	(1972)	(1971)	(1971)	(1972)	(1974)	(1973)	(1972)

e Estimated

07325850 LAKE CREEK NEAR EAKLY, OK—Continued



07325850 LAKE CREEK NEAR EAKLEY, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2004 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	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)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
NOV													
17...	1230	1028	80020	48	735	9.4	8.2	84	7.6	405	--	14.8	193
DEC													
08...	1330	1028	80020	5.3	722	8.1	11.0	104	7.8	603	17.0	10.5	265
JAN													
19...	1330	1028	80020	5.9	733	3.9	13.1	111	8.1	585	13.0	6.4	253
MAR													
02...	1430	1028	80020	6.2	726	--	13.2	134	8.2	628	17.6	13.8	--
APR													
27...	1300	1028	80020	4.5	726	--	15.8	183	8.0	582	21.5	20.1	--
MAY													
02...	1627	1028	80020	8.4	732	--	16.8	173	8.4	578	13.6	14.9	--
JUN													
10...	1055	1028	80020	60	720	--	6.4	77	8.0	209	29.5	21.6	--
11...	1535	1028	80020	134	718	--	5.9	72	7.7	244	--	22.1	--
13...	0045	1028	80020	3,620	717	--	6.9	79	8.4	96	18.0	18.7	--
29...	1150	1028	80020	3.2	725	--	8.2	113	8.2	649	34.0	29.0	--
AUG													
21...	0615	1028	80020	327	728	--	6.7	81	8.1	146	21.2	22.6	--
SEP													
06...	1300	1028	80020	4.8	730	--	9.4	126	8.4	605	32.0	28.2	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Total nitrogen, water, unfltrd mg/L (00600)
NOV													
17...	149	181	.0	2.7	.15	.116	1.56	.35	.363	.036	.011	2.5	3.0
DEC													
08...	217	259	2	.58	.09	.071	3.90	.88	.904	.072	.022	.51	1.5
JAN													
19...	215	254	3	.27	.04	.031	4.90	1.11	1.12	.046	.014	.24	1.4
MAR													
02...	258	308	3	.62	.21	.160	3.36	.76	.784	.085	.026	.46	1.4
APR													
27...	236	276	6	.38	.02	.012	1.40	.32	.353	.122	.037	.36	.73
MAY													
02...	232	272	5	.37	.02	.016	1.83	.41	.441	.089	.027	.35	.81
JUN													
10...	100	121	.0	3.1	.28	.221	1.49	.34	.365	.092	.028	2.9	3.5
11...	81	98	.0	4.2	.36	.279	1.86	.42	.450	.099	.030	4.0	4.7
13...	33	40	.0	6.4	.23	.180	1.28	.29	.301	.039	.012	6.3	6.7
29...	273	325	4	.45	.01	.010	.297	.07	.071	.013	.004	.44	.52
AUG													
21...	48	58	.0	3.8	.14	.111	1.76	.40	.418	.069	.021	3.7	4.2
SEP													
06...	238	284	3	.41	--	<.010	.810	.18	.189	.020	.006	--	.60

07325850 LAKE CREEK NEAR EAKLEY, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
NOV							
17...	.261	.085	.106	.57	40	1,750	228
DEC							
08...	.159	.052	.071	.141	69	170	2.4
JAN							
19...	.046	.015	.021	.051	48	211	3.4
MAR							
02...	.071	.023	.030	.064	46	60	1.0
APR							
27...	.046	.015	.025	.054	46	60	.73
MAY							
02...	.046	.015	.028	.045	18	168	3.8
JUN							
10...	.503	.164	.197	.91	47	1,910	309
11...	.150	.049	.081	1.07	39	3,090	1,120
13...	.276	.090	.115	1.55	38	9,120	89,100
29...	.086	.028	.063	.127	33	336	2.9
AUG							
21...	.346	.113	.144	.91	43	3,090	2,730
SEP							
06...	.147	.048	.067	.105	57	119	1.5

07325860 WILLOW CREEK NEAR ALBERT, OK

LOCATION.--Lat 35°14'00", long 98°27'57", in NE $^1/_4$ NE $^1/_4$ sec.28, T.9 N., R.12 W., Caddo County, Hydrologic Unit 11130302, at county road bridge, 3.1 mi west of Albert, 0.5 mi upstream from Fort Cobb Reservoir, and at mile 2.4.

DRAINAGE AREA.--29.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1971 to June 1978, December 2004 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,344.00 ft NAVD of 1988. Prior to June 30, 1978, datum 4.00 ft lower.

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

AVERAGE DISCHARGE.--6 years 1972-77, 4.59 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 12,000 ft^3/s, May 20, 1977, gage height 14.14 ft, from rating curve extended above 3,000 ft^3/s on basis of slope-area measurement. No flow at times each year except 1977.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period December 2004 to September 2005, 433 ft^3/s, June 10, 13, gage height 10.25 ft; minimum daily discharge .59 ft^3/s, Aug. 3.

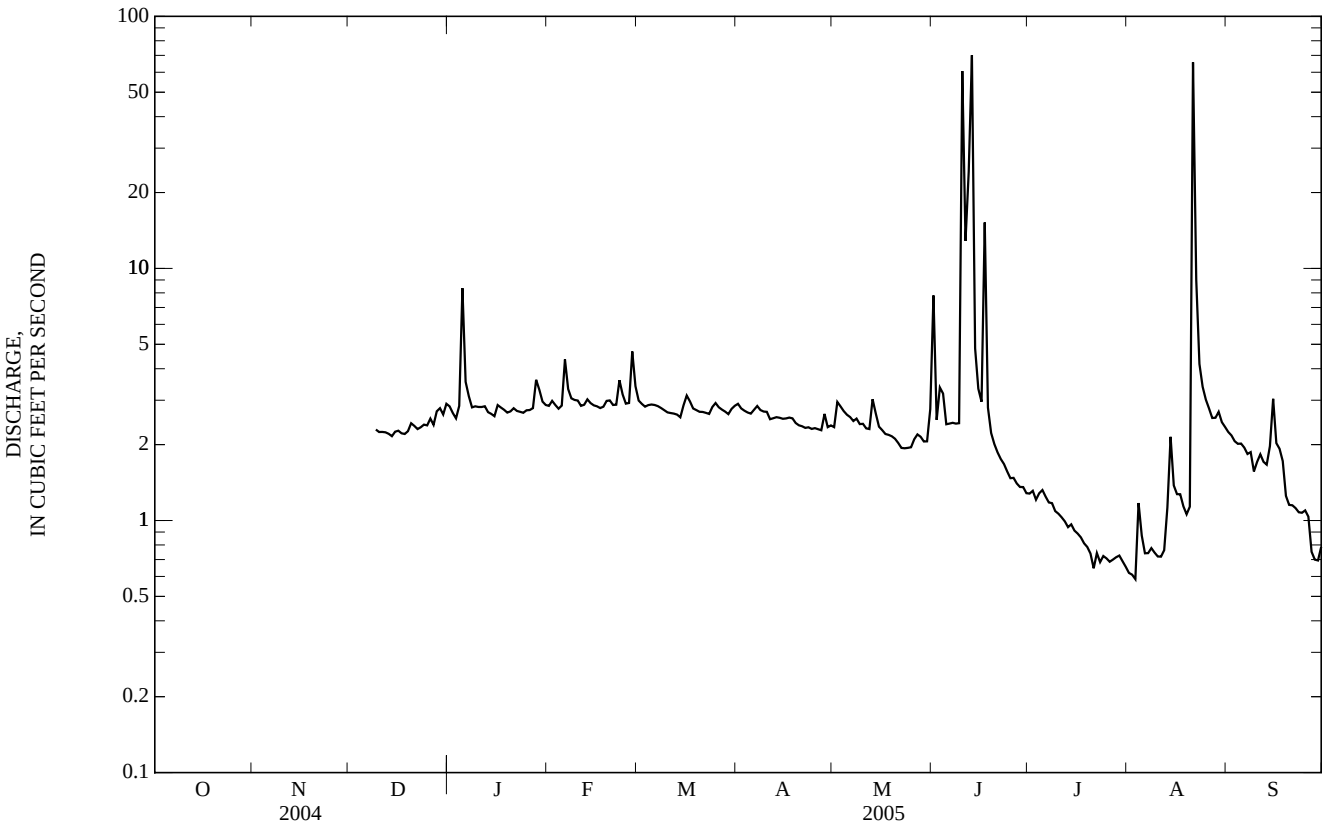
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	2.8	2.8	3.0	2.9	2.3	7.8	1.3	0.62	2.2
2	---	---	---	2.7	3.0	2.9	2.8	3.0	2.5	1.3	0.61	2.2
3	---	---	---	2.5	2.9	2.8	2.7	2.8	3.4	1.2	0.59	2.1
4	---	---	---	2.8	2.8	2.9	2.7	2.7	3.2	1.3	1.2	2.0
5	---	---	---	8.3	2.9	2.9	2.7	2.6	2.4	1.3	0.87	2.0
6	---	---	---	3.5	4.4	2.9	2.7	2.6	2.4	1.2	0.74	1.9
7	---	---	---	3.1	3.3	2.8	2.8	2.5	2.4	1.2	0.74	1.8
8	---	---	---	2.8	3.1	2.8	2.7	2.5	2.4	1.2	0.78	1.9
9	---	---	2.3	2.8	3.0	2.7	2.7	2.4	2.4	1.1	0.75	1.6
10	---	---	2.2	2.8	3.0	2.7	2.7	2.4	61	1.1	0.72	1.7
11	---	---	2.2	2.8	2.9	2.7	2.5	2.3	13	1.0	0.72	1.8
12	---	---	2.2	2.8	2.9	2.7	2.5	2.3	24	0.99	0.76	1.7
13	---	---	2.2	2.7	3.0	2.6	2.6	3.0	70	0.94	1.1	1.7
14	---	---	2.2	2.6	2.9	2.6	2.6	2.7	4.8	0.97	2.1	2.0
15	---	---	2.3	2.6	2.9	2.9	2.5	2.4	3.3	0.91	1.4	3.0
16	---	---	2.3	2.9	2.8	3.1	2.5	2.3	3.0	0.89	1.3	2.0
17	---	---	2.2	2.8	2.8	3.0	2.6	2.2	15	0.86	1.3	1.9
18	---	---	2.2	2.7	2.8	2.8	2.5	2.2	2.8	0.81	1.1	1.7
19	---	---	2.3	2.7	3.0	2.7	2.4	2.2	2.2	0.79	1.1	1.3
20	---	---	2.4	2.7	3.0	2.7	2.4	2.1	2.0	0.74	1.1	1.2
21	---	---	2.4	2.8	2.9	2.7	2.4	2.0	1.9	0.65	66	1.1
22	---	---	2.3	2.7	2.9	2.7	2.3	1.9	1.8	0.74	9.0	1.1
23	---	---	2.3	2.7	3.6	2.6	2.3	1.9	1.7	0.68	4.2	1.1
24	---	---	2.4	2.7	3.2	2.8	2.3	1.9	1.6	0.72	3.4	1.1
25	---	---	2.4	2.7	2.9	2.9	2.3	2.0	1.5	0.71	3.0	1.1
26	---	---	2.5	2.7	2.9	2.8	2.3	2.1	1.5	0.69	2.8	1.0
27	---	---	2.4	2.8	4.7	2.8	2.3	2.2	1.4	0.70	2.6	0.75
28	---	---	2.7	3.6	3.4	2.7	2.6	2.1	1.4	0.72	2.6	0.70
29	---	---	2.8	3.3	---	2.6	2.3	2.1	1.4	0.73	2.7	0.69
30	---	---	2.6	3.0	---	2.8	2.4	2.1	1.3	0.69	2.5	0.79
31	---	---	2.9	2.9	---	2.9	---	2.8	---	0.66	2.3	---
TOTAL	---	---	---	93.3	86.7	86.5	76.0	72.6	245.5	28.79	120.70	47.13
MEAN	---	---	---	3.01	3.10	2.79	2.53	2.34	8.18	0.93	3.89	1.57
MAX	---	---	---	8.3	4.7	3.1	2.9	3.0	70	1.3	66	3.0
MIN	---	---	---	2.5	2.8	2.6	2.3	1.9	1.3	0.65	0.59	0.69
AC-FT	---	---	---	185	172	172	151	144	487	57	239	93

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2005, BY WATER YEAR (WY)

MEAN	1.18	2.32	2.00	2.36	2.60	4.07	3.32	17.6	4.23	3.39	1.79	1.22
MAX	3.00	8.04	2.83	3.67	3.49	16.9	9.03	101	13.3	22.7	3.89	2.33
(WY)	(1974)	(1975)	(1975)	(1973)	(1975)	(1973)	(1973)	(1977)	(1975)	(1975)	(2005)	(1973)
MIN	0.38	0.74	1.00	1.36	1.68	1.69	1.43	1.12	1.00	0.13	0.02	0.06
(WY)	(1973)	(1973)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1974)	(1974)	(1972)	(1972)

07325860 WILLOW CREEK NEAR ALBERT, OK—Continued



07325860 WILLOW CREEK NEAR ALBERT, OK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 2004 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Agency collecting sample, code (00027)	Agency analyzing sample, code (00028)	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Carbon dioxide water, unfltrd mg/L (00405)	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)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
NOV													
17...	1125	1028	80020	22	735	17	9.8	101	7.3	416	16.6	14.9	185
DEC													
08...	1430	1028	80020	2.4	722	7.3	11.4	109	7.8	604	20.0	11.0	239
JAN													
19...	1500	1028	80020	2.6	733	4.5	14.1	122	8.0	590	15.0	7.5	233
MAR													
02...	1230	1028	80020	2.9	728	--	14.0	129	7.9	625	14.3	9.8	--
APR													
27...	1500	1028	80020	2.3	724	--	10.7	127	7.7	635	27.5	21.3	--
MAY													
02...	1725	1028	80020	3.5	731	--	12.5	127	7.8	613	14.4	14.1	--
JUN													
10...	0937	1028	80020	90	720	--	7.0	81	8.3	133	24.0	19.6	--
10...	1518	1028	80020	16	720	--	6.9	83	8.0	204	27.5	21.3	--
13...	0215	1028	80020	333	718	--	6.9	80	8.2	124	18.5	19.8	--
29...	1315	1028	80020	1.5	725	--	9.1	120	8.2	565	37.5	26.9	--
AUG													
21...	0515	1028	80020	254	729	--	6.7	80	8.3	117	20.0	22.0	--
SEP													
06...	1350	1028	80020	2.0	730	--	9.5	119	8.2	501	36.2	24.2	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L (71846)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate water, fltrd, mg/L (71851)	Nitrate water, fltrd, mg/L as N (00618)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L (71856)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, unfltrd mg/L (00605)	Total nitrogen, water, unfltrd mg/L (00600)
NOV													
17...	151	183	.0	2.1	.16	.125	2.41	.55	.559	.046	.014	2.0	2.7
DEC													
08...	196	235	2	.33	.07	.057	3.38	.76	.777	.043	.013	.28	1.1
JAN													
19...	193	230	2	.22	.05	.037	2.32	.53	.532	.023	.007	.18	.75
MAR													
02...	226	272	2	.49	.14	.109	2.29	.52	.533	.053	.016	.38	1.0
APR													
27...	227	270	3	.46	.16	.122	1.61	.36	.402	.125	.038	.33	.86
MAY													
02...	224	270	2	.51	.10	.075	1.63	.37	.391	.076	.023	.44	.90
JUN													
10...	42	50	.0	5.6	.29	.229	2.28	.52	.546	.099	.030	5.4	6.2
10...	62	74	.0	3.8	.13	.103	1.79	.40	.432	.089	.027	3.7	4.2
13...	37	45	.0	4.3	.13	.103	1.05	.24	.250	.039	.012	4.2	4.5
29...	204	244	2	.37	.02	.016	.190	.04	.045	.007	.002	.35	.41
AUG													
21...	37	44	.0	11	.37	.284	1.99	.45	.470	.069	.021	10	11
SEP													
06...	183	220	1	.29	.02	.015	.513	.12	.118	.007	.002	.28	.41

07325860 WILLOW CREEK NEAR ALBERT, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Ortho-phos-phate, water, fltrd, mg/L (00660)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment dis-charge, tons/d (80155)
NOV							
17...	.190	.062	.087	.47	74	764	46
DEC							
08...	.129	.042	.055	.050	67	173	1.1
JAN							
19...	.049	.016	.020	.052	86	84	.60
MAR							
02...	.074	.024	.033	.075	86	54	.42
APR							
27...	.144	.047	.063	.107	45	91	.57
MAY							
02...	.113	.037	.052	.119	50	98	.93
JUN							
10...	.730	.238	.25	1.40	50	3,900	948
10...	.626	.204	.23	.96	76	1,360	59
13...	.484	.158	.18	1.20	45	3,560	3,200
29...	.077	.025	.063	.128	74	129	.52
AUG							
21...	.641	.209	.26	1.89	73	4,650	3,190
SEP							
06...	.126	.041	.061	.096	63	65	.35

07325900 FORT COBB RESERVOIR NEAR FORT COBB, OK

LOCATION.--Lat 35°09'58", long 98°27'23", in SE ¼ NW ¼ 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 8.1.

DRAINAGE AREA.--304 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929 (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, 82,730 acre-ft, June 14, elevation, 1,344.22 ft; minimum, 67,950 acre-ft, Oct. 3, elevation 1,340.39 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1340.45	68,160	--	--
Oct. 31	1340.66	68,910	+750	642
Nov. 30	1341.67	72,610	+3,700	517
Dec. 31	1341.90	73,460	+850	693
CAL YR 04	--	--	+6,890	10,602
Jan. 31	1342.50	75,780	+2,320	785
Feb. 28	1342.50	75,780	0	697
Mar. 31	1342.67	76,440	+660	837
Apr. 30	1342.44	75,550	-890	977
May 31	1342.53	75,900	+350	951
June 30	1342.34	75,160	-740	929
July 31	1341.61	72,380	-2,780	1,116
Aug. 31	1342.45	75,580	+3,200	1,126
Sept. 30	1341.92	73,540	-2,040	1,050
WTR YR 05	-	-	+5,380	10,320

*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, 2.3 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.

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 NGVD of 1929 (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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.8	3.5	1.8	2.4	2.4	2.4	3.5	3.1	5.3	2.1	2.2
2	3.4	3.7	3.4	1.7	2.4	2.4	2.5	4.0	2.7	5.0	2.2	2.2
3	3.5	5.2	3.6	1.8	2.4	2.4	2.5	3.7	2.6	4.7	2.1	2.2
4	3.8	3.8	3.6	2.5	2.3	2.4	2.6	3.7	2.7	4.8	2.1	2.2
5	3.7	e3.7	3.5	3.3	2.3	2.4	2.6	3.7	2.6	4.4	2.2	2.2
6	3.6	e3.6	3.5	2.9	2.8	2.5	2.8	3.7	2.6	4.0	2.1	2.3
7	5.1	e3.5	3.8	2.7	2.6	2.4	2.8	3.9	2.5	3.7	2.1	2.2
8	3.4	e3.4	3.2	3.3	2.5	2.3	2.8	4.0	2.3	3.7	2.1	2.2
9	3.4	3.3	2.8	2.9	61	2.3	3.0	3.9	2.4	3.6	2.1	2.2
10	4.9	3.3	3.4	2.7	124	2.3	3.1	3.8	3.1	3.6	8.6	2.2
11	3.7	3.7	3.3	3.7	126	2.3	3.0	3.6	2.7	3.5	2.4	2.3
12	3.4	3.6	3.3	3.6	135	2.3	2.9	3.5	9.9	3.4	2.4	2.3
13	3.3	3.5	3.0	2.9	135	2.3	3.0	4.0	136	3.4	2.8	2.2
14	3.4	3.8	2.9	2.7	134	2.1	3.2	3.4	497	3.5	4.9	2.7
15	3.3	5.6	3.4	2.7	134	2.3	3.4	3.1	502	3.3	2.5	2.7
16	3.3	4.3	3.4	2.6	133	2.3	3.4	3.1	504	3.2	2.5	2.4
17	3.4	6.0	3.6	2.6	72	2.2	3.2	3.1	519	3.3	2.4	2.4
18	3.7	4.8	3.3	2.5	3.6	2.2	3.1	2.9	516	3.1	2.3	2.3
19	3.4	3.8	3.4	2.5	3.0	2.1	3.2	2.9	515	3.4	2.3	2.3
20	3.5	3.8	3.3	2.4	2.9	2.2	3.1	3.0	511	3.4	2.3	2.3
21	3.4	4.7	3.1	2.3	2.7	2.2	3.2	2.9	361	2.8	3.4	2.3
22	3.6	4.0	3.0	1.9	2.7	2.2	3.2	2.9	238	2.4	3.0	165
23	3.6	4.1	3.1	2.2	3.0	2.3	3.3	2.8	236	e2.4	2.3	452
24	3.6	3.8	3.1	2.3	2.5	2.3	3.4	2.6	185	e2.5	2.3	441
25	3.7	4.7	2.9	2.4	2.5	2.3	3.5	2.6	124	9.5	2.2	138
26	4.2	3.8	2.6	2.4	2.4	2.3	3.4	2.9	123	2.8	2.3	5.0
27	4.1	3.7	2.5	2.3	3.2	2.2	3.3	2.8	64	2.9	2.3	4.1
28	4.0	3.4	2.4	2.6	2.5	2.2	3.2	2.7	8.1	3.2	2.3	3.7
29	3.7	3.3	2.5	2.5	---	2.3	3.4	2.6	6.7	9.1	2.2	3.7
30	3.6	3.5	2.3	2.4	---	2.4	3.5	2.6	6.4	2.3	2.2	3.6
31	3.9	---	2.0	2.5	---	2.4	---	2.9	---	2.0	2.2	---
TOTAL	114.1	119.2	96.7	79.6	1,104.7	71.2	92.0	100.8	5,091.4	118.2	81.2	1,264.4
MEAN	3.68	3.97	3.12	2.57	39.5	2.30	3.07	3.25	170	3.81	2.62	42.1
MAX	5.1	6.0	3.8	3.7	135	2.5	3.5	4.0	519	9.5	8.6	452
MIN	3.3	3.3	2.0	1.7	2.3	2.1	2.4	2.6	2.3	2.0	2.1	2.2
AC-FT	226	236	192	158	2,190	141	182	200	10,100	234	161	2,510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2005, BY WATER YEAR (WY)

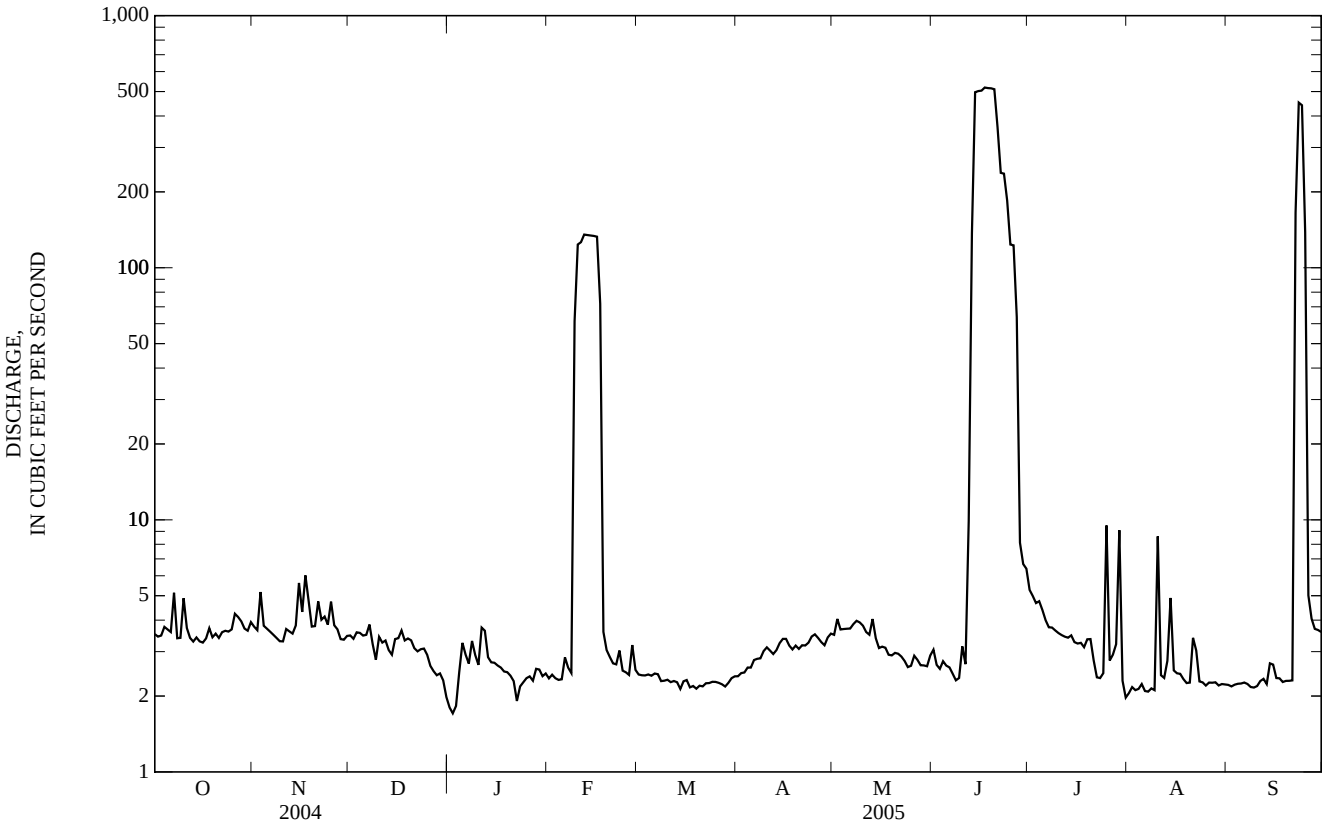
MEAN	22.0	27.0	20.5	24.4	24.8	40.8	34.9	50.6	123	30.7	18.0	19.4
MAX	345	538	194	139	131	312	237	429	779	262	211	157
(WY)	(1987)	(1987)	(1993)	(1969)	(1975)	(1990)	(1998)	(1993)	(1987)	(1995)	(1975)	(1965)
MIN	1.41	1.62	1.57	1.99	2.14	2.12	2.01	1.50	1.90	0.78	1.48	1.60
(WY)	(1985)	(1973)	(1973)	(1977)	(1981)	(1977)	(1985)	(1985)	(1972)	(1985)	(1981)	(1978)

e Estimated

07326000 COBB CREEK NEAR FORT COBB, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1963 - 2005	
ANNUAL TOTAL	5,389.9		8,333.5			
ANNUAL MEAN	14.7		22.8		a36.3	
HIGHEST ANNUAL MEAN					176	1987
LOWEST ANNUAL MEAN					2.34	1981
HIGHEST DAILY MEAN	412	Mar 10	519	Jun 17	1,270	Jun 23, 1987
LOWEST DAILY MEAN	2.0	Dec 31	1.7	Jan 2	b0.20	Jul 20, 1981
ANNUAL SEVEN-DAY MINIMUM	2.5	Dec 25	2.1	Dec 28	0.20	Jul 20, 1981
MAXIMUM PEAK FLOW			526	Jun 17	c1,280	Jun 23, 1987
MAXIMUM PEAK STAGE			10.31	Jun 17	d20.50	Jun 4, 1995
ANNUAL RUNOFF (AC-FT)	10,690		16,530		26,270	
10 PERCENT EXCEEDS	4.0		5.8		86	
50 PERCENT EXCEEDS	3.4		3.1		3.0	
90 PERCENT EXCEEDS	2.6		2.2		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.



07326500 WASHITA RIVER AT ANADARKO, OK

LOCATION.--Lat 35°05'03", long 98°14'35", in NW ¼ 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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	140	638	203	468	329	234	177	235	e489	69	849
2	64	139	578	204	464	306	233	185	218	e480	68	753
3	62	147	510	205	448	281	231	190	178	e420	67	688
4	67	174	467	219	438	260	229	192	164	e400	67	637
5	68	609	434	259	428	251	227	187	155	e310	66	591
6	70	549	410	822	432	249	225	188	150	e280	68	561
7	107	334	398	1,720	441	245	223	185	151	e260	69	534
8	288	252	378	1,250	554	242	218	189	146	e230	84	514
9	2,200	219	429	925	547	241	217	193	138	e200	107	417
10	1,990	198	389	701	557	240	218	194	143	e190	112	321
11	1,190	180	343	568	606	237	216	196	148	e182	145	261
12	1,870	169	313	500	586	237	211	191	156	e174	128	231
13	1,610	160	287	451	587	233	208	202	262	143	112	216
14	890	152	266	412	569	231	206	196	1,580	128	e140	208
15	628	168	251	401	558	232	201	194	2,990	e155	e215	239
16	480	412	239	504	541	234	199	226	1,970	e150	414	1,020
17	369	2,400	233	547	529	236	199	315	e1,450	e146	615	1,940
18	288	3,340	228	534	446	240	195	371	e1,500	e136	351	1,010
19	235	3,230	224	537	429	250	193	310	e1,600	e122	215	632
20	202	2,540	222	546	512	259	191	288	e1,420	e112	164	427
21	180	1,790	218	557	527	276	202	262	e1,250	e95	241	336
22	162	2,390	214	566	537	270	205	233	e950	e91	982	284
23	150	2,500	213	623	554	266	200	212	e860	e89	3,340	396
24	141	1,780	e210	629	725	266	e196	192	e805	e87	3,920	713
25	136	1,590	e205	605	1,000	265	e193	171	e770	e85	2,570	673
26	134	1,390	187	599	577	263	e190	164	e700	e82	1,640	359
27	135	1,090	194	600	447	253	187	161	e620	84	1,280	216
28	140	930	199	617	378	246	181	162	e590	79	1,140	196
29	160	790	207	607	---	243	181	185	e540	76	1,140	184
30	131	690	208	507	---	241	178	190	e510	72	1,160	178
31	135	---	204	475	---	236	---	217	---	72	924	---
TOTAL	14,352	30,452	9,496	17,893	14,885	7,858	6,187	6,518	22,349	5,619	21,613	15,584
MEAN	463	1,015	306	577	532	253	206	210	745	181	697	519
MAX	2,200	3,340	638	1,720	1,000	329	234	371	2,990	489	3,920	1,940
MIN	62	139	187	203	378	231	178	161	138	72	66	178
AC-FT	28,470	60,400	18,840	35,490	29,520	15,590	12,270	12,930	44,330	11,150	42,870	30,910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

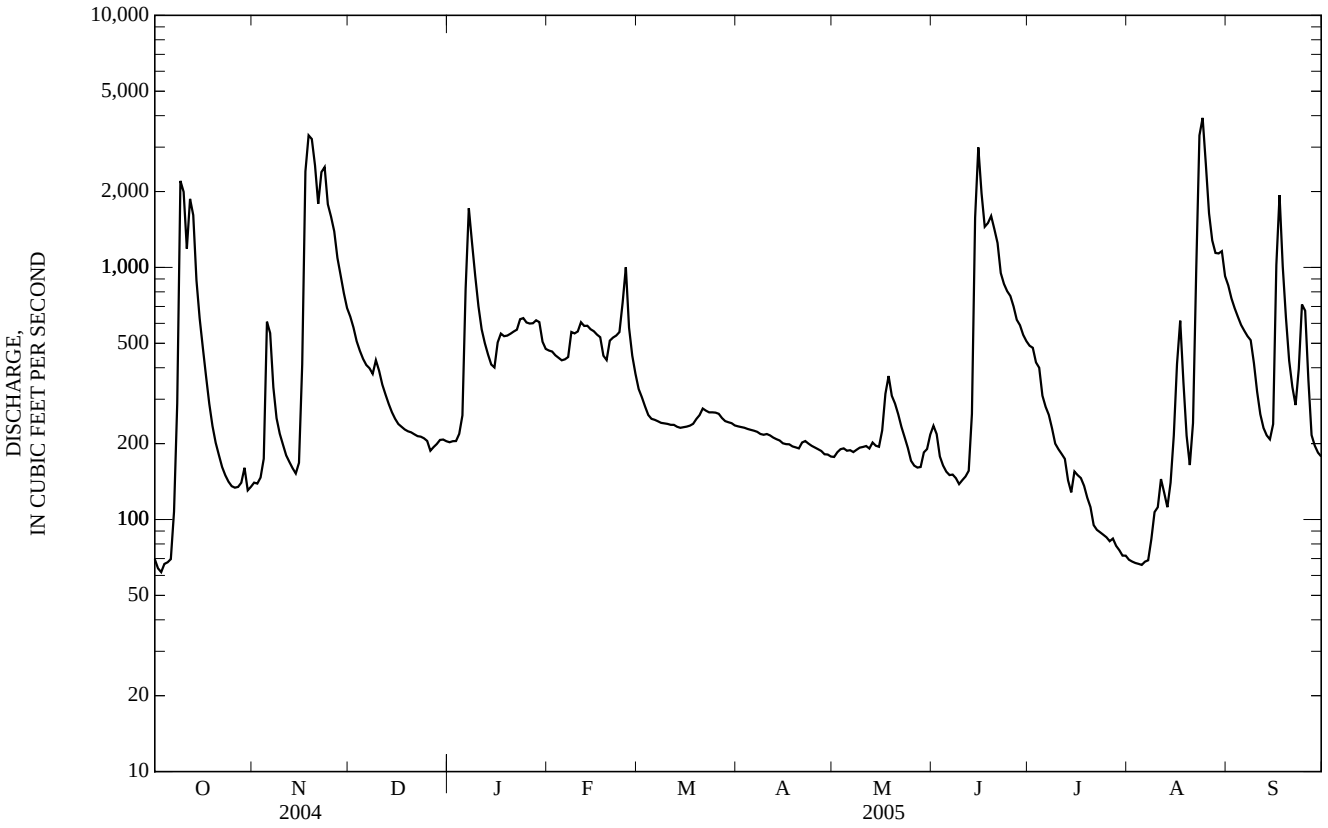
MEAN	475	364	286	285	315	493	484	903	1,053	386	316	389
MAX	5,480	2,205	1,352	1,213	1,269	2,981	3,003	5,601	5,843	1,459	2,223	2,654
(WY)	(1987)	(1987)	(1993)	(1998)	(1997)	(1998)	(1997)	(1993)	(1995)	(1989)	(1995)	(1996)
MIN	21.2	37.0	41.6	52.0	55.4	50.6	16.7	9.57	85.7	12.6	19.7	32.2
(WY)	(1973)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1971)	(1967)	(1964)	(1972)	(1984)

e Estimated

07326500 WASHITA RIVER AT ANADARKO, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1964 - 2005	
ANNUAL TOTAL	148,235		172,806			
ANNUAL MEAN	405		473		a479	
HIGHEST ANNUAL MEAN					1,788	1987
LOWEST ANNUAL MEAN					72.7	1971
HIGHEST DAILY MEAN	6,080	Mar 6	3,920	Aug 24	37,700	Oct 21, 1983
LOWEST DAILY MEAN	54	Sep 22	62	Oct 3	0.00	Aug 1, 1964
ANNUAL SEVEN-DAY MINIMUM	57	Sep 17	68	Aug 1	0.77	Jul 19, 1964
MAXIMUM PEAK FLOW			4,150	Aug 24	52,800	Jun 6, 1995
MAXIMUM PEAK STAGE			15.51	Aug 24	25.37	Jun 6, 1995
ANNUAL RUNOFF (AC-FT)	294,000		342,800		347,200	
10 PERCENT EXCEEDS	1,050		1,010		1,120	
50 PERCENT EXCEEDS	146		243		185	
90 PERCENT EXCEEDS	74		135		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 NGVD of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.06	0.45	1.2	0.99	0.65	1.0	0.89	0.57	0.43	0.02	0.05	0.10
2	0.00	0.91	1.2	1.00	0.72	1.1	0.91	0.67	0.35	0.08	0.07	0.09
3	0.03	2.2	1.1	0.98	0.70	1.0	0.93	0.61	0.38	0.01	0.05	0.09
4	0.08	1.1	1.1	1.2	0.70	1.1	0.90	0.62	0.41	0.06	0.06	0.09
5	0.02	0.97	1.1	2.7	0.72	1.0	0.93	0.60	0.50	0.75	0.16	0.09
6	0.04	0.93	1.2	0.84	1.1	1.0	0.95	0.60	0.32	0.18	0.15	0.10
7	136	0.92	1.1	0.87	0.76	1.0	0.95	0.62	0.30	0.13	0.14	0.09
8	0.76	0.91	1.1	0.80	0.74	1.0	0.97	0.65	0.26	0.13	0.24	0.09
9	0.42	0.93	1.1	0.77	0.72	1.0	0.96	0.60	0.26	0.12	0.21	0.07
10	5.8	0.92	1.1	0.75	0.72	1.0	0.93	0.57	0.44	0.13	0.20	0.08
11	1.0	0.92	1.1	0.73	0.73	1.0	0.85	0.55	0.23	0.09	0.19	0.09
12	0.57	0.95	1.1	0.74	0.76	1.0	0.88	0.55	0.21	0.07	0.20	0.10
13	0.50	0.96	1.0	0.67	0.78	0.98	0.88	0.80	0.22	0.07	0.40	0.08
14	0.48	1.0	1.0	0.65	0.75	0.99	0.85	0.55	0.17	0.08	0.69	0.09
15	0.44	2.5	1.0	0.64	0.78	0.98	0.83	0.50	0.20	0.07	0.34	0.92
16	0.41	1.4	1.0	0.63	0.76	1.0	0.80	0.54	0.17	0.08	0.33	0.09
17	0.41	3.5	1.0	0.63	0.78	1.0	0.78	0.51	0.53	0.07	0.33	0.09
18	0.38	2.1	1.0	0.65	0.80	1.0	0.71	0.51	0.16	0.05	0.27	0.10
19	0.32	1.6	1.0	0.64	0.82	1.00	0.72	0.52	0.15	0.08	0.25	0.09
20	0.31	1.5	1.0	0.65	0.86	1.0	0.66	0.48	0.16	0.05	0.26	0.09
21	0.30	5.1	1.0	0.65	0.89	1.0	0.63	0.47	0.08	0.05	6.2	0.08
22	0.33	1.4	0.97	0.65	0.93	0.97	0.57	0.44	0.07	0.05	0.44	0.09
23	0.31	2.3	0.94	e0.64	0.95	0.96	0.55	0.36	0.07	0.05	0.25	0.07
24	0.29	1.7	0.94	e0.64	0.94	0.99	0.57	0.36	0.09	0.05	0.21	0.08
25	0.31	1.5	0.97	0.63	0.96	0.96	0.61	0.37	0.02	0.05	0.16	0.07
26	0.35	1.4	0.98	0.62	0.98	0.95	0.58	0.41	0.04	0.06	0.15	0.06
27	0.36	1.3	1.00	0.62	1.1	0.95	0.57	0.42	0.05	0.07	0.15	0.09
28	0.33	1.3	1.00	0.73	1.0	0.97	0.61	0.45	0.01	0.07	0.14	0.07
29	0.28	1.3	1.0	0.66	---	0.97	0.60	0.44	0.02	0.11	0.13	0.05
30	0.26	1.2	1.0	0.66	---	0.96	0.57	0.41	0.00	0.07	0.11	6.4
31	0.36	---	1.0	0.64	---	0.94	---	0.48	---	0.05	0.11	---
TOTAL	151.51	45.17	32.30	24.67	23.10	30.77	23.14	16.23	6.30	3.00	12.64	9.69
MEAN	4.89	1.51	1.04	0.80	0.82	0.99	0.77	0.52	0.21	0.10	0.41	0.32
MAX	136	5.1	1.2	2.7	1.1	1.1	0.97	0.80	0.53	0.75	6.2	6.4
MIN	0.00	0.45	0.94	0.62	0.65	0.94	0.55	0.36	0.00	0.01	0.05	0.05
AC-FT	301	90	64	49	46	61	46	32	12	6.0	25	19

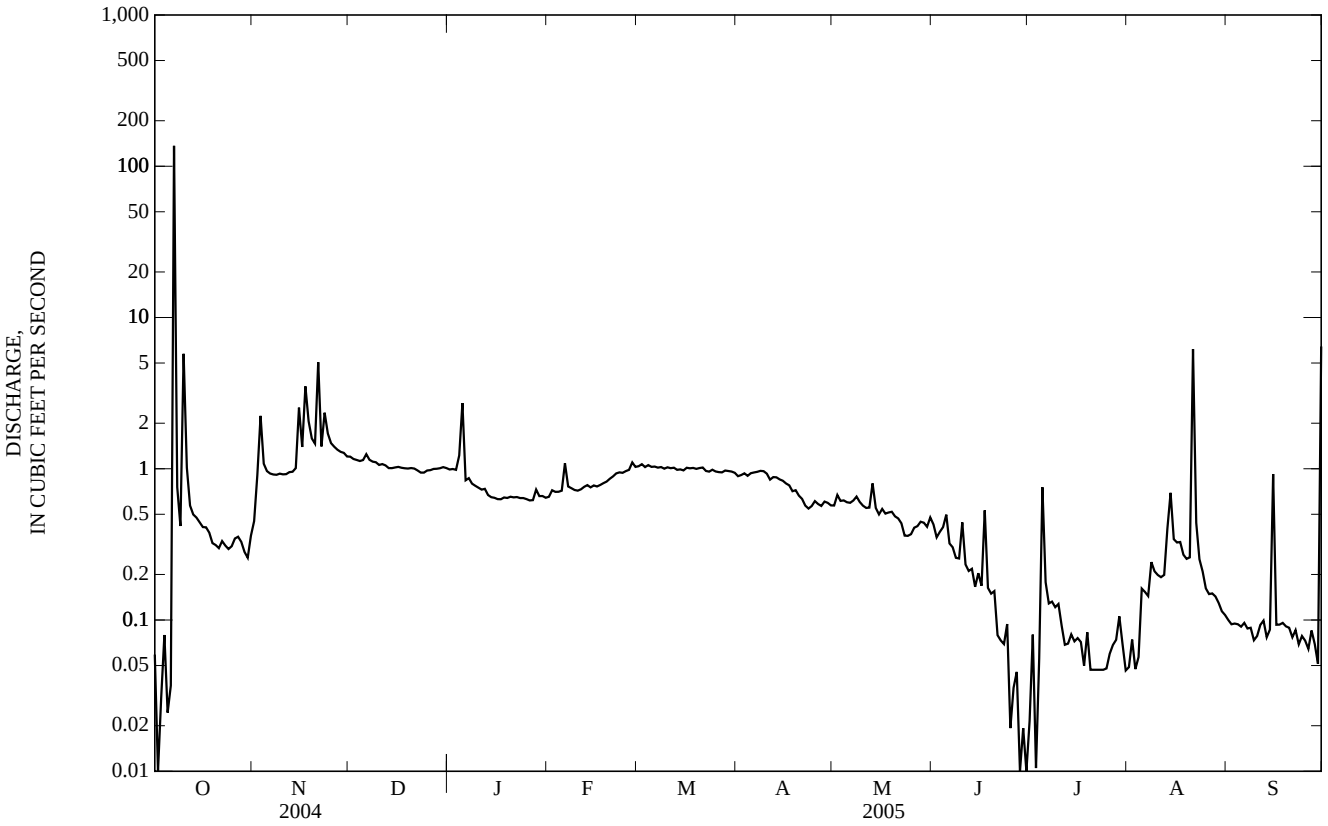
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2005, BY WATER YEAR (WY)

MEAN	3.44	1.27	1.09	1.44	1.56	2.57	1.79	2.11	3.05	1.19	0.93	0.51
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1995 - 2005	
ANNUAL TOTAL	263.78		378.52			
ANNUAL MEAN	0.72		1.04		1.46	
HIGHEST ANNUAL MEAN					3.39	1998
LOWEST ANNUAL MEAN					0.11	2004
HIGHEST DAILY MEAN	136	Oct 7	136	Oct 7	471	Oct 23, 2000
LOWEST DAILY MEAN	0.00	May 24	0.00	Oct 2,Jun 30	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	May 24	0.02	Jun 25	0.00	Sep 28, 2003
MAXIMUM PEAK FLOW			1,270	Oct 7	2,280	Oct 23, 2000
MAXIMUM PEAK STAGE			11.65	Oct 7	14.26	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	523		751		1,060	
10 PERCENT EXCEEDS	1.0		1.1		2.2	
50 PERCENT EXCEEDS	0.17		0.62		0.61	
90 PERCENT EXCEEDS	0.00		0.07		0.08	



07327441 SCS POND NO. 26 NEAR CYRIL, OK

LOCATION.--Lat 34°54'09", long 98°14'22", in SW ¼ SE ¼ 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 NGVD of 1929.

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, 323 acre-ft, Oct. 7, elevation 1,329.83 ft; minimum, 159 acre-ft, Oct. 1-5, elevation 1,320.00 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		

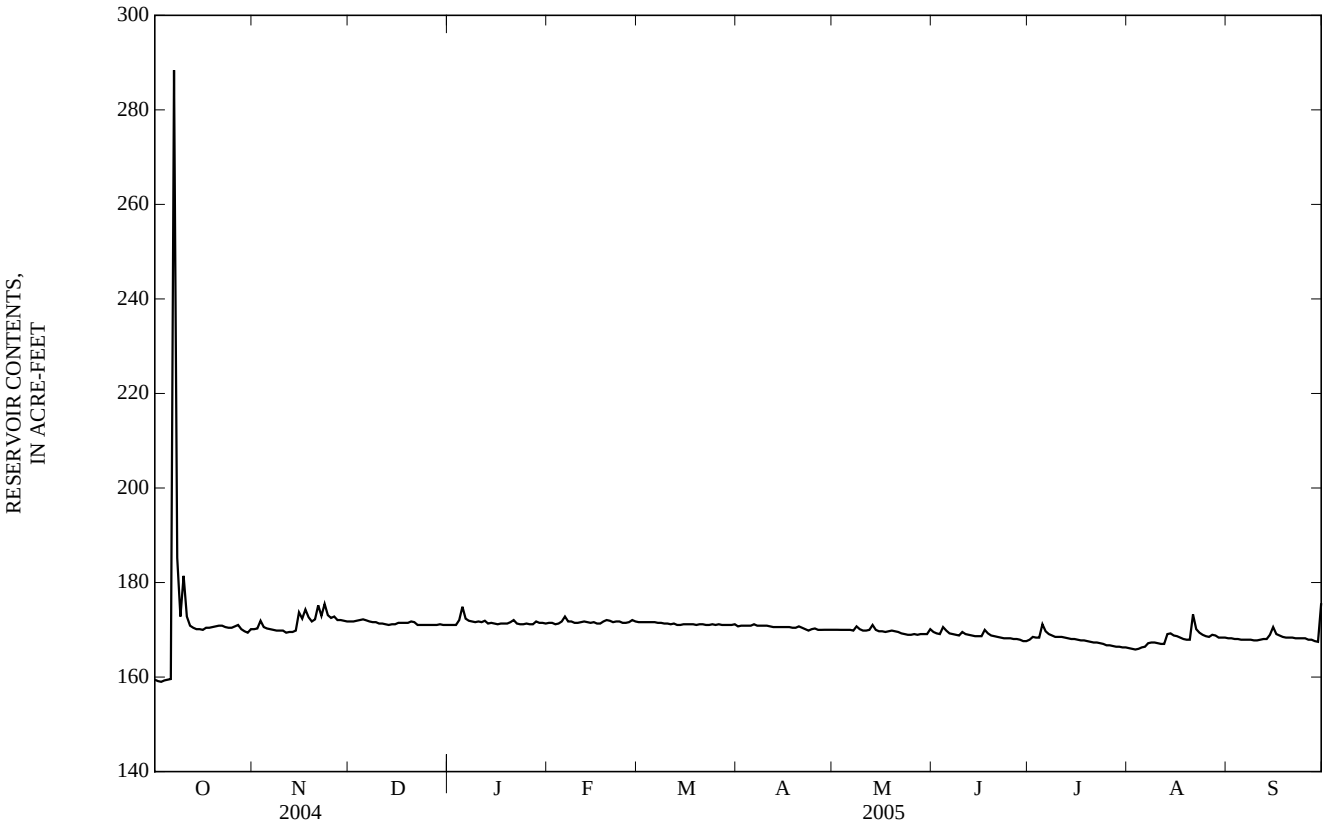
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	170	172	171	171	172	171	e170	170	168	166	168
2	159	170	172	171	171	172	171	e170	169	168	166	168
3	159	172	172	171	171	172	171	170	169	168	166	168
4	159	171	172	172	171	172	171	170	171	168	166	168
5	159	170	172	175	172	172	171	170	170	171	166	168
6	160	170	e172	172	173	172	171	170	169	170	166	168
7	288	170	172	172	172	171	171	170	169	169	167	168
8	185	170	172	172	172	171	171	171	169	169	167	168
9	173	170	172	172	171	171	171	170	169	168	167	168
10	181	170	171	172	171	171	171	170	170	168	167	168
11	173	169	171	172	172	171	171	170	169	168	167	168
12	171	170	171	172	172	171	171	170	169	168	167	168
13	170	170	171	171	172	171	171	171	169	168	169	168
14	170	170	171	171	171	171	171	170	169	168	169	169
15	170	174	171	171	172	171	171	170	169	168	169	171
16	170	172	171	171	171	171	171	170	169	168	169	169
17	170	174	171	171	171	171	171	170	170	168	168	169
18	170	173	171	171	172	171	170	170	169	168	168	168
19	171	172	171	171	172	171	170	170	169	168	168	168
20	171	172	172	172	172	171	171	170	169	167	168	168
21	171	175	172	172	172	171	170	170	168	167	173	168
22	171	173	171	171	172	171	170	169	168	167	170	168
23	171	175	171	171	172	171	170	169	168	167	169	168
24	170	173	171	171	171	171	170	169	168	167	169	168
25	170	173	171	171	171	171	170	169	168	167	169	168
26	171	173	171	171	172	171	170	169	168	167	168	168
27	171	172	171	171	172	171	170	169	168	167	169	168
28	170	172	171	172	172	171	e170	169	168	166	169	168
29	170	172	171	171	---	171	e170	169	168	166	168	167
30	169	172	171	171	---	171	e170	169	168	166	168	176
31	170	---	171	171	---	171	---	170	---	166	168	---
MAX	288	175	172	175	173	172	171	171	171	171	173	176
MIN	159	169	171	171	171	171	170	169	168	166	166	167
(‡)	1320.75	1320.86	1320.81	1320.83	1320.86	1320.82	1320.75	1320.75	1320.58	1320.49	1320.63	1321.12
(‡‡)	+11	+2	-1	0	+1	-1	-1	0	-2	-2	+2	+8

CAL YR 2004 MAX 288 MIN 159 (‡‡) +1
WTR YR 2005 MAX 288 MIN 159 (‡‡) -17

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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.14	2.5	4.1	3.2	3.5	3.1	2.3	1.4	e1.2	0.41	0.14	0.45
2	0.11	2.4	4.0	3.2	3.7	3.0	2.2	1.6	1.1	e0.85	0.18	0.45
3	0.08	5.4	3.9	3.2	3.5	3.0	2.2	1.8	0.93	e0.74	0.16	0.42
4	0.15	3.8	3.9	3.8	3.4	3.0	2.2	1.8	0.92	e0.66	0.16	0.40
5	0.15	3.0	3.9	8.1	3.3	3.0	2.1	1.7	1.7	2.7	0.27	0.38
6	0.10	2.8	4.2	4.8	4.5	3.0	2.2	1.7	1.1	1.3	0.28	0.35
7	103	2.8	4.2	4.2	4.1	3.1	2.1	1.5	0.93	0.80	0.30	0.37
8	20	2.7	3.9	3.9	3.8	3.0	1.9	1.7	0.80	0.67	0.34	0.36
9	7.3	2.5	3.8	3.9	3.6	3.2	1.9	1.9	0.72	0.59	0.28	0.33
10	10	2.4	3.7	3.9	3.5	3.1	1.9	1.6	1.1	0.52	0.24	0.31
11	7.3	2.5	3.6	3.9	3.5	3.1	1.8	1.5	0.88	0.49	0.19	0.28
12	4.4	2.3	3.6	3.9	3.5	3.0	1.7	1.3	0.74	0.47	0.23	0.34
13	3.6	2.4	3.5	3.8	3.5	2.9	1.7	2.3	0.74	0.43	0.65	0.31
14	3.4	2.7	3.4	3.7	3.5	2.8	1.7	1.7	0.64	0.39	1.4	0.44
15	3.2	6.2	3.5	3.6	3.4	2.9	1.6	1.4	0.56	0.37	1.3	1.8
16	3.0	4.9	3.4	3.5	3.4	3.0	1.6	1.3	0.60	0.36	1.1	1.0
17	2.7	7.2	3.4	3.5	3.3	2.9	1.6	1.2	2.0	0.30	e0.90	0.65
18	2.7	5.9	3.4	3.5	3.2	2.8	1.6	1.1	0.96	0.26	e0.62	0.58
19	2.4	5.0	3.4	3.6	3.3	2.8	1.6	1.2	0.76	0.26	0.59	0.46
20	2.3	4.4	3.4	3.5	3.3	2.8	1.5	1.2	0.64	0.26	0.51	0.40
21	2.2	12	3.4	3.4	3.4	2.9	1.7	1.2	0.58	0.22	5.3	0.39
22	2.5	6.1	3.4	3.6	3.3	2.7	1.5	1.1	0.54	0.17	1.7	0.34
23	2.5	7.9	3.2	3.3	3.4	2.6	1.3	e1.1	0.51	0.17	1.1	0.35
24	2.3	6.1	3.2	3.4	3.3	2.6	1.3	e1.1	0.46	e0.13	0.75	0.34
25	2.3	5.2	3.3	3.5	3.2	2.7	1.5	e1.0	0.42	e0.10	0.61	0.35
26	2.3	4.9	3.3	3.4	3.1	2.6	1.4	e1.0	0.41	0.07	0.53	0.39
27	2.5	4.6	3.2	3.4	3.5	2.5	1.4	e1.1	0.37	0.11	0.72	0.38
28	2.8	4.4	3.2	3.8	3.3	2.5	1.4	e1.1	0.32	0.14	0.68	0.35
29	2.5	4.4	3.1	3.7	---	2.5	1.4	e1.0	0.31	0.14	0.60	0.42
30	2.2	4.2	3.2	3.6	---	2.5	1.4	e1.0	0.30	0.13	0.52	0.40
31	2.3	---	3.2	3.5	---	2.4	---	e1.0	---	0.12	0.49	---
TOTAL	202.43	133.6	109.9	117.3	97.3	88.0	51.7	42.6	23.24	14.33	22.84	13.79
MEAN	6.53	4.45	3.55	3.78	3.48	2.84	1.72	1.37	0.77	0.46	0.74	0.46
MAX	103	12	4.2	8.1	4.5	3.2	2.3	2.3	2.0	2.7	5.3	1.8
MIN	0.08	2.3	3.1	3.2	3.1	2.4	1.3	1.0	0.30	0.07	0.14	0.28
AC-FT	402	265	218	233	193	175	103	84	46	28	45	27

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2005, BY WATER YEAR (WY)

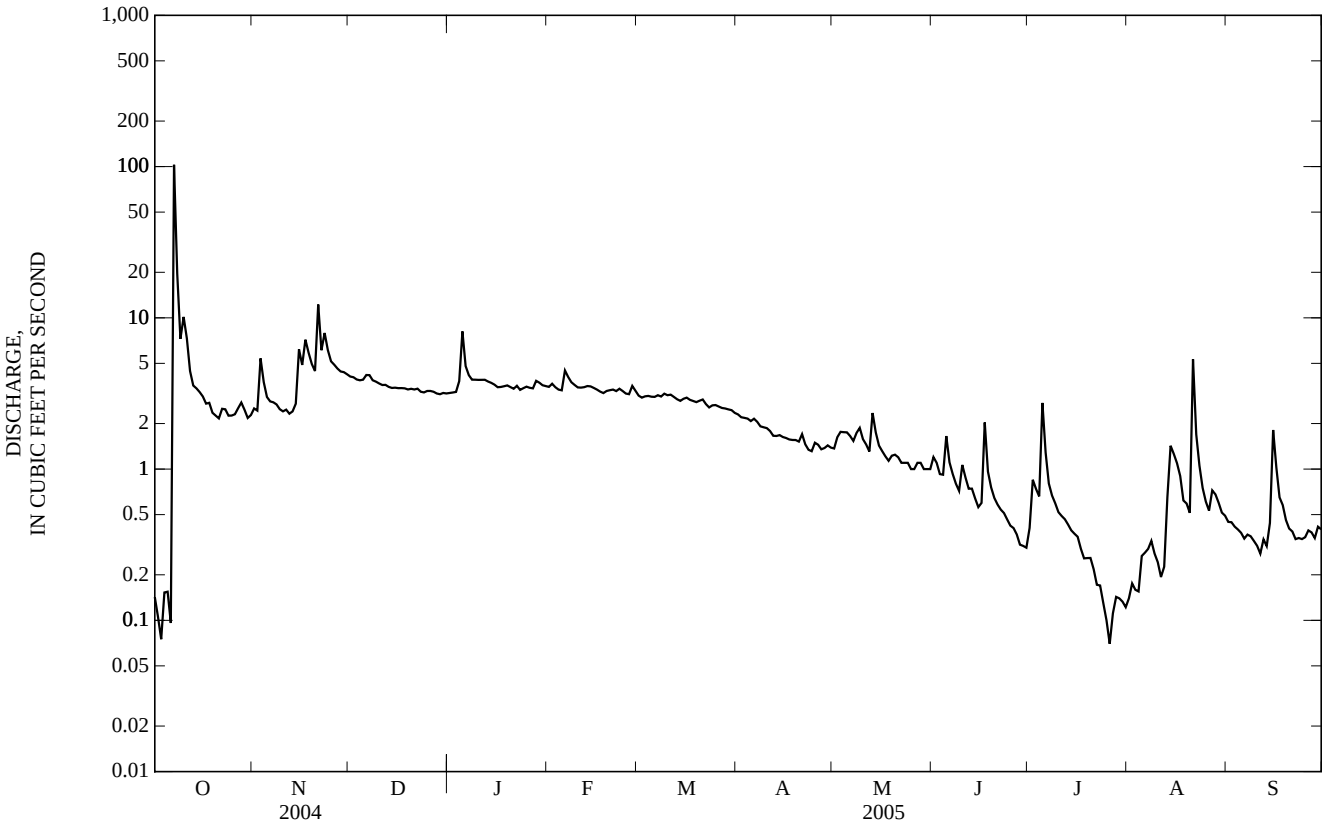
MEAN	5.02	4.17	4.86	4.93	5.36	6.72	6.25	6.12	6.76	2.89	1.95	1.68
MAX	25.7	11.6	19.5	16.7	15.4	22.8	17.3	26.2	35.8	9.55	7.34	7.13
(WY)	(2001)	(1993)	(1993)	(1998)	(1993)	(1998)	(1993)	(1993)	(1995)	(1997)	(1995)	(1996)
MIN	0.29	0.46	0.47	0.61	0.60	1.60	1.02	0.57	0.42	0.25	0.04	0.02
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2002)	(2004)	(2003)	(2004)	(2004)	(2004)	(2004)

e Estimated

07327442 LITTLE WASHITA RIVER NEAR CYRIL, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1993 - 2005	
ANNUAL TOTAL	603.52		917.03			
ANNUAL MEAN	1.65		2.51		4.72	
HIGHEST ANNUAL MEAN					13.2	1993
LOWEST ANNUAL MEAN					0.53	2004
HIGHEST DAILY MEAN	103	Oct 7	103	Oct 7	416	Oct 23, 2000
LOWEST DAILY MEAN	0.02	at times	0.07	Jul 26	a0.00	Aug 21, 2002
ANNUAL SEVEN-DAY MINIMUM	0.02	Sep 18	0.12	Jul 25	0.00	Aug 20, 2002
MAXIMUM PEAK FLOW			399	Oct 7	b1,930	Oct 23, 2000
MAXIMUM PEAK STAGE			11.63	Oct 7	18.09	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	1,200		1,820		3,420	
10 PERCENT EXCEEDS	3.6		3.9		10	
50 PERCENT EXCEEDS	0.62		2.2		2.8	
90 PERCENT EXCEEDS	0.03		0.31		0.44	

a Also occurred Aug. 22-25, 2002.
b From theoretical rating.



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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	10	e17	16	12	18	11	7.1	14	1.8	0.48	2.8
2	2.0	8.8	e17	17	14	17	11	8.4	9.5	4.5	0.38	2.4
3	1.2	27	e16	17	13	17	11	11	7.1	3.5	0.38	2.1
4	1.7	19	e16	18	12	17	11	11	7.7	3.3	0.34	e1.8
5	2.0	12	e17	49	12	18	11	11	46	16	0.52	1.6
6	1.8	8.8	e21	27	28	18	11	10	16	11	0.82	1.5
7	253	7.9	19	16	27	19	11	9.3	9.1	6.2	1.5	1.3
8	102	7.3	15	13	19	17	10	9.8	6.8	4.8	6.0	1.3
9	30	7.1	14	12	18	17	9.7	13	6.0	3.9	3.9	1.2
10	40	7.4	13	12	16	17	9.1	11	8.8	3.3	1.9	1.1
11	42	7.6	13	13	16	16	8.7	8.7	8.1	2.9	1.4	1.1
12	16	7.0	13	13	16	15	7.8	7.5	6.1	2.7	1.2	1.7
13	9.8	7.2	13	12	18	15	7.7	18	5.9	2.4	2.0	1.8
14	7.6	8.0	12	11	17	13	7.8	18	5.3	2.4	4.4	2.8
15	6.4	27	13	11	17	13	7.8	11	5.1	2.3	4.9	29
16	6.0	31	13	9.9	17	14	7.8	8.7	4.9	2.1	4.2	14
17	5.4	38	13	e9.5	16	14	7.7	8.0	25	2.0	3.5	6.1
18	5.3	38	13	10	16	14	7.6	9.2	12	1.7	2.7	4.4
19	5.2	24	13	11	18	13	8.2	8.3	7.2	1.5	2.0	3.4
20	4.9	19	13	11	19	13	8.2	7.4	5.5	1.4	1.7	2.9
21	4.9	95	14	11	19	14	8.7	6.7	4.5	1.2	28	2.6
22	5.4	40	13	10	19	13	8.1	5.9	3.9	1.1	14	2.4
23	7.0	41	12	8.2	20	12	7.0	5.4	3.6	0.97	7.2	2.4
24	5.9	38	e11	8.5	19	12	6.8	5.2	3.1	0.87	5.3	2.6
25	5.5	25	e12	10	17	12	7.9	4.9	2.9	0.71	3.6	2.6
26	6.6	21	14	9.5	18	12	8.2	5.5	2.6	0.50	2.7	3.3
27	8.1	19	14	9.2	23	12	7.5	6.0	2.4	0.70	10	3.6
28	11	17	14	13	21	12	7.3	6.1	2.1	0.53	13	3.6
29	8.3	e16	14	14	---	12	7.5	6.3	2.0	0.52	7.8	3.2
30	6.5	e18	15	12	---	12	7.5	6.6	1.7	0.52	4.9	3.0
31	6.4	---	15	12	---	11	---	7.6	---	0.49	3.5	---
TOTAL	621.1	652.1	442	425.8	497	449	261.6	272.6	244.9	87.81	144.22	113.6
MEAN	20.0	21.7	14.3	13.7	17.8	14.5	8.72	8.79	8.16	2.83	4.65	3.79
MAX	253	95	21	49	28	19	11	18	46	16	28	29
MIN	1.2	7.0	11	8.2	12	11	6.8	4.9	1.7	0.49	0.34	1.1
AC-FT	1,230	1,290	877	845	986	891	519	541	486	174	286	225

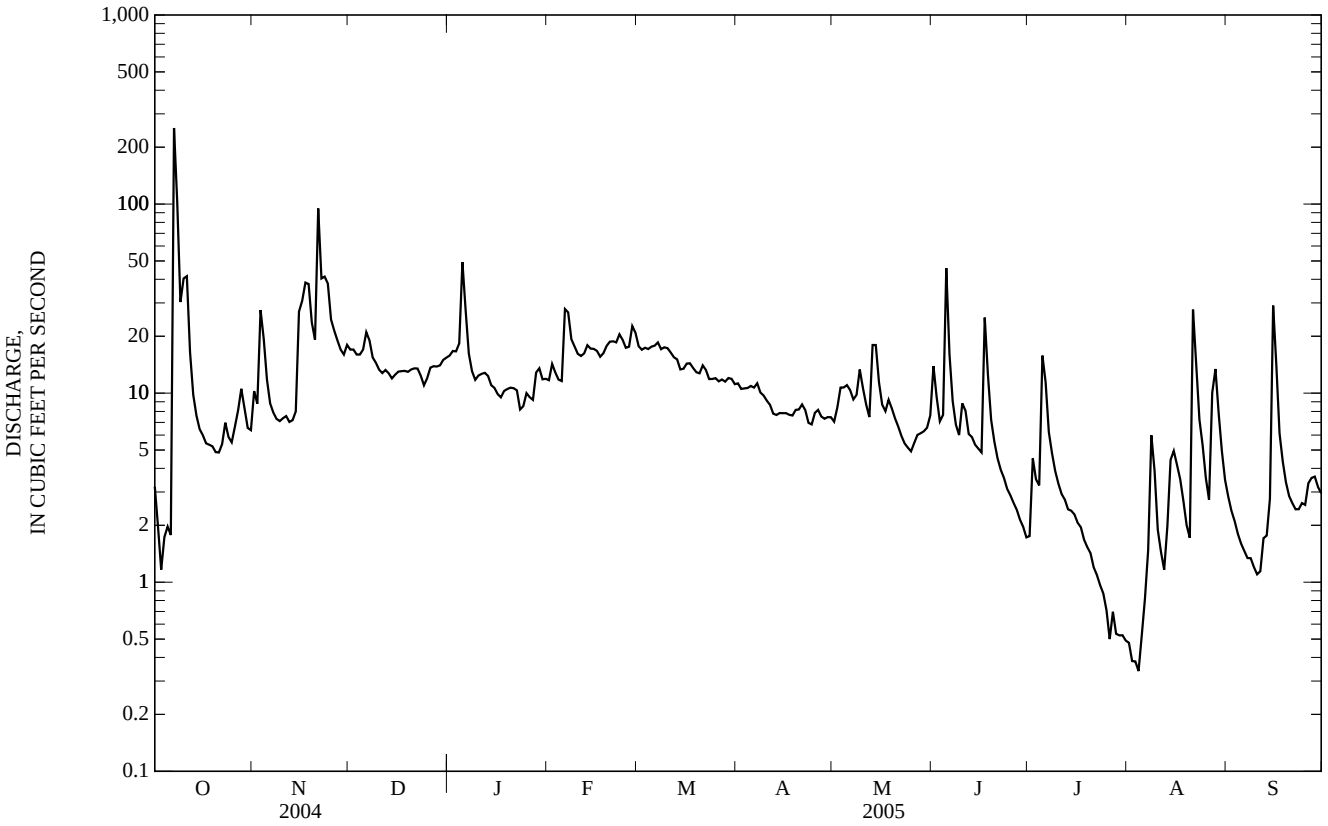
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

MEAN	22.9	17.0	20.6	21.6	24.7	30.6	32.9	34.1	32.2	16.0	10.6	9.05
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	3,184.61		4,211.73			
ANNUAL MEAN	8.70		11.5		21.5	
HIGHEST ANNUAL MEAN					51.6	1993
LOWEST ANNUAL MEAN					5.23	2004
HIGHEST DAILY MEAN	253	Oct 7	253	Oct 7	1,020	Oct 23, 2000
LOWEST DAILY MEAN	0.46	Jul 21	0.34	Aug 4	0.34	Aug 4, 2005
ANNUAL SEVEN-DAY MINIMUM	0.55	Jul 17	0.44	Jul 29	0.44	Jul 29, 2005
MAXIMUM PEAK FLOW			799	Oct 7	2,020	Oct 23, 2000
MAXIMUM PEAK STAGE			9.26	Oct 7	17.66	Oct 23, 2000
ANNUAL RUNOFF (AC-FT)	6,320		8,350		15,550	
10 PERCENT EXCEEDS	16		19		42	
50 PERCENT EXCEEDS	4.9		9.1		12	
90 PERCENT EXCEEDS	1.9		1.8		3.2	



07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK

LOCATION.--Lat 34°57'48", long 97°53'57", in NW ¼ SW ¼ 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e12	e9.9	e51	21	e27	31	18	e8.9	e24	e3.1	e0.76	7.7
2	6.2	e16	e53	21	e35	26	18	e8.9	e29	7.3	e0.63	5.5
3	4.4	e15	e45	22	e37	24	e17	14	e18	8.2	e0.52	4.4
4	3.4	e41	e42	25	e30	24	e16	e17	25	21	e0.34	3.4
5	4.8	e19	e33	87	e27	24	e17	e17	235	29	e0.95	2.7
6	4.2	e15	e32	e102	e62	24	17	e16	e128	35	e1.5	2.1
7	4.0	e14	e37	e57	e72	24	18	e14	e57	e20	e3.0	1.9
8	260	e13	31	e42	e48	23	17	e12	e28	e12	e8.0	1.8
9	e114	e13	27	e34	e40	20	16	e14	e17	e10	32	1.6
10	e68	e12	e18	e29	e34	21	15	e18	e24	e7.0	e5.4	1.4
11	e102	e12	e16	e28	e32	20	15	e13	e16	e5.0	e2.8	1.4
12	e57	e13	e17	e28	e39	19	13	e11	e13	e5.1	e0.90	1.9
13	e30	e13	e16	e25	e40	19	11	e21	e12	e4.2	e2.5	2.2
14	e21	e13	e16	e21	e37	18	11	e65	e10	e3.6	e13	4.4
15	e16	e17	e18	e19	e41	18	11	e27	e9.1	e3.4	e10	18
16	e13	e36	16	e19	e35	e20	11	e21	e30	e3.0	e7.5	57
17	e11	e44	18	e23	32	22	10	e17	48	e2.6	e5.8	21
18	e9.9	e56	18	e19	30	20	9.8	e17	53	e2.4	e3.6	11
19	e10	e35	e18	e20	30	19	11	e15	22	e2.2	e2.1	7.5
20	e13	e31	e18	e22	29	19	12	e13	e11	e2.0	e1.8	5.9
21	e8.8	e45	18	e22	27	23	12	e11	e8.0	e1.8	e73	4.7
22	e12	e121	17	e22	25	23	12	e10	e6.0	e1.6	e65	4.0
23	e9.1	e80	e19	e22	32	21	10	9.1	e5.0	e1.4	23	3.4
24	e8.8	e61	e21	e21	33	20	e9.6	e11	e5.5	e1.5	11	3.3
25	e6.9	e94	e16	e20	27	20	e9.4	e9.0	e4.3	e1.1	6.1	3.0
26	e7.3	e71	e18	e20	25	19	e9.4	e11	e3.8	e1.0	2.9	e3.5
27	e8.8	e64	e19	e19	37	20	e9.2	e14	e3.8	e1.2	88	e3.8
28	e10	e68	e19	e23	42	19	e9.1	e14	e3.7	e1.0	26	e3.8
29	e12	e62	e20	e36	---	19	e9.0	e16	e3.4	e0.92	20	e3.4
30	e11	e64	21	e31	---	19	e9.0	e15	e3.1	e0.84	21	e3.2
31	e9.9	---	22	e29	---	19	---	e15	---	e0.84	12	---
TOTAL	868.5	1,167.9	750	929	1,005	657	382.5	494.9	855.7	199.30	451.10	198.9
MEAN	28.0	38.9	24.2	30.0	35.9	21.2	12.8	16.0	28.5	6.43	14.6	6.63
MAX	260	121	53	102	72	31	18	65	235	35	88	57
MIN	3.4	9.9	16	19	25	18	9.0	8.9	3.1	0.84	0.34	1.4
AC-FT	1,720	2,320	1,490	1,840	1,990	1,300	759	982	1,700	395	895	395

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

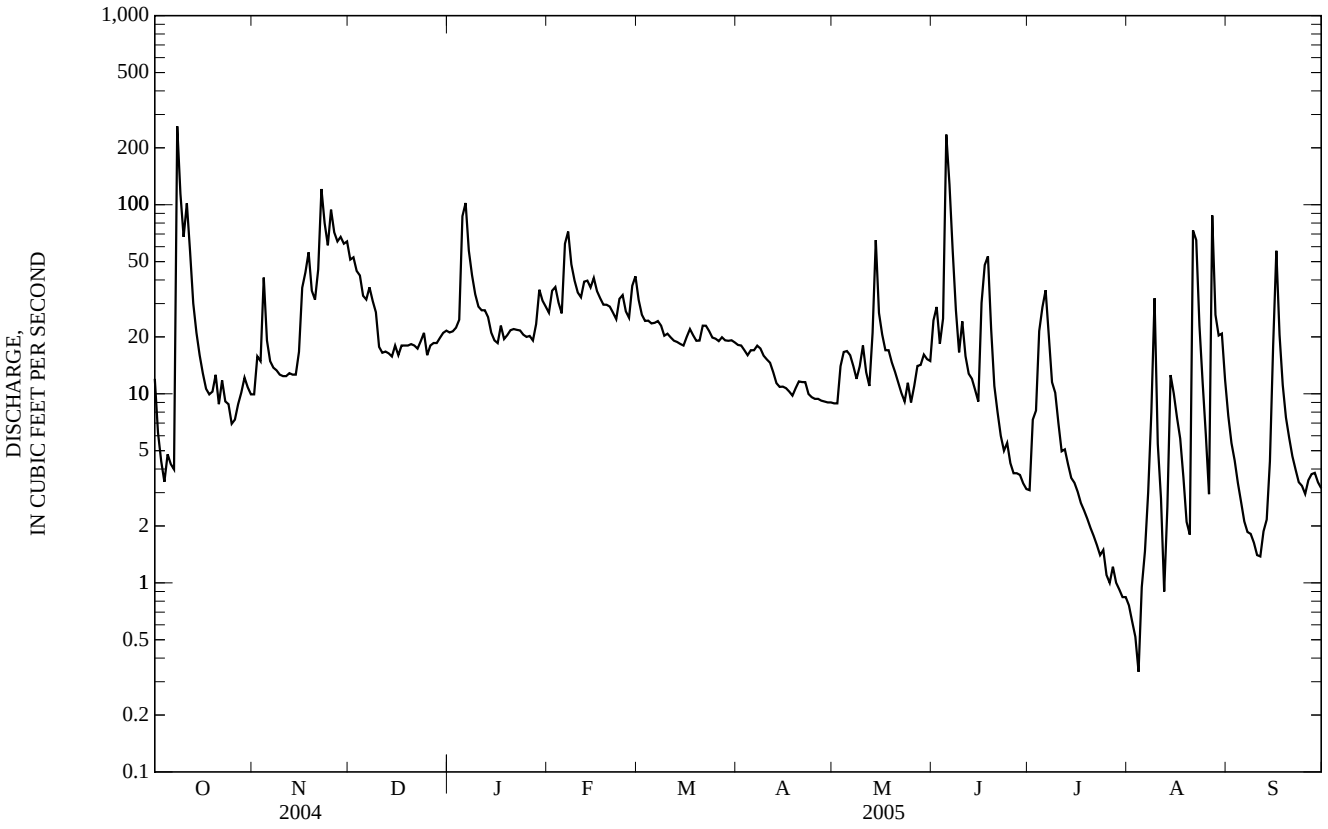
MEAN	43.8	46.0	55.0	61.9	70.5	82.0	84.9	99.0	94.7	36.9	26.3	26.4
MAX	164	105	185	264	196	320	181	325	352	126	92.7	85.4
(WY)	(2001)	(1993)	(1993)	(1998)	(1993)	(1998)	(1998)	(1993)	(1995)	(1992)	(1992)	(1992)
MIN	4.67	13.0	9.80	8.75	7.39	21.2	12.8	16.0	10.7	4.37	2.77	4.81
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2005)	(2004)	(2003)	(2000)	(2003)

e Estimated

07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	7,576.2		7,959.80			
ANNUAL MEAN	20.7		21.8		57.8	
HIGHEST ANNUAL MEAN					137	1993
LOWEST ANNUAL MEAN					15.4	2004
HIGHEST DAILY MEAN	441	Mar 4	260	Oct 8	3,570	May 30, 1997
LOWEST DAILY MEAN	1.0	Jul 21	0.34	Aug 4	0.34	Aug 4, 2005
ANNUAL SEVEN-DAY MINIMUM	1.3	Jul 17	0.69	Jul 29	0.69	Jul 29, 2005
MAXIMUM PEAK FLOW			494	Oct 8	a9,920	May 9, 1993
MAXIMUM PEAK STAGE			9.97	Oct 8	b20.70	May 9, 1993
ANNUAL RUNOFF (AC-FT)	15,030		15,790		41,850	
10 PERCENT EXCEEDS	41		43		114	
50 PERCENT EXCEEDS	12		17		32	
90 PERCENT EXCEEDS	3.9		3.0		7.2	

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 $^1/_4$ 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 NGVD of 1929. 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 except for estimated periods which are poor. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	243	718	321	611	684	291	206	299	423	73	820
2	87	223	628	318	609	597	290	219	297	415	65	712
3	81	309	572	315	604	546	289	231	308	413	63	645
4	82	363	527	324	591	502	286	237	277	433	61	570
5	79	311	494	474	570	469	284	240	612	483	66	519
6	76	314	490	740	637	449	277	243	385	399	70	476
7	81	574	496	750	748	433	274	246	253	347	72	448
8	653	489	486	1,310	693	417	278	250	216	311	78	425
9	500	391	469	1,080	673	402	275	247	196	289	84	408
10	1,330	340	481	920	706	388	273	245	209	233	78	388
11	2,030	307	494	804	671	379	273	235	216	209	89	333
12	1,140	283	463	723	715	370	262	222	230	187	82	287
13	1,530	264	437	656	728	354	257	240	393	178	107	244
14	1,380	252	415	607	725	348	253	249	518	170	314	240
15	912	285	398	557	708	341	248	251	1,290	155	249	204
16	718	466	382	523	692	339	244	238	2,420	143	167	183
17	589	538	369	533	685	342	244	225	2,120	152	196	319
18	495	2,010	360	591	659	340	241	243	1,860	142	358	1,440
19	426	3,090	354	599	643	338	240	351	1,460	130	474	1,120
20	378	3,240	350	591	572	339	241	407	1,420	118	333	689
21	340	2,990	342	603	610	351	243	352	1,420	113	342	503
22	312	2,270	335	602	646	345	237	325	1,180	108	383	413
23	290	2,520	334	606	675	342	232	300	947	102	640	355
24	266	2,570	e290	624	716	331	228	273	750	94	2,440	309
25	248	1,720	e275	655	740	325	228	248	676	95	3,500	431
26	238	1,410	e335	656	973	320	229	236	626	89	2,620	571
27	250	1,190	333	645	866	315	228	225	563	91	1,730	e475
28	360	1,000	312	658	748	317	220	218	549	82	1,220	315
29	258	907	317	679	---	314	214	214	530	78	1,010	228
30	240	806	319	700	---	304	211	215	458	74	900	205
31	247	---	324	663	---	299	---	237	---	75	965	---
TOTAL	15,697	31,675	12,899	19,827	19,214	11,940	7,590	7,868	22,678	6,331	18,829	14,275
MEAN	506	1,056	416	640	686	385	253	254	756	204	607	476
MAX	2,030	3,240	718	1,310	973	684	291	407	2,420	483	3,500	1,440
MIN	76	223	275	315	570	299	211	206	196	74	61	183
AC-FT	31,140	62,830	25,590	39,330	38,110	23,680	15,050	15,610	44,980	12,560	37,350	28,310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2005, BY WATER YEAR (WY)

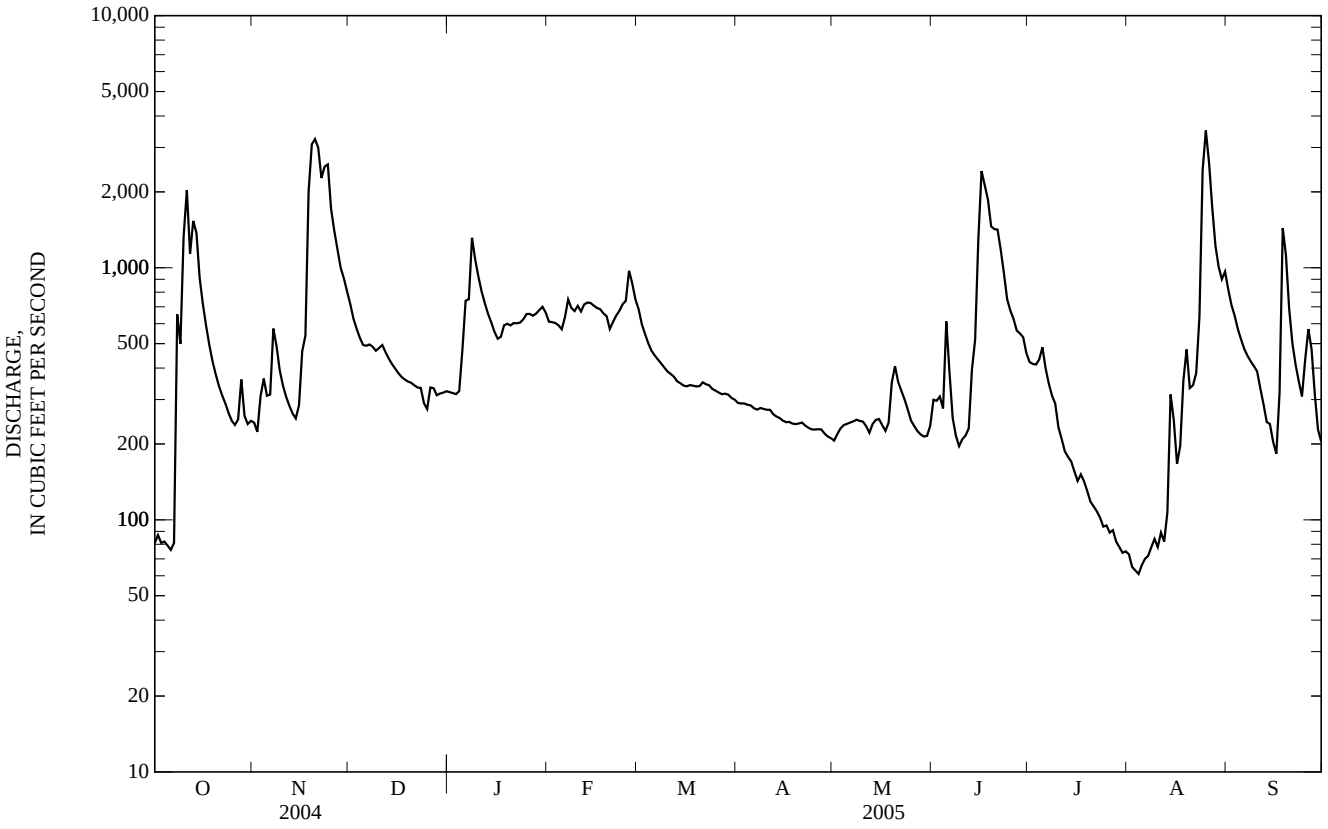
MEAN	559	490	457	429	479	732	751	1,257	1,405	516	387	503
MAX	4,441	1,672	2,615	2,057	1,829	4,446	3,598	6,916	6,865	1,678	2,325	3,345
(WY)	(1984)	(1993)	(1993)	(1998)	(1998)	(1998)	(1997)	(1993)	(1995)	(1975)	(1995)	(1996)
MIN	61.1	52.9	64.5	77.3	86.1	73.8	23.9	22.9	96.9	13.9	3.88	40.0
(WY)	(1979)	(1971)	(1968)	(1971)	(1967)	(1971)	(1971)	(1971)	(1967)	(1970)	(1972)	(1972)

e Estimated

07328100 WASHITA RIVER AT ALEX, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1965 - 2005	
ANNUAL TOTAL	179,820		188,823			
ANNUAL MEAN	491		517		663	
HIGHEST ANNUAL MEAN					1,902	1993
LOWEST ANNUAL MEAN					120	1971
HIGHEST DAILY MEAN	6,230	Mar 7	3,500	Aug 25	22,500	Oct 21, 1983
LOWEST DAILY MEAN	57	Sep 22	61	Aug 4	a0.00	Aug 13, 1970
ANNUAL SEVEN-DAY MINIMUM	61	Sep 19	67	Aug 1	0.01	Aug 12, 1970
MAXIMUM PEAK FLOW			3,680	Aug 25	25,000	Jun 8, 1995
MAXIMUM PEAK STAGE			9.82	Aug 25	b33.78	Oct 21, 1983
ANNUAL RUNOFF (AC-FT)	356,700		374,500		480,100	
10 PERCENT EXCEEDS	1,200		954		1,530	
50 PERCENT EXCEEDS	243		348		304	
90 PERCENT EXCEEDS	87		154		78	

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 ¼ SE ¼ 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 NGVD of 1929.

REMARKS.--Records poor. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.51	2.0	2.2	1.7	1.7	2.2	e1.4	0.15	0.60	0.02	0.00	0.00
2	0.00	2.0	2.1	1.8	1.8	2.0	e1.0	e0.23	0.47	0.01	0.00	0.00
3	0.00	4.1	1.8	2.1	1.7	2.0	e0.96	e0.42	0.38	0.00	0.00	0.00
4	0.25	1.6	1.7	2.3	1.5	2.0	e0.95	e0.56	0.39	0.29	0.00	0.00
5	0.13	1.6	1.7	5.6	1.4	1.9	e0.94	e0.63	0.46	0.07	0.09	0.00
6	0.09	1.6	2.9	4.1	3.5	1.8	0.94	e0.61	0.36	0.00	0.11	0.00
7	0.16	1.5	2.7	3.2	3.3	2.1	1.1	e0.55	0.29	0.00	0.34	0.00
8	0.09	1.5	2.4	2.5	2.7	2.1	0.84	e0.49	0.23	0.00	0.20	0.00
9	0.24	1.5	2.5	2.1	2.5	2.0	0.89	e0.34	0.18	0.00	0.05	0.00
10	3.3	1.6	2.5	2.0	2.2	1.9	0.85	e0.29	0.25	0.00	0.02	0.00
11	1.0	1.5	2.2	1.9	2.1	1.8	0.83	e0.49	0.12	0.00	0.01	0.00
12	0.65	1.6	2.2	1.9	2.2	1.8	0.65	e0.20	0.08	0.00	0.01	0.00
13	0.55	1.6	2.1	2.0	2.2	2.2	0.52	1.4	0.33	0.00	0.14	0.00
14	0.62	1.7	1.7	1.5	2.2	1.8	0.39	1.1	0.18	0.00	0.59	1.2
15	0.57	3.2	1.5	1.4	2.1	1.8	0.36	e0.75	0.13	0.00	0.41	0.69
16	0.51	0.98	1.6	1.3	2.3	1.8	0.35	e0.57	0.07	0.00	0.32	0.00
17	0.57	4.6	1.5	1.3	2.0	1.7	0.41	e0.48	0.50	0.00	0.17	0.00
18	0.55	3.9	1.5	1.3	1.8	1.7	0.34	e0.37	0.06	0.00	0.05	0.00
19	0.58	3.5	1.4	1.2	1.9	1.7	0.36	e0.31	0.02	0.00	0.00	0.00
20	0.66	3.0	1.5	1.1	2.0	1.7	0.31	e0.26	0.01	0.00	0.00	0.00
21	0.66	2.8	1.7	1.1	2.0	e2.0	0.36	e0.23	0.01	0.00	0.46	0.00
22	0.73	2.4	2.1	1.9	2.0	e1.7	0.38	e0.20	0.01	0.00	0.04	0.00
23	0.80	4.2	1.8	1.6	2.3	e1.5	0.30	0.42	0.00	0.00	0.02	0.00
24	0.77	3.8	1.7	1.2	2.3	e1.4	0.25	0.59	0.00	0.00	0.02	0.00
25	0.82	3.1	1.6	1.3	2.0	e1.3	0.33	0.60	0.00	0.00	0.00	0.00
26	1.2	2.7	1.6	1.4	1.9	e1.3	0.36	0.55	0.00	0.00	0.00	0.00
27	1.0	2.6	1.6	1.2	2.5	e1.4	0.31	0.62	0.00	1.2	0.00	0.00
28	1.0	2.3	1.6	1.5	2.4	e1.2	0.34	0.60	0.00	0.04	0.03	0.00
29	0.96	2.6	1.6	1.6	---	e1.2	0.33	0.63	0.00	0.01	0.00	0.00
30	0.95	2.4	1.6	1.6	---	e1.2	0.32	0.64	0.00	0.01	0.00	0.00
31	1.6	---	1.7	1.7	---	e1.2	---	0.63	---	0.00	0.00	---
TOTAL	21.52	73.48	58.3	58.4	60.5	53.4	17.67	15.91	5.13	1.65	3.08	1.89
MEAN	0.69	2.45	1.88	1.88	2.16	1.72	0.59	0.51	0.17	0.05	0.10	0.06
MAX	3.3	4.6	2.9	5.6	3.5	2.2	1.4	1.4	0.60	1.2	0.59	1.2
MIN	0.00	0.98	1.4	1.1	1.4	1.2	0.25	0.15	0.00	0.00	0.00	0.00
AC-FT	43	146	116	116	120	106	35	32	10	3.3	6.1	3.7

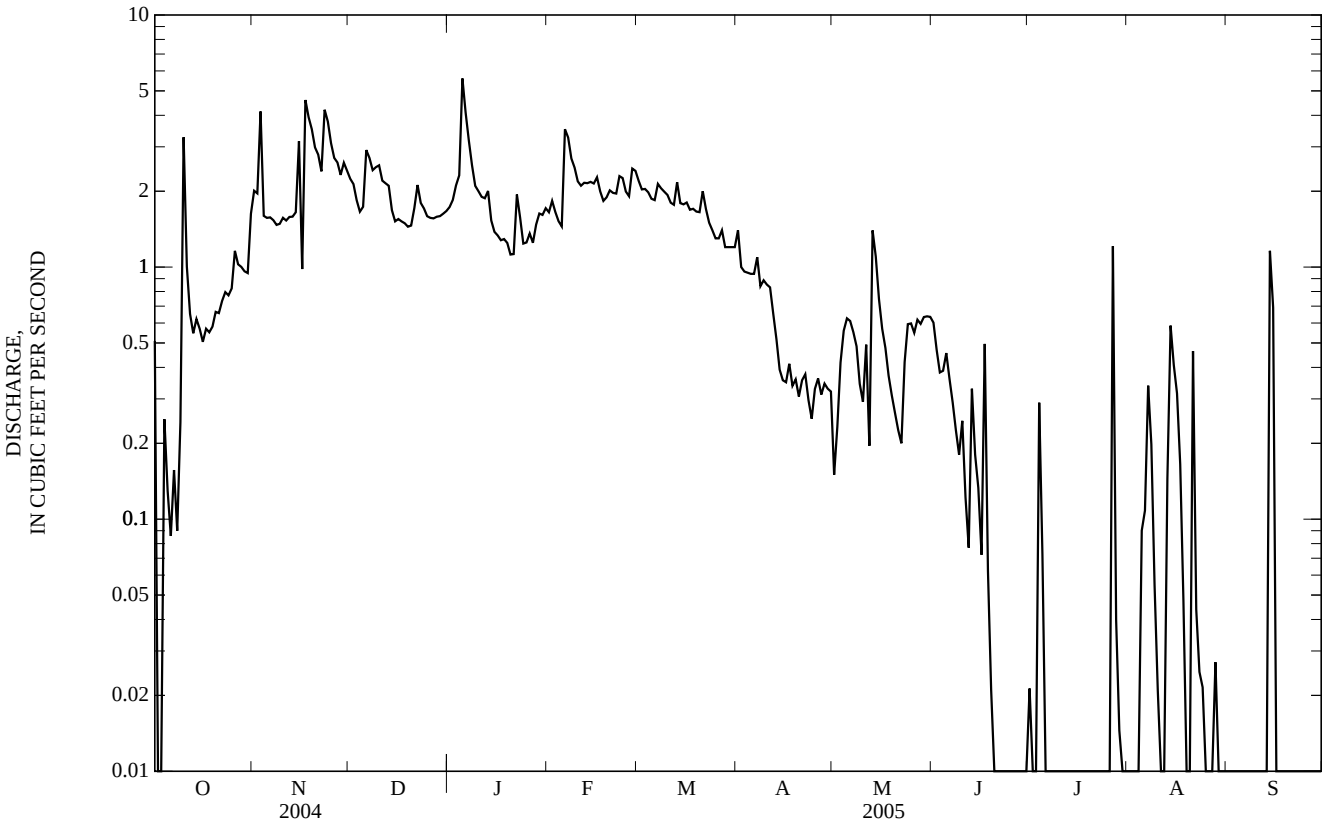
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

MEAN	1.15	1.84	2.24	2.11	2.87	3.69	4.04	4.88	2.79	1.43	1.42	1.18
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	0.17	0.01	0.01	0.00
(WY)	(2000)	(2004)	(2004)	(2000)	(2004)	(2004)	(2004)	(2004)	(2005)	(2003)	(2000)	(2004)

e Estimated

07328180 NORTH CRINER CREEK NEAR CRINER, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1990 - 2005	
ANNUAL TOTAL	289.91		370.93			
ANNUAL MEAN	0.79		1.02		2.47	
HIGHEST ANNUAL MEAN					6.65	1993
LOWEST ANNUAL MEAN					0.43	2004
HIGHEST DAILY MEAN	8.7	Jul 1	5.6	Jan 5	151	May 2, 1990
LOWEST DAILY MEAN	0.00	Mar 27	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.00	May 5	0.00	Jun 23	0.00	Jun 21, 1994
MAXIMUM PEAK FLOW			13	Nov 23	605	May 23, 1993
MAXIMUM PEAK STAGE			3.66	Nov 23	11.24	May 23, 1993
ANNUAL RUNOFF (AC-FT)	575		736		1,790	
10 PERCENT EXCEEDS	2.3		2.2		5.7	
50 PERCENT EXCEEDS	0.30		0.65		1.0	
90 PERCENT EXCEEDS	0.00		0.00		0.08	



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 NGVD of 1929. 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.--No estimated daily discharge. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	878	1,070	336	851	909	387	206	218	614	87	946
2	78	869	953	346	791	854	373	210	275	572	87	767
3	88	1,290	878	962	779	772	360	231	319	564	87	683
4	108	967	820	665	763	711	353	247	344	606	77	673
5	145	724	778	1,850	749	668	345	250	507	923	70	615
6	128	574	769	1,920	908	625	341	255	726	779	76	553
7	90	462	1,270	1,420	1,130	602	340	253	609	644	87	512
8	81	636	987	1,570	1,040	586	330	262	400	496	100	495
9	514	678	836	1,730	906	561	336	276	291	419	94	492
10	728	542	736	1,380	836	538	332	263	245	391	98	514
11	2,260	440	679	1,150	834	515	323	254	223	331	95	529
12	1,870	367	681	968	799	496	313	245	249	280	92	479
13	1,190	324	633	851	844	482	303	267	251	250	100	371
14	1,650	291	569	755	871	465	290	289	319	233	182	300
15	1,260	290	524	695	863	451	280	294	571	219	521	555
16	880	511	495	664	845	441	268	278	1,820	210	554	607
17	761	979	455	650	820	433	257	263	2,470	191	342	353
18	655	2,060	430	651	795	432	256	238	2,080	176	266	748
19	552	3,170	413	732	798	432	252	226	1,780	186	340	1,200
20	463	3,570	394	748	782	428	260	269	1,480	173	518	790
21	407	3,410	390	733	720	535	256	421	1,560	156	551	674
22	358	3,190	383	738	724	509	254	416	1,460	144	402	581
23	313	3,070	372	742	789	479	246	355	1,220	139	511	484
24	277	4,330	351	741	822	461	237	321	1,030	131	966	392
25	248	3,100	343	759	851	443	234	288	852	121	2,740	322
26	289	2,180	333	803	877	424	230	259	777	110	3,260	323
27	249	1,860	352	812	1,190	433	227	238	743	177	2,110	595
28	255	1,550	357	799	1,060	422	224	227	662	178	1,520	627
29	355	1,370	333	827	---	409	224	223	621	127	1,130	428
30	335	1,250	317	854	---	410	211	217	632	100	960	255
31	312	---	331	879	---	400	---	206	---	93	875	---
TOTAL	16,974	44,932	18,232	28,730	24,037	16,326	8,642	8,247	24,734	9,733	18,898	16,863
MEAN	548	1,498	588	927	858	527	288	266	824	314	610	562
MAX	2,260	4,330	1,270	1,920	1,190	909	387	421	2,470	923	3,260	1,200
MIN	75	290	317	336	720	400	211	206	218	93	70	255
AC-FT	33,670	89,120	36,160	56,990	47,680	32,380	17,140	16,360	49,060	19,310	37,480	33,450

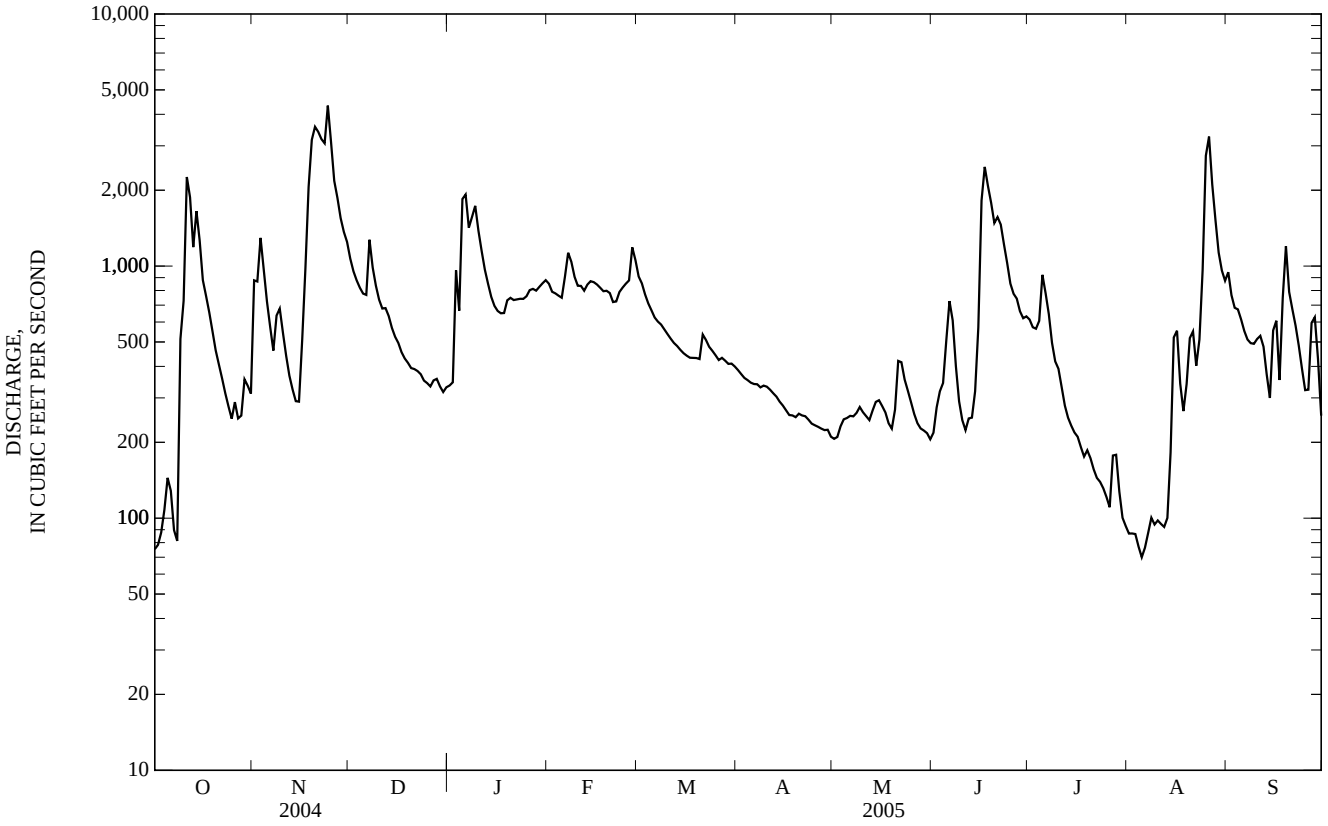
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	867	763	625	617	730	1,056	1,041	1,782	1,907	672	450	615
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)

07328500 WASHITA RIVER NEAR PAULS VALLEY, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	232,769		236,348			
ANNUAL MEAN	636		648		a927	
HIGHEST ANNUAL MEAN					3,661	1987
LOWEST ANNUAL MEAN					181	1967
HIGHEST DAILY MEAN	6,410	Mar 8	4,330	Nov 24	41,700	May 29, 1987
LOWEST DAILY MEAN	62	Sep 24	70	Aug 5	b0.00	Jul 21, 1964
ANNUAL SEVEN-DAY MINIMUM	64	Sep 21	82	Aug 1	0.00	Jul 21, 1964
MAXIMUM PEAK FLOW			4,320	Nov 24	43,600	May 29, 1987
MAXIMUM PEAK STAGE			7.65	Nov 24	c28.72	May 29, 1987
ANNUAL RUNOFF (AC-FT)	461,700		468,800		671,400	
10 PERCENT EXCEEDS	1,540		1,230		2,080	
50 PERCENT EXCEEDS	329		484		418	
90 PERCENT EXCEEDS	120		189		95	

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.



07329780 HONEY CREEK BELOW TURNER FALLS NEAR DAVIS, OK

LOCATION.--Lat 34°25'54", long 97°08'49", in NE ¼ NE ¼ sec.36, T.1 S., R.1 E., Murray County, Hydrologic Unit 11130303, on right bank 150 ft upstream from low-water crossing at Turner Falls Park.

DRAINAGE AREA.--16.4 mi^2.

PERIOD OF RECORD.--October 2004 to September 2005.

GAGE.--Water-stage recorder. Datum of gage is 865.865 ft NAVD of 1988.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e105	158	23	9.5	12	17	7.7	4.2	5.6	4.2	6.4	13
2	e68	76	21	9.3	13	17	7.5	4.7	5.0	4.0	5.8	12
3	e52	125	20	238	13	17	7.3	4.4	4.7	3.8	5.6	11
4	e96	82	19	115	13	17	7.3	4.3	4.9	4.1	5.2	10
5	e61	57	21	179	13	16	7.0	4.1	10	5.4	5.2	9.9
6	e52	45	33	122	61	16	7.4	4.1	9.3	4.5	5.0	9.4
7	e29	36	73	77	67	15	6.9	4.0	7.5	4.3	4.8	9.1
8	e25	30	52	58	50	15	6.9	4.1	7.0	4.0	4.8	8.8
9	e21	26	41	47	41	13	6.7	4.0	6.5	3.9	4.8	8.5
10	e245	23	33	40	35	13	6.9	3.8	6.2	3.7	4.4	8.3
11	e90	21	29	35	32	13	6.5	3.8	5.7	3.7	4.2	8.1
12	e49	19	25	31	30	12	6.3	4.4	5.5	3.9	3.9	7.8
13	e34	18	22	27	29	12	6.1	5.5	5.4	3.6	4.0	7.5
14	e29	17	20	24	26	12	6.1	4.8	5.2	3.4	35	7.4
15	e25	17	19	23	25	12	6.0	4.4	5.1	3.5	553	20
16	e21	16	18	21	23	11	5.9	4.3	4.8	3.4	259	12
17	e19	151	17	20	23	11	5.3	4.3	17	3.3	150	10
18	e18	154	16	19	22	11	5.3	4.2	11	3.4	76	9.0
19	e16	82	15	18	22	10	5.2	4.2	8.1	3.3	52	8.3
20	e15	59	14	17	21	10	5.0	3.9	7.3	3.0	39	7.8
21	12	48	13	16	20	10	5.2	3.8	6.5	3.0	31	7.6
22	13	40	13	15	19	9.8	4.7	3.7	5.8	3.0	27	8.1
23	12	43	13	14	19	9.7	4.7	3.5	5.6	2.9	23	7.2
24	10	53	12	14	18	9.2	4.6	3.7	5.2	2.9	20	6.9
25	9.5	51	12	13	18	8.9	5.2	3.8	5.0	2.9	18	6.7
26	9.4	44	12	12	17	8.8	4.6	3.8	4.8	2.8	17	6.5
27	8.9	36	11	12	18	8.7	4.4	3.8	4.5	28	25	6.2
28	9.1	31	11	12	17	8.5	4.3	4.0	4.3	14	19	6.0
29	8.9	29	10	12	---	8.2	4.4	5.4	4.3	9.4	16	6.0
30	8.7	25	10	12	---	7.8	4.3	4.0	4.1	7.8	15	5.9
31	122	---	9.7	12	---	7.8	---	4.9	---	6.8	14	---
TOTAL	1,293.5	1,612	657.7	1,273.8	717	367.4	175.7	129.9	191.9	159.9	1,453.1	265.0
MEAN	41.7	53.7	21.2	41.1	25.6	11.9	5.86	4.19	6.40	5.16	46.9	8.83
MAX	245	158	73	238	67	17	7.7	5.5	17	28	553	20
MIN	8.7	16	9.7	9.3	12	7.8	4.3	3.5	4.1	2.8	3.9	5.9
AC-FT	2,570	3,200	1,300	2,530	1,420	729	349	258	381	317	2,880	526
CFSM	2.54	3.28	1.29	2.51	1.56	0.72	0.36	0.26	0.39	0.31	2.86	0.54
IN.	2.93	3.66	1.49	2.89	1.63	0.83	0.40	0.29	0.44	0.36	3.30	0.60

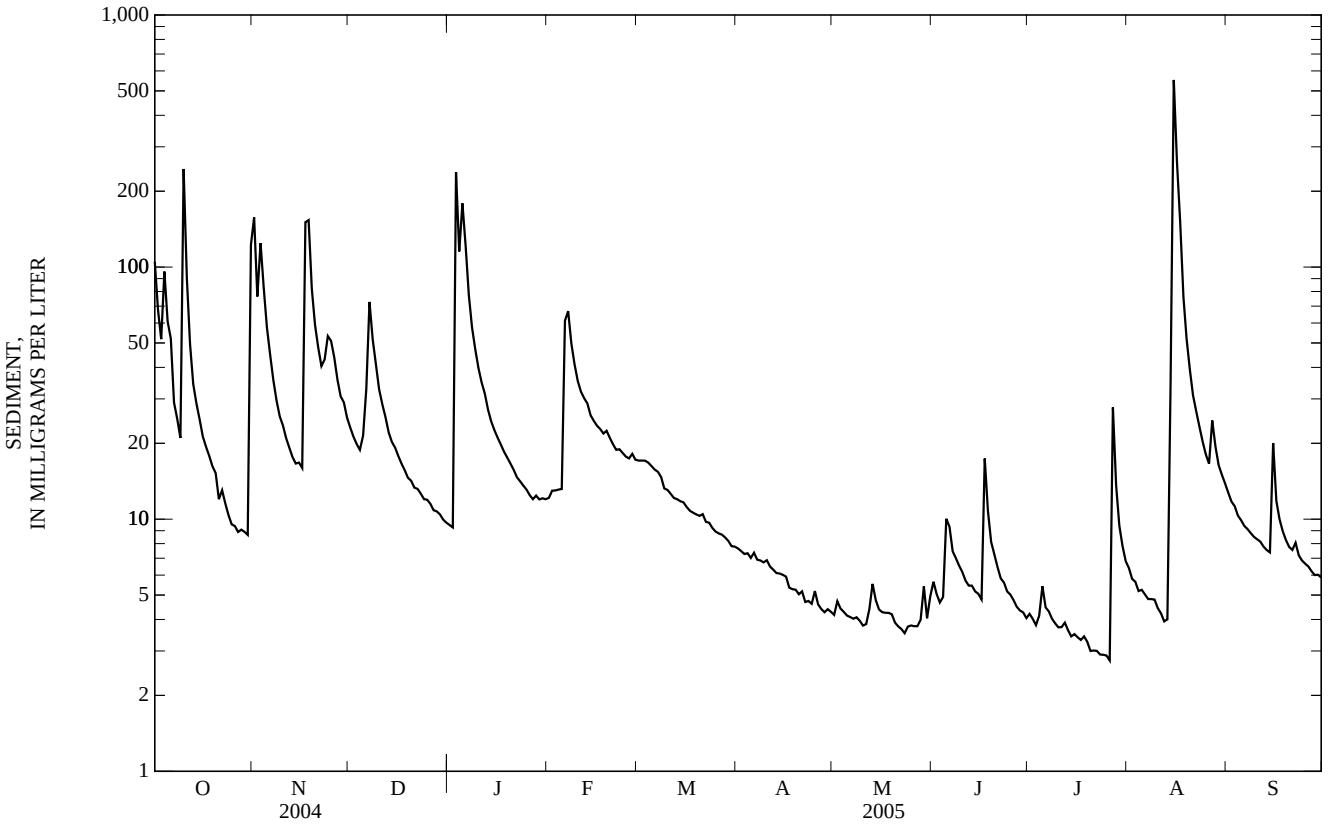
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2005 - 2005, BY WATER YEAR (WY)

MEAN	41.7	53.7	21.2	41.1	25.6	11.9	5.86	4.19	6.40	5.16	46.9	8.83
MAX	41.7	53.7	21.2	41.1	25.6	11.9	5.86	4.19	6.40	5.16	46.9	8.83
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)
MIN	41.7	53.7	21.2	41.1	25.6	11.9	5.86	4.19	6.40	5.16	46.9	8.83
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)

e Estimated

07329780 HONEY CREEK BELOW TURNER FALLS NEAR DAVIS, OK—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR	
ANNUAL TOTAL	8,296.9	
ANNUAL MEAN	22.7	
HIGHEST DAILY MEAN	553	Aug 15
LOWEST DAILY MEAN	2.8	Jul 26
ANNUAL SEVEN-DAY MINIMUM	2.9	Jul 20
MAXIMUM PEAK FLOW	1,890	Aug 15
MAXIMUM PEAK STAGE	4.88	Aug 15
ANNUAL RUNOFF (AC-FT)	16,460	
ANNUAL RUNOFF (CFSM)	1.39	
ANNUAL RUNOFF (INCHES)	18.82	
10 PERCENT EXCEEDS	49	
50 PERCENT EXCEEDS	11	
90 PERCENT EXCEEDS	4.0	



07329849 ANTELOPE SPRING AT SULPHUR, OK

LOCATION.--Lat 34°30'16", long 96°56'28", in NW ¼ NE ¼ 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.--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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.70	1.0	3.6	4.3	7.7	8.2	4.3	3.8	3.3	2.1	1.4	2.3
2	0.57	1.3	3.7	4.3	7.7	7.5	4.5	3.9	2.9	2.0	1.4	2.4
3	0.61	1.6	3.7	4.6	7.2	7.4	4.5	4.2	3.0	2.2	1.4	2.1
4	0.66	1.8	3.7	4.8	6.7	7.6	4.6	3.4	3.1	2.3	1.4	2.1
5	0.56	2.1	3.9	5.2	6.7	7.4	4.7	3.4	3.1	2.3	1.4	1.9
6	0.60	2.3	3.8	5.4	7.0	7.6	4.7	3.4	3.0	2.2	1.4	1.8
7	0.61	2.3	3.7	5.8	7.1	7.6	4.8	3.5	2.9	2.2	1.2	1.9
8	0.55	2.3	3.8	6.2	7.2	7.7	4.7	3.7	2.6	2.2	1.4	2.0
9	0.63	2.4	4.0	6.2	7.2	7.6	3.7	3.7	2.8	2.2	1.5	1.9
10	0.73	2.6	4.0	6.6	7.3	7.5	3.7	3.8	3.4	2.1	1.5	1.8
11	e0.74	2.6	4.1	6.7	7.6	7.5	3.6	4.0	3.2	1.9	1.5	1.5
12	e0.74	2.8	4.3	7.0	7.6	7.2	3.4	3.9	2.9	2.0	1.4	1.4
13	e0.74	2.8	4.1	7.0	7.2	6.8	3.5	3.9	2.8	2.0	1.3	1.5
14	0.73	2.8	4.2	7.1	7.2	6.2	3.6	4.0	2.7	1.9	1.5	1.7
15	e0.73	2.8	4.2	7.2	7.2	6.4	3.6	3.8	2.8	2.1	1.8	1.8
16	e0.72	2.9	4.1	7.2	7.2	6.5	3.6	3.9	2.8	2.2	1.9	1.8
17	e0.72	3.0	4.0	7.2	7.2	6.7	3.7	4.0	2.6	2.0	2.3	1.9
18	e0.72	3.1	4.0	7.2	7.2	6.7	3.7	4.0	2.6	2.2	2.6	1.9
19	e0.71	3.3	4.0	7.2	7.4	6.7	3.7	4.0	2.6	2.2	2.7	1.9
20	e0.71	3.4	4.2	7.2	7.7	6.4	3.8	4.1	2.6	2.0	2.8	1.9
21	0.71	3.4	4.1	7.2	7.3	4.6	3.9	4.0	2.7	2.0	2.9	1.8
22	0.73	3.4	4.0	7.4	7.5	4.6	3.9	3.8	2.6	1.9	2.8	1.9
23	0.68	3.6	4.0	7.7	7.7	4.6	4.0	3.8	2.6	1.6	2.9	2.0
24	0.65	3.5	4.1	7.7	7.7	4.6	3.7	4.0	2.6	1.4	2.9	2.0
25	0.58	3.4	4.0	7.7	7.7	4.6	3.9	4.0	2.5	1.2	2.7	2.0
26	0.60	3.6	4.0	7.7	8.1	4.6	4.0	4.3	2.2	1.1	2.9	2.0
27	0.68	3.6	4.1	8.2	8.2	4.5	4.0	3.9	2.1	1.3	2.9	2.1
28	0.75	3.5	4.2	7.8	8.2	4.3	4.0	4.3	2.1	1.3	2.7	2.1
29	0.75	3.6	4.3	7.7	---	4.3	4.0	3.8	2.1	1.1	2.6	2.0
30	0.77	3.6	4.3	7.7	---	4.3	3.9	3.4	2.3	1.2	2.5	1.9
31	0.96	---	4.3	7.7	---	4.3	---	3.4	---	1.4	2.3	---
TOTAL	21.34	84.4	124.5	208.9	207.7	192.5	119.7	119.1	81.5	57.8	63.9	57.3
MEAN	0.69	2.81	4.02	6.74	7.42	6.21	3.99	3.84	2.72	1.86	2.06	1.91
MAX	0.96	3.6	4.3	8.2	8.2	8.2	4.8	4.3	3.4	2.3	2.9	2.4
MIN	0.55	1.0	3.6	4.3	6.7	4.3	3.4	3.4	2.1	1.1	1.2	1.4
AC-FT	42	167	247	414	412	382	237	236	162	115	127	114

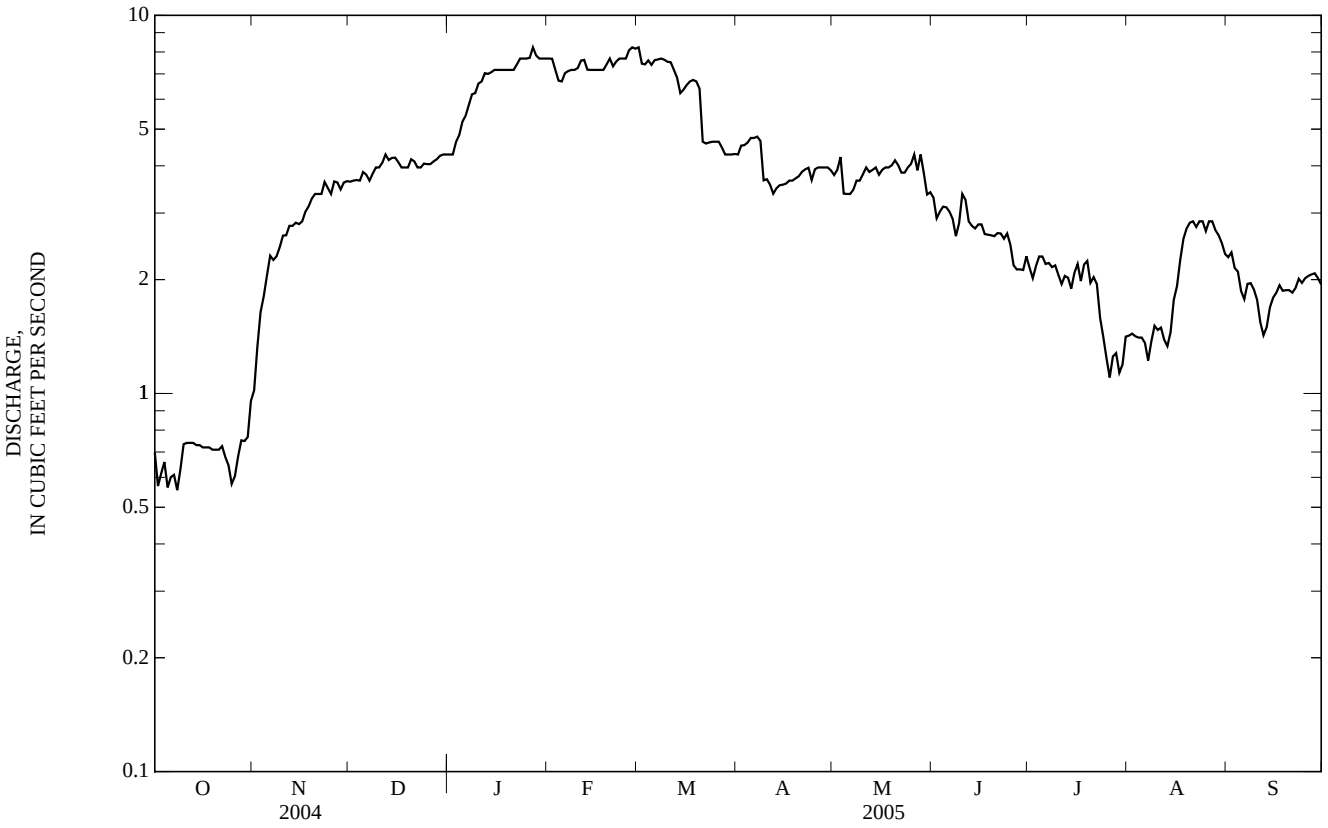
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2005, BY WATER YEAR (WY)

MEAN	1.76	2.26	3.21	4.14	4.11	4.18	3.80	3.48	3.30	2.94	2.58	2.25
MAX	3.15	3.85	5.22	7.48	7.42	7.81	7.94	5.88	5.15	4.07	3.32	3.25
(WY)	(1988)	(1988)	(1986)	(1988)	(2005)	(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)

e Estimated

07329849 ANTELOPE SPRING AT SULPHUR, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1986 - 2005	
ANNUAL TOTAL	428.24		1,338.64			
ANNUAL MEAN	1.17		3.67		3.05	
HIGHEST ANNUAL MEAN					5.27	1988
LOWEST ANNUAL MEAN					0.65	2004
HIGHEST DAILY MEAN	4.3	Dec 12	8.2	at times	11	Mar 28, 1988
LOWEST DAILY MEAN	0.04	Feb 2	0.55	Oct 8	0.04	Feb 2, 2004
ANNUAL SEVEN-DAY MINIMUM	0.06	Feb 1	0.59	Oct 2	0.06	Feb 1, 2004
MAXIMUM PEAK FLOW			8.2	at times	11	Mar 28, 1988
MAXIMUM PEAK STAGE			0.76	at times	0.76	Feb 26, 2005
INSTANTANEOUS LOW FLOW					0.08	Feb 9, 1989
ANNUAL RUNOFF (AC-FT)	849		2,660		2,210	
10 PERCENT EXCEEDS	3.5		7.2		5.8	
50 PERCENT EXCEEDS	0.75		3.5		3.0	
90 PERCENT EXCEEDS	0.08		1.2		0.57	



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 NGVD of 1929.

REMARKS.--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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	488	26	9.7	e15	38	27	12	11	7.4	8.0	8.9
2	5.7	197	24	9.5	e16	36	26	17	9.7	6.8	7.4	8.2
3	5.5	647	22	1,230	e15	36	25	15	9.4	6.8	6.9	8.8
4	12	245	19	529	e15	37	28	14	10	49	6.4	8.9
5	7.1	131	22	1,070	e15	35	26	14	17	246	6.8	7.7
6	6.2	83	179	511	259	35	24	13	12	45	7.1	7.5
7	12	60	250	391	177	36	23	13	11	23	6.8	7.4
8	12	54	91	268	92	34	24	16	9.6	16	9.9	8.3
9	6.5	54	57	204	68	33	24	16	8.9	12	7.6	8.1
10	275	44	36	e117	50	32	23	12	8.5	10	6.4	7.3
11	431	37	28	e80	44	32	23	12	8.4	9.6	6.4	7.2
12	120	30	25	e64	44	32	22	11	8.3	8.4	7.1	8.1
13	45	29	20	e53	51	32	21	19	9.3	8.0	7.5	7.6
14	24	27	16	e38	43	30	20	30	9.2	7.8	43	7.8
15	17	28	15	e32	38	30	19	24	8.7	8.4	1,190	258
16	13	30	15	e28	35	30	19	17	8.1	7.8	637	101
17	10	567	14	e26	33	31	18	13	20	7.4	301	35
18	8.6	389	14	e23	34	31	18	11	10	7.9	181	18
19	7.8	176	14	e21	41	30	18	11	9.1	7.7	78	12
20	7.6	83	15	e20	40	30	18	10	8.6	7.2	44	10
21	8.5	50	17	e20	38	34	18	9.7	8.1	7.0	30	8.6
22	31	39	12	e18	35	34	18	9.4	7.8	6.8	24	7.9
23	32	134	11	e17	35	32	16	9.3	7.6	7.3	18	7.6
24	19	134	9.9	e17	35	31	16	9.6	7.4	7.5	13	8.2
25	15	64	10	e17	34	30	16	9.7	7.3	7.4	10	8.2
26	139	42	11	e16	34	30	16	9.2	7.0	7.4	11	7.8
27	48	34	11	e15	46	30	15	9.3	6.9	125	10	7.5
28	30	27	10	e15	44	29	14	10	6.7	41	11	7.3
29	23	28	10	e15	---	29	13	10	6.6	22	11	6.8
30	18	30	10	e15	---	30	13	12	6.5	12	11	7.0
31	506	---	9.9	e17	---	29	---	11	---	9.2	9.6	---
TOTAL	1,914.5	3,981	1,023.8	4,906.2	1,426	998	601	409.2	278.7	754.8	2,726.9	622.7
MEAN	61.8	133	33.0	158	50.9	32.2	20.0	13.2	9.29	24.3	88.0	20.8
MAX	506	647	250	1,230	259	38	28	30	20	246	1,190	258
MIN	5.5	27	9.9	9.5	15	29	13	9.2	6.5	6.8	6.4	6.8
AC-FT	3,800	7,900	2,030	9,730	2,830	1,980	1,190	812	553	1,500	5,410	1,240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

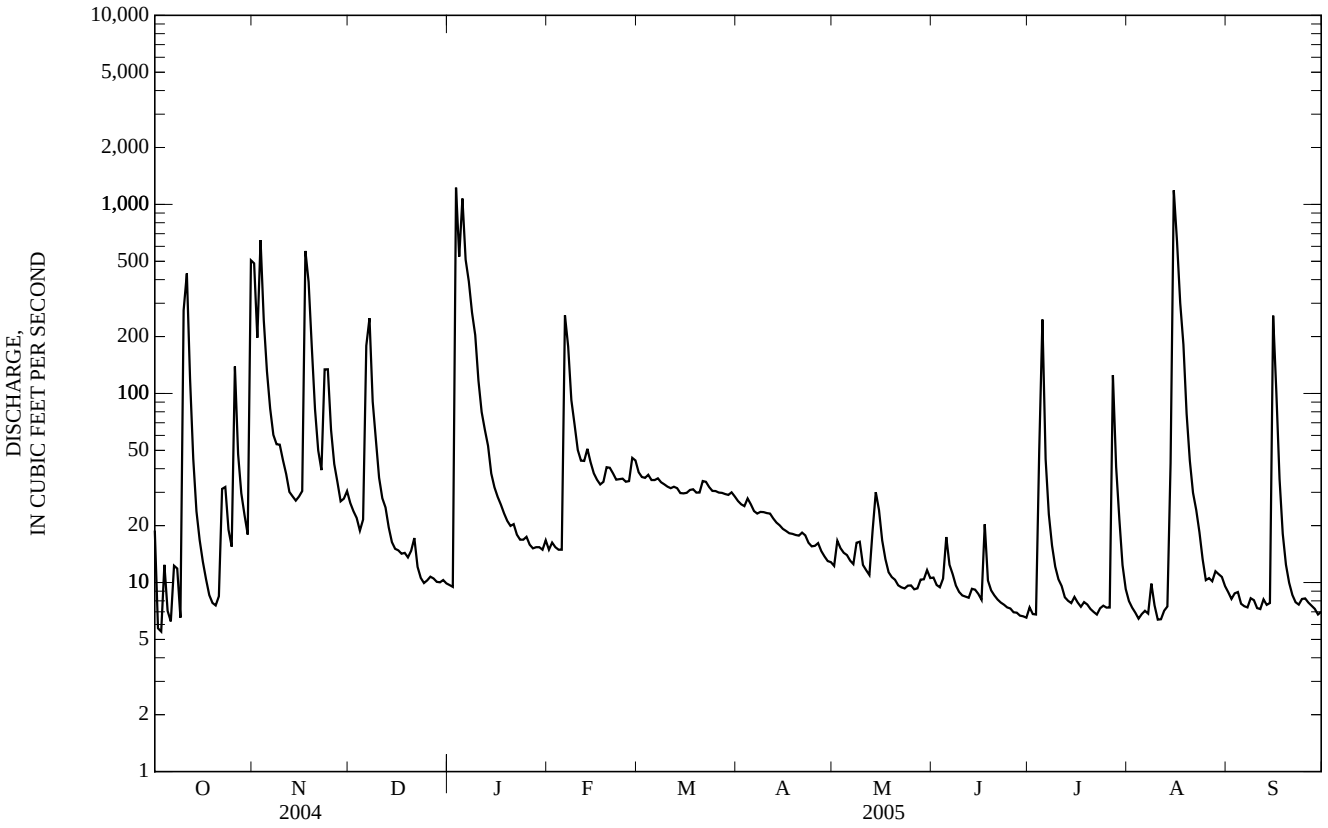
MEAN	28.8	45.2	55.3	65.1	56.1	89.1	90.3	82.7	59.2	26.5	21.3	47.6
MAX	77.3	170	210	281	243	261	390	406	211	121	88.0	213
(WY)	(1997)	(1997)	(1992)	(1998)	(2001)	(1990)	(1990)	(1990)	(1991)	(1992)	(2005)	(1993)
MIN	5.24	5.77	4.74	4.62	7.66	18.8	8.68	5.03	8.49	6.09	3.48	2.34
(WY)	(2004)	(2004)	(2004)	(2004)	(2000)	(2004)	(2004)	(2004)	(2000)	(2000)	(2000)	(2000)

e Estimated

07329852 ROCK CREEK AT SULPHUR, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1990 - 2005	
ANNUAL TOTAL	12,978.6		19,642.8			
ANNUAL MEAN	35.5		53.8		55.5	
HIGHEST ANNUAL MEAN					129	1990
LOWEST ANNUAL MEAN					10.4	2000
HIGHEST DAILY MEAN	647	Nov 3	1,230	Jan 3	3,450	May 2, 1990
LOWEST DAILY MEAN	2.5	Jun 1	5.5	Oct 3	1.9	Sep 21, 2000
ANNUAL SEVEN-DAY MINIMUM	3.4	May 26	6.8	Jun 27	2.0	Sep 16, 2000
MAXIMUM PEAK FLOW			4,270	Aug 15	a10,400	Apr 26, 1990
MAXIMUM PEAK STAGE			13.83	Aug 15	19.65	Apr 26, 1990
ANNUAL RUNOFF (AC-FT)	25,740		38,960		40,240	
10 PERCENT EXCEEDS	82		91		96	
50 PERCENT EXCEEDS	8.5		17		19	
90 PERCENT EXCEEDS	4.0		7.4		6.9	

a From indirect measurement.



07331000 WASHITA RIVER NEAR DICKSON, OK

LOCATION.--Lat 34°14'00", long 96°58'32", in SW ¼ SE ¼ 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 NGVD of 1929 (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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	7,340	3,320	e803	1,730	1,960	634	312	440	617	189	1,470
2	159	6,110	2,910	e1,120	1,760	1,640	600	312	381	618	159	1,440
3	130	8,070	2,640	30,500	1,610	1,470	577	346	362	561	140	1,330
4	129	8,320	2,400	22,300	1,080	1,340	553	363	389	540	125	1,100
5	161	5,150	2,250	16,400	971	1,090	531	370	728	753	125	978
6	374	4,140	2,400	21,700	1,790	995	531	364	1,450	1,360	144	884
7	305	3,460	5,320	11,900	5,050	931	535	359	1,400	1,110	122	813
8	210	2,820	4,750	8,310	3,540	883	516	353	1,200	756	138	750
9	165	2,480	3,430	7,090	2,770	843	503	358	794	576	152	695
10	623	2,370	3,000	6,150	2,340	792	494	749	569	476	169	652
11	6,680	2,130	2,560	5,400	2,050	742	500	551	459	414	130	630
12	5,300	1,800	2,210	4,570	1,930	696	490	427	405	383	127	610
13	3,140	1,150	2,010	4,150	1,840	673	477	410	380	336	119	593
14	2,350	987	1,830	3,660	1,840	639	460	710	422	359	350	539
15	2,920	912	1,650	2,810	1,800	623	442	945	476	302	12,300	793
16	2,250	1,000	1,530	2,490	1,730	604	430	722	518	288	12,500	3,560
17	1,580	3,950	1,430	2,240	1,630	590	416	573	2,030	248	8,400	1,870
18	1,270	12,000	1,360	2,050	1,470	569	403	491	3,230	236	6,320	1,080
19	1,100	9,160	1,290	1,890	1,460	561	403	440	2,450	242	4,540	843
20	918	7,520	1,220	1,680	1,430	547	403	404	1,940	208	3,670	1,950
21	680	7,400	1,160	1,620	1,410	816	404	380	1,590	201	3,170	1,320
22	595	6,870	1,140	1,170	1,340	775	403	400	1,590	187	2,770	973
23	642	6,570	e1,120	1,060	1,370	831	384	482	1,650	171	2,330	1,250
24	485	13,200	e1,200	994	1,340	773	365	474	1,370	157	2,040	926
25	418	9,680	e883	959	1,360	736	359	443	1,170	145	2,150	596
26	554	6,610	e963	948	1,350	723	372	408	953	137	5,200	501
27	555	5,190	e1,280	949	1,460	702	353	379	825	536	5,320	438
28	758	4,520	e1,040	959	1,890	682	332	364	764	1,280	3,950	472
29	723	4,020	e1,040	1,010	---	690	329	389	710	718	2,940	642
30	594	3,700	e883	1,050	---	667	320	379	641	377	2,200	611
31	3,020	---	e883	1,160	---	656	---	386	---	255	1,730	---
TOTAL	38,911	158,629	61,102	169,092	51,341	26,239	13,519	14,043	31,286	14,547	83,719	30,309
MEAN	1,255	5,288	1,971	5,455	1,834	846	451	453	1,043	469	2,701	1,010
MAX	6,680	13,200	5,320	30,500	5,050	1,960	634	945	3,230	1,360	12,500	3,560
MIN	123	912	883	803	971	547	320	312	362	137	119	438
AC-FT	77,180	314,600	121,200	335,400	101,800	52,050	26,810	27,850	62,060	28,850	166,100	60,120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

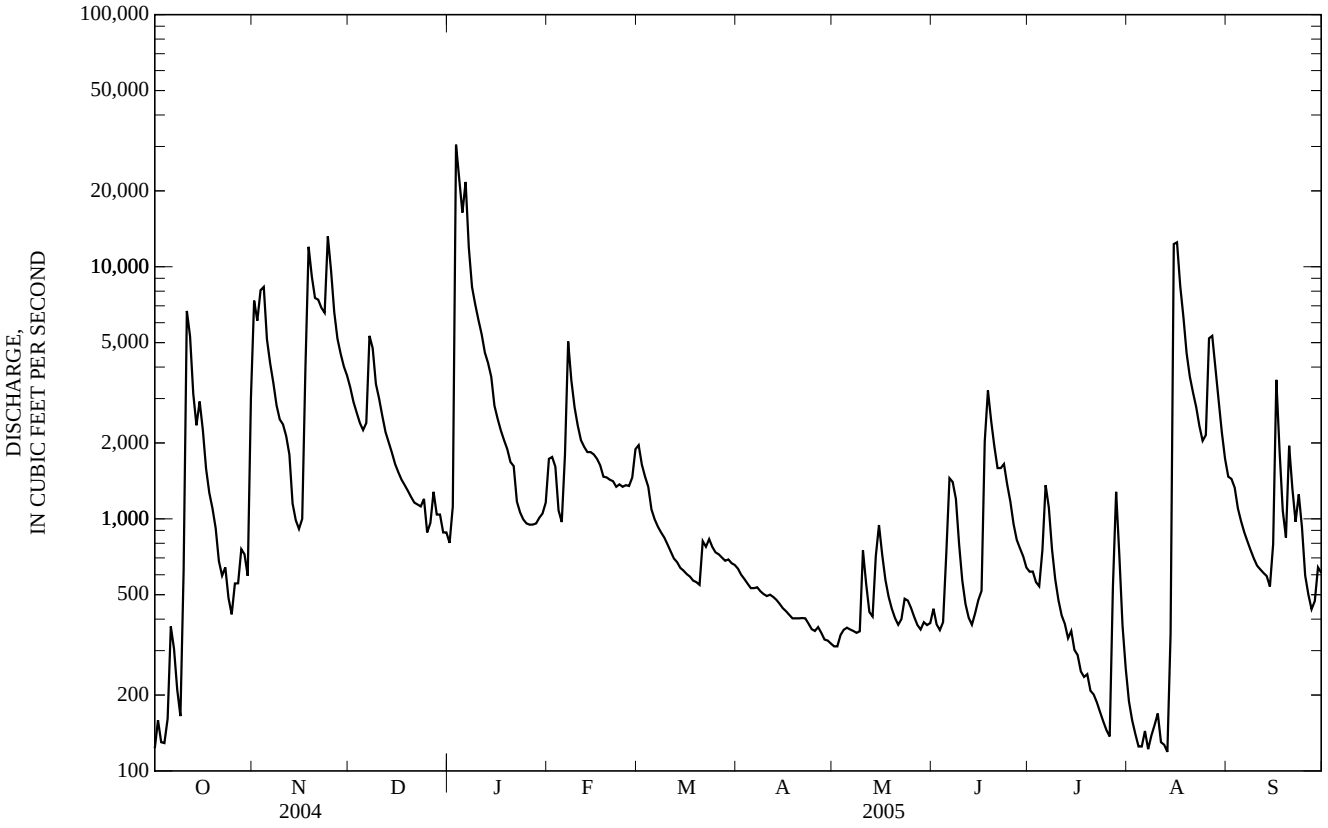
MEAN	1,468	1,647	1,403	1,316	1,530	2,351	2,409	3,815	3,388	1,023	642	1,115
MAX	8,274	5,879	9,324	6,061	6,996	10,890	15,940	18,720	14,090	4,042	3,048	5,236
(WY)	(1987)	(1987)	(1992)	(1998)	(2001)	(1990)	(1990)	(1993)	(1995)	(1987)	(1995)	(1991)
MIN	30.4	73.5	103	103	93.6	78.4	210	249	158	31.4	12.8	42.1
(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	593,835		692,737			
ANNUAL MEAN	1,622		1,898		a1,841	
HIGHEST ANNUAL MEAN					5,644	1987
LOWEST ANNUAL MEAN					340	1964
HIGHEST DAILY MEAN	13,200	Nov 24	30,500	Jan 3	94,400	May 3, 1990
LOWEST DAILY MEAN	79	Sep 29	119	Aug 13	b0.10	Aug 11, 1964
ANNUAL SEVEN-DAY MINIMUM	84	Sep 24	135	Aug 3	0.30	Aug 8, 1964
MAXIMUM PEAK FLOW			32,800	Jan 4	c118,000	May 3, 1990
MAXIMUM PEAK STAGE			23.93	Jan 4	45.24	May 30, 1987
ANNUAL RUNOFF (AC-FT)	1,178,000		1,374,000		1,334,000	
10 PERCENT EXCEEDS	5,060		4,550		4,190	
50 PERCENT EXCEEDS	656		883		710	
90 PERCENT EXCEEDS	210		317		148	

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, 1,830 microsiements, May 25; minimum, 227 microsiemens, Aug. 15.
WATER TEMPERATURE: Maximum, 36.8°C, July 22; minimum, 4.0°C, Jan. 17.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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)	Hardness, water, mg/L as CaCO3 (00900)
OCT													
06...	1320	1028	80020	10.71	436	753	8.6	97	7.7	1,580	21.9	20.3	530
NOV													
01...	0800	1028	80020	14.53	413	741	8.3	91	7.7	413	18.1	18.7	170
DEC													
06...	0800	1028	80020	12.39	2,250	746	11.2	100	7.9	892	9.0	9.0	220
JAN													
18...	1600	1028	80020	12.23	2,010	751	12.7	103	8.0	859	7.2	5.8	400
FEB													
07...	1300	1028	80020	14.13	5,250	747	11.1	101	7.7	872	7.5	10.4	360
MAR													
15...	1300	1028	80020	10.75	622	744	11.1	106	8.2	1,420	10.2	12.2	690
APR													
27...	1000	1028	80020	9.91	361	748	9.2	102	7.3	1,590	22.8	19.0	720
MAY													
23...	1040	1028	80020	10.10	499	745	7.7	102	7.9	1,530	31.5	28.5	750
JUN													
13...	1500	1028	80020	9.80	369	742	10.0	141	7.7	1,220	36.4	32.1	510
JUL													
13...	1130	1028	80020	10.02	337	749	7.2	97	8.3	1,840	35.9	29.5	900
AUG													
09...	1100	1028	80020	9.37	1,900	750	9.5	126	7.7	1,350	37.0	29.0	550
SEP													
07...	1000	1028	80020	10.68	826	754	8.1	107	8.0	1,200	39.7	29.4	570

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT													
06...	380	116	59.5	5.40	3	134	35	153	182	2	170	.5	5.2
NOV													
01...	35	50.7	10.5	4.99	.5	15.9	16	135	163	.0	16.2	.2	9.1
DEC													
06...	20	57.9	19.4	2.85	.8	25.9	20	204	245	2	52.9	.3	11.4
JAN													
18...	180	102	35.5	3.90	1	46.2	20	222	268	1	56.1	.3	9.3
FEB													
07...	170	88.2	34.8	3.90	1	44.8	21	189	E230	E.0	57.8	.3	8.7
MAR													
15...	530	156	72.4	3.63	1	86.3	21	163	E197	E.0	96.3	.5	3.5
APR													
27...	490	158	79.2	3.82	2	98.0	23	231	E281	E.0	109	.5	8.1
MAY													
23...	570	164	81.4	4.50	2	106	23	174	E210	E1	103	.5	11.5
JUN													
13...	360	113	54.1	6.09	1	73.6	24	148	175	3	88.7	.6	10.9
JUL													
13...	750	200	97.2	6.70	1	87.3	17	151	E184	E.0	80.0	.7	11.4
AUG													
09...	420	111	67.0	5.96	2	96.8	27	130	E157	E1	107	.9	11.8
SEP													
07...	440	146	50.6	7.29	1	56.2	17	135	E163	E.0	52.8	.6	13.0

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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 (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													
06...	387	969	1.32	1,140	59	1.1	--	E.007	--	--	<.016	--	<.002
NOV													
01...	46.0	236	.32	263	810	1.8	.10	.076	1.12	.25	.273	.069	.021
DEC													
06...	179	473	.64	2,870	166	.47	.03	.025	.235	.05	.055	.007	.002
JAN													
18...	165	554	.75	3,010	115	.60	.09	.067	2.12	.48	.490	.039	.012
FEB													
07...	172	526	.72	7,450	856	1.7	.05	.042	1.59	.36	.367	.026	.008
MAR													
15...	433	950	1.29	1,600	200	1.0	--	E.009	.120	.03	.034	.023	.007
APR													
27...	498	1,090	1.49	1,070	63	.83	.05	.042	.341	.08	.098	.069	.021
MAY													
23...	526	1,100	1.50	1,480	94	.88	--	E.007	.173	.04	.057	.059	.018
JUN													
13...	337	774	1.05	771	29	.94	--	E.005	.403	.09	.119	.092	.028
JUL													
13...	761	1,340	1.82	1,220	33	.86	.02	.014	.257	.06	.081	.076	.023
AUG													
09...	419	897	1.22	4,600	42	1.0	--	E.005	.336	.08	.093	.056	.017
SEP													
07...	437	849	1.15	1,890	385	1.3	.02	.019	2.97	.67	.678	.026	.008

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Organic nitro-gen, water, unfltrd mg/L (00605)	Total nitro-gen, water, unfltrd mg/L (00600)	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)	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													
06...	--	--	--	<.006	.007	.139	2.2	E2	224	246	E.02	.04	<.8
NOV													
01...	1.8	2.1	.288	.094	.112	.61	1.9	5	86	261	E.02	.19	<.8
DEC													
06...	.45	.53	--	E.003	.011	.030	1.5	3	93	213	E.03	.19	<.8
JAN													
18...	.54	1.1	.144	.047	.060	.151	1.9	2	146	180	E.03	.08	<.8
FEB													
07...	1.7	2.1	.132	.043	.059	.44	1.5	6	124	355	.75	.18	<.8
MAR													
15...	--	1.0	--	E.004	.014	.20	1.6	3	171	213	.08	.23	<.8
APR													
27...	.79	.93	.040	.013	.029	.166	1.2	3	173	169	E.02	E.04	<.8
MAY													
23...	--	.94	.046	.015	.026	.179	2.8	3	183	219	.05	.08	<.8
JUN													
13...	--	1.1	.021	.007	.023	.133	3.6	3	171	168	.05	.07	<.8
JUL													
13...	.85	.94	.135	.044	.069	.186	5.4	5	235	236	E.03	.09	<.8
AUG													
09...	--	1.1	--	<.006	.012	.080	3.7	4	158	157	E.03	.05	<.8
SEP													
07...	1.3	2.0	.285	.093	.117	.42	5.4	5.9	195	308	E.04	.10	.10

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	Nickel, water, unfltrd recover-able, ug/L (01067)
OCT													
06...	E.7	4.3	5.4	<6	710	<.08	.96	4.1	88	<.01	<.01	2.59	5.30
NOV													
01...	10.1	5.2	18.7	19	8,720	.11	12.2	3.1	496	<.01	.02	1.70	18.8
DEC													
06...	3.4	5.1	13.8	<6	2,570	.16	4.53	3.4	155	<.01	E.01	3.40	7.03
JAN													
18...	1.7	2.2	7.0	E4	1,680	.41	12.7	14.0	98	.03	.04	2.77	4.68
FEB													
07...	9.7	2.3	15.4	12	8,990	.09	13.4	12.1	644	<.01	.02	2.96	19.2
MAR													
15...	2.5	2.7	18.8	E4	2,360	.19	5.04	48.4	192	<.01	.01	3.57	8.03
APR													
27...	.9	1.7	5.2	E4	600	.15	1.30	6.1	146	<.01	<.01	<.06	5.26
MAY													
23...	1.1	2.1	9.4	<6	1,010	.09	1.75	3.9	236	<.01	<.01	7.09	5.22
JUN													
13...	<.8	2.4	5.9	E4	280	.17	.76	3.6	119	<.01	<.01	5.15	4.21
JUL													
13...	1.2	5.5	5.2	<6	560	E.06	1.21	5.9	152	<.01	<.01	8.60	8.89
AUG													
09...	1.2	3.3	2.9	<6	680	.27	1.18	3.4	108	<.01	<.01	4.62	4.33
SEP													
07...	6.0	3.5	13.0	<6	5,930	.09	6.92	.8	460	E.01	.03	4.57	14.7

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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 06...	<1	<1	<.2	<.16	1.9	5	--	--	--	--	--	--	--
NOV 01...	<1	<1	<.2	<.16	2.4	64	--	--	--	--	--	--	--
DEC 06...	<1	<1	<.2	<.16	6.0	50	<.04	<.1	<.03	17.0	<.1	<1	<.1
JAN 18...	1.0	1.8	<.2	<.16	5.9	31	--	--	--	--	--	--	--
FEB 07...	<1	<1	<.2	<.16	1.3	34	--	--	--	--	--	--	--
MAR 15...	1.2	2.3	<.2	<.16	4.0	22	--	--	--	--	--	--	--
APR 27...	1.8	2.4	<.2	<.16	2.6	6	--	--	--	--	--	--	--
MAY 23...	--	1.8	<.2	<.16	1.9	9	<.20	<.5	<.15	95.4	<.5	<5	<.5
JUN 13...	--	1.8	<.2	<.16	2.7	5	<.04	<.1	<.03	71.0	<.1	<1	<.1
JUL 13...	1.5	1.5	<.2	<.16	3.9	33	--	--	--	--	--	--	--
AUG 09...	<1	<1	<.2	<.16	3.7	6	--	--	--	--	--	--	--
SEP 07...	.65	1.4	<.2	<.16	1.9	37	<.20	<.5	<.15	79.6	<.5	<5	<.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endosulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlordane, technical, water, unfltrd ug/L (39350)	cis-Chlordane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Dieldrin, water, unfltrd ug/L (39380)	Endosulfan sulfate water unfltrd ug/L (34351)	Endrin aldehyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Heptachlor epoxide water unfltrd ug/L (39420)
OCT 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 06...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JAN 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 07...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 23...	<.5	<.5	<.5	<.20	<.15	<.5	<.5	<.45	<.10	<3.0	<1.0	<.30	<4.0
JUN 13...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	<.5	<.5	<.5	<.20	<.15	<.5	<.5	<.45	<.10	<3.0	<1.0	<.30	<4.0

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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									
06...	--	--	--	--	--	--	--	--	--
NOV									
01...	--	--	--	--	--	--	--	--	--
DEC									
06...	<.03	16.2	<.03	<.1	<.04	<.1	E18.5	<2	<.1
JAN									
18...	--	--	--	--	--	--	--	--	--
FEB									
07...	--	--	--	--	--	--	--	--	--
MAR									
15...	--	--	--	--	--	--	--	--	--
APR									
27...	--	--	--	--	--	--	--	--	--
MAY									
23...	<.15	76.1	<.15	<.5	<.20	<.5	108	<10	<.5
JUN									
13...	<.03	60.5	<.03	<.1	<.04	<.1	90.9	<2	<.1
JUL									
13...	--	--	--	--	--	--	--	--	--
AUG									
09...	--	--	--	--	--	--	--	--	--
SEP									
07...	<.15	67.7	<.15	<.5	<.20	<.5	71.4	<10	<.5

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,680	1,370	1,540	441	360	396	731	708	716	---	---	---
2	1,620	1,460	1,570	372	332	348	764	731	747	---	---	---
3	1,580	1,430	1,520	396	319	355	799	764	783	---	---	---
4	1,450	1,420	1,430	370	313	326	836	799	816	376	273	333
5	1,490	1,400	1,460	395	370	388	864	836	850	427	369	392
6	1,540	1,300	1,480	443	391	418	878	675	850	441	326	371
7	1,300	1,060	1,130	509	443	466	789	573	696	498	427	461
8	1,100	915	977	539	509	528	611	540	577	582	497	535
9	1,150	1,050	1,120	624	532	589	649	600	620	721	566	626
10	1,140	601	949	784	624	696	742	649	694	907	721	846
11	842	382	532	827	784	810	835	742	789	870	674	766
12	791	422	577	837	755	799	913	835	873	725	668	689
13	770	516	579	837	759	800	988	913	951	751	725	744
14	536	480	499	759	731	738	1,050	988	1,020	761	749	753
15	534	482	505	795	735	763	1,090	1,050	1,070	890	761	853
16	553	528	536	831	795	818	1,120	1,090	1,110	885	861	868
17	556	546	551	885	399	704	1,130	1,120	1,130	881	867	872
18	555	542	547	515	378	430	1,140	1,130	1,130	906	881	894
19	566	555	561	516	397	439	1,160	1,140	1,150	943	906	926
20	582	561	568	797	516	680	1,180	1,160	1,170	1,050	943	1,020
21	649	582	612	613	511	570	1,190	1,180	1,190	1,110	1,050	1,080
22	683	648	669	511	464	476	---	---	---	1,330	1,110	1,250
23	699	653	670	532	495	520	---	---	---	1,400	1,330	1,360
24	750	688	724	521	352	396	---	---	---	1,460	1,400	1,420
25	783	750	768	526	435	484	---	---	---	1,510	1,460	1,490
26	801	664	769	536	519	526	---	---	---	1,540	1,510	1,520
27	827	663	744	603	536	575	---	---	---	1,560	1,520	1,540
28	901	827	856	656	603	628	---	---	---	1,570	1,550	1,560
29	850	444	597	---	---	---	---	---	---	1,570	1,540	1,570
30	742	657	710	---	---	---	---	---	---	1,570	1,530	1,560
31	843	291	547	---	---	---	---	---	---	1,550	1,500	1,520

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,510	1,280	1,340	1,480	1,450	1,460	1,430	1,410	1,420	1,620	1,600	1,610
2	1,290	1,280	1,280	1,480	1,460	1,470	1,460	1,430	1,440	1,620	1,590	1,610
3	1,290	1,270	1,280	1,480	1,240	1,350	1,460	1,440	1,450	1,610	1,580	1,600
4	1,470	1,270	1,410	1,310	1,250	1,280	1,460	1,450	1,450	1,580	1,520	1,540
5	1,480	1,470	1,470	1,380	1,310	1,350	1,460	1,450	1,460	1,520	1,450	1,480
6	1,480	1,000	1,240	1,430	1,370	1,400	1,450	1,440	1,450	1,480	1,460	1,470
7	1,090	755	888	1,450	1,430	1,450	1,450	1,430	1,450	1,470	1,450	1,460
8	839	745	795	1,450	1,440	1,450	1,440	1,420	1,430	1,460	1,440	1,450
9	961	839	903	1,460	1,440	1,450	1,440	1,430	1,440	1,460	1,420	1,440
10	1,040	961	1,000	1,460	1,440	1,450	1,490	1,430	1,450	1,490	1,320	1,400
11	1,130	1,040	1,090	1,450	1,440	1,440	1,480	1,410	1,440	1,320	1,060	1,140
12	1,200	1,130	1,170	1,440	1,430	1,440	1,490	1,440	1,460	1,270	1,200	1,250
13	1,240	1,200	1,220	1,440	1,430	1,440	1,480	1,460	1,470	1,290	1,230	1,270
14	1,270	1,240	1,250	1,460	1,440	1,450	1,480	1,460	1,470	1,280	929	1,170
15	1,300	1,270	1,290	1,470	1,450	1,460	1,480	1,470	1,480	1,270	1,070	1,130
16	1,300	1,270	1,290	1,470	1,450	1,460	1,470	1,460	1,460	1,240	1,100	1,190
17	1,270	1,210	1,230	1,480	1,460	1,470	1,500	1,440	1,450	1,340	1,240	1,310
18	1,290	1,240	1,280	1,490	1,470	1,480	1,520	1,500	1,500	1,350	1,320	1,330
19	1,290	1,260	1,270	1,490	1,480	1,480	1,590	1,500	1,550	1,370	1,330	1,360
20	1,260	1,250	1,260	1,480	1,460	1,480	1,570	1,550	1,560	1,490	1,350	1,420
21	1,270	1,250	1,260	1,460	990	1,260	1,560	1,540	1,550	1,490	1,480	1,480
22	1,270	1,250	1,260	1,410	1,310	1,360	1,550	1,530	1,540	1,560	1,490	1,530
23	1,250	1,130	1,180	1,470	1,320	1,430	1,560	1,540	1,550	1,620	1,430	1,560
24	1,230	1,200	1,220	1,370	1,310	1,350	1,590	1,540	1,570	1,790	1,620	1,710
25	1,380	1,230	1,290	1,390	1,370	1,380	1,600	1,580	1,590	1,830	1,790	1,810
26	1,440	1,380	1,410	1,410	1,390	1,400	1,600	1,550	1,580	1,820	1,650	1,740
27	1,440	1,400	1,420	1,430	1,410	1,420	1,570	1,540	1,560	1,680	1,290	1,480
28	1,450	1,410	1,430	1,450	1,430	1,440	1,580	1,540	1,570	1,290	1,150	1,190
29	---	---	---	1,450	1,430	1,440	1,600	1,570	1,590	1,210	1,170	1,190
30	---	---	---	1,430	1,410	1,420	1,610	1,590	1,600	1,220	1,180	1,200
31	---	---	---	1,420	1,410	1,410	---	---	---	1,230	1,100	1,180
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,100	1,010	1,060	1,390	1,340	1,370	1,090	998	1,050	701	646	674
2	1,110	1,010	1,060	1,480	1,390	1,410	1,100	1,050	1,080	755	701	725
3	1,160	1,100	1,140	1,620	1,480	1,550	1,160	1,100	1,140	853	755	803
4	1,200	1,100	1,180	1,650	1,600	1,630	1,280	1,160	1,230	978	853	891
5	1,100	757	926	1,650	1,260	1,460	1,330	1,280	1,310	1,020	978	1,000
6	1,110	710	938	1,640	1,160	1,410	1,340	1,110	1,280	1,130	1,010	1,060
7	904	710	794	1,290	1,090	1,180	1,390	1,310	1,360	1,230	1,130	1,210
8	1,030	904	977	1,510	1,170	1,350	1,370	1,130	1,290	1,270	1,190	1,220
9	1,050	862	997	1,570	1,500	1,550	1,320	1,170	1,270	1,370	1,260	1,290
10	862	760	787	1,640	1,480	1,540	1,330	1,220	1,280	1,500	1,370	1,450
11	1,020	796	895	1,750	1,640	1,690	1,430	1,300	1,380	1,580	1,500	1,540
12	1,130	1,020	1,090	1,790	1,730	1,770	1,430	1,230	1,330	1,640	1,580	1,600
13	1,190	1,130	1,150	1,800	1,730	1,770	1,340	1,230	1,280	1,680	1,630	1,660
14	1,200	1,080	1,160	1,760	1,290	1,630	1,350	911	1,240	1,710	1,680	1,700
15	1,290	1,100	1,230	1,660	1,300	1,610	1,080	227	359	1,700	1,250	1,490
16	1,300	1,230	1,260	1,620	1,380	1,530	339	233	290	1,550	483	706
17	1,300	982	1,160	1,620	1,530	1,590	397	319	350	733	525	657
18	1,180	928	1,040	1,640	1,460	1,580	615	389	479	880	733	832
19	948	828	858	1,460	1,300	1,360	400	375	385	919	849	883
20	843	736	781	1,340	1,250	1,310	432	398	408	1,450	919	1,280
21	843	759	792	1,430	1,300	1,380	568	432	493	1,440	1,020	1,300
22	854	818	833	1,450	1,290	1,400	754	568	693	1,020	800	869
23	906	854	885	1,470	1,380	1,430	826	712	761	800	655	727
24	947	901	922	1,500	1,400	1,460	736	637	668	749	634	686
25	1,080	947	1,010	1,560	1,450	1,510	780	714	755	808	719	756
26	1,090	1,020	1,050	1,650	1,560	1,600	892	726	807	928	808	878
27	1,100	1,020	1,070	1,600	659	1,030	759	592	642	1,000	928	963
28	1,100	1,030	1,070	1,460	677	988	592	547	560	1,010	990	999
29	1,160	1,020	1,050	821	723	773	627	570	608	1,050	996	1,020
30	1,340	1,160	1,270	955	778	891	631	616	623	1,150	1,050	1,110
31	---	---	---	998	887	955	646	612	628	---	---	---

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.7	20.6	22.2	18.9	18.4	18.8	8.9	7.5	8.3	---	---	---
2	23.3	19.0	21.2	18.4	16.0	17.3	8.9	7.4	8.3	---	---	---
3	22.1	18.0	20.1	16.0	13.7	14.8	8.5	7.2	8.0	---	---	---
4	23.5	19.3	20.9	13.9	12.7	13.4	8.3	6.9	7.7	12.7	11.6	12.2
5	24.8	20.1	22.1	14.7	13.0	13.9	9.4	8.1	8.8	11.6	7.3	9.9
6	23.0	20.2	21.7	15.4	13.3	14.5	11.1	9.2	9.9	7.3	5.1	5.7
7	24.6	20.6	22.4	16.3	14.3	15.4	11.1	10.1	10.7	5.4	4.8	5.1
8	26.6	22.2	24.0	16.7	15.1	15.8	10.7	9.8	10.3	6.4	5.1	5.7
9	24.1	21.3	22.3	16.0	14.7	15.4	11.3	9.8	10.6	7.6	6.0	6.7
10	21.3	19.3	20.2	15.1	14.2	14.7	11.0	9.9	10.5	9.9	7.4	8.5
11	19.6	18.8	19.2	14.6	12.8	13.8	10.2	8.9	9.6	10.9	9.9	10.3
12	19.4	18.0	18.8	12.9	12.2	12.6	10.6	8.8	9.7	11.2	9.9	10.6
13	19.7	17.7	18.6	12.7	11.9	12.3	9.8	8.1	8.9	10.9	8.7	9.5
14	18.7	16.9	17.8	11.9	11.3	11.6	8.1	6.2	7.2	8.7	7.3	8.0
15	18.3	15.9	17.2	12.9	11.6	12.2	6.2	4.8	5.5	7.8	6.1	6.8
16	18.4	16.3	17.4	14.7	12.9	13.8	7.2	5.1	6.0	6.2	4.5	5.4
17	18.4	16.2	17.4	15.4	14.7	15.0	7.8	5.7	6.7	5.5	4.0	4.8
18	21.1	18.3	19.5	15.3	15.0	15.2	8.4	6.4	7.3	5.3	4.1	4.9
19	21.5	18.5	19.9	15.5	15.1	15.3	8.2	6.8	7.4	6.7	4.8	5.8
20	21.6	18.5	19.9	15.1	14.5	14.7	8.6	6.0	7.3	8.1	5.9	7.0
21	23.4	19.3	21.1	14.5	13.7	14.0	9.3	7.4	8.2	9.3	7.3	8.4
22	22.6	21.3	21.9	13.7	13.4	13.5	---	---	---	9.3	7.1	8.7
23	22.4	19.9	21.1	14.2	13.4	13.8	---	---	---	7.1	5.3	6.2
24	21.7	17.8	19.9	14.1	12.3	13.4	---	---	---	7.0	4.8	5.9
25	22.5	20.4	21.4	12.3	10.9	11.4	---	---	---	9.3	6.1	7.6
26	22.6	21.2	21.8	12.3	10.4	11.2	---	---	---	10.6	8.4	9.4
27	23.3	21.1	22.1	12.4	11.7	12.0	---	---	---	9.7	8.5	9.0
28	23.9	21.9	22.8	11.7	10.4	10.8	---	---	---	8.5	7.1	7.7
29	24.4	22.0	23.1	---	---	---	---	---	---	7.2	6.8	7.0
30	23.0	19.8	21.0	---	---	---	---	---	---	6.8	6.0	6.3
31	20.4	18.1	19.0	---	---	---	---	---	---	6.3	5.7	6.0
		FEBRUARY			MARCH			APRIL			MAY	
1	6.4	5.9	6.2	11.2	9.9	10.4	17.0	14.3	15.6	20.9	15.2	18.0
2	6.3	5.9	6.2	10.4	9.1	9.8	18.3	12.9	15.6	18.5	14.1	15.7
3	7.6	5.1	6.4	13.0	10.3	11.5	19.6	14.7	17.0	14.4	13.5	13.9
4	8.0	5.9	7.0	14.5	11.8	13.1	20.4	16.4	18.2	15.6	13.2	14.3
5	9.3	6.8	8.0	15.0	13.0	14.0	21.5	18.0	19.4	18.4	14.6	16.3
6	10.0	8.9	9.3	15.4	13.7	14.5	19.0	17.0	17.9	23.0	16.3	19.4
7	10.1	9.6	9.9	16.0	14.1	14.9	20.5	15.8	17.9	21.4	19.2	20.2
8	9.6	8.9	9.2	15.4	12.5	14.0	21.3	16.7	19.0	24.6	19.1	21.4
9	9.0	7.7	8.4	15.0	12.8	13.9	22.5	17.9	20.0	25.0	19.9	22.1
10	8.7	6.6	7.7	15.3	11.8	13.6	20.7	18.8	19.4	27.3	21.7	24.3
11	9.2	7.5	8.4	16.1	12.9	14.4	21.6	17.6	19.4	28.1	23.8	25.8
12	9.6	9.0	9.2	17.4	13.4	15.4	20.9	16.1	18.6	26.1	23.4	24.4
13	12.4	9.6	11.1	16.3	13.7	14.9	21.1	16.0	18.5	25.0	21.5	23.3
14	13.3	10.9	12.1	15.4	12.1	13.7	22.9	16.8	19.7	26.1	21.3	23.6
15	14.4	12.1	13.2	13.9	11.2	12.4	22.5	17.8	20.1	24.4	22.0	23.2
16	13.5	11.1	12.4	11.3	10.1	10.7	22.6	17.4	20.0	25.9	20.9	23.2
17	11.1	10.2	10.7	13.0	8.6	10.8	22.9	18.2	20.6	26.3	21.4	23.8
18	10.3	9.5	9.9	15.3	10.5	12.7	21.4	19.2	20.1	25.5	22.3	24.1
19	9.9	9.6	9.8	16.2	12.4	14.2	20.6	18.3	19.3	29.0	22.9	25.8
20	14.3	9.9	12.2	17.6	13.4	15.4	21.7	19.1	20.2	32.6	25.2	28.7
21	15.6	12.9	14.2	18.1	14.9	16.5	24.5	20.2	22.1	33.7	27.1	30.3
22	16.2	13.7	14.9	16.8	12.5	14.4	24.0	20.2	22.2	33.4	27.9	30.7
23	15.2	13.1	14.2	14.1	11.2	12.5	21.6	17.1	19.5	31.0	28.0	29.1
24	13.3	11.5	12.4	16.3	11.7	13.9	20.9	15.7	18.3	31.4	25.6	28.3
25	12.1	10.6	11.4	17.3	13.8	15.5	19.5	16.7	18.0	29.3	26.3	27.2
26	11.7	11.0	11.3	15.4	11.6	13.3	21.7	16.3	19.0	27.9	24.8	26.4
27	11.2	10.7	11.0	13.5	10.4	11.8	22.7	16.9	19.8	26.0	23.5	24.9
28	12.1	9.8	10.9	16.1	10.4	13.2	24.7	18.2	21.3	24.6	22.4	23.4
29	---	---	---	17.0	13.9	15.6	22.4	17.4	19.9	24.0	22.0	23.0
30	---	---	---	20.1	15.2	17.5	20.9	15.0	17.7	26.8	22.5	24.3
31	---	---	---	18.2	16.2	17.2	---	---	---	28.0	23.3	25.2

07331000 WASHITA RIVER NEAR DICKSON, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	28.7	23.4	25.8	31.5	28.3	29.9	34.3	27.3	30.7	30.8	26.8	28.7
2	30.5	24.5	27.4	31.5	27.2	29.3	35.1	28.5	31.7	30.8	27.6	29.1
3	29.2	26.1	27.6	33.7	27.6	30.5	35.0	28.8	31.7	30.6	27.5	29.0
4	29.9	25.2	27.4	31.3	26.6	28.5	35.6	29.2	31.9	30.4	27.3	28.7
5	28.3	23.2	25.9	29.0	25.1	27.1	33.3	28.5	30.2	29.7	26.0	27.8
6	28.8	25.7	27.2	30.1	27.0	28.5	32.7	26.3	29.2	29.5	25.3	27.4
7	30.2	26.6	28.2	29.8	27.6	28.6	33.6	27.8	30.1	29.6	25.8	27.6
8	31.2	27.3	29.1	32.3	26.9	29.4	32.1	27.1	29.2	29.9	25.6	27.7
9	31.7	27.9	29.6	32.9	28.0	30.3	33.4	26.6	29.7	29.3	25.3	27.4
10	31.1	27.9	29.4	33.8	28.0	30.8	33.0	27.7	30.3	28.6	24.8	26.8
11	31.5	27.0	29.1	34.7	28.6	31.6	33.7	27.8	30.5	27.7	25.8	26.8
12	31.3	27.5	29.4	35.9	29.4	32.5	34.0	28.0	30.6	29.0	25.6	27.1
13	32.4	26.9	29.3	34.8	29.6	32.1	33.9	28.2	30.6	30.4	25.9	28.1
14	31.6	26.1	28.7	33.1	28.4	30.2	30.1	26.6	27.8	31.0	27.2	28.9
15	30.8	26.2	28.6	30.4	27.2	28.6	26.7	24.3	24.8	29.3	25.9	27.3
16	31.7	26.4	29.0	31.9	26.3	28.8	25.0	24.6	24.8	27.0	23.5	25.0
17	30.1	25.1	27.9	33.3	27.6	30.2	26.6	24.3	25.4	26.6	23.1	24.8
18	28.6	26.7	27.8	32.6	28.1	29.9	28.2	26.2	27.1	29.4	25.2	27.0
19	29.5	26.9	28.1	34.0	27.4	30.4	29.1	26.9	27.9	30.7	26.2	28.3
20	30.2	27.0	28.6	35.0	28.9	31.8	29.8	27.3	28.5	30.0	27.4	28.6
21	30.8	27.4	29.1	35.9	29.1	32.3	30.0	27.5	28.7	30.4	27.3	28.8
22	31.0	27.8	29.3	36.8	29.9	33.3	30.5	27.7	29.0	30.5	26.9	28.6
23	31.3	28.2	29.7	36.5	30.6	33.5	30.6	28.0	29.2	28.8	26.5	27.4
24	31.7	28.4	30.0	35.3	30.0	32.5	30.8	27.7	29.2	27.6	25.3	26.4
25	32.3	28.6	30.4	33.9	29.4	31.4	31.2	28.0	29.4	29.7	25.1	27.2
26	32.6	28.8	30.7	33.8	27.5	30.6	30.6	29.0	29.8	29.9	26.0	27.9
27	32.8	28.7	30.7	30.9	24.2	26.2	30.3	27.5	29.0	30.2	25.7	27.8
28	32.9	28.6	30.7	28.1	24.4	26.1	28.6	26.4	27.5	30.9	26.2	28.2
29	32.9	28.5	30.7	30.8	25.1	27.8	28.8	26.7	27.8	26.2	21.9	23.7
30	33.4	28.7	31.0	32.7	25.9	29.2	29.4	26.6	27.9	24.5	20.6	22.5
31	---	---	---	33.6	27.0	30.2	30.2	26.6	28.3	---	---	---

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 left 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 NAVD of 1988.

REMARKS.--No estimated daily discharge. Records good. Small diversions for Tishomingo National Fish Hatchery. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	197	59	48	79	64	46	34	28	22	19	17
2	17	75	58	49	82	64	45	36	27	22	18	17
3	18	232	56	1,170	76	63	45	35	27	22	18	17
4	25	100	56	218	74	63	45	34	27	33	18	17
5	24	78	59	451	74	61	45	34	68	55	19	17
6	23	71	73	220	127	61	44	33	37	36	19	17
7	18	66	95	173	112	60	43	32	34	27	19	16
8	16	63	74	153	92	59	44	32	32	26	32	16
9	16	60	70	144	86	58	43	34	34	24	21	16
10	32	59	65	138	81	57	44	33	30	23	19	18
11	61	57	63	133	82	56	45	31	28	24	17	17
12	39	56	62	131	87	55	41	29	27	22	17	18
13	30	55	60	132	89	54	40	29	30	22	16	18
14	28	53	58	115	78	53	38	36	30	22	24	18
15	27	54	58	112	74	52	38	29	27	22	75	77
16	27	53	58	108	74	52	38	28	26	22	46	29
17	28	103	58	106	74	51	38	28	37	22	35	19
18	27	145	57	104	74	51	37	28	27	22	26	18
19	28	86	56	102	76	50	38	28	26	22	23	19
20	27	76	56	99	76	50	37	27	25	21	22	17
21	26	72	55	97	73	81	38	26	24	21	21	18
22	28	68	53	93	69	58	37	28	24	20	21	16
23	26	76	52	87	71	53	35	30	24	20	20	17
24	26	70	51	87	69	52	35	27	23	20	20	16
25	29	66	51	86	66	52	41	27	23	23	20	16
26	29	66	51	84	66	51	40	25	23	19	20	16
27	25	64	49	81	70	52	36	24	23	21	19	15
28	24	62	49	82	67	50	36	26	23	19	19	15
29	26	63	49	81	---	50	35	30	22	19	20	16
30	25	61	49	79	---	48	34	49	22	19	19	16
31	212	---	48	83	---	47	---	30	---	18	18	---
TOTAL	1,013	2,407	1,808	4,846	2,218	1,728	1,201	952	858	730	720	579
MEAN	32.7	80.2	58.3	156	79.2	55.7	40.0	30.7	28.6	23.5	23.2	19.3
MAX	212	232	95	1,170	127	81	46	49	68	55	75	77
MIN	16	53	48	48	66	47	34	24	22	18	16	15
AC-FT	2,010	4,770	3,590	9,610	4,400	3,430	2,380	1,890	1,700	1,450	1,430	1,150

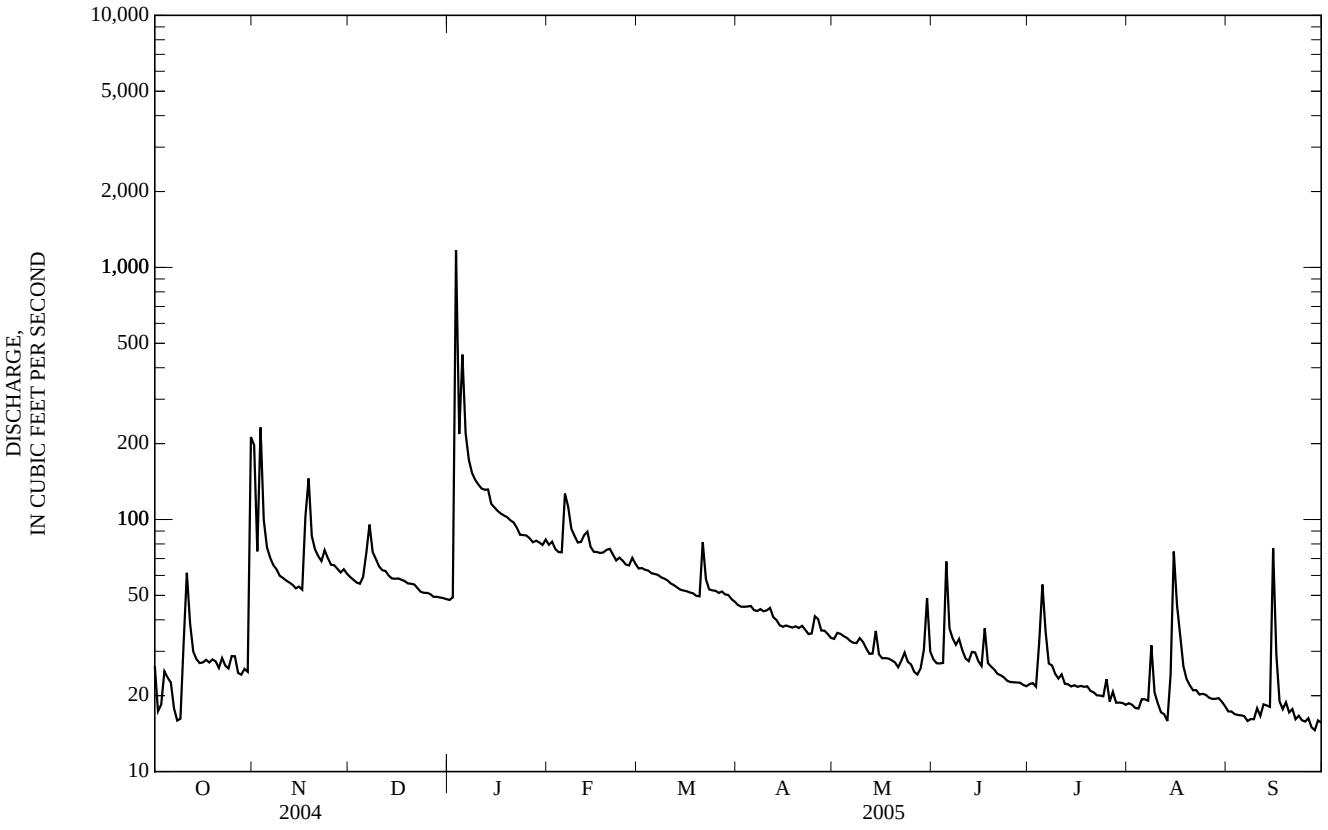
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2005, BY WATER YEAR (WY)

MEAN	29.4	49.8	36.6	88.0	53.2	48.9	33.9	25.5	25.3	26.1	23.8	19.2
MAX	32.7	80.2	58.3	156	79.2	55.7	40.0	30.7	28.6	28.6	24.5	19.3
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2004)	(2004)	(2005)
MIN	26.2	19.4	14.8	19.7	28.1	42.1	27.7	20.4	22.0	23.5	23.2	19.2
(WY)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2004)	(2005)	(2005)	(2004)

07331300 PENNINGTON CREEK NEAR REAGAN, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 2004 - 2005	
ANNUAL TOTAL	12,305		19,060			
ANNUAL MEAN	33.6		52.2		38.3	
HIGHEST ANNUAL MEAN					52.2	2005
LOWEST ANNUAL MEAN					24.4	2004
HIGHEST DAILY MEAN	232	Nov 3	1,170	Jan 3	1,170	Jan 3, 2005
LOWEST DAILY MEAN	14	Jan 14	15	Sep 27,28	9.9	Dec 11, 2003
ANNUAL SEVEN-DAY MINIMUM	15	Jan 9	16	Sep 24	13	Dec 6, 2003
MAXIMUM PEAK FLOW			3,480	Jan 3	3,480	Jan 3, 2005
MAXIMUM PEAK STAGE			14.60	Jan 3	a14.60	Jan 3, 2005
ANNUAL RUNOFF (AC-FT)	24,410		37,810		27,740	
10 PERCENT EXCEEDS	60		86		71	
50 PERCENT EXCEEDS	26		37		26	
90 PERCENT EXCEEDS	19		18		17	

a From high-water mark.



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 fair 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,680	1,720	15,300	5,790	5,840	5,900	5,190	47	1,660	1,840	2,460	2,330
2	171	1,720	12,800	5,890	5,860	5,850	4,730	2,510	1,560	130	2,440	2,240
3	2,360	1,750	11,600	6,370	5,840	5,880	4,710	2,500	1,560	45	2,460	1,540
4	2,790	1,690	10,600	3,640	5,870	5,850	5,020	2,530	192	1,720	2,510	1,500
5	2,370	1,680	10,500	158	5,870	5,850	5,250	2,490	45	1,870	2,480	2,240
6	2,630	3,060	10,500	7,350	5,910	5,840	3,140	2,510	1,400	140	1,310	2,260
7	2,650	205	9,090	13,900	5,860	5,880	2,960	308	1,540	888	1,170	2,250
8	2,570	2,500	5,760	13,900	5,860	5,860	3,000	47	1,530	2,060	2,730	2,250
9	168	2,670	5,670	13,900	5,830	5,840	2,830	2,050	1,540	157	2,490	2,270
10	72	1,620	5,640	13,900	5,830	5,860	2,830	2,290	1,540	44	2,080	1,570
11	4,590	1,590	5,680	13,900	5,830	5,890	3,530	2,530	184	1,670	2,490	1,540
12	4,760	2,610	5,670	13,900	5,870	5,880	2,950	2,540	42	1,770	2,550	2,240
13	5,150	249	5,680	13,800	5,830	5,890	2,950	2,530	1,410	1,770	1,560	2,290
14	4,960	48	5,670	13,900	5,810	5,930	2,950	1,450	1,520	1,830	1,470	2,320
15	4,960	2,400	5,720	13,900	5,830	5,960	2,950	1,290	1,530	1,680	1,760	2,250
16	495	1,930	5,690	13,800	5,800	5,960	2,770	2,620	1,730	133	1,750	2,250
17	65	2,140	5,690	14,000	5,840	5,950	2,780	2,540	1,670	46	1,750	1,580
18	2,590	4,490	5,690	13,900	5,860	5,950	2,970	2,540	1,070	1,720	2,930	1,510
19	3,200	14,600	5,700	12,300	5,860	5,960	2,980	1,950	1,030	1,300	3,090	2,230
20	3,210	18,400	5,700	8,500	5,820	6,010	2,960	2,170	1,730	1,800	1,360	2,240
21	5,220	18,400	5,710	5,850	5,810	6,020	3,420	2,300	1,530	2,050	1,180	2,240
22	5,440	18,400	5,700	5,810	5,840	5,930	3,480	2,210	2,000	2,050	2,830	2,250
23	679	18,600	5,720	5,850	5,900	5,980	2,770	2,530	2,240	143	3,000	2,260
24	65	18,500	5,720	5,850	5,830	5,010	1,560	2,510	1,810	51	3,280	1,560
25	4,710	18,500	5,720	5,800	5,850	4,980	3,130	2,540	148	2,830	3,350	1,440
26	5,260	18,500	5,760	5,820	5,860	4,980	2,780	1,540	41	3,090	3,130	2,850
27	5,680	18,400	5,740	5,860	5,860	4,970	2,990	1,530	1,670	2,640	2,200	2,990
28	5,680	18,500	5,750	5,860	5,830	4,760	2,990	305	1,780	3,100	2,170	2,990
29	5,660	18,700	5,770	5,830	---	4,970	2,980	44	2,030	3,040	3,030	2,990
30	624	18,500	5,770	5,900	---	4,960	418	1,290	2,030	3,120	3,170	3,020
31	72	---	5,750	5,810	---	4,970	---	1,560	---	2,980	3,200	---
TOTAL	91,531	252,072	217,460	280,938	163,700	175,520	95,968	57,801	39,762	47,707	73,380	65,490
MEAN	2,953	8,402	7,015	9,063	5,846	5,662	3,199	1,865	1,325	1,539	2,367	2,183
MAX	5,680	18,700	15,300	14,000	5,910	6,020	5,250	2,620	2,240	3,120	3,350	3,020
MIN	65	48	5,640	158	5,800	4,760	418	44	41	44	1,170	1,440
AC-FT	181,600	500,000	431,300	557,200	324,700	348,100	190,400	114,600	78,870	94,630	145,500	129,900

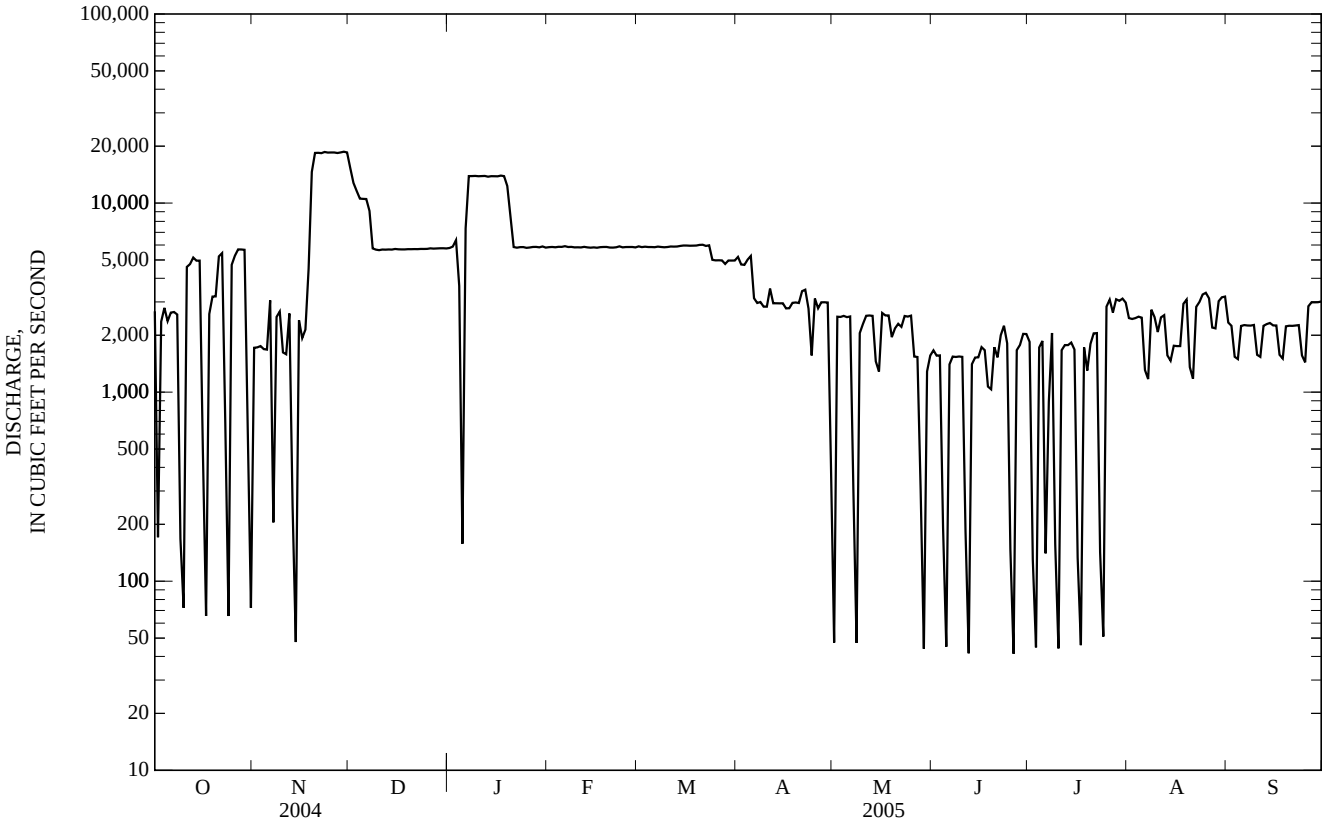
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	4,614	3,691	3,458	3,802	3,571	4,643	4,835	7,184	10,650	5,374	3,500	2,582
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	1,325	1,539	953	325
(WY)	(1957)	(1957)	(1981)	(1945)	(1945)	(1976)	(1978)	(1959)	(2005)	(2005)	(1972)	(1984)

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	1,275,738		1,561,329			
ANNUAL MEAN	3,486		4,278		a4,772	
HIGHEST ANNUAL MEAN					16,030	1987
LOWEST ANNUAL MEAN					1,510	1964
HIGHEST DAILY MEAN	18,700	Nov 29	18,700	Nov 29	96,200	Jun 5, 1957
LOWEST DAILY MEAN	48	Nov 14	41	Jun 26	16	Feb 16, 2003
ANNUAL SEVEN-DAY MINIMUM	901	Jan 1	948	Jul 1	25	Mar 8, 2000
MAXIMUM PEAK FLOW			19,300	Nov 23	b102,000	Jun 5, 1957
MAXIMUM PEAK STAGE			14.01	Nov 23	c26.26	Jun 5, 1957
ANNUAL RUNOFF (AC-FT)	2,530,000		3,097,000		3,457,000	
10 PERCENT EXCEEDS	6,920		6,010		10,500	
50 PERCENT EXCEEDS	2,620		2,960		2,760	
90 PERCENT EXCEEDS	138		1,050		186	

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, 2,080 microsiemens Sept. 27, 28, 29; minimum, 1,190 microsiemens Oct. 1.
WATER TEMPERATURE: Maximum, 28.7°C July 3; minimum, 6.8°C Jan. 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

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)	Hardness, water, mg/L as CaCO3 (00900)
OCT													
05...	1430	1028	80020	4.84	91	755	8.6	108	8.2	1,740	27.1	25.8	340
NOV													
01...	0950	1028	80020	5.20	439	741	7.0	81	7.6	1,760	18.8	20.9	360
DEC													
07...	1050	1028	80020	10.60	11,400	751	9.6	95	7.9	1,760	11.5	13.8	340
JAN													
19...	0730	1028	80020	12.22	13,700	753	12.1	104	7.9	1,540	3.5	7.9	340
FEB													
08...	0800	1028	80020	8.72	5,830	738	11.5	101	8.1	1,560	3.1	8.0	330
MAR													
14...	1730	1028	80020	8.81	6,020	750	11.0	102	7.6	1,570	13.7	11.1	350
APR													
27...	1800	1028	80020	8.78	5,960	743	8.6	97	8.2	1,670	16.7	19.6	360
MAY													
23...	1700	1028	80020	5.20	464	747	14.1	174	8.3	1,780	35.6	24.6	380
JUN													
13...	2030	1028	80020	8.78	5,930	747	4.3	53	7.4	1,800	33.5	24.3	390
JUL													
13...	0730	1028	80020	4.96	197	752	7.9	94	7.6	2,030	29.7	23.1	410
AUG													
09...	1930	1028	80020	8.92	6,240	750	3.1	40	7.5	1,980	35.1	27.6	430
SEP													
07...	1900	1028	80020	7.41	3,890	750	5.5	71	7.5	2,040	29.7	27.6	410

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Noncarb hard-ness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)	Sodium, percent (00932)	Alka-linity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicar-bonate, wat flt incrm. titr., field, mg/L (00453)	Carbon-ate, wat flt incrm. titr., field, mg/L (00452)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)
OCT 05...	220	84.3	30.7	5.65	5	224	59	115	134	3	339	.3	5.7
NOV 01...	250	92.5	31.6	6.32	5	228	57	108	131	.0	349	.3	6.0
DEC 07...	230	86.1	30.6	6.02	5	225	58	107	128	.0	365	.3	2.8
JAN 19...	220	87.7	29.6	5.88	5	206	56	116	E142	E.0	312	.3	5.3
FEB 08...	210	84.3	28.0	5.87	5	194	56	116	141	.0	300	.3	6.2
MAR 14...	230	90.1	29.4	5.56	5	196	55	120	E145	E1	299	.3	6.8
APR 27...	240	92.7	31.4	5.65	5	197	54	124	148	2	306	.3	6.7
MAY 23...	220	94.3	36.1	5.87	5	237	57	163	E190	E4	347	.3	6.4
JUN 13...	260	96.3	35.7	5.67	5	214	54	131	157	1	352	.3	8.1
JUL 13...	280	105	36.1	5.59	5	216	53	136	E164	E.0	362	.3	8.2
AUG 09...	290	107	38.6	6.27	5	250	56	133	161	E.0	390	.3	8.8
SEP 07...	280	104	37.3	5.97	5	244	56	135	E164	E.0	395	.3	9.3

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)	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 (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 05...	234	994	1.35	244	<10	.41	.02	.013	.186	.04	.044	.007	.002
NOV 01...	234	1,010	1.38	1,200	<10	.43	.04	.034	.987	.22	.270	.154	.047
DEC 07...	226	1,010	1.37	31,000	<10	.35	.02	.018	.753	.17	.173	.010	.003
JAN 19...	197	915	1.24	33,800	<10	.46	.08	.066	.925	.21	.226	.056	.017
FEB 08...	188	878	1.19	13,800	<10	.41	.07	.052	1.28	.29	.305	.049	.015
MAR 14...	190	892	1.21	14,500	<10	.48	.02	.017	1.48	.33	.345	.033	.010
APR 27...	204	920	1.25	14,800	<10	.44	.07	.057	1.09	.25	.257	.036	.011
MAY 23...	234	1,060	1.44	1,330	<10	.46	.07	.053	.602	.14	.179	.141	.043
JUN 13...	231	1,020	1.39	16,400	<10	.47	.04	.030	1.54	.35	.356	.023	.007
JUL 13...	233	1,050	1.43	558	<10	.57	.20	.153	--	--	E.013	.010	.003
AUG 09...	245	1,130	1.53	19,000	<10	.62	.30	.232	--	--	<.016	--	E.001
SEP 07...	247	1,130	1.53	11,800	<10	1.0	.73	.566	--	--	<.016	--	E.001

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Organic nitro-gen, water, unfltrd mg/L (00605)	Total nitro-gen, water, unfltrd mg/L (00600)	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)	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 05...	.40	.46	.025	.008	.013	.027	2.1	E2	121	121	<.20	<.04	<.8
NOV 01...	.39	.70	.064	.021	.029	.044	1.6	E2	140	141	<.04	<.04	<.8
DEC 07...	.33	.52	.021	.007	.013	.054	1.9	E1	131	133	<.04	<.04	1.0
JAN 19...	.39	.68	.043	.014	.032	.048	1.9	2	131	130	<.04	E.02	<.8
FEB 08...	.36	.72	.080	.026	.038	.051	1.7	E2	118	131	E.02	E.02	<.8
MAR 14...	.46	.82	.067	.022	.035	.061	1.8	E2	135	124	E.02	<.04	<.8
APR 27...	.39	.70	.049	.016	.027	.044	1.7	E2	138	124	<.04	E.04	<.8
MAY 23...	.41	.64	.049	.016	.030	.045	2.8	E2	135	123	E.02	<.04	<.8
JUN 13...	.44	.83	.120	.039	.058	.069	2.3	E1	133	125	E.03	E.02	<.8
JUL 13...	.42	--	.405	.132	.155	.185	3.1	2	144	137	<.04	.14	<.8
AUG 09...	.39	--	.304	.099	.127	.140	3.2	2	136	127	<.04	E.02	<.8
SEP 07...	.46	--	.432	.141	.167	.194	3.4	3.4	137	134	E.03	E.03	.07

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	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)	Nickel, water, unfltrd recover-able, ug/L (01067)
OCT 05...	<.8	3.2	3.6	<6	50	<.40	.18	2.8	23	<.01	<.01	1.51	2.87
NOV 01...	<.8	2.0	5.5	<6	190	<.08	.34	27.2	101	<.01	<.01	.58	3.73
DEC 07...	<.8	1.6	5.6	<6	80	.09	.37	1.0	19	<.01	<.01	4.07	3.35
JAN 19...	<.8	1.7	4.5	<6	120	E.06	.55	.8	18	<.01	<.01	2.38	2.89
FEB 08...	<.8	1.8	3.1	E4	90	E.06	.21	.9	14	<.01	<.01	2.50	2.69
MAR 14...	<.8	1.7	7.0	<6	70	E.05	.17	1.0	19	<.01	<.01	2.40	3.55
APR 27...	<.8	1.5	3.3	E4	80	.14	.24	1.1	14	<.01	<.01	.19	3.28
MAY 23...	<.8	1.7	4.0	E4	70	<.08	.14	25.3	49	<.01	<.01	4.80	2.96
JUN 13...	<.8	2.0	4.1	<6	50	<.08	.08	101	118	<.01	<.01	4.92	3.25
JUL 13...	E.6	1.6	1.8	7	60	<.08	.39	473	597	<.01	<.01	5.02	4.71
AUG 09...	<.8	1.7	1.1	24	60	<.08	.08	422	401	<.01	<.01	4.36	2.69
SEP 07...	.14	1.3	2.1	40	110	E.05	.22	439	480	.01	E.01	3.70	2.71

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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 05...	<1	1	<1.0	<.16	E1.7	4	--	--	--	--	--	--	--
NOV 01...	<1	<1	<.2	<.16	2.3	4	--	--	--	--	--	--	--
DEC 07...	<1	<1	<.2	<.16	1.9	3	<.04	<.1	<.03	18.7	<.1	<1	<.1
JAN 19...	1.0	1.1	<.2	<.16	1.2	5	--	--	--	--	--	--	--
FEB 08...	<1	<1	<.2	<.16	1.3	E2	--	--	--	--	--	--	--
MAR 14...	.7	1.5	<.2	<.16	1.6	E2	--	--	--	--	--	--	--
APR 27...	1.4	2.1	<.2	<.16	3.2	4	--	--	--	--	--	--	--
MAY 23...	3.2	1.7	<.2	<.16	2.1	4	<.20	<.5	<.15	74.9	<.5	<5	<.5
JUN 13...	--	1.6	<.2	<.16	2.0	3	<.04	<.1	<.03	59.8	<.1	<1	<.1
JUL 13...	<1	<1	<.2	<.16	1.8	9	--	--	--	--	--	--	--
AUG 09...	<1	<1	<.2	<.16	1.1	E2	--	--	--	--	--	--	--
SEP 07...	.23	.7	<.2	<.16	2.7	12	<.20	<.5	<.15	90.3	<.5	<5	<.5

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Aroclor 1248, water, unfltrd ug/L (39500)	Aroclor 1254, water, unfltrd ug/L (39504)	Aroclor 1260, water, unfltrd ug/L (39508)	beta-Endosulfan, water, unfltrd ug/L (34356)	beta-HCH, water, unfltrd ug/L (39338)	Chlordane, technical, water, unfltrd ug/L (39350)	cis-Chlordane, water, unfltrd ug/L (39062)	delta-HCH, water, unfltrd ug/L (34259)	Dieldrin, water, unfltrd ug/L (39380)	Endosulfan sulfate water unfltrd ug/L (34351)	Endrin aldehyde, water, unfltrd ug/L (34366)	Endrin, water, unfltrd ug/L (39390)	Heptachlor epoxide water unfltrd ug/L (39420)
OCT 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 01...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 07...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JAN 19...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 08...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 23...	<.5	<.5	<.5	<.20	<.15	<.5	<.5	<.45	<.10	<3.0	<1.0	<.30	<4.0
JUN 13...	<.1	<.1	<.1	<.04	<.03	<.1	<.1	<.09	<.02	<.6	<.2	<.06	<.8
JUL 13...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 07...	<.5	<.5	<.5	<.20	<.15	<.5	<.5	<.45	<.10	<3.0	<1.0	<.30	<4.0

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—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									
05...	--	--	--	--	--	--	--	--	--
NOV									
01...	--	--	--	--	--	--	--	--	--
DEC									
07...	<.03	18.1	<.03	<.1	<.04	<.1	22.6	<2	<.1
JAN									
19...	--	--	--	--	--	--	--	--	--
FEB									
08...	--	--	--	--	--	--	--	--	--
MAR									
14...	--	--	--	--	--	--	--	--	--
APR									
27...	--	--	--	--	--	--	--	--	--
MAY									
23...	<.15	68.6	<.15	<.5	<.20	<.5	90.6	<10	<.5
JUN									
13...	<.03	45.3	<.03	<.1	<.04	<.1	77.9	<2	<.1
JUL									
13...	--	--	--	--	--	--	--	--	--
AUG									
09...	--	--	--	--	--	--	--	--	--
SEP									
07...	<.15	64.0	<.15	<.5	<.20	<.5	97.4	<10	<.5

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,780	1,190	1,710	1,780	1,260	1,660	1,770	1,760	1,770	1,640	1,620	1,630
2	1,780	1,760	1,770	1,780	1,630	1,750	1,770	1,760	1,760	1,630	1,470	1,610
3	1,780	1,760	1,780	1,740	1,480	1,690	1,770	1,760	1,770	1,620	1,590	1,610
4	1,780	1,390	1,710	1,740	1,690	1,730	1,770	1,760	1,770	1,630	1,610	1,620
5	1,780	1,750	1,770	1,750	1,700	1,730	1,770	1,750	1,760	1,640	1,500	1,590
6	1,770	1,740	1,760	1,760	1,730	1,740	1,750	1,720	1,740	1,620	1,610	1,620
7	1,770	1,750	1,760	1,760	1,700	1,730	1,750	1,730	1,740	1,620	1,620	1,620
8	1,770	1,760	1,760	1,760	1,740	1,750	1,740	1,720	1,720	1,630	1,620	1,620
9	1,770	1,680	1,740	1,760	1,740	1,750	1,730	1,720	1,720	1,640	1,630	1,630
10	1,750	1,580	1,710	1,760	1,700	1,750	1,730	1,720	1,720	1,640	1,630	1,630
11	1,760	1,670	1,740	1,760	1,730	1,750	1,730	1,720	1,730	1,650	1,630	1,630
12	1,760	1,750	1,760	1,770	1,750	1,760	1,730	1,720	1,720	1,670	1,650	1,660
13	1,770	1,740	1,760	1,760	1,740	1,750	1,730	1,720	1,720	1,650	1,630	1,650
14	1,770	1,750	1,760	1,760	1,750	1,750	1,720	1,720	1,720	1,650	1,650	1,650
15	1,770	1,740	1,760	1,760	1,750	1,760	1,720	1,720	1,720	1,650	1,650	1,650
16	1,770	1,720	1,750	1,770	1,730	1,760	1,720	1,700	1,720	1,650	1,640	1,650
17	1,760	1,740	1,760	1,800	1,460	1,740	1,700	1,690	1,700	1,640	1,600	1,620
18	1,780	1,760	1,760	1,800	1,740	1,780	1,700	1,690	1,690	1,620	1,600	1,610
19	1,780	1,760	1,770	1,800	1,780	1,780	1,690	1,690	1,690	1,600	1,590	1,600
20	1,780	1,750	1,770	1,800	1,780	1,790	1,690	1,690	1,690	1,590	1,580	1,580
21	1,780	1,760	1,770	1,810	1,790	1,800	1,690	1,670	1,680	1,580	1,580	1,580
22	1,780	1,760	1,770	1,800	1,780	1,790	1,680	1,670	1,680	1,600	1,580	1,590
23	1,770	1,740	1,760	1,810	1,780	1,800	1,680	1,660	1,670	1,590	1,580	1,590
24	1,770	1,750	1,760	1,790	1,770	1,780	1,670	1,650	1,660	1,590	1,590	1,590
25	1,770	1,750	1,760	1,800	1,790	1,790	1,650	1,640	1,640	1,590	1,590	1,590
26	1,770	1,750	1,760	1,790	1,790	1,790	1,640	1,630	1,630	1,590	1,580	1,580
27	1,760	1,720	1,740	1,790	1,790	1,790	1,640	1,620	1,630	1,580	1,570	1,570
28	1,730	1,700	1,720	1,790	1,760	1,780	1,620	1,620	1,620	1,580	1,570	1,570
29	1,810	1,720	1,750	1,760	1,740	1,760	1,640	1,620	1,620	1,580	1,560	1,570
30	1,840	1,580	1,780	1,770	1,760	1,770	1,640	1,620	1,630	1,560	1,560	1,560
31	1,920	1,330	1,860	---	---	---	1,640	1,620	1,640	1,560	1,560	1,560

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 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1,570	1,550	1,560	1,670	1,610	1,640	1,650	1,640	1,640	1,670	1,640	1,650
2	1,560	1,550	1,560	1,650	1,620	1,630	1,650	1,630	1,640	1,690	1,660	1,680
3	1,560	1,550	1,560	1,640	1,610	1,630	1,650	1,630	1,640	1,690	1,670	1,680
4	1,560	1,550	1,550	1,710	1,610	1,660	1,640	1,640	1,640	1,710	1,680	1,700
5	1,560	1,550	1,550	1,720	1,670	1,700	1,650	1,600	1,640	1,710	1,700	1,700
6	1,560	1,540	1,550	1,750	1,670	1,700	1,640	1,620	1,640	1,700	1,680	1,700
7	1,570	1,550	1,560	1,790	1,640	1,730	1,650	1,640	1,650	1,700	1,670	1,690
8	1,560	1,550	1,560	1,660	1,610	1,630	1,660	1,650	1,650	1,690	1,670	1,680
9	1,560	1,550	1,550	1,670	1,550	1,600	1,660	1,640	1,650	1,690	1,680	1,690
10	1,560	1,550	1,550	1,630	1,570	1,600	1,660	1,570	1,650	1,690	1,670	1,680
11	1,550	1,550	1,550	1,610	1,570	1,590	1,660	1,650	1,660	1,690	1,670	1,680
12	1,620	1,550	1,570	1,670	1,580	1,600	1,670	1,650	1,660	1,690	1,670	1,680
13	1,660	1,600	1,620	1,680	1,580	1,620	1,680	1,650	1,670	1,710	1,690	1,700
14	1,660	1,630	1,640	1,580	1,570	1,580	1,680	1,650	1,670	1,710	1,680	1,700
15	1,670	1,620	1,640	1,590	1,580	1,590	1,680	1,660	1,670	1,700	1,670	1,690
16	1,670	1,590	1,620	1,590	1,590	1,590	1,680	1,660	1,670	1,700	1,680	1,690
17	1,590	1,580	1,580	1,590	1,580	1,590	1,670	1,660	1,670	1,710	1,680	1,690
18	1,600	1,570	1,580	1,600	1,580	1,590	1,700	1,670	1,680	1,800	1,710	1,770
19	1,670	1,590	1,640	1,610	1,600	1,610	1,710	1,700	1,710	1,810	1,780	1,800
20	1,730	1,650	1,680	1,610	1,610	1,610	1,710	1,700	1,700	1,820	1,770	1,800
21	1,720	1,670	1,690	1,640	1,610	1,620	1,710	1,690	1,700	1,850	1,780	1,810
22	1,710	1,680	1,690	1,640	1,620	1,630	1,700	1,690	1,690	1,880	1,790	1,820
23	1,720	1,640	1,680	1,640	1,620	1,630	1,700	1,670	1,690	1,840	1,800	1,820
24	1,660	1,600	1,630	1,640	1,620	1,630	1,700	1,670	1,690	1,840	1,820	1,830
25	1,660	1,620	1,630	1,650	1,620	1,640	1,700	1,690	1,700	1,860	1,790	1,820
26	1,660	1,640	1,660	1,650	1,610	1,630	1,700	1,680	1,690	1,910	1,790	1,840
27	1,660	1,640	1,640	1,640	1,620	1,630	1,700	1,680	1,690	1,890	1,790	1,840
28	1,650	1,620	1,630	1,640	1,630	1,630	1,690	1,660	1,670	1,880	1,810	1,850
29	---	---	---	1,640	1,630	1,640	1,680	1,660	1,670	1,900	1,850	1,870
30	---	---	---	1,640	1,630	1,640	1,670	1,640	1,650	1,910	1,780	1,860
31	---	---	---	1,650	1,640	1,650	---	---	---	1,860	1,780	1,810
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1,880	1,800	1,830	1,910	1,600	1,880	1,960	1,910	1,940	2,030	1,960	2,010
2	---	---	---	1,900	1,860	1,880	1,960	1,890	1,940	2,030	1,970	2,000
3	---	---	---	1,880	1,850	1,870	1,970	1,880	1,950	2,040	1,970	2,000
4	---	---	---	1,920	1,750	1,880	1,980	1,900	1,950	2,040	1,970	2,000
5	---	---	---	1,900	1,670	1,840	1,990	1,910	1,960	2,040	1,980	2,010
6	---	---	---	1,890	1,850	1,870	1,980	1,910	1,960	2,050	1,980	2,010
7	---	---	---	1,910	1,860	1,880	2,000	1,920	1,960	2,040	1,980	2,010
8	---	---	---	1,900	1,870	1,890	2,020	1,940	1,990	2,050	1,970	2,010
9	1,840	1,820	1,830	1,900	1,860	1,880	2,030	1,950	2,000	2,050	1,980	2,020
10	1,840	1,820	1,830	1,880	1,850	1,870	1,990	1,940	1,970	2,040	1,980	2,010
11	1,840	1,820	1,830	1,910	1,840	1,880	2,010	1,950	1,990	2,050	1,980	2,010
12	1,850	1,830	1,840	1,910	1,870	1,890	2,010	1,970	1,990	2,050	1,980	2,020
13	1,850	1,810	1,830	1,910	1,860	1,890	2,000	1,970	1,990	2,050	1,990	2,020
14	1,830	1,800	1,820	1,920	1,860	1,900	2,010	1,950	1,990	2,050	1,980	2,020
15	1,830	1,810	1,820	1,920	1,870	1,900	2,000	1,960	1,990	2,050	1,880	2,010
16	1,840	1,820	1,830	1,910	1,850	1,880	2,000	1,960	1,990	2,040	1,980	2,020
17	1,840	1,740	1,800	1,880	1,860	1,870	2,000	1,960	1,990	2,040	1,990	2,010
18	1,840	1,830	1,840	1,940	1,870	1,900	2,010	1,970	1,990	2,040	1,990	2,010
19	1,860	1,840	1,850	1,930	1,860	1,910	2,010	1,990	2,000	2,040	1,990	2,010
20	1,860	1,850	1,860	1,920	1,880	1,910	2,010	1,990	2,000	2,050	1,990	2,020
21	1,880	1,860	1,870	1,930	1,880	1,910	2,000	1,980	1,990	2,050	1,990	2,020
22	1,890	1,850	1,870	1,930	1,870	1,910	2,000	1,970	1,990	2,050	1,990	2,020
23	1,890	1,880	1,890	1,920	1,850	1,890	2,010	1,990	2,000	2,050	1,990	2,020
24	1,920	1,870	1,900	1,900	1,840	1,880	2,010	1,980	2,000	2,050	2,000	2,030
25	1,910	1,860	1,890	1,930	1,880	1,900	2,010	1,960	1,990	2,050	1,990	2,010
26	1,900	1,860	1,890	1,930	1,890	1,910	2,020	1,960	2,000	2,050	2,000	2,030
27	1,930	1,890	1,910	1,940	1,750	1,870	2,020	1,960	2,000	2,060	2,000	2,040
28	1,940	1,900	1,920	1,930	1,840	1,920	2,010	1,960	1,990	2,060	2,000	2,030
29	1,940	1,900	1,910	1,930	1,910	1,920	2,020	1,960	2,000	2,060	2,020	2,030
30	1,900	1,870	1,900	1,940	1,890	1,920	2,020	1,960	2,000	2,040	2,020	2,020
31	---	---	---	1,950	1,920	1,940	2,020	1,960	2,010	---	---	---

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.0	22.4	24.1	21.4	20.2	20.9	14.6	14.4	14.5	9.7	9.5	9.6
2	25.7	22.7	23.9	21.3	19.5	20.3	14.4	14.2	14.3	10.5	9.5	9.7
3	25.6	22.2	23.6	20.6	18.5	19.5	14.2	14.0	14.1	9.9	9.7	9.8
4	24.4	22.0	23.5	21.0	17.1	19.2	14.1	13.9	14.0	11.1	9.9	10.2
5	26.2	22.8	23.9	21.3	17.8	19.5	13.9	13.9	13.9	11.5	7.6	9.4
6	25.5	22.4	23.7	20.1	17.7	19.4	13.9	13.7	13.8	9.7	6.8	8.9
7	24.5	23.2	23.8	21.1	18.0	19.4	13.9	13.6	13.7	9.5	9.4	9.5
8	25.1	23.3	23.8	20.7	17.7	19.4	13.7	13.5	13.5	9.5	9.3	9.4
9	23.4	22.6	22.9	20.2	18.2	19.4	13.7	13.4	13.5	9.6	9.2	9.4
10	23.2	22.1	22.7	19.3	17.5	18.4	13.6	13.2	13.4	9.6	9.4	9.5
11	23.7	22.3	23.1	18.7	16.3	17.6	13.4	13.1	13.2	9.7	9.5	9.6
12	23.3	20.8	22.6	18.4	16.8	18.0	13.3	13.1	13.2	9.8	9.4	9.5
13	23.3	21.6	22.7	18.0	16.1	17.0	13.2	12.6	12.9	10.0	9.7	9.9
14	22.6	20.2	21.8	16.3	15.8	16.1	12.6	12.3	12.4	9.7	9.5	9.6
15	22.4	20.2	21.6	17.7	16.2	17.3	12.3	12.1	12.2	9.6	9.5	9.5
16	22.9	20.0	21.3	18.4	17.3	17.5	12.1	11.9	12.0	9.5	9.2	9.3
17	23.6	19.6	21.4	17.4	16.9	17.1	12.1	11.8	12.0	9.2	9.0	9.1
18	23.5	21.5	22.0	17.3	16.5	17.0	12.0	11.9	11.9	9.0	8.8	8.9
19	22.8	20.5	21.5	17.1	17.0	17.1	11.9	11.7	11.8	9.0	8.8	8.9
20	22.6	20.2	21.3	17.1	17.0	17.0	11.8	11.5	11.6	9.1	8.8	8.9
21	22.7	21.1	21.6	17.0	16.9	17.0	11.7	11.4	11.5	9.1	8.9	9.0
22	22.3	21.2	21.6	17.0	16.9	16.9	11.5	10.5	11.1	9.4	8.8	9.1
23	23.7	20.2	21.7	16.9	16.8	16.9	10.5	10.1	10.3	8.9	8.6	8.7
24	23.5	19.2	21.2	16.8	16.2	16.5	10.1	9.7	9.9	8.8	8.5	8.6
25	22.3	21.0	21.4	16.2	16.0	16.2	9.7	9.5	9.6	8.9	8.6	8.7
26	22.0	21.2	21.5	16.0	15.9	15.9	9.5	9.3	9.4	9.0	8.6	8.8
27	22.1	21.4	21.5	15.9	15.6	15.7	9.4	9.1	9.2	8.6	8.5	8.5
28	22.1	21.2	21.4	15.6	15.3	15.5	9.3	9.1	9.2	8.5	8.5	8.5
29	21.8	21.1	21.4	15.3	15.0	15.2	9.5	9.2	9.4	8.6	8.5	8.5
30	22.8	19.8	20.9	15.0	14.6	14.7	9.6	9.3	9.4	8.5	8.4	8.4
31	22.2	19.8	20.9	---	---	---	9.7	9.5	9.6	8.4	8.3	8.4
		FEBRUARY			MARCH			APRIL			MAY	
1	8.3	8.2	8.3	10.1	9.7	9.8	12.9	11.9	12.6	20.6	14.6	17.5
2	8.2	8.0	8.1	9.9	9.6	9.7	12.9	11.7	12.5	17.5	15.8	16.7
3	8.4	7.9	8.1	9.8	9.5	9.6	12.8	11.9	12.5	17.2	16.1	16.7
4	8.2	7.9	8.1	9.9	9.5	9.7	12.8	12.4	12.5	17.9	16.1	16.7
5	8.1	7.9	8.0	10.1	9.6	9.8	13.1	12.4	12.7	18.5	16.3	16.9
6	8.1	7.9	7.9	10.0	9.7	9.9	14.3	12.7	13.4	20.4	16.1	17.1
7	8.2	7.9	8.1	10.6	9.9	10.2	16.5	13.3	14.0	18.5	16.1	17.2
8	8.2	8.0	8.0	10.6	10.1	10.4	16.4	13.1	13.9	20.3	17.0	18.2
9	8.3	7.9	8.1	11.0	10.0	10.5	15.4	13.2	13.6	19.5	16.3	17.2
10	8.3	7.9	8.1	11.0	10.4	10.7	14.8	13.4	13.7	21.2	16.4	17.5
11	8.4	8.3	8.4	11.3	10.6	10.9	15.4	13.5	14.1	21.0	16.6	17.4
12	8.4	8.2	8.3	11.3	10.7	11.0	17.7	13.3	14.9	19.4	16.6	17.1
13	8.7	8.2	8.5	11.2	10.6	10.9	18.0	14.2	15.1	20.5	16.7	17.4
14	8.5	8.2	8.3	11.3	10.8	11.1	18.6	14.1	15.2	21.6	17.0	18.0
15	8.8	8.2	8.5	11.0	10.7	10.9	16.3	14.1	14.9	20.6	16.1	17.7
16	8.9	8.6	8.7	11.0	10.8	10.9	16.3	13.7	14.6	21.3	16.8	18.2
17	8.8	8.6	8.7	11.2	10.8	11.0	16.2	13.8	14.6	21.5	16.6	17.9
18	9.0	8.7	8.8	11.4	10.9	11.1	15.2	14.4	14.6	20.7	16.8	18.0
19	8.8	8.6	8.7	11.4	11.0	11.2	15.8	14.4	14.7	21.6	17.4	18.3
20	9.3	8.6	8.9	11.5	11.1	11.2	16.3	14.5	14.8	22.2	17.4	18.9
21	9.3	8.8	9.1	11.5	11.1	11.2	15.8	14.6	15.0	21.3	17.8	18.5
22	9.3	9.1	9.2	11.8	11.3	11.5	17.4	14.8	15.7	20.9	17.8	18.4
23	9.3	9.0	9.1	11.7	11.3	11.5	17.5	14.4	16.2	20.6	17.7	18.5
24	10.1	9.2	9.7	11.7	11.0	11.5	18.7	15.0	16.6	20.9	17.7	18.4
25	10.0	9.7	9.8	12.1	11.3	11.7	16.5	15.6	16.2	19.9	17.7	18.5
26	9.7	9.4	9.6	11.6	11.3	11.6	19.6	15.0	16.8	21.0	17.6	18.7
27	9.7	9.4	9.5	11.9	11.1	11.7	19.2	15.7	16.7	20.9	17.4	18.6
28	10.1	9.7	9.9	13.6	11.7	12.0	18.8	15.6	16.6	18.9	18.2	18.6
29	---	---	---	12.0	11.8	11.9	17.3	16.0	16.6	21.0	17.6	19.0
30	---	---	---	12.6	11.8	12.2	20.4	15.3	17.6	20.6	17.8	19.0
31	---	---	---	12.5	11.9	12.2	---	---	---	21.1	17.9	18.6

07331600 RED RIVER AT DENISON DAM NEAR DENISON, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.2	18.0	18.5	21.0	18.8	20.0	22.0	19.9	21.2	23.1	19.5	21.5
2	21.4	17.6	18.6	24.2	19.1	21.3	21.9	19.9	21.2	23.1	19.5	21.3
3	20.2	17.9	18.4	28.7	18.8	22.6	21.9	19.8	21.1	23.2	19.3	21.2
4	22.0	17.9	19.5	25.2	20.7	22.4	23.4	20.0	21.2	23.1	19.7	21.2
5	22.4	18.3	20.3	21.1	19.4	20.2	22.0	20.1	21.3	23.3	18.9	21.2
6	21.6	18.2	19.3	24.7	18.9	21.2	22.7	19.9	21.4	23.2	19.1	21.3
7	22.0	18.2	19.0	22.3	18.8	20.0	22.3	19.8	21.2	23.2	19.5	21.3
8	21.6	18.3	18.9	20.7	19.1	20.1	22.0	19.7	21.2	23.3	19.4	21.4
9	22.1	18.4	19.0	24.5	19.0	21.2	22.2	20.1	21.2	23.2	19.3	21.3
10	22.1	18.1	18.9	27.7	19.1	22.6	23.3	20.0	21.5	23.1	19.3	21.1
11	22.5	18.2	20.1	23.2	19.8	21.3	22.5	21.1	21.7	22.8	19.8	21.1
12	23.0	18.3	20.5	22.2	19.2	20.4	22.4	20.9	21.6	23.1	19.7	21.4
13	22.7	18.6	19.7	21.3	19.3	20.2	22.8	21.1	21.6	23.0	20.0	21.6
14	22.6	18.6	19.8	21.3	19.3	20.4	22.5	21.1	21.8	23.2	20.2	21.8
15	22.7	18.6	19.7	21.1	19.4	20.4	23.4	21.4	22.2	23.7	20.2	21.9
16	21.5	18.6	19.4	24.0	19.2	20.8	22.7	21.8	22.2	24.1	19.7	21.8
17	20.2	18.8	19.4	22.5	19.2	20.8	23.2	21.7	22.2	23.9	19.1	21.4
18	20.7	18.7	19.6	21.2	19.4	20.3	22.5	21.8	22.1	23.3	20.0	21.6
19	21.0	18.6	19.8	23.4	19.2	20.6	22.7	21.7	22.2	23.4	20.1	21.7
20	20.7	18.3	19.5	20.8	19.3	20.4	23.6	21.7	22.5	23.7	20.1	22.0
21	21.1	18.3	19.5	21.2	19.3	20.5	25.0	22.0	22.9	23.9	20.0	22.0
22	20.7	18.4	19.5	21.4	19.6	20.7	23.6	22.0	22.5	23.8	19.8	21.9
23	19.9	18.6	19.4	26.9	19.3	22.2	22.9	21.4	22.2	23.8	20.0	21.9
24	21.3	18.7	19.6	24.2	19.6	21.5	22.7	20.7	22.1	24.3	20.5	22.0
25	25.0	18.8	20.9	23.6	19.8	21.0	22.5	20.0	21.4	24.6	20.5	22.2
26	24.6	18.5	20.8	21.1	19.8	20.5	23.0	20.3	21.8	24.6	20.1	22.5
27	21.2	18.5	19.7	22.7	20.3	21.4	23.2	20.2	21.8	24.8	20.5	23.1
28	20.8	18.7	19.6	22.0	20.2	21.3	22.7	19.7	21.3	24.6	20.9	23.0
29	20.0	18.8	19.6	21.7	19.9	21.0	23.5	19.7	21.9	25.2	19.7	22.8
30	20.3	18.7	19.6	21.7	20.0	21.1	23.1	20.0	22.0	24.5	20.3	22.9
31	---	---	---	21.8	20.1	21.2	23.0	19.5	21.6	---	---	---

07332390 BLUE RIVER NEAR CONNERVILLE, OK

LOCATION.--Lat 34°23'00", long 96°36'01", in SW ¼ NW ¼ sec.17, T.2 S., R.7 E., Johnston County, Hydrologic Unit 11140102, on left bank, 1.6 mi downstream from Diamond Spring Branch, 2.0 mi upstream from State Highway 7, 4.0 mi southeast of Connerville, and at mile 99.9.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--162 mi^2.

PERIOD OF RECORD.--October1976 to September 1979, October 2003 to current year.

GAGE.--Water-stage recorder. Datum of gage is 891.75 ft above NGVD of 1929. Prior to Oct. 1, 2004, published as 896.75 ft above NGVD of 1929.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	932	100	94	153	128	95	67	58	58	43	41
2	35	167	97	95	164	124	93	71	56	46	42	40
3	33	499	96	4,590	155	124	92	72	54	43	41	39
4	42	236	96	496	145	123	92	69	54	79	41	37
5	37	125	100	1,330	142	121	94	68	137	231	47	33
6	34	104	152	565	298	122	91	66	81	85	41	33
7	35	96	282	288	289	123	89	65	75	66	41	33
8	36	90	150	243	178	120	87	65	72	58	41	33
9	38	86	125	223	164	116	86	67	70	54	41	33
10	77	86	115	213	154	116	87	65	69	52	40	33
11	507	83	110	207	148	115	89	62	69	50	39	33
12	194	82	108	203	149	114	84	60	68	50	38	33
13	65	80	105	249	168	113	81	61	78	49	37	33
14	49	80	101	193	155	110	81	63	106	49	49	33
15	47	80	100	177	144	111	79	59	75	48	160	202
16	45	80	101	173	135	110	78	58	74	47	107	150
17	45	325	100	170	131	108	78	57	178	47	69	47
18	46	445	100	167	130	109	78	57	59	47	51	37
19	45	168	99	167	136	107	78	58	51	47	47	35
20	45	130	98	164	140	105	78	56	48	46	46	34
21	45	114	99	162	137	162	77	54	47	45	45	34
22	47	111	97	155	132	119	74	54	47	45	45	33
23	47	127	95	149	133	107	73	52	46	45	45	33
24	45	188	94	150	132	105	73	52	45	e44	44	34
25	46	126	94	152	128	104	75	52	45	e44	43	33
26	48	112	95	149	127	103	81	52	45	45	43	34
27	47	107	94	144	136	101	74	51	46	48	44	34
28	47	103	94	147	134	100	71	56	44	45	44	34
29	47	103	94	150	---	101	70	64	44	43	42	33
30	46	101	94	148	---	99	69	114	41	43	41	34
31	181	---	94	155	---	97	---	66	---	43	41	---
TOTAL	2,146	5,166	3,379	11,668	4,337	3,517	2,447	1,933	1,982	1,742	1,538	1,328
MEAN	69.2	172	109	376	155	113	81.6	62.4	66.1	56.2	49.6	44.3
MAX	507	932	282	4,590	298	162	95	114	178	231	160	202
MIN	33	80	94	94	127	97	69	51	41	43	37	33
AC-FT	4,260	10,250	6,700	23,140	8,600	6,980	4,850	3,830	3,930	3,460	3,050	2,630

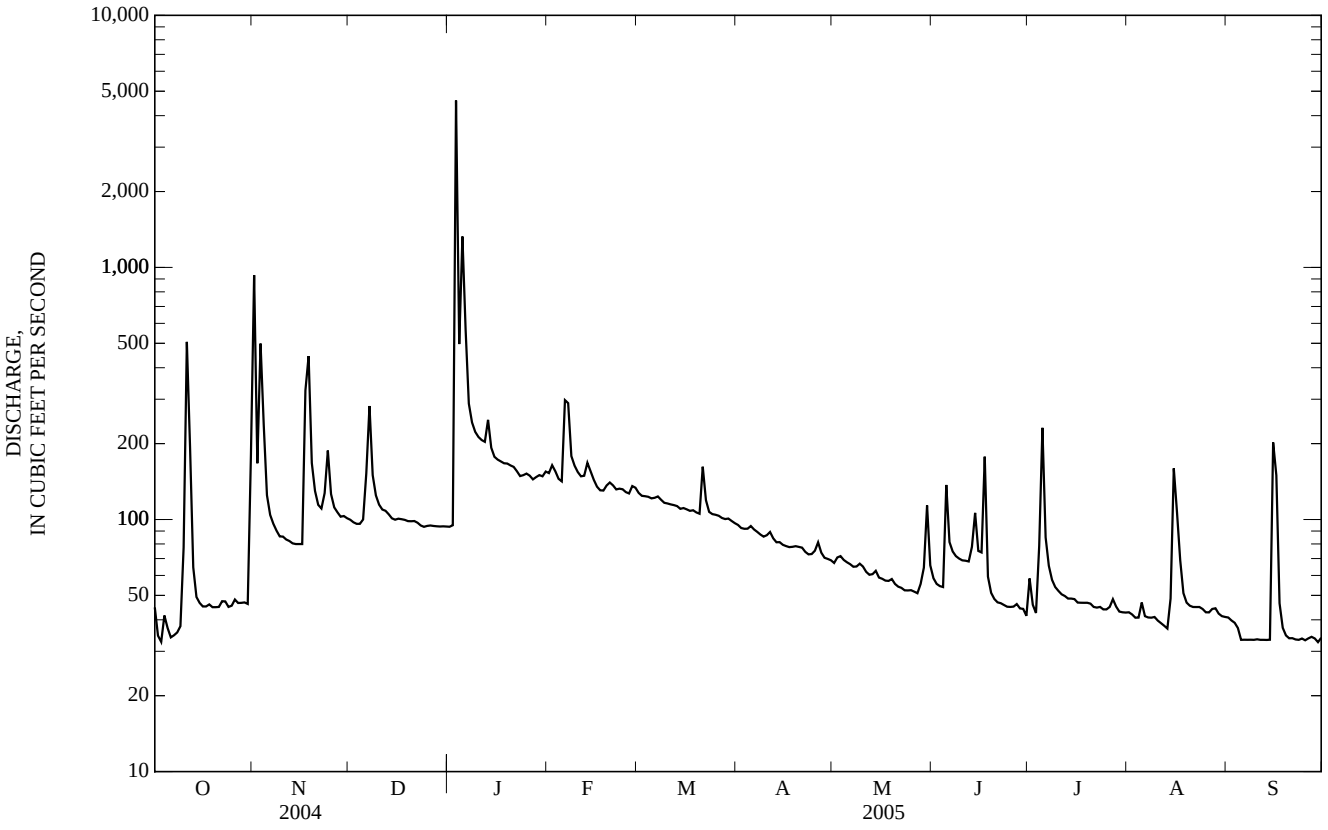
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2005, BY WATER YEAR (WY)

MEAN	46.8	67.6	54.9	108	71.0	110	79.7	93.3	89.1	53.9	44.9	40.7
MAX	69.2	172	109	376	155	208	103	150	148	56.2	49.6	44.3
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(1977)	(1977)	(1978)	(1979)	(2005)	(2005)	(2005)
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 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1977 - 2005	
ANNUAL TOTAL	24,171		41,183			
ANNUAL MEAN	66.0		113		71.7	
HIGHEST ANNUAL MEAN					113	2005
LOWEST ANNUAL MEAN					49.3	2004
HIGHEST DAILY MEAN	932	Nov 1	4,590	Jan 3	4,590	Jan 3, 2005
LOWEST DAILY MEAN	33	Sep 18	33	several days	29	Jan 8, 1978
ANNUAL SEVEN-DAY MINIMUM	33	Sep 17	33	Sep 5	31	Jan 28, 1978
MAXIMUM PEAK FLOW			9,550	Jan 3	9,550	Jan 3, 2005
MAXIMUM PEAK STAGE			13.03	Jan 3	13.03	Jan 3, 2005
ANNUAL RUNOFF (AC-FT)	47,940		81,690		51,970	
10 PERCENT EXCEEDS	101		165		104	
50 PERCENT EXCEEDS	48		78		48	
90 PERCENT EXCEEDS	36		40		34	



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, 651 microsiemens Nov. 17; minimum, 109 microsiemens Jan. 3.
WATER TEMPERATURE: Maximum, 30.6°C July 22; minimum, 3.9°C Dec. 24.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	493	463	474	566	206	275	584	578	582	580	568	576
2	508	473	498	366	267	316	587	578	582	582	568	579
3	519	506	512	373	350	364	588	581	586	568	109	211
4	522	508	516	377	359	368	587	580	584	357	178	288
5	547	522	535	418	377	397	584	579	581	372	229	295
6	552	544	547	482	418	452	590	394	558	328	229	281
7	556	546	552	522	482	504	520	379	447	437	328	386
8	560	551	554	556	522	540	470	432	446	491	437	465
9	561	555	558	585	556	572	520	463	493	535	491	513
10	560	406	522	604	585	596	547	520	535	573	535	553
11	501	176	265	615	604	610	562	547	554	607	573	592
12	337	234	291	626	615	621	571	562	566	638	607	620
13	368	337	353	635	626	631	576	570	572	679	638	663
14	399	355	373	642	635	639	580	572	576	692	679	686
15	482	399	443	646	642	644	582	573	579	689	653	670
16	535	482	511	650	645	648	585	574	581	653	637	648
17	562	535	549	651	640	649	585	571	579	637	624	629
18	575	562	569	640	597	620	583	569	577	624	617	621
19	581	573	576	597	563	579	581	565	576	622	614	618
20	581	575	579	563	551	556	583	568	577	616	609	611
21	583	578	580	555	549	552	583	569	577	612	606	609
22	582	565	576	566	555	560	583	569	577	610	601	606
23	576	571	573	574	566	571	585	570	579	601	589	592
24	581	576	578	577	568	573	585	569	579	590	585	587
25	582	574	579	580	574	576	612	571	582	592	583	587
26	584	577	580	578	565	573	615	575	599	600	590	594
27	586	581	584	566	560	563	613	573	588	598	593	596
28	587	582	585	579	563	572	584	572	579	593	581	587
29	589	586	588	584	573	578	584	574	580	584	580	583
30	590	577	586	589	577	582	585	569	579	580	575	578
31	582	407	552	---	---	---	581	565	575	575	574	575

07332390 BLUE RIVER NEAR CONNERVILLE, OK—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	577	574	576	553	547	550	535	524	531	545	532	539
2	577	572	575	547	540	542	535	519	530	540	528	535
3	573	570	572	557	541	548	538	526	532	540	532	536
4	573	569	571	567	557	562	542	530	536	541	532	536
5	572	568	570	573	567	570	546	531	539	543	533	538
6	568	482	546	578	563	571	548	534	541	544	531	537
7	482	467	473	583	565	573	546	535	541	542	531	536
8	472	466	468	593	582	587	544	533	539	542	531	537
9	493	471	481	597	587	592	546	532	539	543	531	536
10	512	492	502	601	582	592	547	537	542	541	529	535
11	527	511	521	591	577	584	551	533	543	540	527	533
12	534	527	531	588	570	580	545	536	540	541	528	534
13	546	534	541	596	574	588	545	533	540	543	532	538
14	549	542	546	604	572	590	546	536	541	---	---	---
15	554	547	550	583	567	573	545	536	540	---	---	---
16	551	547	549	588	578	583	546	536	540	---	---	---
17	550	547	548	583	564	574	545	534	540	---	---	---
18	549	545	547	573	557	565	549	538	545	---	---	---
19	546	542	543	568	552	560	557	546	550	---	---	---
20	544	540	542	561	544	554	554	546	549	---	---	---
21	548	540	544	549	441	511	553	545	550	---	---	---
22	556	546	552	536	476	504	555	536	547	---	---	---
23	560	555	558	548	536	544	548	537	542	---	---	---
24	564	559	561	550	536	545	549	535	542	---	---	---
25	559	547	554	549	532	542	546	529	542	567	558	563
26	547	539	543	547	540	543	541	530	535	568	559	563
27	542	539	540	548	533	542	539	529	534	567	559	563
28	548	541	545	539	525	534	543	523	535	566	531	557
29	---	---	---	541	523	533	541	529	537	549	452	543
30	---	---	---	545	525	536	546	537	541	537	483	518
31	---	---	---	538	527	533	---	---	---	483	405	432
	JUNE			JULY			AUGUST			SEPTEMBER		
1	524	421	483	544	397	514	549	484	525	586	564	577
2	547	524	538	525	504	516	543	473	515	590	570	582
3	561	547	556	540	506	525	536	470	513	589	568	581
4	568	518	561	541	394	471	557	511	540	586	543	572
5	534	388	470	486	253	353	560	521	544	576	532	560
6	478	399	428	375	255	311	558	524	547	565	518	547
7	541	478	519	524	375	459	556	518	541	548	504	532
8	558	541	552	544	524	539	552	524	539	541	512	529
9	569	555	562	548	542	544	555	521	541	539	510	530
10	567	558	563	562	545	554	553	520	539	538	512	528
11	570	560	565	567	552	558	551	514	535	538	515	529
12	570	562	565	569	552	559	549	500	529	541	511	529
13	570	285	535	569	551	560	541	504	523	539	510	528
14	518	380	489	580	556	563	533	512	525	538	511	527
15	521	476	496	571	552	563	527	374	431	529	226	394
16	539	521	533	573	551	563	420	198	326	316	212	247
17	538	323	383	570	548	560	358	294	324	328	243	283
18	436	346	386	568	540	558	480	358	423	412	328	367
19	511	436	480	566	532	554	551	480	520	494	412	454
20	535	511	527	567	528	552	576	544	562	536	494	517
21	543	534	540	565	521	549	584	567	577	551	536	542
22	550	541	546	563	514	545	591	577	585	556	548	551
23	555	547	551	---	---	---	595	581	589	559	553	555
24	556	550	552	---	---	---	595	579	589	559	553	556
25	554	548	551	---	---	---	594	576	584	559	549	555
26	550	546	548	---	---	---	592	575	583	591	538	558
27	551	545	548	553	537	547	594	577	585	602	562	584
28	548	537	543	559	513	545	599	582	589	608	563	585
29	546	534	541	562	506	543	596	578	588	604	558	586
30	548	530	539	558	503	539	589	568	580	609	551	592
31	---	---	---	554	493	532	591	570	579	---	---	---

07332390 BLUE RIVER NEAR CONNERVILLE, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.0	20.2	21.1	18.4	17.9	18.1	11.2	8.9	9.9	16.7	15.4	16.0
2	21.5	18.8	20.2	17.9	14.9	16.7	11.5	9.0	10.1	16.7	16.0	16.3
3	20.7	17.5	19.1	14.9	12.7	13.9	11.1	8.9	9.9	16.8	14.9	16.1
4	20.9	18.8	19.7	13.8	11.9	12.8	11.0	8.8	9.9	14.9	12.9	13.7
5	22.1	18.7	20.2	15.1	12.6	13.7	11.8	10.2	11.1	12.9	6.5	9.8
6	20.6	18.9	19.8	15.9	13.3	14.4	13.5	11.7	12.6	6.8	5.5	6.2
7	22.3	19.9	20.9	16.9	14.1	15.4	13.2	11.4	12.3	7.7	6.7	7.1
8	24.0	21.0	22.2	16.6	14.9	15.6	12.3	11.2	11.7	9.2	7.5	8.3
9	22.1	20.2	20.9	16.1	14.3	15.0	13.5	11.4	12.3	11.2	9.0	10.1
10	20.2	18.8	19.5	14.9	13.9	14.4	13.0	11.4	12.1	13.8	11.2	12.6
11	18.8	17.6	18.2	14.5	12.8	13.6	12.4	10.5	11.3	15.1	13.8	14.4
12	18.9	16.7	17.6	13.0	12.3	12.7	13.1	10.5	11.6	15.0	14.4	14.7
13	19.6	16.2	17.7	13.1	12.3	12.7	11.7	9.8	10.8	14.6	11.4	12.9
14	18.6	15.8	17.1	13.1	12.4	12.8	10.1	8.0	9.1	11.4	10.0	10.7
15	19.0	15.3	16.9	14.1	12.9	13.5	9.0	6.8	7.8	10.4	8.8	9.6
16	18.4	15.3	16.7	15.5	14.1	14.9	9.9	7.4	8.5	9.2	7.7	8.4
17	18.2	15.3	16.7	15.8	15.1	15.6	11.2	8.3	9.6	8.9	7.1	7.9
18	21.5	18.0	19.2	15.4	14.6	15.0	11.8	9.2	10.3	9.0	7.5	8.2
19	21.3	17.6	19.2	15.6	14.9	15.2	11.3	9.2	10	10.7	8.4	9.4
20	20.6	17.9	19.1	15.9	14.9	15.3	11.2	8.4	9.8	12.4	9.8	10.9
21	22.2	18.6	20.2	15.4	14.6	15.1	11.9	9.5	10.6	13.5	11.1	12.2
22	21.2	20.2	20.6	14.6	14.2	14.4	10.3	6.2	8.3	12.8	9.8	12.0
23	22.1	19.3	20.3	15.6	14.5	15.0	6.5	4.7	5.5	10.0	8.1	9.0
24	20.4	17.4	19.0	15.4	12.1	14.0	6.4	3.9	4.9	10.6	8.0	9.2
25	21.4	19.7	20.4	12.8	11.0	11.9	7.1	4.4	5.6	13.0	9.9	11.3
26	21.4	20.0	20.7	13.6	11.4	12.4	8.9	5.8	7.2	13.8	11.6	12.4
27	21.8	20.3	21.0	14.4	12.7	13.5	10.0	7.8	8.8	12.1	11.0	11.5
28	23.0	20.9	21.8	12.7	11.6	12.0	10.8	8.9	9.7	11.0	10.0	10.3
29	22.1	21.1	21.6	12.4	11.7	12.0	12.6	10.2	11.4	10.4	9.9	10.2
30	21.3	18.6	19.9	11.8	10.1	11.2	15.0	12.4	13.8	10.2	9.5	9.8
31	19.5	18.2	18.7	---	---	---	16.2	14.2	15.1	9.9	9.4	9.7
		FEBRUARY			MARCH			APRIL			MAY	
1	10.1	9.5	9.9	12.6	11.5	12.0	17.1	14.5	15.7	18.6	14.8	16.7
2	9.5	9.0	9.4	12.4	11.0	11.6	18.5	13.3	15.6	17.2	14.4	15.3
3	11.1	8.4	9.6	15.4	11.9	13.4	19.3	14.7	16.6	14.7	13.7	14.2
4	11.6	9.1	10.2	16.8	13.6	14.9	19.4	16.2	17.5	15.9	13.8	14.7
5	12.6	10.1	11.1	16.4	14.3	15.2	20.1	17.4	18.5	17.5	15.1	16.2
6	11.7	10.8	11.3	16.6	14.3	15.2	19.3	17.3	18.1	20.9	15.8	18.0
7	12.3	11.1	11.6	16.5	14.6	15.6	19.6	16.5	17.7	20.1	17.9	19.1
8	11.7	10.6	11.1	16.3	13.1	14.5	20.8	16.3	18.3	22.0	18.7	20.0
9	11.7	10.1	10.9	15.9	13.5	14.4	21.7	17.2	19.1	21.2	18.7	19.9
10	11.8	9.3	10.4	16.2	12.4	14.1	19.7	18.0	18.7	24.2	19.2	21.4
11	12.5	10.5	11.4	16.8	13.3	14.8	20.8	17.1	18.5	25.4	21.1	23.1
12	12.3	11.8	12.1	18.0	13.8	15.6	20.6	16.0	18.0	23.6	21.9	22.7
13	14.6	12.2	13.2	16.1	13.7	15.1	20.6	16.0	18.0	23.8	20.8	22.2
14	15.6	12.8	14.0	15.9	12.3	13.9	21.5	16.5	18.6	---	---	---
15	16.7	13.7	14.9	13.8	12.4	13.3	20.7	16.9	18.6	---	---	---
16	14.8	12.5	13.8	12.5	11.0	11.9	20.9	16.5	18.5	---	---	---
17	12.9	11.6	12.2	14.4	10.0	11.9	21.8	17.1	19.1	---	---	---
18	12.4	11.3	11.8	16.1	11.6	13.6	19.8	18.6	19.2	---	---	---
19	12.1	11.8	11.9	16.3	13.2	14.6	19.4	18.3	18.7	---	---	---
20	16.2	12.1	14.0	17.3	13.5	15.2	20.2	18.2	19.0	---	---	---
21	17.6	14.8	15.8	16.9	14.5	15.7	22.0	18.8	20.1	---	---	---
22	17.3	14.6	15.7	15.5	13.2	14.4	22.3	18.6	20.3	---	---	---
23	15.5	14.0	15.0	15.3	12.2	13.4	20.6	16.7	18.6	---	---	---
24	14.8	12.7	13.5	16.9	12.7	14.6	19.7	15.5	17.6	---	---	---
25	13.7	11.8	12.7	18.1	14.4	16.0	17.9	16.2	16.8	25.5	23.5	24.2
26	13.4	12.3	12.8	15.7	12.8	14.2	19.9	15.2	17.2	24.3	22.3	23.2
27	13.0	12.2	12.7	13.8	11.7	12.6	20.7	16.0	18.1	22.8	21.0	21.9
28	14.0	11.2	12.5	16.8	11.4	13.8	22.4	17.4	19.7	21.8	20.4	21.1
29	---	---	---	17.3	14.4	15.8	20.6	17.3	18.7	21.8	20.2	20.9
30	---	---	---	20.2	15.7	17.6	19.6	15.4	17.3	23.0	20.7	21.4
31	---	---	---	18.0	16.2	17.0	---	---	---	23.0	20.4	21.6

07332390 BLUE RIVER NEAR CONNERVILLE, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	24.7	21.2	22.7	27.9	24.3	26.4	28.8	24.4	26.4	27.7	23.4	25.3
2	25.9	21.6	23.6	28.4	24.2	26.1	29.3	25.0	26.9	27.8	23.8	25.6
3	25.1	22.9	24.0	29.4	24.3	26.6	29.4	25.3	27.1	27.1	23.9	25.4
4	26.3	22.9	24.4	27.5	23.6	25.3	29.8	25.7	27.4	27.6	24.1	25.6
5	24.7	22.4	23.5	25.2	23.0	23.8	28.6	25.4	26.7	27.0	23.0	24.8
6	26.9	22.3	24.4	27.5	23.1	24.9	27.6	24.7	25.9	26.5	22.6	24.4
7	27.3	23.7	25.4	26.7	23.9	25.1	27.8	24.6	25.9	26.3	23.0	24.5
8	27.2	24.5	25.9	28.1	23.5	25.5	27.1	24.1	25.6	26.2	22.8	24.4
9	28.2	24.6	26.2	28.4	24.0	26.1	27.5	24.1	25.7	26.1	22.4	24.1
10	28.3	24.7	26.3	28.8	24.6	26.6	27.9	24.1	25.8	25.6	22.0	23.7
11	28.5	24.8	26.5	29.2	24.8	26.9	28.3	24.6	26.2	24.9	22.9	23.9
12	28.5	25.0	26.7	29.7	25.2	27.3	29.0	24.9	26.6	25.9	22.9	24.2
13	27.8	20.2	25.5	29.0	25.5	27.1	28.8	25.5	26.9	26.8	23.5	24.9
14	27.2	22.7	24.9	27.3	25.5	26.3	26.9	24.9	25.8	26.7	24.3	25.4
15	26.7	22.9	24.7	28.2	24.5	25.9	25.7	23.7	24.5	25.7	22.0	23.5
16	27.9	23.6	25.5	27.3	24.4	25.8	24.1	23.3	23.6	23.6	20.7	22.0
17	26.4	22.7	24.1	27.9	24.5	26.0	27.0	22.9	24.6	24.1	19.9	21.9
18	26.8	22.6	24.4	28.4	24.7	26.2	28.7	24.2	26.2	26.1	22.1	23.9
19	27.3	23.1	25.1	29.4	24.9	26.7	29.5	25.3	27.2	27.0	23.2	24.9
20	27.9	23.3	25.5	29.9	25.6	27.5	30.1	25.9	27.8	27.5	23.9	25.4
21	28.0	23.6	25.6	30.4	25.7	27.8	29.4	25.8	27.5	27.4	23.9	25.5
22	27.8	23.6	25.6	30.6	26.2	28.2	29.8	25.8	27.5	27.1	23.5	25.2
23	28.4	24.1	26.1	---	---	---	28.9	25.9	27.3	27.0	23.7	25.2
24	28.6	24.6	26.5	---	---	---	29.7	25.7	27.5	25.5	24.0	24.8
25	28.8	25.1	26.8	---	---	---	29.7	25.7	27.6	26.7	23.1	24.6
26	29.0	24.9	26.8	---	---	---	30.1	26.1	27.9	27.0	23.4	25.0
27	29.3	25.1	27.1	27.9	24.7	25.9	28.0	25.7	26.6	26.6	23.5	24.9
28	29.4	25.0	27.0	27.8	23.2	25.1	27.8	24.6	25.9	27.4	24.1	25.3
29	29.5	25.1	27.2	27.8	22.9	25.1	27.7	24.0	25.6	24.3	20.8	22.2
30	29.9	25.3	27.4	28.0	23.6	25.6	27.9	23.7	25.6	22.6	19.5	21.0
31	---	---	---	28.5	24.0	26.1	27.7	23.3	25.3	---	---	---

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 NGVD of 1929. 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 fair. 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)
Nov 1	1530	4,500	17.64	Nov 30	0030	6,280	20.30
Nov 24	1500	6,250	20.26	Jan 4	unk	*unk	*unk

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	2,860	669	138	271	247	135	79	163	42	37	24
2	43	2,360	373	341	488	212	134	81	100	47	35	25
3	34	1,300	276	2,560	445	197	127	79	77	61	33	25
4	33	1,290	229	e7,200	314	192	121	85	65	53	37	29
5	36	581	223	e5,100	259	185	126	88	82	745	34	28
6	33	289	270	3,110	468	178	272	82	328	968	32	27
7	32	203	1,050	1,340	1,140	174	247	80	198	303	34	26
8	28	163	830	642	639	171	153	76	105	145	35	25
9	25	138	441	509	418	163	134	73	80	104	32	26
10	44	123	311	446	349	158	125	69	68	84	29	26
11	126	125	252	416	297	151	1,230	68	60	73	27	24
12	274	115	217	421	274	148	287	64	54	65	26	24
13	444	107	200	744	330	145	185	61	51	58	24	26
14	153	105	193	473	369	141	142	64	51	54	31	27
15	86	102	181	376	298	136	125	96	111	69	45	30
16	59	96	173	315	255	135	116	106	96	59	57	83
17	48	221	170	290	228	135	110	69	77	60	169	230
18	43	2,040	168	277	213	134	105	60	129	57	114	123
19	40	1,090	168	269	217	133	102	57	155	55	74	64
20	39	428	163	265	231	130	102	55	81	51	55	47
21	37	285	158	261	241	129	99	53	60	47	45	39
22	37	234	156	251	229	552	98	50	52	44	41	36
23	46	756	154	237	245	287	93	46	48	43	36	33
24	44	4,190	149	223	308	187	87	48	45	41	32	32
25	44	1,340	144	218	250	159	85	47	43	39	30	32
26	43	424	148	218	215	182	94	44	43	37	29	31
27	44	279	152	213	211	247	124	43	41	45	30	31
28	40	220	154	211	250	198	106	45	42	63	30	29
29	40	2,320	144	221	---	159	90	143	42	48	32	29
30	44	3,620	141	225	---	149	84	258	39	41	31	25
31	53	---	140	263	---	141	---	176	---	38	26	---
TOTAL	2,112	27,404	8,197	27,773	9,452	5,655	5,038	2,445	2,586	3,639	1,322	1,256
MEAN	68.1	913	264	896	338	182	168	78.9	86.2	117	42.6	41.9
MAX	444	4,190	1,050	7,200	1,140	552	1,230	258	328	968	169	230
MIN	20	96	140	138	211	129	84	43	39	37	24	24
AC-FT	4,190	54,360	16,260	55,090	18,750	11,220	9,990	4,850	5,130	7,220	2,620	2,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2005, BY WATER YEAR (WY)

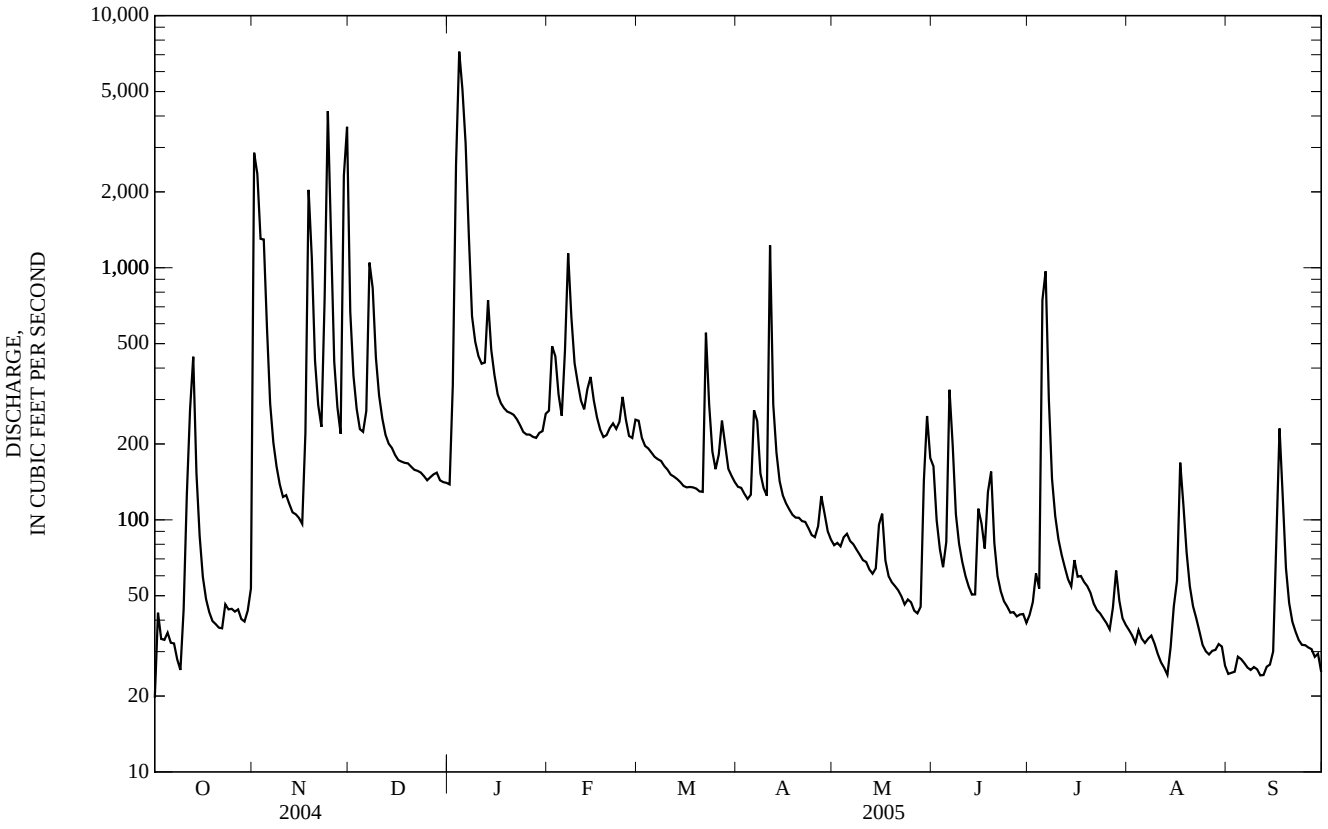
MEAN	239	276	270	245	386	461	574	601	411	143	79.6	158
MAX	3,613	1,813	1,384	1,291	2,156	3,089	3,846	2,953	2,510	780	755	1,501
(WY)	(1982)	(1997)	(1972)	(1998)	(1938)	(1945)	(1990)	(1990)	(1945)	(1950)	(1950)	(1957)
MIN	4.37	11.3	17.8	18.1	27.0	22.8	51.5	33.2	24.2	5.23	0.94	0.42
(WY)	(1940)	(1940)	(1940)	(1940)	(1967)	(1940)	(1956)	(1939)	(1939)	(1956)	(1956)	(1956)

e Estimated

07332500 BLUE RIVER NEAR BLUE, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1936 - 2005	
ANNUAL TOTAL	73,570		96,879			
ANNUAL MEAN	201		265		320	
HIGHEST ANNUAL MEAN					972	1945
LOWEST ANNUAL MEAN					30.8	1956
HIGHEST DAILY MEAN	4,220	Apr 25	7,200	Jan 4	45,500	Oct 14, 1981
LOWEST DAILY MEAN	15	Sep 12	20	Oct 1	a0.00	Aug 3, 1936
ANNUAL SEVEN-DAY MINIMUM	18	Sep 21	25	Sep 7	0.00	Sep 19, 1956
MAXIMUM PEAK FLOW			unk	Jan 4	65,200	Oct 14, 1981
MAXIMUM PEAK STAGE			unk	Jan 4	b44.20	Oct 14, 1981
ANNUAL RUNOFF (AC-FT)	145,900		192,200		231,700	
10 PERCENT EXCEEDS	315		433		529	
50 PERCENT EXCEEDS	74		115		89	
90 PERCENT EXCEEDS	26		32		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 NGVD of 1929.

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 recreation. 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, 136,300 acre-ft, Jan. 5, 6, elevation 592.11 ft; minimum, 84,890 acre-ft, Oct. 1, elevation 582.69 ft.

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

576	56,660	584	91,160
578	64,410	586	101,300
580	72,780	590	123,500
582	81,670	595	154,400

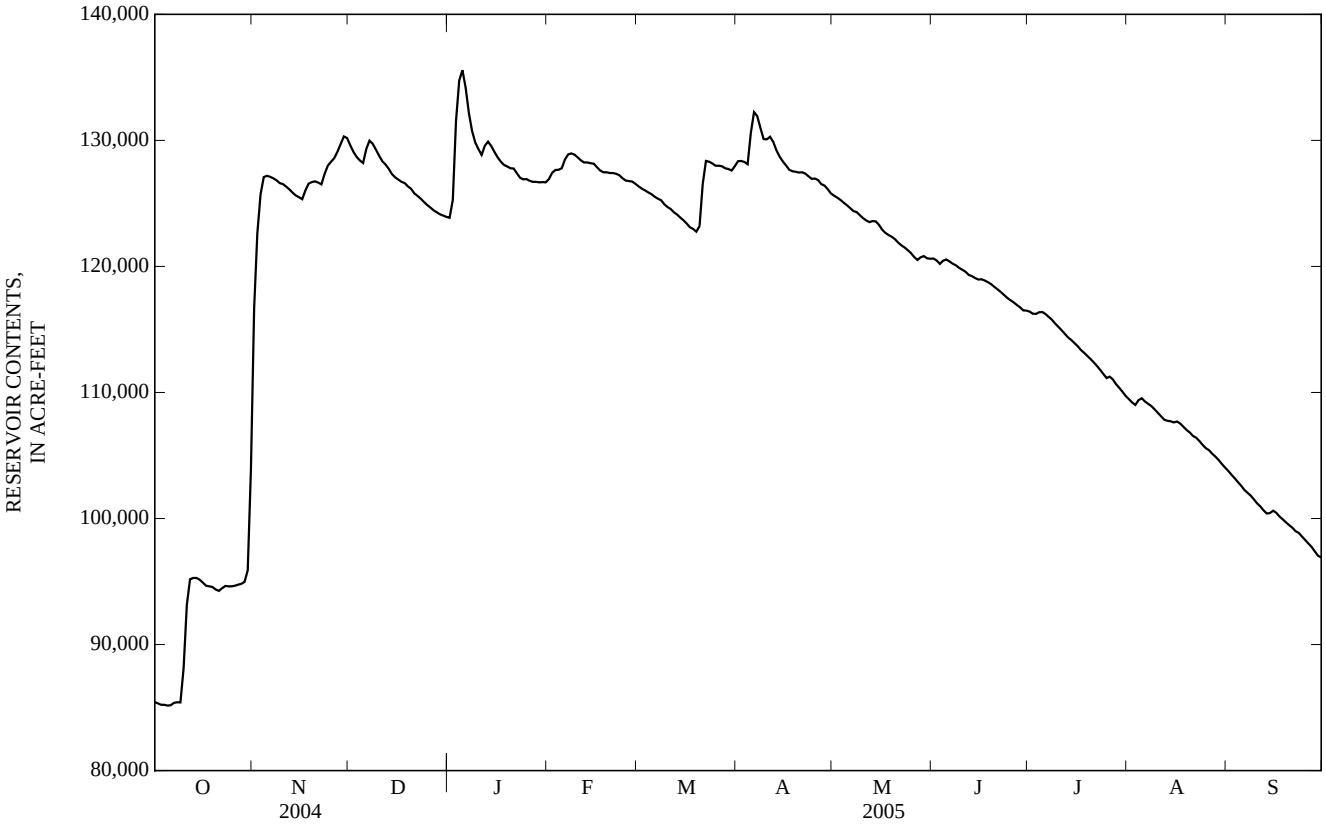
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85,220	107,700	130,000	123,900	126,600	126,500	128,100	125,700	120,600	116,500	109,600	104,000
2	85,550	121,100	129,400	123,800	127,100	126,300	128,400	125,600	120,600	116,400	109,400	103,700
3	85,220	123,400	128,900	126,000	127,600	126,100	128,300	125,400	120,400	116,200	109,100	103,400
4	85,220	126,900	128,600	134,300	127,700	126,000	128,300	125,200	120,100	116,300	109,000	103,100
5	85,220	127,200	128,300	135,000	127,700	125,800	128,000	125,000	120,600	116,400	109,600	102,800
6	85,130	127,200	128,100	135,900	127,800	125,700	131,900	124,800	120,500	116,400	109,500	102,500
7	85,220	127,100	129,900	133,400	128,800	125,500	132,400	124,600	120,300	116,100	109,200	102,200
8	85,450	126,900	130,000	131,600	128,900	125,300	131,700	124,300	120,200	115,900	109,100	102,000
9	85,410	126,800	129,600	130,300	129,000	125,200	130,600	124,300	120,000	115,700	108,800	101,700
10	85,410	126,500	129,100	129,600	128,800	124,800	129,800	124,000	119,800	115,300	108,600	101,400
11	89,520	126,500	128,600	129,200	128,600	124,700	130,200	123,800	119,700	115,100	108,300	101,100
12	94,980	126,200	128,200	128,700	128,300	124,500	130,300	123,600	119,500	114,800	108,000	100,900
13	95,280	126,100	128,000	130,000	128,200	124,200	129,700	123,500	119,200	114,600	107,800	100,500
14	95,280	125,800	127,600	129,800	128,300	124,100	129,000	123,700	119,200	114,300	107,800	100,300
15	95,280	125,600	127,200	129,400	128,100	123,800	128,600	123,500	119,000	114,100	107,700	100,500
16	95,080	125,500	127,000	128,900	128,100	123,600	128,200	123,200	118,900	113,800	107,600	100,700
17	94,830	125,300	126,800	128,500	127,700	123,300	127,900	122,800	119,000	113,600	107,800	100,300
18	94,590	126,400	126,600	128,200	127,500	123,000	127,500	122,600	118,800	113,300	107,400	100,100
19	94,640	126,600	126,600	128,000	127,400	123,000	127,500	122,400	118,700	113,100	107,200	99,870
20	94,540	126,700	126,200	127,900	127,500	122,700	127,500	122,300	118,500	112,800	106,900	99,610
21	94,290	126,800	126,100	127,700	127,400	123,500	127,400	122,100	118,300	112,600	106,800	99,410
22	94,240	126,600	125,600	127,800	127,400	128,100	127,500	121,800	118,100	112,300	106,400	99,200
23	94,590	126,500	125,600	127,200	127,300	128,500	127,300	121,600	117,900	112,000	106,400	98,890
24	94,680	127,800	125,300	126,900	127,200	128,200	127,100	121,400	117,700	111,700	106,000	98,840
25	94,590	e128,100	125,000	126,900	126,900	128,100	126,900	121,200	117,400	111,400	105,800	98,430
26	94,640	e128,400	124,800	126,900	126,800	127,900	127,000	121,000	117,300	111,000	105,500	98,230
27	94,680	128,700	124,600	126,700	126,800	128,000	126,800	120,600	117,100	111,400	105,400	97,920
28	94,780	e129,300	124,400	126,700	126,700	127,900	126,400	120,500	116,900	110,900	105,000	97,660
29	94,830	e129,900	124,300	126,700	---	127,700	126,400	120,900	116,700	110,500	104,900	97,250
30	95,030	130,500	124,100	126,600	---	127,700	126,000	120,800	116,400	110,300	104,500	96,950
31	96,330	---	124,000	126,700	---	127,500	---	120,600	---	109,900	104,200	---
MAX	96,330	130,500	130,000	135,900	129,000	128,500	132,400	125,700	120,600	116,500	109,600	104,000
MIN	85,130	107,700	124,000	123,800	126,600	122,700	126,000	120,500	116,400	109,900	104,200	96,950
(‡)	585.59	591.11	590.07	590.54	590.52	590.73	590.38	589.50	588.77	587.58	586.53	585.11
(‡‡)	+8210	+34170	-6500	+2700	0	+800	-1500	-5400	-4200	-6500	-5700	-7250

CAL YR 2004 MAX 130500 MIN 61810 (‡‡) +57810
WTR YR 2005 MAX 135900 MIN 85130 (‡‡) +12010

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 ¼ NE ¼ 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 current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929.

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 recreation, water quality control and flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 146,000 acre-ft, Nov. 5 2004, gage height, 584.80 ft; minimum, 90,890 acre-ft, Jan 12-16, 2004, gage height, 570.57.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 146,000 acre-ft, Nov. 5, gage height, 584.80 ft; minimum, 103,500 acre-ft, Oct 7, gage height, 574.23.

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

568	82,770	577	113,600
570	89,090	580	125,400
572	95,710	583	138,000
574	102,600	586	151,400

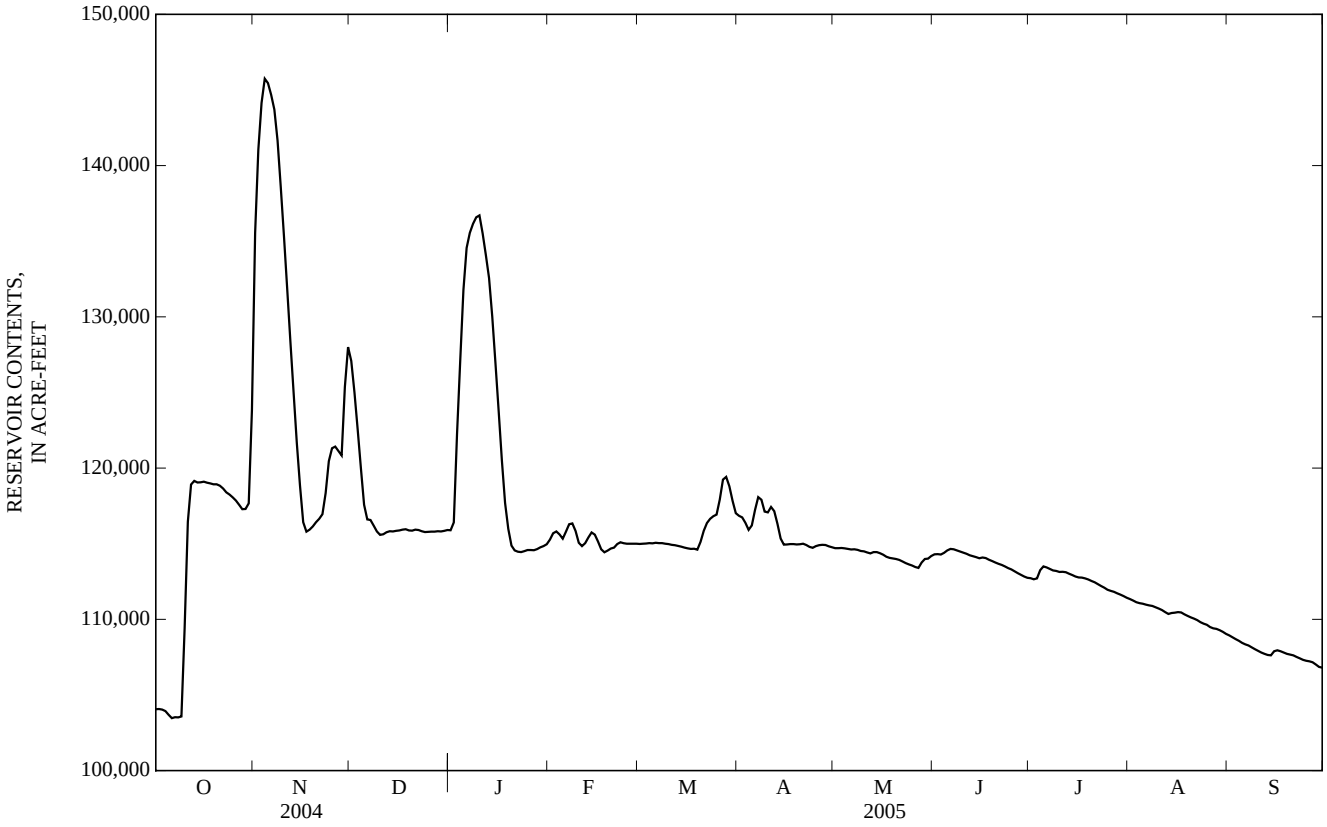
RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103,900	126,800	128,200	115,900	115,000	115,000	116,800	114,800	114,300	112,700	111,400	109,000
2	104,100	139,900	126,500	115,900	115,400	115,000	116,900	114,700	114,300	112,700	111,300	108,900
3	104,000	141,600	124,200	116,700	115,800	115,000	116,700	114,700	114,300	112,600	111,200	108,800
4	104,000	145,400	121,700	125,000	115,800	115,000	116,200	114,700	114,300	112,800	111,100	108,700
5	103,900	145,900	119,100	128,100	115,500	115,100	115,800	114,700	114,500	113,500	111,100	108,500
6	103,600	145,200	116,800	133,600	115,200	115,000	116,400	114,600	114,600	e113,500	111,000	108,400
7	103,400	144,400	116,500	135,000	116,100	115,100	117,600	114,600	114,700	e113,400	110,900	108,300
8	103,600	143,400	116,600	135,800	116,400	115,000	118,300	114,600	114,600	e113,300	110,900	108,200
9	103,500	140,800	116,000	136,300	116,300	115,100	117,700	114,600	114,500	e113,200	110,900	108,100
10	103,600	137,500	115,700	136,700	115,600	115,000	116,800	114,500	114,500	e113,200	110,800	108,000
11	112,300	134,200	115,500	136,700	114,800	115,000	117,200	114,500	114,400	e113,100	110,700	107,900
12	118,500	130,700	115,700	134,900	114,900	114,900	117,500	114,400	114,300	113,200	110,600	107,800
13	119,100	127,200	115,800	133,700	115,100	114,900	117,000	114,300	114,200	113,100	110,400	107,700
14	119,200	123,900	115,800	132,000	115,600	114,800	116,000	114,500	114,200	113,000	110,300	107,600
15	119,000	120,600	115,800	129,000	115,800	114,800	115,000	114,400	114,100	112,900	110,500	107,600
16	119,100	118,000	115,900	125,900	115,500	114,700	114,900	114,300	114,000	112,800	110,400	108,000
17	119,100	115,600	115,900	122,700	115,000	114,700	115,000	114,200	114,100	112,800	110,500	107,900
18	119,000	115,900	116,000	119,400	114,500	114,600	115,000	114,100	114,000	112,800	110,400	107,900
19	119,000	116,000	116,000	116,800	114,400	114,700	115,000	114,100	113,900	112,700	110,300	107,800
20	118,900	116,200	115,800	115,600	114,600	114,600	114,900	114,000	113,800	112,600	110,200	107,700
21	118,900	116,500	115,900	114,500	114,700	115,400	115,000	114,000	113,700	112,500	110,100	107,700
22	118,800	116,700	116,000	114,600	114,800	116,100	115,000	113,900	113,600	112,400	110,000	107,600
23	118,600	117,100	115,900	114,400	115,100	116,500	114,900	113,800	113,600	112,300	109,900	107,500
24	118,300	119,000	115,800	114,500	115,100	116,700	114,800	113,700	113,500	112,200	109,800	107,400
25	118,200	121,200	115,800	114,500	e115,000	116,900	114,700	113,600	113,300	112,100	109,700	107,300
26	118,000	121,400	115,800	114,600	e115,000	117,000	114,900	113,500	113,300	111,900	109,600	107,300
27	117,800	121,400	115,800	114,600	e115,000	118,400	114,900	113,400	113,100	111,900	109,400	107,200
28	117,500	121,000	115,800	114,600	e115,000	119,700	114,900	113,400	113,000	111,800	109,400	107,100
29	117,200	120,800	115,800	114,700	---	119,300	114,900	113,900	112,900	111,700	109,400	107,000
30	117,300	127,700	115,800	114,800	---	118,500	114,800	114,000	112,800	111,600	109,200	106,800
31	117,800	---	115,900	114,900	---	117,500	---	114,000	---	111,500	109,100	---
MAX	119,200	145,900	128,200	136,700	116,400	119,700	118,300	114,800	114,700	113,500	111,400	109,000
MIN	103,400	115,600	115,500	114,400	114,400	114,600	114,700	113,400	112,800	111,500	109,100	106,800
(‡)	578.40	580.73	577.61	577.35	577.52	577.87	577.32	577.11	576.75	576.40	575.75	575.16
(‡‡)	+13800	+9900	-11800	-1000	+100	+2500	-2700	-800	-1200	-1300	-2400	-2300

CAL YR 2004 MAX 145900 MIN 90890 (‡‡) +49710
WTR YR 2005 MAX 145900 MIN 103400 (‡‡) +21860

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 NGVD of 1929. 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.--Records poor. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	10,500	2,710	96	265	443	768	87	130	24	13	19
2	35	10,400	2,420	145	704	337	734	67	66	23	12	18
3	29	8,800	2,120	2,990	1,310	165	659	58	49	22	e13	17
4	37	9,400	1,940	8,360	959	140	588	59	40	22	e13	16
5	37	7,720	1,900	10,900	697	125	560	53	149	1,040	e12	16
6	35	3,890	1,760	13,200	915	115	2,890	48	216	490	e12	15
7	66	1,530	3,130	11,400	2,400	109	3,020	48	107	92	e13	15
8	123	1,410	4,730	8,200	2,270	104	1,980	51	73	65	e15	15
9	76	2,010	3,060	3,320	1,560	103	1,570	50	65	58	e37	15
10	156	2,080	1,360	1,380	1,610	94	1,210	48	64	45	e29	14
11	4,330	2,020	744	1,600	1,060	92	3,260	46	51	36	25	15
12	4,620	2,000	475	2,020	485	83	2,980	43	43	31	22	15
13	4,880	1,950	372	2,910	509	80	1,670	42	38	27	20	15
14	3,110	1,920	310	2,980	579	79	1,150	49	35	25	20	15
15	402	1,750	239	2,700	719	80	731	47	31	22	19	28
16	183	1,320	181	2,420	720	70	263	42	29	21	156	31
17	127	1,190	150	2,230	608	66	196	37	29	23	1,270	236
18	98	2,520	140	2,000	447	65	152	40	27	22	775	198
19	79	3,460	130	1,260	212	63	123	38	27	21	324	101
20	67	2,140	127	815	204	63	110	35	44	19	150	64
21	59	710	118	599	219	261	103	35	56	18	91	48
22	55	479	117	215	230	2,560	95	34	47	18	64	38
23	53	771	172	257	306	1,020	103	33	40	18	48	32
24	54	2,930	122	166	252	526	109	32	37	17	38	28
25	53	3,320	109	138	224	336	91	31	33	16	33	26
26	79	1,700	99	127	184	446	92	29	30	16	29	24
27	69	1,030	96	132	174	1,070	95	28	28	17	26	22
28	59	801	95	129	261	851	81	29	26	16	24	20
29	59	2,710	98	135	---	917	83	112	24	16	22	19
30	83	5,000	98	143	---	807	93	92	23	15	21	18
31	751	---	98	212	---	758	---	59	---	15	20	---
TOTAL	19,890	97,461	29,220	83,179	20,083	12,028	25,559	1,502	1,657	2,310	3,366	1,153
MEAN	642	3,249	943	2,683	717	388	852	48.5	55.2	74.5	109	38.4
MAX	4,880	10,500	4,730	13,200	2,400	2,560	3,260	112	216	1,040	1,270	236
MIN	26	479	95	96	174	63	81	28	23	15	12	14
AC-FT	39,450	193,300	57,960	165,000	39,830	23,860	50,700	2,980	3,290	4,580	6,680	2,290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)

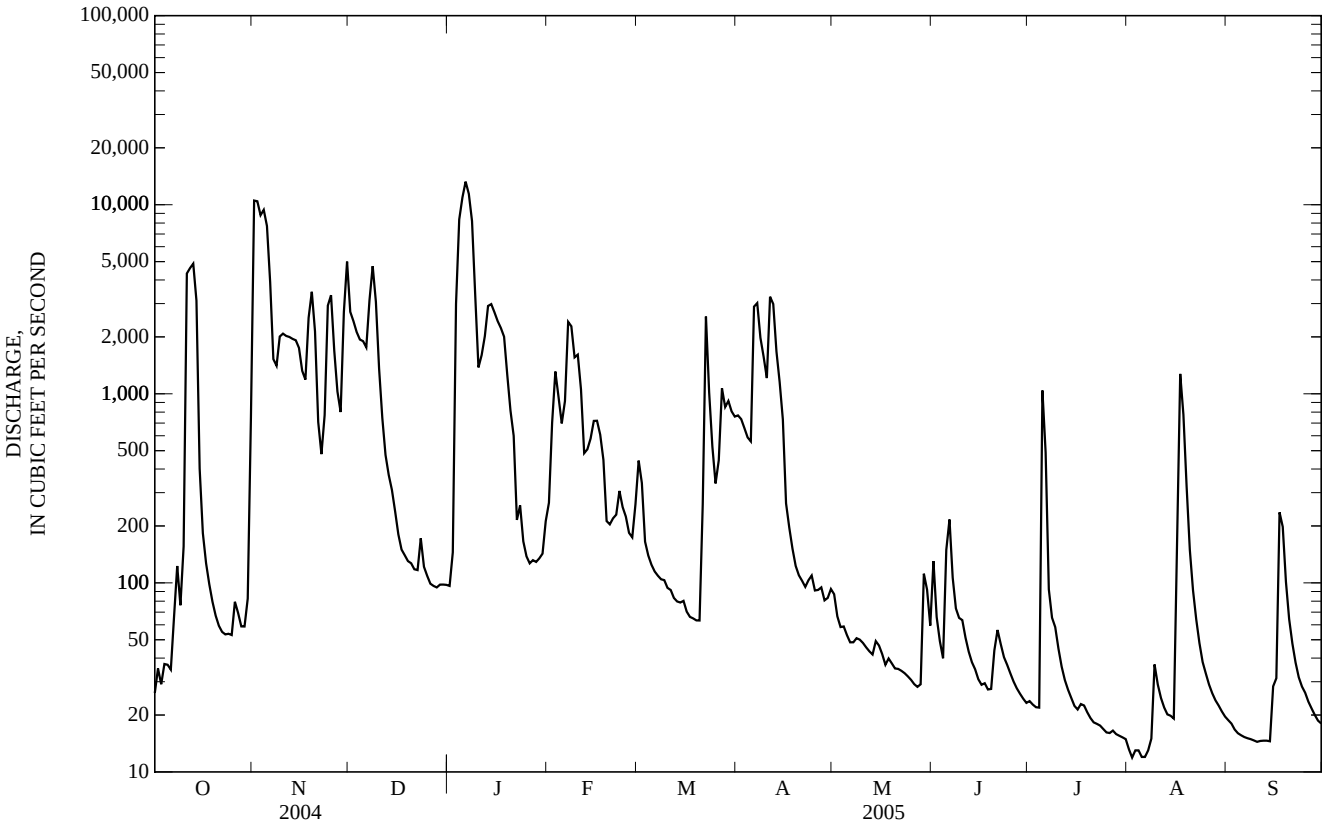
MEAN	269	969	1,298	1,073	1,121	1,717	1,697	1,678	914	288	188	308
MAX	1,489	4,184	4,223	5,313	4,165	4,541	6,622	8,384	2,764	1,854	1,525	1,026
(WY)	(1992)	(1997)	(1992)	(1998)	(2001)	(1990)	(1990)	(1990)	(1991)	(1992)	(1992)	(1992)
MIN	13.5	26.0	22.8	81.6	41.5	265	37.0	34.7	25.0	15.5	13.7	13.8
(WY)	(2000)	(2002)	(2004)	(2000)	(1996)	(2000)	(2003)	(1988)	(1988)	(1998)	(1998)	(1988)

e Estimated

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1988 - 2005	
ANNUAL TOTAL	221,946		297,408			
ANNUAL MEAN	606		815		a959	
HIGHEST ANNUAL MEAN					2,145	1990
LOWEST ANNUAL MEAN					197	2003
HIGHEST DAILY MEAN	10,500	Nov 1	13,200	Jan 6	45,700	May 5, 1990
LOWEST DAILY MEAN	18	Aug 17	12	Aug 2,5,6	b7.5	Sep 26, 2000
ANNUAL SEVEN-DAY MINIMUM	19	Aug 12	13	Aug 1	11	Oct 18, 1991
MAXIMUM PEAK FLOW			14,300	Nov 1	c49,800	May 5, 1990
MAXIMUM PEAK STAGE			36.81	Nov 1	d48.73	May 5, 1990
INSTANTANEOUS LOW FLOW					7.5	Sep 26, 2000
ANNUAL RUNOFF (AC-FT)	440,200		589,900		694,600	
10 PERCENT EXCEEDS	1,960		2,420		2,420	
50 PERCENT EXCEEDS	74		98		116	
90 PERCENT EXCEEDS	24		19		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 NGVD of 1929. Flow meters on diversion pipe and wells, to City of Ada.

REMARKS.--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: 46 years, 9.03 ft^3/s. Combined spring flow: 15 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, 26.0 ft^3/s, at times; minimum daily discharge, 8.3 ft^3/s, Oct. 5.

DISCHARGE, CUBIC FEET PER SECOND, CREEK FLOW
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.1	8.4	11	14	18	15	15	11	8.7	e4.5	e6.4	5.4
2	e5.0	6.8	11	14	18	16	15	11	10	e4.9	8.3	5.3
3	e4.9	7.9	11	14	18	17	e15	11	e10	e4.9	8.3	5.2
4	6.7	8.8	11	14	18	17	e15	11	e10	e4.8	8.3	5.2
5	7.4	9.1	11	15	18	17	15	11	e10	e4.6	8.2	5.1
6	7.7	9.4	11	15	18	17	15	11	e9.8	e4.6	8.2	5.2
7	8.1	9.7	11	15	18	17	14	11	e9.8	e4.6	8.2	5.1
8	8.2	10	11	16	18	16	14	10	e9.4	e4.8	8.2	5.0
9	8.2	12	11	e17	18	18	14	9.1	e9.0	e5.1	8.1	5.0
10	8.5	12	11	e18	18	21	14	9.1	e8.7	e4.9	7.9	4.9
11	9.4	12	11	18	18	19	14	9.0	e8.4	e4.9	7.7	4.9
12	9.9	12	11	18	18	16	14	9.0	e8.3	e4.8	7.7	4.8
13	10	11	11	18	18	16	14	9.0	e8.1	e4.9	7.6	4.8
14	10	11	11	18	18	16	13	8.9	e7.8	e4.9	7.6	4.8
15	10	12	11	18	18	16	13	9.0	e7.5	e4.6	8.2	5.1
16	10	12	14	18	18	16	13	8.9	e7.2	e4.5	8.2	5.0
17	10	12	14	18	18	16	13	8.9	e7.0	e4.4	8.4	5.1
18	10	12	14	18	18	16	13	8.7	e6.7	e4.5	6.3	5.0
19	10	12	14	18	18	16	13	8.6	e6.3	e4.4	3.9	4.9
20	10	12	14	18	18	16	13	8.7	e6.3	e4.1	3.9	4.9
21	10	12	14	18	18	16	13	8.9	e6.0	e4.1	4.0	4.9
22	8.1	12	14	18	18	16	13	9.0	5.8	e4.1	4.1	4.9
23	6.5	12	14	18	18	15	12	8.4	e5.9	e4.1	4.1	4.9
24	9.6	13	14	18	18	15	12	7.8	e5.9	e4.1	4.0	4.9
25	9.4	12	14	18	17	15	12	7.5	e5.5	e3.9	4.0	4.8
26	9.4	11	14	18	16	15	12	7.5	e5.3	e3.8	4.0	4.9
27	9.4	11	14	18	15	15	12	7.4	e5.3	3.7	4.1	4.8
28	9.4	11	14	18	15	15	12	7.4	e5.3	e3.8	4.1	4.8
29	9.4	11	14	18	---	15	12	7.4	e5.4	e4.0	4.0	4.8
30	9.4	11	13	18	---	15	11	7.4	e4.9	e4.2	4.7	4.8
31	8.7	---	14	18	---	15	---	7.4	---	e4.3	5.4	---
TOTAL	268.4	328.1	388	530	495	501	400	280.0	224.3	137.8	196.1	149.2
MEAN	8.66	10.9	12.5	17.1	17.7	16.2	13.3	9.03	7.48	4.45	6.33	4.97
MAX	10	13	14	18	18	21	15	11	10	5.1	8.4	5.4
MIN	4.9	6.8	11	14	15	15	11	7.4	4.9	3.7	3.9	4.8
AC-FT	532	651	770	1,050	982	994	793	555	445	273	389	296

CAL YR 2004 TOTAL 2046.9 MEAN 5.59 MAX 14 MIN 1.4 AC-FT 4060
WTR YR 2005 TOTAL 3897.9 MEAN 10.7 MAX 21 MIN 3.7 AC-FT 7730

e Estimated

07334200 BYRDS MILL SPRING NEAR FITTSTOWN, OK—Continued

DISCHARGE, CUBIC FEET PER SECOND, COMBINED FLOW
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e10	13	18	22	26	25	23	20	18	e16	e15	15
2	e10	14	18	22	26	25	23	20	e19	e15	16	15
3	e10	15	18	22	26	25	e23	20	e20	e15	16	14
4	9.8	16	19	22	26	25	e23	20	e20	e15	16	15
5	8.3	17	19	22	26	25	23	20	e20	e15	15	14
6	8.7	17	19	23	26	25	23	20	e19	e15	15	15
7	9.1	17	18	23	26	25	22	20	e19	e15	15	14
8	8.8	18	18	24	26	24	22	19	e19	e15	15	14
9	8.6	18	18	e24	26	24	22	18	e18	e15	15	14
10	9.0	17	18	e26	26	25	22	18	e18	e15	15	14
11	9.8	17	18	26	26	24	22	18	e18	e15	15	14
12	12	18	18	26	26	24	22	18	e18	e15	15	14
13	12	18	18	26	26	24	22	18	e18	e15	15	14
14	12	18	18	26	26	24	21	18	e17	e15	15	14
15	12	20	18	26	26	24	21	18	e17	e15	16	14
16	12	20	22	26	26	24	21	18	e17	e14	16	14
17	12	20	22	26	26	24	21	18	e16	e14	16	14
18	12	20	22	26	26	24	21	18	e16	e14	15	14
19	12	20	22	26	26	24	21	18	e16	e14	14	14
20	12	20	22	26	26	24	21	18	e16	e14	14	14
21	12	20	22	26	26	24	21	18	e16	e14	14	14
22	12	20	22	26	26	24	21	18	15	e14	14	14
23	12	20	22	26	26	23	20	18	e15	e14	14	14
24	12	20	22	26	26	23	20	17	e15	e14	14	14
25	12	20	22	26	25	23	20	17	e15	e14	14	14
26	12	19	22	26	25	23	20	17	e15	e14	14	14
27	12	19	22	26	25	23	20	17	e15	14	14	14
28	12	18	22	26	25	23	20	17	e15	e14	14	14
29	12	18	22	26	---	23	20	17	e15	e14	14	14
30	12	18	20	26	---	23	20	17	e16	e14	14	14
31	12	---	22	26	---	23	---	17	---	e14	15	---
TOTAL	342.1	545	623	776	724	743	641	565	511	450	459	424
MEAN	11.0	18.2	20.1	25.0	25.9	24.0	21.4	18.2	17.0	14.5	14.8	14.1
MAX	12	20	22	26	26	25	23	20	20	16	16	15
MIN	8.3	13	18	22	25	23	20	17	15	14	14	14
AC-FT	679	1,080	1,240	1,540	1,440	1,470	1,270	1,120	1,010	893	910	841

CAL YR 2004 TOTAL 4132.5 MEAN 11.3 MAX 22 MIN 4.6 AC-FT 8200
WTR YR 2005 TOTAL 6803.1 MEAN 18.6 MAX 26 MIN 8.3 AC-FT 13490

e Estimated

07335000 CLEAR BOGGY CREEK NEAR CANEY, OK

LOCATION.--Lat 34°15'09", long 96°12'19", in NW ¼ SE ¼ sec.36, T.3 S., R.10 E., Atoka County, Hydrologic Unit 11140104, on downstream side of left pier of bridge on old U.S. Highways 69 and 75, 0.5 mi downstream from Caney Creek, 1.5 mi north of Caney, and at mile 24.1.

DRAINAGE AREA.--720 mi^2.

PERIOD OF RECORD.--October 1942 to September 1989, April to September 2005. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 485.05 ft above NGVD of 1929 (levels by U.S. Army Corps of Ingineers). Prior to Mar. 13, 1945, nonrecording gage at same site and datum.

REMARKS.--Records poor. Some regulation since 1964 by numerous floodwater-retarding structures. Satellite telemeter at site.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53,500 ft^3/s, Oct. 14, 1981, gage height, 26.60 ft, maximum gage height, 26.77 ft, Dec. 11, 1946; no flow at times in several years.

EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 26.9 ft occurred in February 1938, information provided by local resident.

EXTREMES FOR CURRENT PERIOD.--Maximum daily discharge during period April to September, 2,650 ft^3/s, Apr. 11, gage height, unknown; minimum daily discharge, 11 ft^3/s, Sep 11-14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	134	e87	e126	e14	e13	e19
2	---	---	---	---	---	---	134	e67	e63	e12	e12	e17
3	---	---	---	---	---	---	136	e58	e47	e12	e13	e16
4	---	---	---	---	---	---	136	e59	e37	e12	e13	e15
5	---	---	---	---	---	---	e310	e53	e146	e1,040	e12	e13
6	---	---	---	---	---	---	e2,300	e49	e213	e490	e12	e12
7	---	---	---	---	---	---	e2,490	e49	e103	e92	e13	e12
8	---	---	---	---	---	---	e1,730	e51	e70	e66	e15	12
9	---	---	---	---	---	---	e1,250	e50	e63	e58	e15	e12
10	---	---	---	---	---	---	e971	e48	e60	e45	16	e12
11	---	---	---	---	---	---	e2,650	e46	e50	e36	17	e11
12	---	---	---	---	---	---	e2,270	e43	e42	e31	17	e11
13	---	---	---	---	---	---	e1,300	e42	e36	e27	16	e11
14	---	---	---	---	---	---	e818	e49	e34	e25	19	e11
15	---	---	---	---	---	---	e435	e47	e29	23	24	e28
16	---	---	---	---	---	---	e148	e42	e28	23	1,690	e31
17	---	---	---	---	---	---	129	e37	e28	24	996	e236
18	---	---	---	---	---	---	129	e40	e26	24	628	e196
19	---	---	---	---	---	---	127	e38	e26	21	355	e114
20	---	---	---	---	---	---	e110	e35	e42	e19	242	e74
21	---	---	---	---	---	---	e103	e35	e54	e18	171	e67
22	---	---	---	---	---	---	e95	e35	e44	e18	125	63
23	---	---	---	---	---	---	e103	e33	e36	e18	92	47
24	---	---	---	---	---	---	e110	e32	e30	e17	69	36
25	---	---	---	---	---	---	e91	e31	e25	e16	53	30
26	---	---	---	---	---	---	e92	e29	e20	e16	42	25
27	---	---	---	---	---	---	e94	e28	e17	e17	34	22
28	---	---	---	---	---	---	e81	e29	e16	e16	29	19
29	---	---	---	---	---	---	e83	e109	e15	e16	24	16
30	---	---	---	---	---	---	e93	e89	e14	e15	e22	14
31	---	---	---	---	---	---	---	e57	---	e15	e21	---
TOTAL	---	---	---	---	---	---	18,652	1,497	1,540	2,276	4,820	1,202
MEAN	---	---	---	---	---	---	622	48.3	51.3	73.4	155	40.1
MAX	---	---	---	---	---	---	2,650	109	213	1,040	1,690	236
MIN	---	---	---	---	---	---	81	28	14	12	12	11
AC-FT	---	---	---	---	---	---	37,000	2,970	3,050	4,510	9,560	2,380
CFSM	---	---	---	---	---	---	0.86	0.07	0.07	0.10	0.22	0.06
IN.	---	---	---	---	---	---	0.96	0.08	0.08	0.12	0.25	0.06

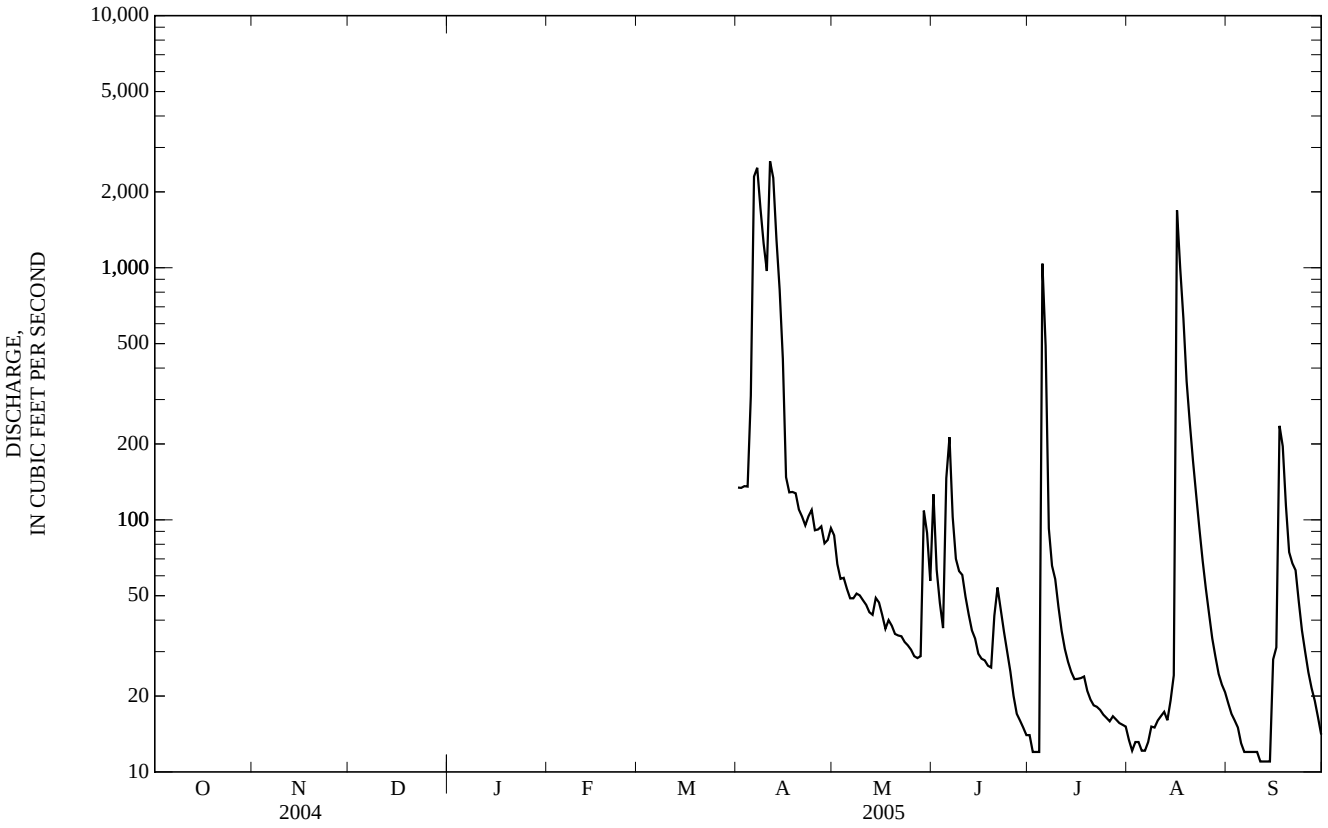
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	444	366	341	268	525	810	857	1,038	661	177	90.0	244
MAX	6,358	2,529	3,066	1,361	2,332	5,684	4,390	3,760	4,093	1,673	1,140	2,490
(WY)	(1982)	(1974)	(1947)	(1968)	(1946)	(1945)	(1957)	(1957)	(1945)	(1950)	(1950)	(1957)
MIN	0.00	7.01	8.23	7.91	7.77	6.53	20.1	48.3	11.9	0.05	0.00	0.00
(WY)	(1957)	(1964)	(1967)	(1967)	(1967)	(1967)	(1980)	(2005)	(1966)	(1956)	(1956)	(1956)

07335000 CLEAR BOGGY CREEK NEAR CANEY, OK—Continued

SUMMARY STATISTICS	WATER YEARS 1943 - 2005	
ANNUAL MEAN	488	
HIGHEST ANNUAL MEAN	1,668	1945
LOWEST ANNUAL MEAN	54.4	1956
HIGHEST DAILY MEAN	41,500	Oct 14, 1981
LOWEST DAILY MEAN	0.00	Sep 3, 1954
ANNUAL SEVEN-DAY MINIMUM	0.00	Sep 3, 1954
MAXIMUM PEAK FLOW	53,500	Oct 14, 1981
MAXIMUM PEAK STAGE	26.77	Dec 11, 1946
ANNUAL RUNOFF (AC-FT)	353,500	
ANNUAL RUNOFF (CFSM)	0.678	
ANNUAL RUNOFF (INCHES)	9.21	
10 PERCENT EXCEEDS	1,050	
50 PERCENT EXCEEDS	80	
90 PERCENT EXCEEDS	10	

e Estimated



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 NGVD of 1929. Prior to Sept. 19, 1985, gage 500 ft downstream at same datum.

REMARKS.--No estimated daily discharge. Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

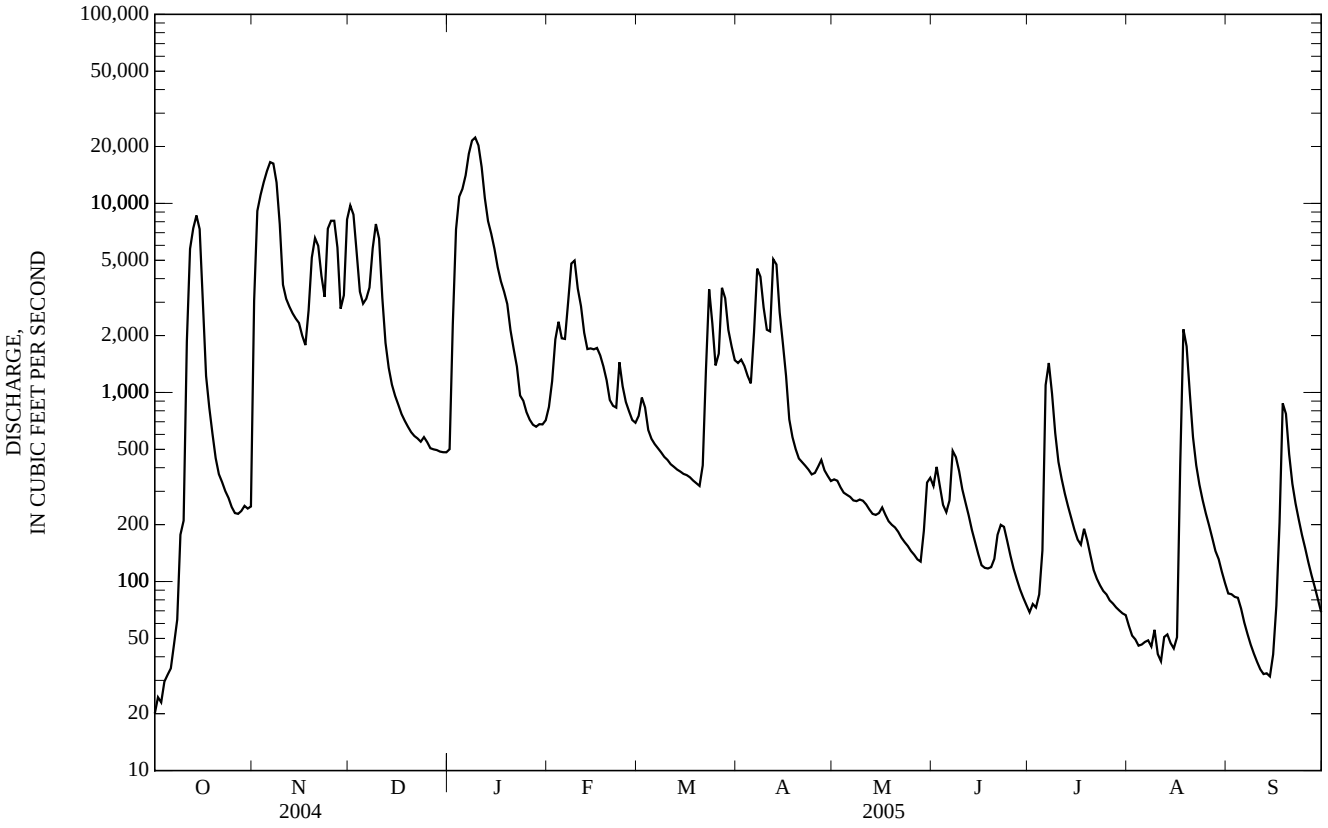
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	3,050	9,750	501	838	752	1,430	347	320	69	58	86
2	24	9,120	8,720	2,290	1,150	940	1,490	341	404	76	52	86
3	23	11,100	5,490	7,280	1,910	834	1,380	315	319	73	49	83
4	30	13,000	3,410	10,900	2,370	633	1,220	295	254	85	46	82
5	32	14,800	2,950	11,900	1,930	569	1,120	287	233	146	46	72
6	35	16,500	3,130	14,100	1,920	533	2,080	280	268	1,090	48	61
7	47	16,200	3,590	18,300	3,020	507	4,520	269	491	1,430	49	53
8	63	12,900	5,780	21,500	4,810	483	4,100	266	455	986	45	46
9	177	7,760	7,780	22,300	4,980	456	2,810	271	385	610	56	41
10	210	3,710	6,520	20,300	3,540	440	2,150	267	308	429	41	38
11	1,860	3,130	3,170	15,600	2,860	417	2,100	256	261	349	38	34
12	5,750	2,840	1,830	10,700	2,070	404	5,060	240	223	292	51	32
13	7,390	2,620	1,350	8,060	1,700	391	4,750	228	187	250	53	33
14	8,630	2,460	1,100	6,910	1,710	382	2,650	225	161	217	47	31
15	7,310	2,330	960	5,750	1,690	371	1,820	230	139	188	44	41
16	3,020	2,000	860	4,600	1,720	365	1,220	247	122	167	51	74
17	1,220	1,780	769	3,880	1,570	356	721	225	118	157	412	204
18	832	2,720	709	3,410	1,370	342	580	208	117	190	2,160	876
19	604	5,170	659	2,940	1,160	331	501	200	119	165	1,750	771
20	449	6,560	617	2,140	912	320	447	193	132	137	992	472
21	370	5,970	589	1,700	850	412	428	183	177	115	580	329
22	335	4,140	571	1,370	831	1,310	410	171	199	103	412	258
23	301	3,200	549	964	1,440	3,510	391	162	195	95	325	212
24	277	7,350	581	904	1,080	2,310	369	154	164	89	270	176
25	248	8,100	546	787	891	1,390	375	145	138	85	229	150
26	230	8,090	507	718	795	1,600	405	138	117	80	198	126
27	228	5,840	500	675	715	3,580	439	131	103	77	170	108
28	236	2,770	496	659	692	3,150	387	127	91	73	145	93
29	251	3,270	487	680	---	2,140	362	186	82	70	131	80
30	243	8,220	483	678	---	1,750	340	334	75	68	113	69
31	249	---	483	713	---	1,480	---	354	---	66	98	---
TOTAL	40,694	196,700	74,936	203,209	50,524	32,458	46,055	7,275	6,357	8,027	8,759	4,817
MEAN	1,313	6,557	2,417	6,555	1,804	1,047	1,535	235	212	259	283	161
MAX	8,630	16,500	9,750	22,300	4,980	3,580	5,060	354	491	1,430	2,160	876
MIN	20	1,780	483	501	692	320	340	127	75	66	38	31
AC-FT	80,720	390,200	148,600	403,100	100,200	64,380	91,350	14,430	12,610	15,920	17,370	9,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2005, BY WATER YEAR (WY)

MEAN	725	2,024	2,592	2,112	2,484	3,570	3,431	3,849	2,053	583	327	584
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)

07335300 MUDDY BOGGY CREEK NEAR UNGER, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1983 - 2005	
ANNUAL TOTAL	496,625		679,811			
ANNUAL MEAN	1,357		1,862		2,024	
HIGHEST ANNUAL MEAN					4,951	1990
LOWEST ANNUAL MEAN					450	2000
HIGHEST DAILY MEAN	16,500	Nov 6	22,300	Jan 9	76,000	May 6, 1990
LOWEST DAILY MEAN	16	Sep 30	20	Oct 1	1.8	Sep 8, 1984
ANNUAL SEVEN-DAY MINIMUM	18	Sep 24	30	Oct 1	2.6	Sep 3, 1984
MAXIMUM PEAK FLOW			22,500	Jan 9	76,700	May 6, 1990
MAXIMUM PEAK STAGE			40.17	Jan 9	55.27	May 6, 1990
ANNUAL RUNOFF (AC-FT)	985,100		1,348,000		1,467,000	
10 PERCENT EXCEEDS	4,150		5,750		6,150	
50 PERCENT EXCEEDS	313		440		438	
90 PERCENT EXCEEDS	47		69		53	



07335500 RED RIVER AT ARTHUR CITY, TX

LOCATION.--Lat 33°52'30", long 95°30'06", in NW $^1/_4$ sec.11, T.8 S., R.17 E., Choctaw County, OK, Hydrologic Unit 11140101, on right downstream bank of bridge on U.S. Highway 271 at Arthur City, 10.6 mi downstream from Muddy Boggy River, 26.0 mi upstream from Kiamichi River, and at mile 633.1.

DRAINAGE AREA.--44,531 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 NGVD of 1929. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2,550	4,160	44,600	7,350	9,340	8,150	7,730	3,880	1,910	2,100	3,090	2,700
2	2,730	9,210	35,800	9,070	9,830	8,270	7,670	3,220	2,340	2,330	3,110	2,820
3	2,610	15,700	26,200	34,200	11,000	8,300	7,600	2,120	2,670	2,470	2,850	2,710
4	2,080	16,000	21,700	65,400	12,100	7,980	6,980	2,260	2,500	2,390	2,520	2,180
5	1,000	17,900	18,100	57,100	10,900	7,840	6,800	3,280	2,320	1,510	2,490	1,980
6	2,010	18,000	17,500	39,300	10,500	7,740	8,340	3,300	2,240	1,640	2,480	1,560
7	2,190	17,600	19,200	31,500	12,100	7,680	12,400	3,260	1,640	5,790	2,480	1,520
8	2,200	16,500	22,100	38,100	15,000	7,600	11,000	3,320	1,770	4,440	2,370	1,880
9	2,430	12,400	20,200	40,700	14,900	7,590	7,860	2,880	2,260	2,440	1,730	1,940
10	2,480	6,620	16,400	39,400	12,800	7,450	6,620	1,930	2,320	2,100	1,710	1,940
11	4,110	6,020	12,800	36,700	11,300	7,390	5,930	1,840	2,220	2,460	2,360	1,930
12	4,680	5,350	10,300	33,500	10,500	7,300	8,140	2,780	2,160	1,550	2,340	1,880
13	7,180	4,830	9,290	33,900	9,960	7,280	10,300	2,900	2,080	1,250	2,090	1,490
14	11,200	4,890	8,790	33,600	10,000	7,280	7,380	3,030	1,460	1,780	2,330	1,450
15	12,200	4,630	8,520	29,600	9,860	7,300	5,930	3,050	1,210	2,070	2,320	1,930
16	9,080	3,570	8,270	27,000	9,660	7,250	5,330	2,740	1,620	2,150	1,800	2,310
17	6,310	3,070	8,080	25,600	9,370	7,230	4,690	2,300	2,000	2,200	1,780	2,270
18	4,310	4,930	7,950	24,800	9,040	7,190	4,350	2,560	2,130	2,120	2,830	2,380
19	2,010	9,670	7,860	24,200	8,860	7,150	4,270	2,960	2,330	1,360	3,920	2,920
20	1,360	15,500	7,760	23,000	8,630	7,150	4,250	2,930	2,180	1,100	3,340	2,240
21	2,460	28,700	7,680	18,500	8,520	7,270	4,120	2,920	1,860	1,640	3,480	1,900
22	2,910	30,900	7,660	13,100	8,450	7,740	4,060	2,890	1,780	1,690	3,090	2,130
23	3,900	30,400	7,690	10,800	9,330	9,960	4,260	2,690	2,110	1,960	1,940	2,130
24	5,150	43,000	7,620	10,300	10,300	10,200	4,390	2,810	2,090	2,120	1,780	2,150
25	3,880	46,000	7,570	9,910	9,300	8,290	4,000	3,010	2,350	2,060	2,640	2,130
26	1,460	38,400	7,460	9,650	8,640	7,630	3,620	2,850	2,470	1,260	2,840	2,030
27	1,710	32,700	7,430	9,430	8,350	13,500	3,890	2,840	2,170	1,050	3,030	1,610
28	4,640	29,100	7,430	9,340	8,220	16,900	4,110	2,530	1,380	2,480	2,980	1,530
29	5,250	28,400	7,400	9,280	---	12,400	4,140	2,440	1,120	3,010	2,740	2,330
30	5,430	39,200	7,390	9,200	---	8,800	3,970	2,560	1,670	2,910	2,170	2,550
31	5,500	---	7,360	9,230	---	8,070	---	2,060	---	3,080	2,170	---
TOTAL	127,010	543,350	414,110	772,760	286,760	261,880	184,130	86,140	60,360	68,510	78,800	62,520
MEAN	4,097	18,110	13,360	24,930	10,240	8,448	6,138	2,779	2,012	2,210	2,542	2,084
MAX	12,200	46,000	44,600	65,400	15,000	16,900	12,400	3,880	2,670	5,790	3,920	2,920
MIN	1,000	3,070	7,360	7,350	8,220	7,150	3,620	1,840	1,120	1,050	1,710	1,450
AC-FT	251,900	1,078,000	821,400	1,533,000	568,800	519,400	365,200	170,900	119,700	135,900	156,300	124,000

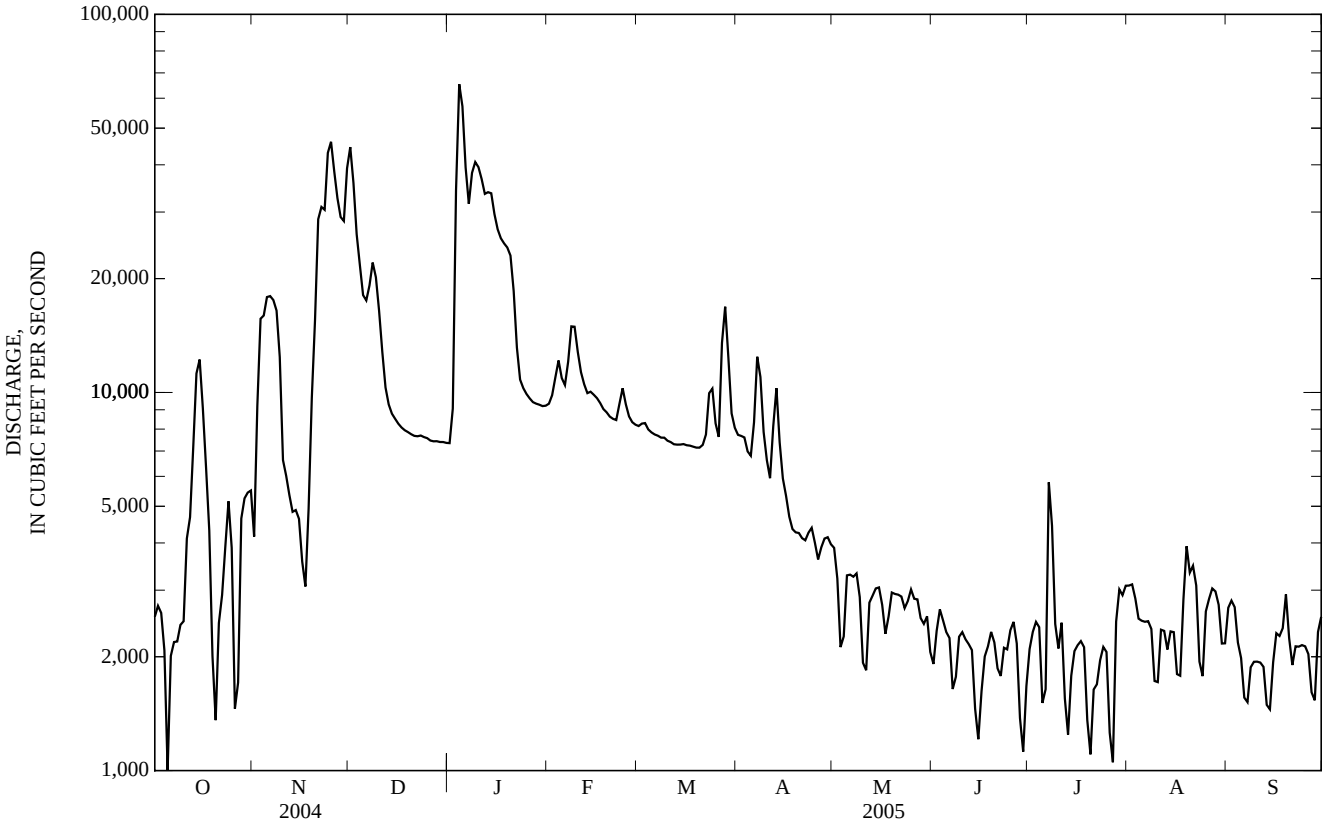
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2005, BY WATER YEAR (WY)

MEAN	6,564	7,425	7,487	7,330	8,667	11,000	11,630	16,020	16,950	7,589	4,816	4,631
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	2,779	2,012	1,586	1,108	859
(WY)	(1957)	(1957)	(1957)	(1964)	(1959)	(1967)	(1956)	(2005)	(2005)	(1956)	(1972)	(1988)

07335500 RED RIVER AT ARTHUR CITY, TX—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1945 - 2005	
ANNUAL TOTAL	2,121,757		2,946,330			
ANNUAL MEAN	5,797		8,072		a9,169	
HIGHEST ANNUAL MEAN					23,290	1990
LOWEST ANNUAL MEAN					2,754	1964
HIGHEST DAILY MEAN	46,000	Nov 25	65,400	Jan 4	269,000	May 4, 1990
LOWEST DAILY MEAN	573	Jan 6	1,000	Oct 5	134	bDec 11, 1956
ANNUAL SEVEN-DAY MINIMUM	1,070	Jan 3	1,680	Jul 21	134	Dec 11, 1956
MAXIMUM PEAK FLOW			68,400	Jan 4	c275,000	May 4, 1990
MAXIMUM PEAK STAGE			18.57	Jan 4	d34.21	May 4, 1990
ANNUAL RUNOFF (AC-FT)	4,209,000		5,844,000		6,643,000	
10 PERCENT EXCEEDS	12,200		18,300		23,500	
50 PERCENT EXCEEDS	3,470		4,260		4,260	
90 PERCENT EXCEEDS	1,190		1,850		1,370	

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 ¼ SE ¼ 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 NGVD of 1929.

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)
Nov 29	1530	2,560	9.56	Jan 13	0000	*4,540	*11.45
Jan 3	1430	3,090	10.19				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	205	288	42	38	45	101	30	37	0.11	0.00	0.00
2	0.05	112	177	114	66	43	84	27	38	0.18	0.00	0.00
3	0.03	76	128	1,320	70	43	73	26	31	0.11	0.00	0.00
4	0.01	73	99	1,100	68	40	66	23	25	0.00	0.00	0.00
5	0.02	56	93	867	67	37	63	20	28	0.00	0.00	0.00
6	0.00	42	99	539	165	35	79	17	22	0.00	0.00	0.00
7	0.03	31	248	281	311	34	80	15	16	0.00	0.00	0.00
8	0.16	21	190	195	196	32	79	34	13	0.00	0.00	0.00
9	0.24	15	152	155	153	30	79	49	9.4	0.00	0.00	0.00
10	0.70	12	121	131	123	29	75	36	6.9	0.00	0.00	0.00
11	1.0	37	99	115	104	27	78	30	5.1	0.00	0.00	0.00
12	0.91	32	86	513	93	26	68	25	4.0	0.00	0.00	0.00
13	0.60	31	71	1,080	109	24	61	21	3.2	0.00	0.00	0.00
14	0.91	28	61	304	94	23	55	32	2.6	0.00	0.00	0.00
15	1.4	23	55	205	86	22	50	31	2.0	0.00	0.00	0.00
16	1.4	19	49	156	78	22	45	23	1.9	0.00	0.00	0.00
17	1.3	17	45	129	69	21	41	18	5.5	0.00	0.00	0.00
18	1.3	108	42	109	63	20	38	15	4.1	0.00	0.00	0.00
19	1.2	112	38	95	60	25	35	12	3.1	0.00	0.00	0.00
20	1.1	81	35	84	59	22	32	10	2.4	0.00	0.00	0.00
21	1.0	60	34	74	55	42	29	8.0	1.8	0.00	0.00	0.00
22	0.72	49	34	64	49	118	74	6.3	1.4	0.00	0.00	0.00
23	0.26	116	35	56	58	102	49	5.2	1.1	0.00	0.00	0.00
24	0.21	396	34	51	58	86	41	10	0.95	0.00	0.00	0.00
25	0.16	192	33	47	54	75	38	188	0.76	0.00	0.00	0.00
26	0.19	123	31	44	51	159	56	74	0.62	0.00	0.00	0.00
27	9.1	108	29	40	51	293	43	54	0.45	0.00	0.00	0.00
28	14	80	29	40	50	252	38	44	0.33	0.00	0.00	0.00
29	5.5	845	28	41	---	174	36	50	0.21	0.00	0.00	0.00
30	7.7	591	29	38	---	133	35	45	0.12	0.00	0.00	0.00
31	104	---	31	41	---	106	---	38	---	0.00	0.00	---
TOTAL	155.24	3,691	2,523	8,070	2,498	2,140	1,721	1,016.5	267.94	0.40	0.00	0.00
MEAN	5.01	123	81.4	260	89.2	69.0	57.4	32.8	8.93	0.01	0.00	0.00
MAX	104	845	288	1,320	311	293	101	188	38	0.18	0.00	0.00
MIN	0.00	12	28	38	38	20	29	5.2	0.12	0.00	0.00	0.00
AC-FT	308	7,320	5,000	16,010	4,950	4,240	3,410	2,020	531	0.8	0.00	0.00
CFSM	0.12	3.07	2.03	6.49	2.22	1.72	1.43	0.82	0.22	0.00	0.00	0.00
IN.	0.14	3.42	2.34	7.49	2.32	1.99	1.60	0.94	0.25	0.00	0.00	0.00

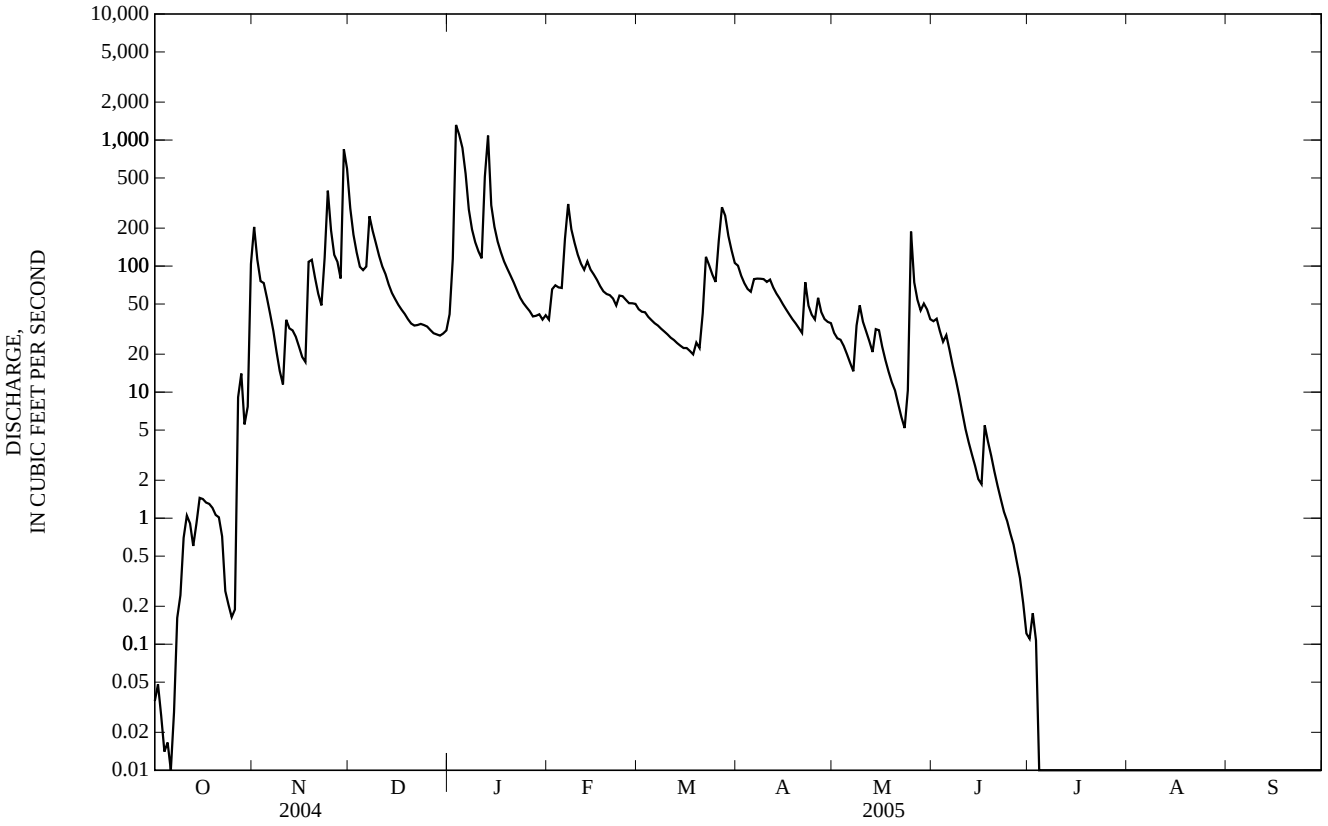
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2005, BY WATER YEAR (WY)

MEAN	59.4	97.4	127	104	118	144	126	125	63.6	22.5	6.27	18.1
MAX	514	533	445	260	354	362	362	614	263	128	51.0	283
(WY)	(1985)	(1997)	(1972)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1966 - 2005	
ANNUAL TOTAL	25,548.58		22,083.08			
ANNUAL MEAN	69.8		60.5		84.1	
HIGHEST ANNUAL MEAN					152	1985
LOWEST ANNUAL MEAN					33.9	1978
HIGHEST DAILY MEAN	2,960	Jun 22	1,320	Jan 3	5,960	May 13, 1982
LOWEST DAILY MEAN	0.00	at times	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	0.03	Sep 30	0.00	Jul 4	0.00	Oct 16, 1966
MAXIMUM PEAK FLOW			4,540	Jan 13	a27,400	May 19, 1990
MAXIMUM PEAK STAGE			11.45	Jan 13	19.60	May 19, 1990
ANNUAL RUNOFF (AC-FT)	50,680		43,800		60,900	
ANNUAL RUNOFF (CFSM)	1.74		1.51		2.10	
ANNUAL RUNOFF (INCHES)	23.70		20.49		28.48	
10 PERCENT EXCEEDS	147		123		172	
50 PERCENT EXCEEDS	32		28		26	
90 PERCENT EXCEEDS	0.65		0.00		0.05	

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 ¼ SE ¼ 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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	3,490	5,530	136	310	1,030	2,480	113	78	5.9	0.40	1.3
2	1.3	3,420	3,020	358	631	663	2,400	107	83	6.3	0.34	1.1
3	1.0	2,870	2,270	6,320	1,330	229	2,100	101	66	5.1	0.35	1.0
4	1.7	2,850	1,870	10,300	896	212	1,940	96	60	4.4	e0.35	1.1
5	1.9	2,390	1,710	8,580	401	197	1,860	92	64	5.4	e0.33	0.90
6	1.5	2,080	2,550	7,810	517	179	2,050	87	56	5.1	e0.31	0.71
7	4.4	1,910	4,180	4,200	1,160	167	2,560	80	49	4.2	e0.29	0.60
8	8.9	1,800	3,640	3,870	1,660	153	2,120	77	44	3.7	e0.27	0.34
9	4.8	1,720	3,130	3,350	2,270	144	821	73	40	3.2	0.25	0.19
10	5.7	1,230	2,890	3,090	2,130	132	641	70	40	3.0	0.20	0.12
11	26	444	2,700	3,140	1,350	122	709	108	31	2.6	0.14	0.08
12	59	795	2,580	3,420	547	111	1,050	95	27	2.4	0.11	0.06
13	94	529	2,490	6,790	543	105	1,250	78	25	2.3	0.08	0.04
14	58	390	2,390	6,130	561	98	1,150	95	22	2.1	0.08	0.03
15	40	311	1,510	3,970	775	93	754	211	18	2.0	0.17	0.13
16	31	748	329	3,540	1,120	90	307	155	16	1.9	0.72	0.18
17	25	1,720	288	3,320	1,060	86	263	110	20	1.9	0.81	0.13
18	21	2,820	263	3,180	690	83	233	89	18	1.8	0.76	0.10
19	18	2,740	238	2,620	283	82	205	74	16	1.8	0.68	0.09
20	16	1,220	208	1,910	274	93	183	66	17	2.1	0.57	0.09
21	14	832	187	1,500	267	143	165	59	19	2.1	0.48	0.07
22	12	634	173	914	249	1,600	292	52	16	1.9	0.37	0.06
23	12	1,170	165	843	335	1,290	540	47	14	1.6	0.33	0.05
24	11	6,680	159	642	762	1,360	582	43	12	1.3	0.66	0.05
25	9.7	4,960	148	273	864	1,200	392	38	9.9	1.1	3.1	0.13
26	9.1	2,090	138	249	438	1,230	142	38	9.1	0.85	3.9	0.11
27	8.9	1,430	135	228	417	2,860	162	202	7.9	1.0	3.5	0.09
28	8.7	1,060	140	212	682	2,970	175	140	7.1	0.93	2.8	0.08
29	11	4,800	144	226	---	2,320	148	105	6.4	0.77	2.4	0.09
30	140	9,610	142	270	---	2,330	125	86	5.6	0.63	2.0	0.06
31	213	---	139	266	---	2,090	---	76	---	0.50	1.6	---
TOTAL	869.7	68,743	45,456	91,657	22,522	23,462	27,799	2,863	897.0	79.88	28.35	9.08
MEAN	28.1	2,291	1,466	2,957	804	757	927	92.4	29.9	2.58	0.91	0.30
MAX	213	9,610	5,530	10,300	2,270	2,970	2,560	211	83	6.3	3.9	1.3
MIN	1.0	311	135	136	249	82	125	38	5.6	0.50	0.08	0.03
AC-FT	1,730	136,400	90,160	181,800	44,670	46,540	55,140	5,680	1,780	158	56	18

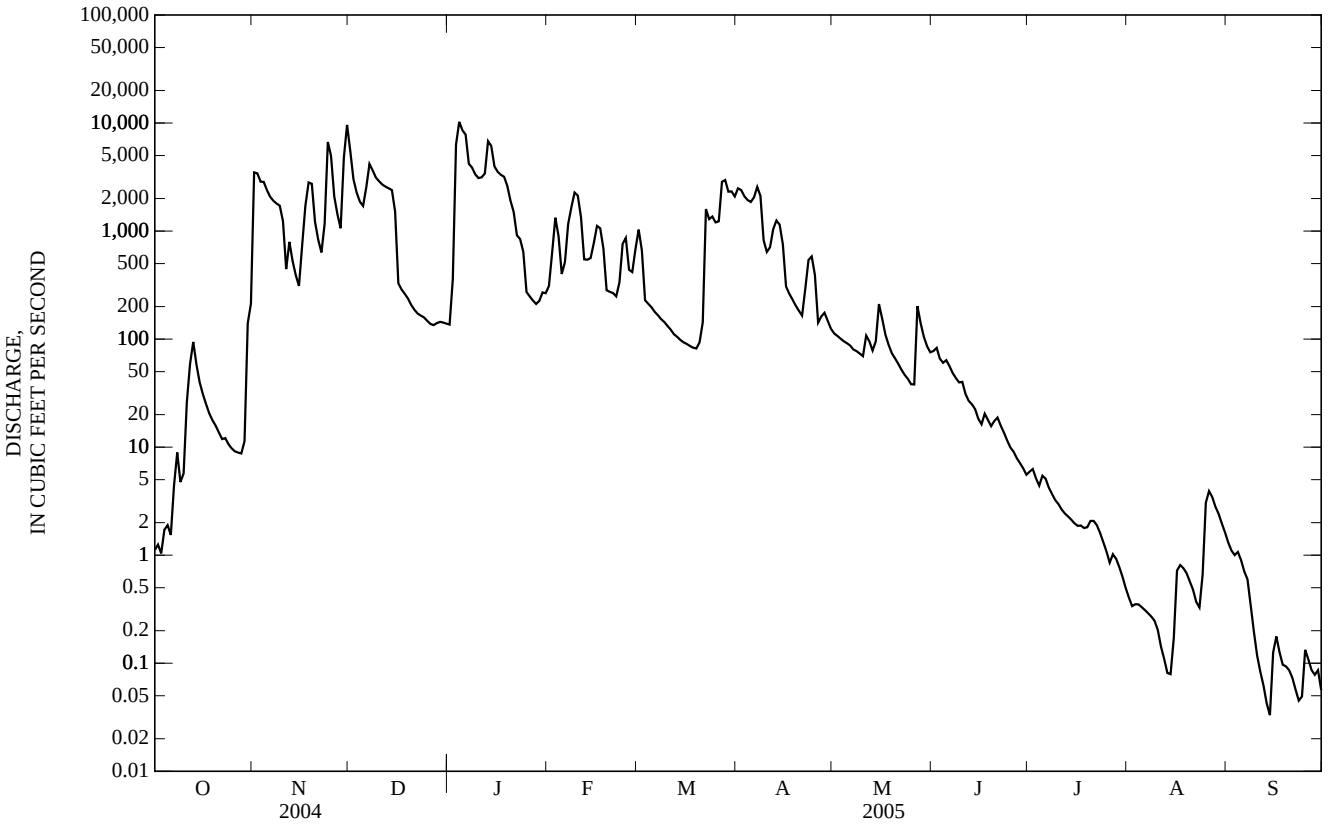
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2005, BY WATER YEAR (WY)

MEAN	637	1,256	1,500	1,269	1,502	1,556	1,557	1,675	900	233	153	247
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	2.58	0.29	0.30
(WY)	(2000)	(2000)	(1990)	(1986)	(1996)	(2000)	(2003)	(1988)	(1988)	(2005)	(1998)	(2005)

e Estimated

07335790 KIAMICHI RIVER NEAR CLAYTON, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1982 - 2005	
ANNUAL TOTAL	305,147.91		284,386.01			
ANNUAL MEAN	834		779		1,037	
HIGHEST ANNUAL MEAN					1,967	1990
LOWEST ANNUAL MEAN					340	2003
HIGHEST DAILY MEAN	9,610	Nov 30	10,300	Jan 4	36,800	May 4, 1990
LOWEST DAILY MEAN	0.84	Sep 30	0.03	Sep 14	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	1.1	Sep 27	0.07	Sep 18	0.00	Oct 3, 1983
MAXIMUM PEAK FLOW			10,700	Jan 4	40,200	May 4, 1990
MAXIMUM PEAK STAGE			11.97	Jan 4	22.23	May 4, 1990
ANNUAL RUNOFF (AC-FT)	605,300		564,100		751,600	
10 PERCENT EXCEEDS	2,750		2,600		3,010	
50 PERCENT EXCEEDS	198		107		229	
90 PERCENT EXCEEDS	5.6		0.35		3.5	



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 NGVD of 1929.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	7,240	11,000	228	537	993	2,540	185	196	12	2.5	0.13
2	8.1	8,720	5,050	640	839	1,130	3,130	166	395	11	3.3	0.03
3	5.8	4,110	3,170	8,110	1,480	751	2,540	161	226	10	4.1	0.00
4	8.7	3,980	2,370	16,900	1,610	448	2,160	155	165	9.3	4.3	0.00
5	9.1	3,030	2,110	15,400	1,030	406	1,980	148	149	50	4.3	0.00
6	7.1	2,320	2,590	13,800	1,010	376	2,200	141	151	88	4.4	0.00
7	24	1,950	5,290	8,020	2,530	344	2,760	134	150	68	3.9	0.00
8	18	1,740	5,310	5,270	2,180	318	3,010	134	122	55	4.2	0.00
9	8.8	1,600	3,930	4,290	2,540	292	1,830	130	102	40	6.1	0.00
10	192	1,510	3,330	3,700	2,590	269	1,020	122	85	29	5.6	0.00
11	5,090	1,010	2,940	3,360	2,270	252	1,120	115	72	21	5.2	0.00
12	3,190	628	2,690	3,770	1,210	235	1,510	107	64	17	4.7	0.00
13	561	774	2,510	8,770	1,230	220	1,400	119	59	13	3.9	0.00
14	282	556	2,370	9,530	1,160	205	1,320	147	55	9.6	3.1	0.00
15	214	443	2,230	5,550	947	193	1,180	142	49	8.2	2.8	0.35
16	157	373	1,040	4,310	1,130	179	758	170	43	7.0	2.6	0.63
17	116	873	458	3,800	1,220	171	452	236	45	7.5	2.4	0.50
18	88	2,130	408	3,520	1,140	164	394	192	40	7.7	1.9	0.43
19	68	4,100	370	3,330	768	156	349	156	38	7.1	1.6	0.33
20	54	2,190	334	2,270	529	151	315	134	37	7.7	1.4	0.25
21	44	1,240	306	1,960	529	166	285	117	36	9.9	1.1	0.25
22	37	942	284	1,320	498	762	260	104	33	10	0.95	0.40
23	39	2,030	267	985	917	1,640	288	93	29	9.4	0.79	0.56
24	43	11,100	249	902	1,350	1,430	530	82	25	8.0	0.70	0.69
25	36	10,200	237	717	1,380	1,300	556	74	22	6.5	0.63	0.97
26	29	4,130	230	448	1,050	1,360	477	66	21	5.3	0.61	0.89
27	28	2,290	225	407	752	3,960	274	61	20	4.3	0.52	0.79
28	27	1,570	220	384	748	4,930	250	59	17	3.7	0.49	0.78
29	26	4,890	221	385	---	3,240	249	162	15	3.1	0.54	0.84
30	26	14,500	228	395	---	2,700	219	189	12	2.7	0.41	0.69
31	34	---	228	505	---	2,390	---	154	---	2.3	0.28	---
TOTAL	10,474.3	102,169	62,195	132,976	35,174	31,131	35,356	4,155	2,473	543.3	79.32	9.51
MEAN	338	3,406	2,006	4,290	1,256	1,004	1,179	134	82.4	17.5	2.56	0.32
MAX	5,090	14,500	11,000	16,900	2,590	4,930	3,130	236	395	88	6.1	0.97
MIN	3.7	373	220	228	498	151	219	59	12	2.3	0.28	0.00
AC-FT	20,780	202,700	123,400	263,800	69,770	61,750	70,130	8,240	4,910	1,080	157	19

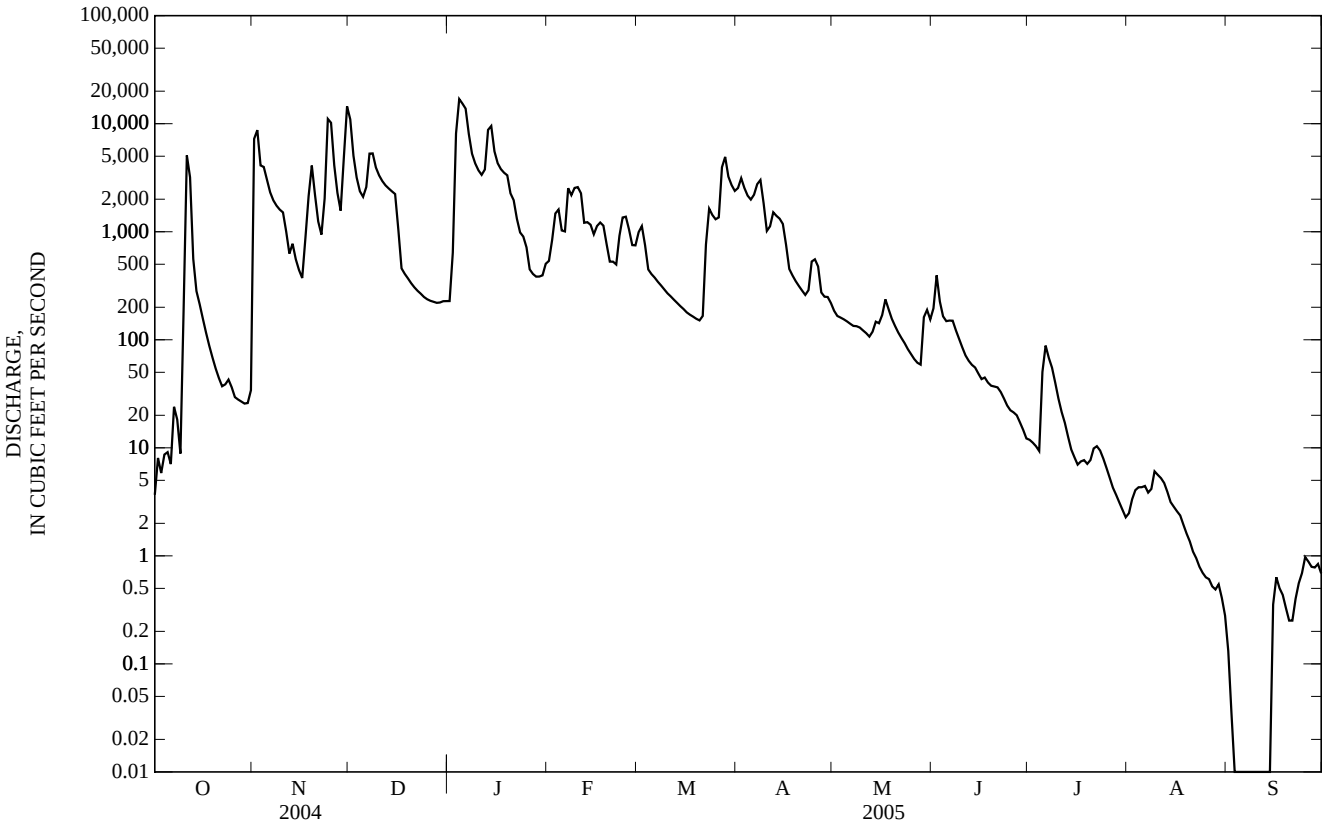
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2005, BY WATER YEAR (WY)

MEAN	921	2,083	2,324	1,928	2,295	2,616	2,591	2,550	1,336	379	218	349
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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1984 - 2005	
ANNUAL TOTAL	442,609.9		416,735.43			
ANNUAL MEAN	1,209		1,142		a1,628	
HIGHEST ANNUAL MEAN					3,184	1990
LOWEST ANNUAL MEAN					479	2003
HIGHEST DAILY MEAN	14,500	Nov 30	16,900	Jan 4	57,000	May 4, 1990
LOWEST DAILY MEAN	1.8	Sep 30	0.00	Sep 3	b0.00	Jul 31, 1998
ANNUAL SEVEN-DAY MINIMUM	2.6	Sep 24	0.00	Sep 3	0.00	Jul 31, 1998
MAXIMUM PEAK FLOW			17,500	Jan 4	62,300	May 3, 1990
MAXIMUM PEAK STAGE			20.71	Jan 4	42.65	May 3, 1990
ANNUAL RUNOFF (AC-FT)	877,900		826,600		1,179,000	
10 PERCENT EXCEEDS	3,470		3,280		4,510	
50 PERCENT EXCEEDS	333		196		362	
90 PERCENT EXCEEDS	18		0.82		8.2	

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.



07336820 RED RIVER NEAR DE KALB, TX

LOCATION .--Lat 33°40'59", long 94°41'39", Bowie County, Hydrologic Unit 11140106, on right bank at downstream side of bridge on U.S. Highway 259, 4.8 mi upstream from North Mill Creek, 13 mi north of De Kalb, and at mile 556.9.

DRAINAGE AREA.--47,348 mi^2, of which 5,936 mi^2 probably is noncontributing.

PERIOD OF RECORD.--December 1967 to September 1988, October 2004 to September 2005.

GAGE.--Water-stage recorder. Datum of gage is 302.92 ft above NGVD of 1929.

REMARKS.--Records poor. Since installation of gage in December 1967, at least 10% of contributing drainage area has been regulated by Lake Texoma (station 07331500) located approximately 169 mi upstream, and low flows may be affected by releases for the generation of electric power. Storage and/or releases from Lake Hugo on the Kiamichi River, a tributary to the Red River about 45 mi upstream, may also affect flows. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since 1957, 205,000 ft^3/s June 1957 (gage height, 32.2 ft), from rating curve extended above 186,500 ft^3/s. The greatest flood since 1936 occurred in February 1938, stage unknown.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e928	e5,020	60,100	6,490	10,800	10,500	14,600	4,810	3,270	1,610	3,300	2,570
2	e1,730	e5,180	67,700	6,560	10,900	e10,200	13,700	4,650	2,740	2,010	3,430	2,580
3	e2,500	e5,490	59,000	10,800	11,800	e9,400	13,400	4,470	2,560	2,460	3,460	2,970
4	e2,540	e15,700	46,300	65,100	13,200	e8,590	13,200	3,540	2,880	2,660	3,460	3,110
5	e2,540	e20,600	38,700	98,800	14,500	e7,990	12,000	2,930	3,180	2,840	3,220	2,930
6	e2,000	e26,000	34,200	88,800	14,100	e7,610	13,300	3,290	3,010	2,870	2,950	2,480
7	e1,300	e30,200	33,400	60,500	14,900	7,540	16,000	3,850	2,840	2,120	2,880	2,200
8	e1,500	e27,200	33,800	54,400	15,400	e7,640	19,600	3,890	2,660	2,590	2,870	1,850
9	e1,650	e24,500	29,000	60,200	19,000	e7,650	21,300	3,910	2,190	5,740	3,030	1,810
10	e1,770	e21,300	24,900	62,800	21,900	e7,510	19,600	3,910	2,250	4,580	2,940	2,070
11	e1,950	e16,600	19,400	61,800	19,600	e7,470	17,400	3,290	2,640	2,990	2,430	2,130
12	e2,170	e12,600	15,200	58,400	15,300	e7,380	14,000	2,620	2,710	2,690	2,440	2,140
13	e2,800	e10,500	11,700	57,900	11,800	e7,350	9,890	2,650	2,620	2,720	2,960	2,140
14	e5,000	e7,140	10,000	58,600	11,000	e7,340	13,200	3,280	2,570	2,010	2,980	2,060
15	e10,100	e6,490	11,700	57,700	10,700	e7,370	11,900	3,440	2,420	1,740	2,840	1,820
16	e12,700	e6,230	14,400	53,100	11,200	e7,350	9,150	3,520	1,950	2,160	3,080	1,960
17	e11,400	e5,450	12,700	48,200	11,800	e7,280	7,960	3,500	1,800	2,390	2,840	2,350
18	e7,800	e5,450	13,500	45,100	11,500	e7,250	7,120	3,130	2,050	2,570	2,390	2,550
19	e5,830	e6,880	13,400	35,400	10,600	e7,190	6,180	2,800	2,340	2,630	2,200	2,530
20	e3,630	e9,340	13,100	30,400	9,620	e7,200	5,440	3,110	2,490	2,430	3,200	2,700
21	e2,040	e14,800	13,000	28,700	9,380	e7,420	5,330	3,410	2,640	1,800	4,100	3,060
22	e1,660	e28,800	12,800	26,700	9,180	e7,680	5,170	3,390	2,520	1,540	3,840	2,550
23	e1,990	37,300	11,000	21,300	9,840	e8,990	5,030	3,350	2,230	1,850	3,870	2,240
24	2,800	44,500	8,910	17,600	13,300	e10,400	4,950	3,310	2,150	1,990	3,370	2,570
25	3,850	56,700	8,620	16,400	16,000	9,650	5,180	3,250	2,400	2,220	2,440	2,670
26	4,590	61,200	8,490	15,700	e17,800	8,880	5,490	3,250	2,470	2,390	2,270	2,570
27	3,140	52,300	8,350	15,200	e14,000	9,520	5,200	3,400	2,690	2,290	2,960	2,460
28	e1,670	43,900	8,030	14,800	10,400	14,200	4,490	3,320	2,800	1,680	3,200	2,300
29	e2,190	40,500	7,470	13,000	---	20,700	4,890	3,480	2,500	1,500	3,400	1,940
30	e4,270	44,100	7,340	11,000	---	19,300	4,940	3,790	1,850	2,620	3,360	1,960
31	e4,700	---	6,960	10,800	---	16,100	---	3,680	---	3,260	3,080	---
TOTAL	114,738	691,970	663,170	1,212,250	369,520	290,650	309,610	108,220	75,420	76,950	94,790	71,270
MEAN	3,701	23,070	21,390	39,100	13,200	9,376	10,320	3,491	2,514	2,482	3,058	2,376
MAX	12,700	61,200	67,700	98,800	21,900	20,700	21,300	4,810	3,270	5,740	4,100	3,110
MIN	928	5,020	6,960	6,490	9,180	7,190	4,490	2,620	1,800	1,500	2,200	1,810
AC-FT	227,600	1,373,000	1,315,000	2,404,000	732,900	576,500	614,100	214,700	149,600	152,600	188,000	141,400

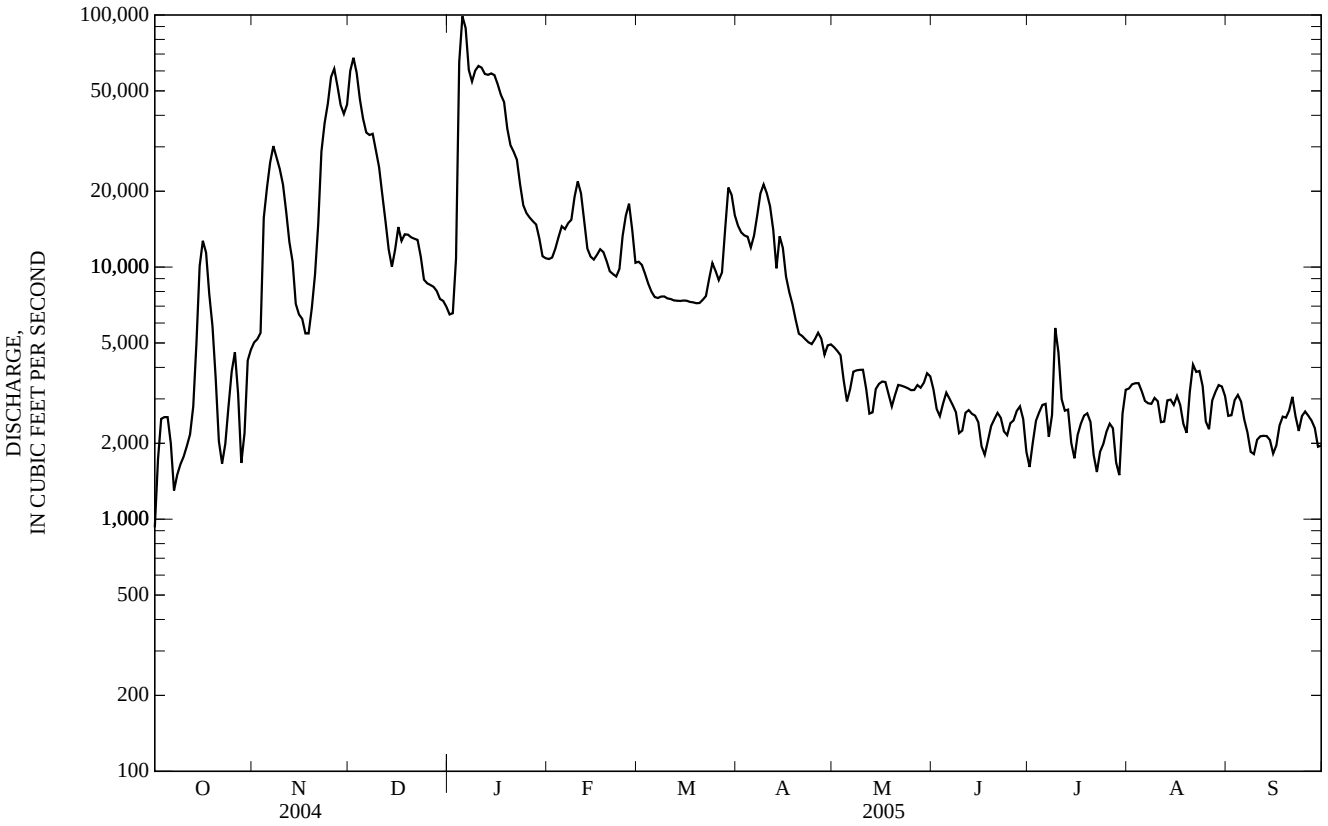
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2005, BY WATER YEAR (WY)

MEAN	8,819	14,590	15,060	13,700	14,560	19,920	18,590	23,830	24,500	9,300	5,761	5,898
MAX	39,980	53,170	45,440	56,380	31,000	48,590	62,330	125,500	67,360	35,030	21,150	24,010
(WY)	(1982)	(1975)	(1972)	(1998)	(1969)	(1987)	(1990)	(1990)	(1987)	(1982)	(1995)	(1974)
MIN	1,783	2,105	1,608	1,699	2,876	2,492	3,005	3,491	2,514	2,482	1,418	1,368
(WY)	(1979)	(1980)	(1978)	(1981)	(1976)	(1980)	(1981)	(2005)	(2005)	(2005)	(1972)	(1988)

e Estimated

07336820 RED RIVER NEAR DE KALB, TX—Continued

SUMMARY STATISTICS	FOR 2005 WATER YEAR		WATER YEARS 1969 - 2005	
ANNUAL TOTAL	4,078,558			
ANNUAL MEAN	11,170		14,690	
HIGHEST ANNUAL MEAN			30,100	1990
LOWEST ANNUAL MEAN			4,690	1980
HIGHEST DAILY MEAN	98,800	Jan 5	278,000	May 7, 1990
LOWEST DAILY MEAN	928	Oct 1	254	Nov 29, 1979
ANNUAL SEVEN-DAY MINIMUM	1,760	Oct 6	529	Aug 31, 1972
MAXIMUM PEAK FLOW	104,000	Jan 5	279,000	May 6, 1990
MAXIMUM PEAK STAGE	25.54	Jan 5	34.42	May 6, 1990
ANNUAL RUNOFF (AC-FT)	8,090,000		10,650,000	
10 PERCENT EXCEEDS	28,700		40,400	
50 PERCENT EXCEEDS	5,020		7,030	
90 PERCENT EXCEEDS	2,140		2,190	



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 NGVD of 1929.

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)
Nov 24	1230	8,820	9.54	Jan 3	2130	*29,000	*17.43
Nov 29	2300	16,100	12.85	Jan 13	0730	11,800	11.03

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	1,520	3,040	53	128	191	481	61	818	5.2	2.3	0.00
2	2.7	1,900	1,670	233	182	165	426	57	629	6.0	1.9	0.00
3	2.8	893	1,050	11,100	440	189	364	54	460	5.3	1.5	0.00
4	4.5	757	751	11,200	402	167	312	50	322	4.4	e1.0	0.00
5	6.2	621	613	4,290	340	143	279	47	234	4.3	e0.50	0.00
6	5.9	464	852	3,840	752	123	512	43	182	3.6	e3.2	0.00
7	6.8	367	2,330	2,180	3,150	108	761	40	160	3.2	e2.5	0.00
8	12	289	1,650	1,400	1,720	95	692	46	139	2.8	e1.9	0.00
9	31	224	1,040	970	1,110	83	565	51	128	2.4	1.2	0.00
10	56	176	758	742	778	72	460	197	116	1.9	0.48	0.00
11	125	177	550	601	583	63	441	186	87	1.5	0.18	0.00
12	88	235	428	589	464	56	407	142	67	0.98	0.00	0.00
13	66	300	357	6,020	483	50	342	109	54	0.81	0.00	0.00
14	65	247	284	2,480	518	44	288	86	43	1.2	0.01	0.00
15	62	201	231	1,370	410	42	254	400	34	2.3	0.46	0.52
16	45	172	200	895	345	39	220	405	29	2.2	2.9	0.61
17	37	152	177	649	288	35	192	273	35	2.2	3.6	0.01
18	31	154	157	498	239	32	169	195	30	23	2.8	0.00
19	25	907	138	404	215	31	151	147	23	17	2.1	0.00
20	22	972	122	344	209	28	139	116	18	11	1.5	0.00
21	19	683	107	293	211	35	128	93	16	8.9	0.95	0.00
22	19	550	100	245	204	136	115	75	14	7.1	0.72	0.00
23	22	1,850	95	198	226	261	100	61	13	6.0	0.54	0.00
24	38	6,640	84	167	323	195	85	51	11	5.4	0.30	0.44
25	39	2,880	74	151	325	156	75	42	9.8	5.0	0.08	1.9
26	43	1,530	65	138	277	276	74	34	8.7	4.2	0.00	2.2
27	45	1,080	59	125	242	1,990	75	30	7.7	3.7	0.00	5.5
28	90	789	56	112	217	1,890	76	31	6.8	3.4	0.00	6.5
29	123	3,040	54	108	---	1,150	78	677	6.1	3.5	0.00	6.0
30	107	6,390	53	114	---	810	73	823	5.4	3.2	0.00	4.6
31	174	---	52	118	---	603	---	916	---	2.6	0.00	---
TOTAL	1,415.7	36,160	17,197	51,627	14,781	9,258	8,334	5,538	3,706.5	154.29	32.62	28.28
MEAN	45.7	1,205	555	1,665	528	299	278	179	124	4.98	1.05	0.94
MAX	174	6,640	3,040	11,200	3,150	1,990	761	916	818	23	3.6	6.5
MIN	2.7	152	52	53	128	28	73	30	5.4	0.81	0.00	0.00
AC-FT	2,810	71,720	34,110	102,400	29,320	18,360	16,530	10,980	7,350	306	65	56
CFSM	0.14	3.83	1.76	5.29	1.68	0.95	0.88	0.57	0.39	0.02	0.00	0.00
IN.	0.17	4.27	2.03	6.10	1.75	1.09	0.98	0.65	0.44	0.02	0.00	0.00

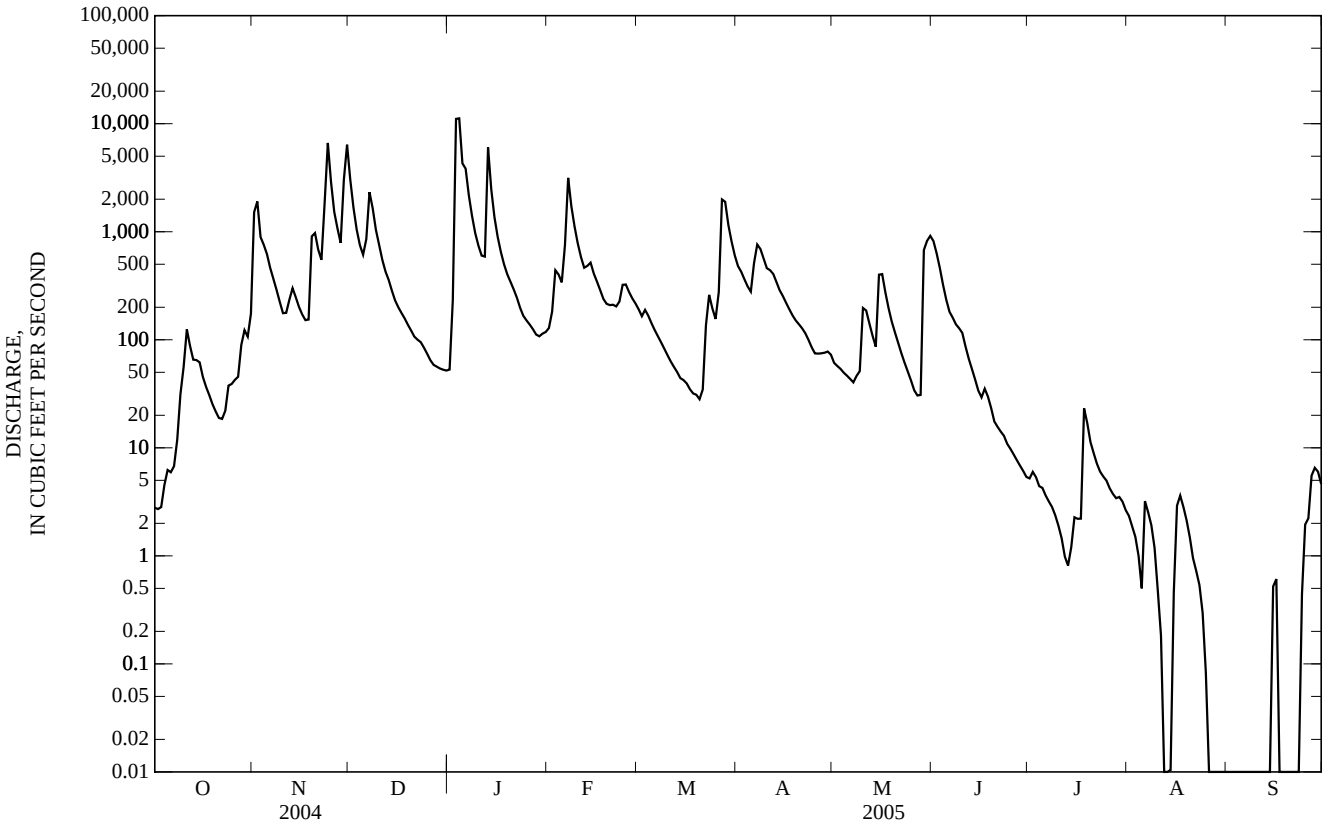
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2005, BY WATER YEAR (WY)

MEAN	358	587	745	543	699	819	685	795	371	91.0	63.9	198
MAX	2,427	2,615	3,376	1,665	1,943	2,506	2,753	3,503	1,514	534	461	2,690
(WY)	(1985)	(1997)	(1972)	(2005)	(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 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1962 - 2005	
ANNUAL TOTAL	199,760.9		148,232.39			
ANNUAL MEAN	546		406		495	
HIGHEST ANNUAL MEAN					979	1973
LOWEST ANNUAL MEAN					169	1976
HIGHEST DAILY MEAN	8,940	Jun 22	11,200	Jan 4	53,100	Dec 10, 1971
LOWEST DAILY MEAN	2.7	Sep 30	0.00	at times	0.00	at times
ANNUAL SEVEN-DAY MINIMUM	2.9	Sep 27	0.00	Aug 26	0.00	Aug 4, 1970
MAXIMUM PEAK FLOW			29,000	Jan 3	98,600	Dec 10, 1971
MAXIMUM PEAK STAGE			17.43	Jan 3	29.72	Dec 10, 1971
ANNUAL RUNOFF (AC-FT)	396,200		294,000		358,600	
ANNUAL RUNOFF (CFSM)	1.73		1.29		1.57	
ANNUAL RUNOFF (INCHES)	23.59		17.51		21.35	
10 PERCENT EXCEEDS	1,520		868		1,050	
50 PERCENT EXCEEDS	177		87		124	
90 PERCENT EXCEEDS	7.9		0.49		3.6	



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 NGVD of 1929. 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.--No estimated daily discharge. Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	162	9,540	416	1,370	755	740	131	1,120	43	35	38
2	32	1,700	9,690	479	1,020	707	1,330	126	741	47	35	38
3	32	2,800	8,920	4,350	1,560	693	1,750	120	589	49	34	37
4	37	3,430	7,920	15,300	1,860	715	1,660	117	426	47	34	37
5	41	3,380	7,240	17,900	1,550	687	1,110	114	310	45	33	37
6	45	2,540	6,930	15,200	1,610	641	1,260	111	246	44	31	36
7	46	1,660	6,940	10,700	4,070	608	1,500	107	243	47	33	35
8	47	1,530	6,740	5,890	4,540	582	1,720	106	419	45	37	34
9	48	1,460	3,830	2,430	4,110	560	1,970	114	430	42	41	34
10	61	1,770	1,420	3,290	4,040	444	1,890	126	411	39	40	35
11	65	1,260	998	4,850	3,650	280	2,050	150	364	37	40	36
12	86	713	773	5,590	2,250	244	1,600	194	191	37	37	37
13	103	588	640	6,920	1,410	229	851	176	119	37	35	38
14	85	310	848	8,100	1,500	218	599	147	98	40	36	39
15	73	230	2,630	7,490	1,350	207	514	126	89	40	37	48
16	67	196	3,740	7,280	2,630	208	461	234	85	41	38	68
17	66	400	3,760	7,020	3,470	224	418	319	92	40	49	77
18	62	790	3,710	6,740	1,730	210	390	242	97	39	56	64
19	59	874	3,630	6,520	570	191	416	197	97	45	50	50
20	54	2,810	3,570	6,350	517	185	490	162	87	51	42	43
21	51	3,510	2,400	6,260	526	201	472	356	79	52	38	41
22	48	3,350	1,260	6,300	501	330	450	856	72	51	36	40
23	49	3,540	779	6,290	1,600	468	367	858	67	49	34	39
24	49	6,460	383	6,220	2,590	518	206	855	67	46	33	48
25	51	7,970	340	6,110	2,140	428	158	514	60	47	36	70
26	56	6,760	325	6,000	1,300	523	168	163	58	45	36	44
27	60	5,470	314	5,540	884	2,500	167	97	57	36	36	38
28	60	5,510	303	3,620	815	3,440	158	89	56	27	35	31
29	63	5,360	298	2,020	---	2,230	144	601	50	31	34	28
30	85	7,350	291	1,900	---	1,340	135	1,660	42	36	35	25
31	109	---	323	1,930	---	958	---	1,410	---	36	37	---
TOTAL	1,828	83,883	100,485	195,005	55,163	21,524	25,144	10,578	6,862	1,311	1,163	1,265
MEAN	59.0	2,796	3,241	6,290	1,970	694	838	341	229	42.3	37.5	42.2
MAX	109	7,970	9,690	17,900	4,540	3,440	2,050	1,660	1,120	52	56	77
MIN	32	162	291	416	501	185	135	89	42	27	31	25
AC-FT	3,630	166,400	199,300	386,800	109,400	42,690	49,870	20,980	13,610	2,600	2,310	2,510

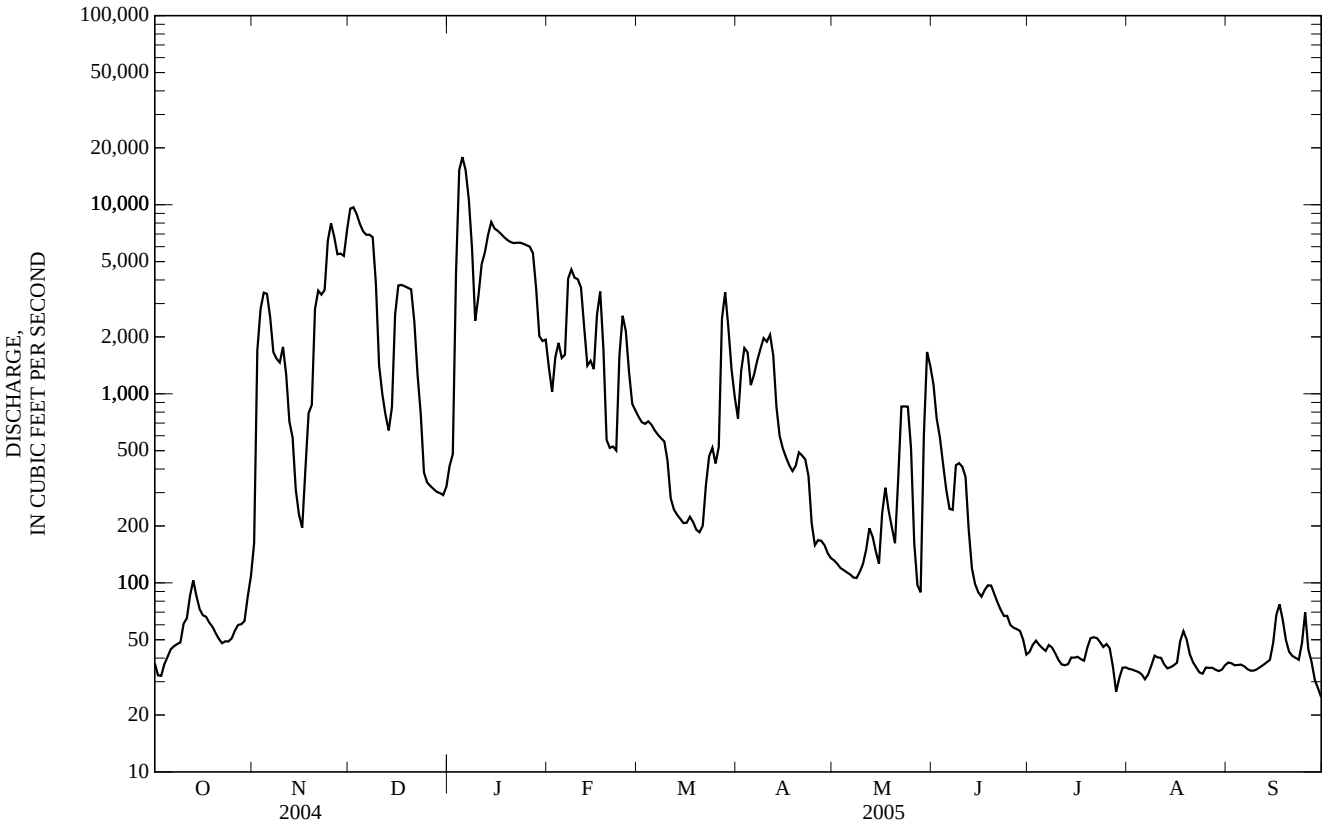
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2005, BY WATER YEAR (WY)

MEAN	1,034	2,236	2,897	2,250	2,601	2,993	2,334	2,794	1,872	431	285	628
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)

07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1971 - 2005	
ANNUAL TOTAL	646,478		504,211			
ANNUAL MEAN	1,766		1,381		a1,858	
HIGHEST ANNUAL MEAN					3,424	1973
LOWEST ANNUAL MEAN					676	1976
HIGHEST DAILY MEAN	11,800	Jun 24	17,900	Jan 5	66,800	Dec 11, 1971
LOWEST DAILY MEAN	32	Oct 2	25	Sep 30	b7.8	Aug 14, 1976
ANNUAL SEVEN-DAY MINIMUM	39	Oct 1	33	Jul 28	11	Oct 15, 1972
MAXIMUM PEAK FLOW			18,400	Jan 5	103,000	Dec 10, 1971
MAXIMUM PEAK STAGE			29.66	Jan 5	39.39	Dec 10, 1971
ANNUAL RUNOFF (AC-FT)	1,282,000		1,000,000		1,346,000	
10 PERCENT EXCEEDS	5,500		5,050		5,940	
50 PERCENT EXCEEDS	496		242		559	
90 PERCENT EXCEEDS	51		37		46	

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 NGVD of 1929.

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 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)
Oct 27	1930	12,300	14.12	Jan 3	2100	*22,100	*18.42
Nov 29	2230	13,100	14.44				

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.69	5,050	3,090	163	227	326	457	136	173	9.5	2.0	2.1
2	0.68	2,810	1,720	287	359	280	387	123	167	9.2	1.8	2.1
3	0.72	1,390	1,160	10,500	524	260	318	111	130	8.1	1.8	2.3
4	0.62	1,020	837	11,800	450	244	274	105	103	7.3	1.8	2.5
5	0.68	703	731	5,260	400	221	253	99	91	7.8	1.7	2.3
6	0.59	533	905	4,470	863	202	501	90	80	7.6	1.7	1.8
7	0.86	418	2,670	2,270	2,900	190	494	82	67	7.1	1.8	1.7
8	158	329	1,660	1,480	1,570	178	455	104	56	6.4	2.4	1.5
9	292	262	1,150	1,070	1,140	166	392	203	48	6.2	2.9	1.5
10	173	221	831	858	812	156	345	201	41	6.3	6.1	1.5
11	368	299	621	726	638	145	422	155	33	6.4	5.4	1.3
12	274	342	507	1,170	540	136	486	127	27	6.4	4.2	1.3
13	173	266	420	6,040	644	131	368	106	22	6.9	3.4	1.3
14	126	228	341	2,330	596	125	310	146	18	6.2	2.6	1.3
15	94	202	290	1,390	489	118	265	202	16	10	2.0	1.2
16	75	186	261	983	434	117	229	170	13	17	2.1	1.2
17	56	172	237	743	371	120	202	130	77	9.5	3.1	1.1
18	45	341	219	600	324	113	183	106	78	7.4	4.6	1.1
19	36	1,080	201	505	301	108	167	91	67	6.7	5.4	e0.90
20	30	732	184	437	310	111	155	79	51	6.2	6.4	e0.80
21	27	552	171	382	339	167	144	66	35	5.8	6.5	e0.70
22	26	492	168	332	285	689	163	56	27	6.0	5.7	e0.68
23	66	2,070	177	279	400	691	285	46	22	5.4	4.7	e0.68
24	153	6,460	165	243	620	512	181	40	19	5.1	3.9	e0.65
25	134	2,760	149	228	521	416	157	347	16	4.5	3.1	1.1
26	106	1,480	141	213	454	551	169	299	15	3.7	2.4	1.1
27	3,620	1,920	139	197	406	1,540	244	176	13	3.1	1.8	1.1
28	2,670	1,250	140	190	386	1,470	174	147	12	3.3	1.7	4.9
29	907	4,530	138	213	---	1,020	152	156	11	3.2	1.6	14
30	632	6,520	138	206	---	740	143	229	10	2.5	1.8	10
31	2,030	---	141	214	---	554	---	197	---	2.2	2.0	---
TOTAL	44,618	19,702	55,779	17,303	11,797	8,475	4,325	1,538	203.0	98.4	65.71	12275.84
MEAN	396	1,487	636	1,799	618	381	282	140	51.3	6.55	3.17	2.19
MAX	3,620	6,520	3,090	11,800	2,900	1,540	501	347	173	17	6.5	14
MIN	0.59	172	138	163	227	108	143	40	10	2.2	1.6	0.65
AC-FT	24,350	88,500	39,080	110,600	34,320	23,400	16,810	8,580	3,050	403	195	130

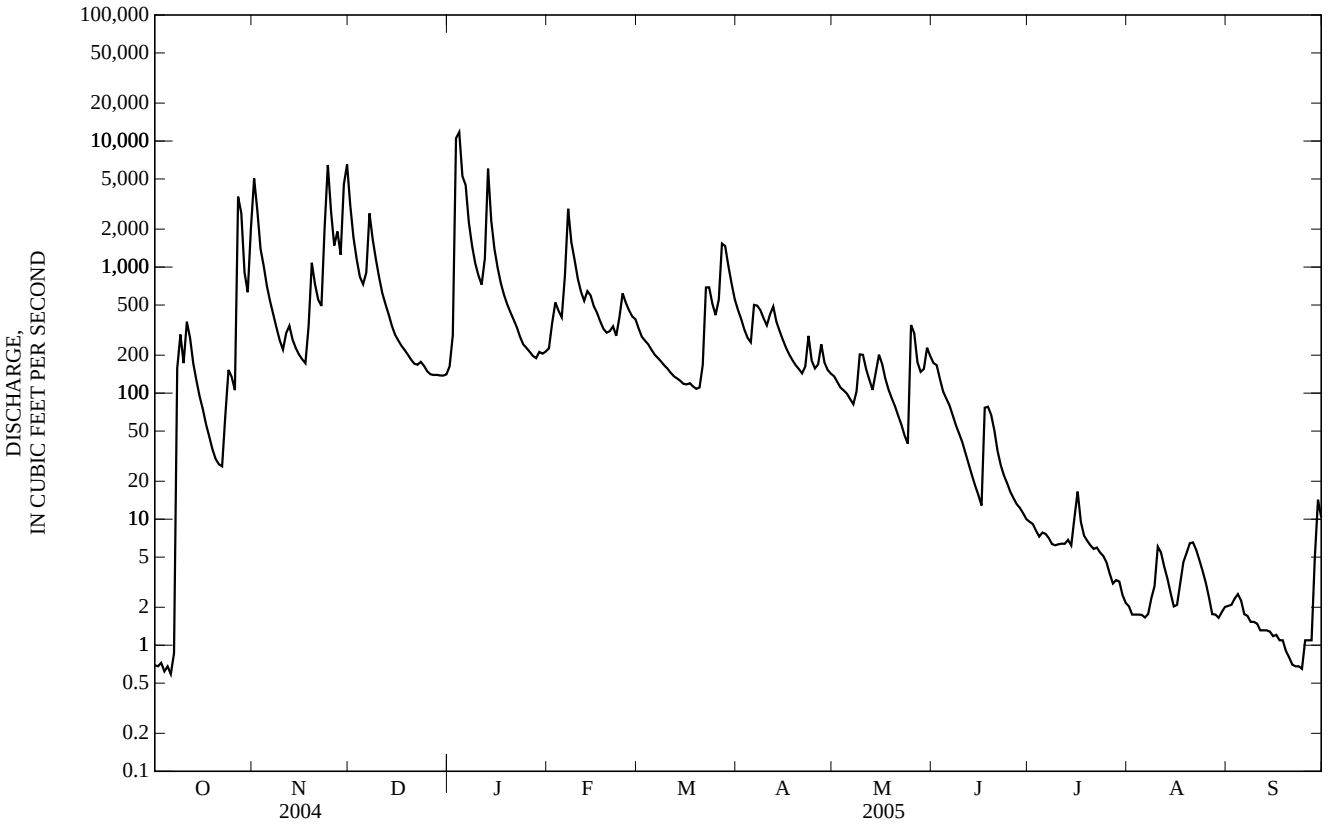
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2005, BY WATER YEAR (WY)

MEAN	463	822	1,061	842	808	803	635	590	445	202	36.9	171
MAX	1,936	1,814	2,351	1,799	2,208	1,886	1,443	1,397	1,825	1,019	158	1,525
(WY)	(1999)	(1997)	(2002)	(2005)	(2001)	(2002)	(2002)	(1993)	(2000)	(2004)	(1996)	(1992)
MIN	7.69	8.97	99.2	190	129	271	165	97.1	51.3	6.55	3.17	2.19
(WY)	(2000)	(1996)	(2004)	(2000)	(1996)	(1996)	(2003)	(1997)	(2005)	(2005)	(2005)	(2005)

e Estimated

07338750 MOUNTAIN FORK AT SMITHVILLE, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1992 - 2005	
ANNUAL TOTAL	217,406.72		176,179.95			
ANNUAL MEAN	594		483		572	
HIGHEST ANNUAL MEAN					821	1999
LOWEST ANNUAL MEAN					214	1996
HIGHEST DAILY MEAN	15,200	Jul 3	11,800	Jan 4	33,700	Oct 6, 1998
LOWEST DAILY MEAN	0.41	Sep 30	0.59	Oct 6	0.12	Aug 31, 1995
ANNUAL SEVEN-DAY MINIMUM	0.52	Sep 25	0.69	Oct 1	0.52	Sep 25, 2004
MAXIMUM PEAK FLOW			22,100	Jan 3	46,500	Oct 6, 1998
MAXIMUM PEAK STAGE			18.42	Jan 3	30.40	Oct 6, 1998
ANNUAL RUNOFF (AC-FT)	431,200		349,500		414,500	
10 PERCENT EXCEEDS	1,360		1,070		1,170	
50 PERCENT EXCEEDS	220		156		198	
90 PERCENT EXCEEDS	9.3		1.8		8.2	



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, 26.3°C Sept. 25, 2005; minimum, 0.3°C Jan. 27, 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 26.3°C Sept. 25; minimum, 2.0°C Dec. 25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.9	19.9	20.4	21.2	20.7	20.9	11.0	10.0	10.4	13.7	12.9	13.3
2	21.2	19.5	20.3	20.7	18.9	19.9	11.2	9.7	10.4	13.6	13.1	13.4
3	22.7	20.8	21.5	18.9	17.2	18.1	11.2	9.8	10.4	14.7	13.1	13.8
4	21.4	20.2	20.7	17.8	16.3	16.9	11.1	9.3	10.2	14.8	14.2	14.4
5	20.9	19.4	20.1	17.4	15.9	16.5	11.8	10.4	11.1	15.0	11.5	14.0
6	21.0	19.4	20.1	17.5	15.7	16.5	13.6	11.8	12.7	11.5	8.2	9.4
7	21.6	20.0	20.8	17.6	15.9	16.7	13.8	11.8	13.0	8.2	7.2	7.7
8	22.7	20.9	21.6	17.2	16.2	16.6	13.5	10.9	12.0	7.9	6.3	6.9
9	22.0	20.7	21.2	16.8	15.8	16.2	13.0	10.7	11.8	8.6	6.0	7.2
10	20.7	19.8	20.3	16.5	15.3	15.9	11.3	9.5	10.3	9.6	7.5	8.6
11	21.1	19.7	20.3	16.5	15.7	16.0	11.3	8.5	9.4	11.3	9.5	10.6
12	20.8	19.4	20.0	15.7	14.8	15.1	11.1	7.9	9.3	12.0	11.0	11.4
13	20.0	18.5	19.3	14.9	14.2	14.5	9.5	7.1	8.4	12.0	9.7	10.9
14	18.8	17.5	18.0	14.8	14.2	14.5	8.3	5.1	6.5	9.8	8.4	9.1
15	19.1	16.8	17.8	15.8	14.8	15.1	7.3	4.4	5.4	8.7	7.1	7.9
16	19.0	17.3	18.1	16.8	15.6	16.2	7.7	4.7	6.1	7.9	6.3	7.0
17	19.2	18.2	18.6	17.3	16.4	16.9	8.8	5.1	6.6	6.8	5.3	6.0
18	21.8	19.2	20.3	17.0	16.3	16.6	9.0	6.1	7.4	6.4	4.7	5.5
19	23.2	21.1	22.0	16.8	16.1	16.4	8.7	6.4	7.2	8.0	6.0	6.9
20	22.2	20.6	21.5	17.4	16.0	16.6	9.0	5.5	6.9	9.3	7.3	8.2
21	22.1	21.0	21.4	17.4	16.7	16.9	9.1	6.3	7.7	10.1	7.6	8.9
22	21.9	21.0	21.4	16.9	16.4	16.6	8.8	5.5	7.4	10.1	6.1	8.9
23	22.3	21.2	21.6	16.7	16.2	16.4	5.7	3.4	4.4	7.1	4.8	5.8
24	21.8	20.4	21.1	16.2	12.6	14.5	4.7	2.4	3.2	6.9	4.1	5.4
25	21.4	20.6	20.9	12.9	11.4	12.0	4.9	2.0	3.2	8.6	5.0	6.5
26	21.7	20.7	21.1	13.5	11.2	12.3	6.1	2.6	3.8	9.7	7.2	8.2
27	22.2	21.2	21.5	14.3	12.9	13.5	6.9	3.7	4.9	9.0	7.6	8.2
28	22.9	21.8	22.3	12.9	11.3	12.1	8.4	4.5	6.2	7.6	6.6	6.9
29	22.5	21.8	22.0	12.9	11.4	12.2	8.9	6.8	7.9	7.9	6.3	7.0
30	22.3	21.2	21.6	12.9	10.7	12.0	11.3	8.5	10.0	7.3	6.4	6.8
31	21.4	20.7	21.0	---	---	---	13.3	11.1	12.3	8.5	6.8	7.5

07338905 MOUNTAIN FORK AT HIGHWAY 259A NEAR BROKEN BOW, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.7	7.0	7.4	---	---	---	16.8	15.6	16.2	17.7	15.6	16.6
2	8.8	6.8	7.6	---	---	---	16.5	14.2	15.3	17.7	16.1	16.8
3	9.3	6.6	7.7	---	---	---	16.8	14.5	15.8	16.1	15.3	15.7
4	9.9	7.0	8.2	---	---	---	16.6	15.4	15.9	15.8	14.5	15.0
5	10.0	7.4	8.5	---	---	---	16.4	15.8	16.0	16.7	15.1	15.8
6	9.3	8.7	9.0	---	---	---	16.1	15.2	15.7	18.2	16.4	17.1
7	11.2	9.3	10.0	---	---	---	15.7	15.0	15.3	18.9	17.7	18.3
8	11.9	9.8	10.7	13.8	12.3	13.2	16.6	14.6	15.4	18.9	18.2	18.6
9	10.9	8.7	10.0	13.9	13.0	13.4	18.1	15.6	16.7	18.4	17.7	18.0
10	10.4	7.4	8.6	13.7	11.7	12.8	18.4	17.6	17.9	19.4	18.1	18.5
11	10.3	7.1	8.5	13.8	12.5	13.2	19.4	17.9	18.4	21.2	19.4	20.0
12	10.0	8.2	9.0	14.8	12.1	13.4	18.8	16.9	17.9	21.8	20.8	21.3
13	12.6	9.3	10.6	14.5	12.7	13.6	18.7	16.6	17.5	22.1	21.2	21.6
14	13.2	9.9	11.3	13.7	11.9	12.7	18.5	16.8	17.6	21.9	21.1	21.5
15	13.7	10.5	11.8	12.9	10.6	11.7	18.8	17.6	18.2	21.7	20.0	20.8
16	12.5	10.6	11.7	10.6	9.9	10.2	19.7	17.5	18.4	21.0	19.4	20.1
17	12.1	9.8	10.6	11.6	9.3	10.4	19.8	18.3	19.0	20.7	19.3	20.0
18	11.7	9.2	10.3	12.1	9.7	10.9	19.8	18.6	19.2	21.4	19.8	20.5
19	10.5	9.9	10.2	13.4	11.4	12.3	19.7	18.9	19.3	21.4	20.4	20.8
20	11.7	10.1	10.8	14.1	12.5	13.2	19.6	19.0	19.3	22.1	20.8	21.4
21	14.7	11.2	12.7	13.9	13.5	13.7	20.1	18.6	19.4	22.9	21.3	22.0
22	14.9	12.0	13.3	14.1	12.9	13.6	21.2	19.1	20.0	24.2	22.3	23.0
23	13.7	11.8	12.7	13.8	12.0	12.8	20.5	18.5	19.4	23.7	22.5	22.9
24	12.0	10.7	11.3	14.0	12.1	13.1	19.4	17.2	18.3	22.7	21.8	22.1
25	12.1	9.7	10.8	15.6	13.3	14.3	18.9	18.0	18.4	22.3	21.3	21.8
26	12.0	9.5	10.7	15.3	13.6	14.2	19.4	17.3	18.2	22.5	21.0	21.7
27	11.1	9.8	10.5	13.8	11.2	12.4	18.7	16.9	17.8	22.4	21.2	21.9
28	---	---	---	13.7	10.5	12.0	19.4	17.5	18.4	22.0	21.2	21.5
29	---	---	---	14.6	12.1	13.3	19.3	17.9	18.5	21.4	19.8	20.4
30	---	---	---	17.3	14.4	15.6	18.4	16.8	17.5	20.1	19.2	19.6
31	---	---	---	17.0	15.6	16.4	---	---	---	20.2	19.3	19.8
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.8	19.8	20.2	23.1	21.3	22.0	21.8	20.2	20.8	22.2	20.6	21.3
2	21.7	19.6	20.7	22.0	21.0	21.5	21.7	20.2	20.9	22.2	20.4	21.3
3	22.4	21.2	21.8	22.6	20.3	21.4	21.4	20.0	20.6	22.5	20.9	21.6
4	22.4	21.6	21.9	22.9	21.6	22.3	20.3	19.0	19.6	22.4	20.7	21.4
5	21.7	20.6	21.0	22.9	21.4	22.1	20.2	18.4	19.3	22.2	20.3	21.2
6	21.6	20.3	21.0	23.1	21.4	22.1	20.6	19.3	19.9	22.2	20.6	21.3
7	21.7	20.5	21.2	22.9	21.9	22.3	20.5	18.7	19.6	21.4	19.9	20.7
8	22.0	20.8	21.3	22.6	21.6	22.0	21.3	19.7	20.3	21.5	19.6	20.6
9	21.7	20.8	21.3	22.4	20.9	21.7	21.5	19.3	20.3	21.8	20.1	20.9
10	22.0	20.9	21.5	22.4	21.5	21.9	22.1	20.3	21.1	22.1	20.2	21.1
11	22.2	20.9	21.5	22.3	20.8	21.5	22.8	20.8	21.5	22.2	20.6	21.3
12	22.6	21.0	21.8	22.1	20.9	21.5	22.7	20.5	21.4	22.2	20.3	21.1
13	23.5	21.3	22.3	21.7	20.9	21.3	23.1	20.9	21.8	22.3	20.8	21.4
14	23.6	21.4	22.4	21.6	20.4	21.0	22.8	21.2	21.8	22.5	20.7	21.4
15	23.9	21.6	22.6	21.7	20.6	21.1	22.3	20.5	21.3	22.0	20.8	21.4
16	23.2	21.6	22.0	22.7	20.5	21.4	22.8	20.5	21.3	22.1	20.0	20.8
17	21.9	20.7	21.1	22.7	20.9	21.6	22.6	20.5	21.4	23.0	20.8	21.8
18	22.1	20.0	21.0	21.9	20.8	21.2	23.3	21.0	22.0	23.5	21.5	22.3
19	22.6	20.9	21.7	21.9	20.6	21.2	23.2	21.2	22.0	23.5	21.4	22.3
20	22.5	21.2	21.8	23.6	20.9	22.0	23.8	21.5	22.4	23.8	21.5	22.5
21	22.5	21.1	21.8	24.8	21.7	23.1	23.9	21.9	22.6	23.1	21.9	22.5
22	22.2	21.0	21.6	24.2	22.5	23.5	23.3	21.7	22.3	23.1	21.5	22.3
23	21.7	20.7	21.2	23.9	21.6	22.5	23.0	21.1	21.9	23.1	21.5	22.4
24	22.0	20.8	21.4	21.7	20.4	21.0	23.3	21.5	22.2	22.3	21.0	21.9
25	22.3	20.9	21.6	22.1	20.5	21.1	23.0	21.4	22.1	26.3	21.0	23.4
26	22.2	21.0	21.6	22.3	20.0	21.0	22.7	21.1	21.9	25.7	24.6	25.2
27	22.2	20.9	21.5	21.7	20.3	20.8	22.6	21.1	21.8	25.0	23.8	24.3
28	23.5	21.1	22.3	21.0	19.5	20.2	22.3	20.9	21.5	24.8	23.1	23.8
29	23.1	21.7	22.4	21.4	19.1	20.2	21.7	20.7	21.1	23.8	22.0	22.9
30	23.6	21.9	22.7	21.9	20.1	20.9	22.1	19.9	20.9	23.5	21.9	22.4
31	---	---	---	21.6	20.0	20.7	22.4	20.7	21.5	---	---	---

07338960 MOUNTAIN FORK AT PRESBYTERIAN FALLS NEAR EAGLETOWN, OK

LOCATION.--Lat 34°04'21", long 94°37'42", in NE ¼ NW ¼ 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 31.6°C June 13, 2005; minimum 2.9°C Jan. 1, 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 31.6°C June 13; minimum 8.7°C Jan. 31.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.9	20.4	20.9	20.9	19.9	20.3	15.3	14.6	14.8	12.0	11.2	11.7
2	23.1	20.5	21.5	20.9	19.6	20.1	14.9	14.1	14.7	12.8	11.5	12.2
3	22.3	20.2	21.0	19.7	19.2	19.4	14.9	14.3	14.6	15.1	12.4	13.8
4	21.6	20.4	20.8	19.7	18.6	19.0	14.7	14.1	14.4	15.4	14.8	15.2
5	22.1	20.1	20.8	19.5	18.2	18.6	14.5	14.1	14.3	15.6	14.1	15.1
6	21.9	20.2	20.8	19.7	17.6	18.5	14.9	14.2	14.4	14.2	11.0	12.9
7	22.2	20.6	21.1	19.6	16.8	18.1	14.7	13.9	14.3	11.0	10.4	10.7
8	22.5	21.0	21.5	18.1	16.7	17.4	14.6	13.6	14.0	10.5	9.6	10.2
9	21.3	20.6	20.9	18.0	16.9	17.3	14.4	13.2	13.7	10.2	9.2	9.7
10	20.7	20.2	20.5	18.2	16.5	17.3	13.9	12.3	13.0	10.6	9.2	9.9
11	21.3	19.9	20.5	17.7	16.2	17.1	13.6	12.2	12.8	11.0	10.5	10.7
12	20.4	19.5	19.9	17.0	16.5	16.7	14.1	11.4	12.7	11.7	10.4	10.8
13	21.4	19.1	20.0	17.0	15.8	16.5	12.9	11.0	11.9	11.1	10.4	10.7
14	19.8	17.7	18.9	16.4	15.6	16.0	12.7	11.3	12.2	10.9	10.2	10.5
15	19.9	16.8	18.3	16.8	15.7	16.3	12.7	12.0	12.3	10.7	10.1	10.4
16	19.7	17.8	18.6	17.5	16.1	16.7	12.4	11.6	12.1	10.6	10.0	10.3
17	19.0	17.2	18.0	17.3	16.4	16.8	12.7	11.7	12.0	10.2	9.7	10.0
18	21.6	18.3	19.8	17.0	16.5	16.8	12.9	11.7	12.2	10.1	9.7	9.9
19	21.9	19.6	20.6	17.3	16.7	16.9	12.3	11.3	11.7	10.5	9.7	10.2
20	22.0	18.7	20.5	17.9	16.6	17.1	12.2	11.0	11.4	10.7	10.0	10.4
21	21.0	20.1	20.5	17.0	16.5	16.7	12.0	11.1	11.4	11.0	10.0	10.5
22	22.1	20.1	21.0	16.8	16.3	16.6	11.7	10.9	11.4	11.0	10.1	10.5
23	21.7	19.8	21.0	17.4	16.4	16.9	11.0	10.1	10.5	10.1	9.3	9.7
24	21.4	18.5	20.1	17.2	15.6	16.3	10.5	9.0	9.8	10.0	9.2	9.5
25	21.5	19.5	20.4	16.2	14.8	15.5	9.9	8.2	9.0	10.3	9.5	9.8
26	21.6	20.3	20.9	15.8	14.9	15.3	9.8	8.1	8.8	10.5	9.7	10.0
27	21.2	20.1	20.8	15.8	15.0	15.3	9.7	8.3	9.0	10.3	9.8	10.0
28	21.6	20.3	20.8	15.4	14.9	15.2	11.0	9.3	10.0	9.9	9.4	9.7
29	20.9	19.8	20.5	15.4	14.3	14.7	11.0	10.0	10.5	10.0	9.2	9.6
30	21.9	20.1	20.8	15.6	14.7	15.2	11.4	10.4	10.8	9.3	8.9	9.2
31	21.6	19.8	20.5	---	---	---	12.2	10.7	11.4	9.5	8.7	9.2

07338960 MOUNTAIN FORK AT PRESBYTERIAN FALLS NEAR EAGLETOWN, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.7	9.2	9.4	11.7	10.4	11.0	13.1	12.1	12.5	20.9	16.3	18.6
2	9.7	9.2	9.5	11.6	11.0	11.2	14.1	12.6	13.2	19.0	16.3	17.1
3	10.3	9.2	9.6	12.2	10.7	11.3	16.5	12.7	14.2	18.4	17.2	17.7
4	10.3	9.4	9.7	12.1	10.8	11.3	14.6	12.5	13.5	18.2	16.1	17.0
5	11.1	9.5	10.0	13.5	10.8	11.9	14.1	13.0	13.4	19.0	15.2	16.9
6	10.0	9.2	9.7	14.8	11.1	12.9	15.5	13.2	14.1	20.4	15.8	18.0
7	10.6	9.6	10.0	14.1	12.0	12.8	14.8	13.2	14.0	20.6	16.1	18.4
8	10.2	9.4	9.8	12.4	11.1	11.8	15.3	13.2	14.2	19.1	17.3	18.1
9	10.4	9.5	9.8	13.6	11.8	12.5	18.1	14.3	15.9	22.1	17.5	19.7
10	10.1	9.1	9.5	14.8	10.7	12.8	16.8	14.2	15.6	23.6	18.6	21.0
11	13.4	9.4	9.8	14.4	11.4	13.0	18.5	15.4	16.6	19.8	17.5	18.4
12	10.1	9.4	9.8	15.7	12.4	13.7	18.2	15.3	16.4	18.8	17.2	17.7
13	11.0	9.6	10.2	13.2	11.5	12.5	17.8	14.9	15.9	19.2	16.7	17.5
14	10.8	9.8	10.2	14.6	10.7	12.4	18.5	15.7	16.6	20.2	17.8	18.8
15	10.9	10.1	10.5	12.2	11.4	11.7	17.5	15.4	16.3	20.6	16.8	18.6
16	10.7	10.2	10.5	11.5	11.1	11.3	18.1	15.1	16.3	20.6	16.2	18.3
17	11.0	10.3	10.5	14.4	10.3	12.2	19.6	14.4	16.8	22.7	18.0	20.1
18	11.0	10.3	10.6	13.9	10.4	12.3	18.2	14.9	16.6	23.4	18.7	20.5
19	11.0	10.6	10.8	15.4	11.4	13.4	18.6	16.2	17.8	23.0	20.4	21.3
20	11.9	10.6	11.2	14.3	11.8	13.0	17.5	15.6	16.4	23.1	19.0	20.7
21	12.8	10.9	11.7	13.7	12.3	12.7	19.2	17.2	18.1	22.6	19.5	20.8
22	11.9	11.0	11.4	14.9	12.7	13.8	20.9	16.9	18.6	23.3	17.9	20.3
23	---	---	---	14.3	12.2	12.8	20.0	16.8	18.3	20.9	18.2	19.6
24	---	---	---	13.2	11.8	12.4	20.4	15.9	18.1	23.7	20.4	22.2
25	---	---	---	13.8	11.9	12.7	18.6	16.3	17.4	22.5	19.4	20.9
26	---	---	---	12.9	12.4	12.7	20.9	17.0	18.7	24.7	21.8	23.0
27	---	---	---	12.7	11.8	12.4	20.8	16.5	18.5	22.8	19.3	21.0
28	---	---	---	12.9	11.3	12.2	20.1	17.8	18.8	23.8	20.4	22.6
29	---	---	---	13.3	11.9	12.6	18.0	16.7	17.4	21.1	19.0	20.1
30	---	---	---	13.5	12.2	12.8	20.1	16.7	18.5	23.4	19.2	20.9
31	---	---	---	12.8	11.8	12.3	---	---	---	23.5	19.9	22.0
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.3	17.9	19.1	23.6	21.9	22.9	---	---	---	24.9	21.7	22.7
2	23.9	20.0	21.8	---	---	---	---	---	---	24.5	21.4	22.4
3	22.9	18.4	20.5	---	---	---	---	---	---	24.4	21.6	22.5
4	22.8	21.3	22.0	---	---	---	---	---	---	24.2	21.9	22.7
5	23.3	19.0	21.1	---	---	---	---	---	---	24.0	21.4	22.4
6	26.2	19.6	22.1	---	---	---	---	---	---	23.7	21.1	22.2
7	23.8	20.2	21.9	---	---	---	---	---	---	23.9	21.2	22.2
8	22.3	20.1	20.9	---	---	---	---	---	---	23.8	21.1	22.1
9	21.9	19.6	20.5	---	---	---	26.3	21.9	24.3	23.7	20.8	21.9
10	22.2	20.0	20.9	---	---	---	24.2	21.9	23.1	23.9	20.8	21.9
11	22.3	19.7	20.8	26.2	21.1	23.3	25.8	22.6	23.7	23.2	20.7	21.7
12	24.4	19.8	22.5	24.8	22.9	23.9	24.7	22.2	23.4	23.7	20.8	22.1
13	31.6	19.7	24.8	23.7	21.6	22.7	24.9	22.2	23.4	23.8	21.6	22.4
14	23.9	19.7	21.8	22.9	20.5	21.5	26.2	23.3	24.3	24.2	21.4	22.5
15	24.3	20.9	22.3	21.8	19.3	20.3	28.7	22.6	23.6	27.8	21.4	23.9
16	22.8	20.1	21.6	22.2	19.2	20.3	30.6	23.9	25.9	24.0	21.1	22.4
17	25.2	19.3	21.7	23.2	19.7	21.1	25.3	22.0	23.4	23.7	20.9	21.9
18	24.0	19.9	21.8	22.2	19.0	19.9	25.9	22.9	23.9	24.2	21.1	22.1
19	25.0	20.9	23.0	23.4	20.0	21.7	25.4	22.2	23.8	24.7	21.3	22.6
20	24.1	19.1	21.5	23.0	20.3	21.2	25.8	22.2	23.9	24.6	21.6	22.8
21	24.9	21.2	22.9	23.8	21.1	22.1	26.2	23.2	24.5	24.4	21.5	22.8
22	24.7	21.2	22.6	24.4	21.4	22.4	24.9	22.8	23.9	24.3	21.7	22.8
23	24.4	20.9	22.4	24.7	21.8	22.6	25.6	22.7	24.0	24.9	22.4	23.3
24	24.9	21.2	22.6	---	---	---	26.2	22.1	23.4	23.8	22.4	22.9
25	25.7	21.6	23.3	---	---	---	25.4	22.5	23.5	24.7	22.5	23.5
26	25.7	21.7	23.5	---	---	---	25.7	23.1	23.9	25.4	22.4	23.4
27	25.7	20.2	22.6	---	---	---	25.4	22.7	23.6	24.5	22.8	23.4
28	25.5	21.7	23.5	---	---	---	24.2	21.9	22.7	25.4	22.8	23.6
29	25.9	21.8	24.0	---	---	---	24.6	22.3	23.1	24.2	22.1	23.2
30	26.0	22.1	24.0	---	---	---	25.5	22.3	23.5	23.0	20.6	21.7
31	---	---	---	---	---	---	24.6	22.0	23.0	---	---	---

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 NGVD of 1929. See WSP 1920 for history of changes prior to July 23, 1950.

REMARKS.--Records fair. 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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	751	385	7,220	133	2,230	1,930	4,130	144	251	427	861	359
2	391	997	8,340	165	2,700	599	2,150	146	364	352	1,700	398
3	391	1,040	8,300	e250	2,470	1,060	602	594	227	283	2,000	399
4	520	1,030	8,290	e210	2,380	1,370	1,140	851	305	161	e1,950	391
5	912	964	8,300	e180	889	472	1,210	334	164	235	e892	384
6	1,070	728	8,350	3,500	260	170	802	188	404	153	e700	347
7	1,080	185	6,250	7,650	1,980	934	1,320	142	1,570	224	e550	346
8	756	196	760	1,910	2,470	1,420	1,200	148	2,200	149	e700	346
9	390	689	236	372	2,270	516	360	139	2,150	199	1,600	344
10	323	656	300	2,490	2,260	162	165	1,010	2,130	248	1,420	562
11	210	1,010	667	7,660	1,870	177	593	2,120	1,380	288	994	622
12	257	1,020	166	7,860	2,360	590	897	2,960	457	523	1,520	368
13	321	789	856	8,440	1,960	164	1,110	1,630	745	602	1,000	349
14	403	190	3,050	7,900	2,260	238	1,290	652	1,250	836	570	348
15	198	215	3,830	7,790	2,780	329	1,180	168	642	907	452	379
16	275	620	2,900	7,790	3,240	191	702	147	508	709	506	363
17	192	392	2,870	7,750	2,020	144	174	238	207	341	577	369
18	207	267	2,260	7,810	2,560	141	152	265	306	263	385	426
19	491	601	1,660	7,810	857	137	461	612	364	617	366	504
20	465	391	2,030	7,840	188	133	176	918	368	1,890	359	807
21	589	176	2,130	4,900	1,240	135	676	419	789	2,430	361	1,020
22	513	169	4,150	4,250	1,950	183	273	158	797	2,340	330	989
23	566	791	2,450	4,420	1,330	1,070	330	157	849	2,060	357	474
24	184	1,570	973	3,890	721	1,610	149	219	652	1,250	389	390
25	328	1,190	657	2,520	1,080	1,620	134	168	441	1,030	380	402
26	869	1,370	614	2,150	685	663	192	247	312	1,200	423	427
27	1,150	1,260	1,030	2,440	191	433	155	153	415	974	338	366
28	1,690	1,440	1,120	2,190	642	1,580	723	302	777	401	341	395
29	1,350	2,950	1,040	959	---	2,150	172	183	602	538	346	540
30	525	5,390	963	181	---	3,330	302	186	504	911	347	543
31	189	---	261	993	---	3,500	---	451	---	580	346	---
TOTAL	17,556	28,671	92,023	124,403	47,843	27,151	22,920	16,049	22,130	23,121	23,060	13,957
MEAN	566	956	2,968	4,013	1,709	876	764	518	738	746	744	465
MAX	1,690	5,390	8,350	8,440	3,240	3,500	4,130	2,960	2,200	2,430	2,000	1,020
MIN	184	169	166	133	188	133	134	139	164	149	330	344
AC-FT	34,820	56,870	182,500	246,800	94,900	53,850	45,460	31,830	43,890	45,860	45,740	27,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2005, BY WATER YEAR (WY)

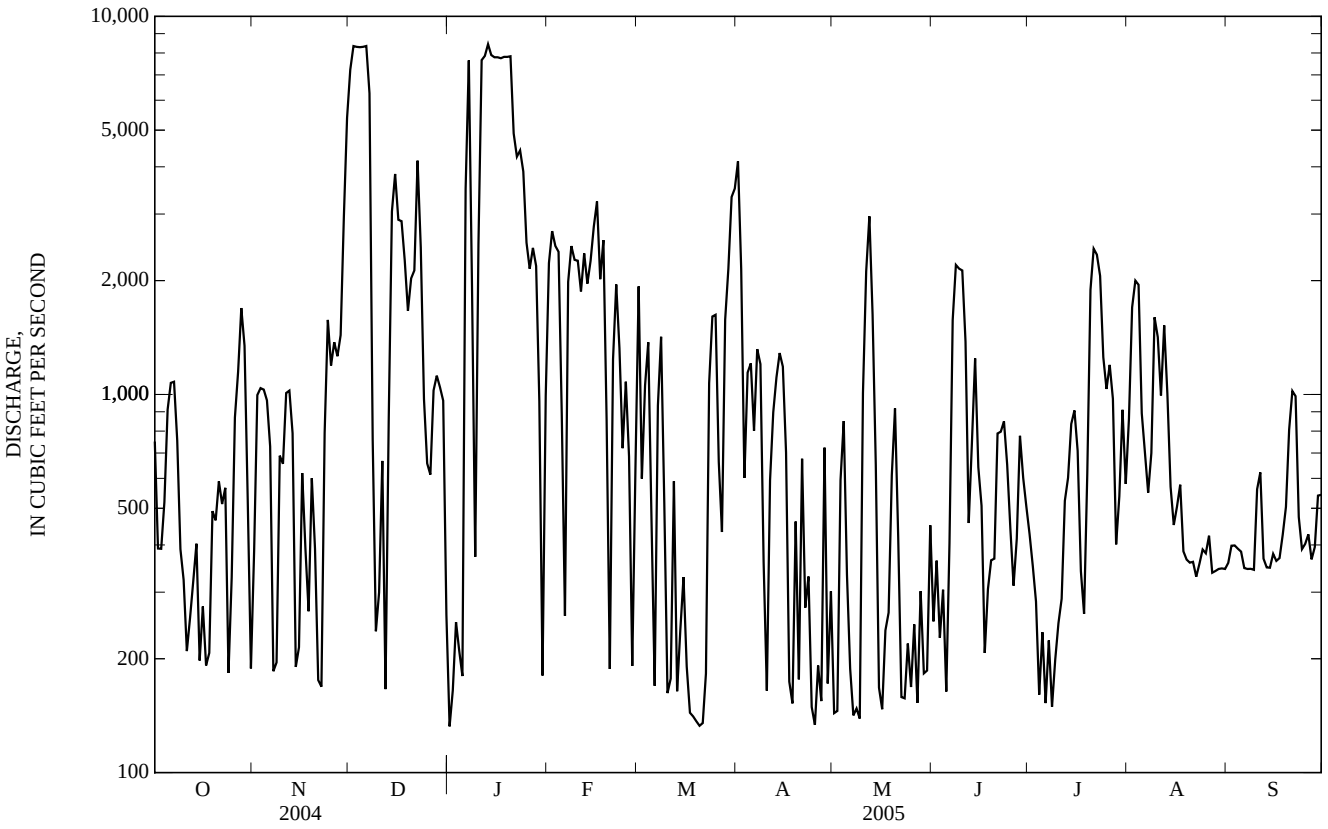
MEAN	646	1,167	2,005	1,805	1,812	2,118	1,981	1,929	1,524	1,012	776	610
MAX	2,638	6,897	5,286	5,121	4,159	5,623	4,976	7,264	6,061	3,371	1,515	2,300
(WY)	(1994)	(1985)	(1997)	(1988)	(1989)	(1997)	(1979)	(1991)	(1990)	(1999)	(1983)	(1992)
MIN	136	110	154	166	292	348	306	313	219	155	238	155
(WY)	(1989)	(1996)	(1990)	(2000)	(1981)	(1996)	(1980)	(2003)	(1988)	(1988)	(1985)	(1989)

e Estimated

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1970 - 2005	
ANNUAL TOTAL	391,202		458,884			
ANNUAL MEAN	1,069		1,257		a1,447	
HIGHEST ANNUAL MEAN					2,468	1973
LOWEST ANNUAL MEAN					450	1996
HIGHEST DAILY MEAN	8,350	Dec 6	8,440	Jan 13	11,500	May 19, 1991
LOWEST DAILY MEAN	67	Jan 5	133	Jan 1,Mar 20	b16	Dec 12, 1971
ANNUAL SEVEN-DAY MINIMUM	78	Apr 15	152	Mar 16	68	Jan 12, 1996
MAXIMUM PEAK FLOW			9,010	Jan 13	c18,200	Jun 2, 1990
MAXIMUM PEAK STAGE			8.05	Jan 13	d11.58	Jun 2, 1990
ANNUAL RUNOFF (AC-FT)	775,900		910,200		1,049,000	
10 PERCENT EXCEEDS	3,030		2,730		3,940	
50 PERCENT EXCEEDS	522		602		655	
90 PERCENT EXCEEDS	105		177		155	

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 recorded (more than 20% missing record) 27.8°C Aug. 23; minimum recorded 7.3°C Dec. 25.

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.0	20.2	20.6	20.6	19.9	20.4	14.4	13.6	14.0	12.1	11.5	11.8
2	22.1	20.1	21.1	20.1	19.2	19.7	14.2	13.6	13.9	---	---	---
3	21.9	20.3	21.1	19.2	18.3	18.7	14.1	13.6	13.8	---	---	---
4	21.2	20.0	20.5	19.2	18.0	18.6	14.0	13.4	13.6	---	---	---
5	21.5	19.8	20.5	18.8	17.2	18.0	13.7	13.4	13.5	---	---	---
6	21.0	19.5	20.3	19.0	17.2	18.1	13.9	13.6	13.8	---	---	---
7	21.6	20.0	20.6	18.4	17.0	17.8	14.1	13.1	13.6	---	---	---
8	22.0	20.2	21.0	18.0	16.6	17.4	14.2	12.6	13.3	---	---	---
9	21.6	20.3	20.7	17.4	16.2	16.8	13.9	12.8	13.3	---	---	---
10	20.3	19.9	20.0	17.3	16.0	16.7	13.7	12.0	12.7	---	---	---
11	20.6	19.8	20.1	17.2	15.9	16.6	12.9	11.6	12.2	---	---	---
12	20.3	18.5	19.6	16.2	15.9	16.0	13.1	11.3	12.1	---	---	---
13	20.4	18.0	18.9	16.5	15.9	16.1	12.2	11.0	11.5	---	---	---
14	19.4	17.4	18.5	16.0	15.5	15.7	11.8	10.3	11.2	---	---	---
15	18.9	16.2	17.4	16.2	15.5	15.8	11.8	11.2	11.5	---	---	---
16	19.5	17.3	18.2	16.9	15.9	16.4	11.7	10.9	11.3	---	---	---
17	18.4	17.9	18.1	16.7	15.9	16.3	12.0	10.8	11.4	---	---	---
18	21.0	17.9	19.5	16.6	16.3	16.5	12.2	11.0	11.5	---	---	---
19	21.8	19.0	20.3	16.6	16.3	16.4	11.6	10.6	11.1	---	---	---
20	21.1	18.7	20.0	17.1	16.2	16.7	11.5	10.2	10.7	---	---	---
21	20.3	19.5	19.9	17.0	16.6	16.9	11.4	10.4	10.8	---	---	---
22	21.0	19.5	20.3	16.7	16.3	16.5	11.1	10.3	10.8	---	---	---
23	21.2	20.2	20.5	16.5	16.3	16.3	10.4	9.2	9.9	---	---	---
24	21.1	19.0	19.9	16.4	14.7	15.5	10.0	8.5	9.2	---	---	---
25	20.9	19.9	20.3	15.3	14.0	14.6	9.1	7.3	8.4	---	---	---
26	20.9	20.0	20.5	15.0	14.2	14.6	9.1	7.5	8.3	---	---	---
27	20.9	19.8	20.4	15.3	14.2	14.7	9.2	7.6	8.5	---	---	---
28	21.2	19.7	20.3	14.4	13.9	14.2	10.4	8.4	9.3	---	---	---
29	20.4	19.8	20.1	14.7	13.7	14.1	10.4	9.4	9.8	---	---	---
30	21.3	19.4	20.3	14.7	14.0	14.4	11.1	9.8	10.4	---	---	---
31	21.2	20.4	20.7	---	---	---	11.9	10.6	11.2	---	---	---

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	13.0	12.0	12.5	20.4	17.3	18.5
2	---	---	---	11.3	10.4	10.8	14.4	12.2	13.1	18.8	16.8	18.1
3	---	---	---	12.1	10.6	11.2	16.0	12.3	13.9	17.8	16.4	17.0
4	---	---	---	12.2	10.2	11.0	15.4	13.7	14.5	18.4	16.0	17.1
5	---	---	---	12.4	10.3	11.4	14.1	13.1	13.6	18.8	16.2	17.5
6	---	---	---	14.1	11.7	12.7	14.8	13.0	13.7	19.7	16.5	17.9
7	---	---	---	14.4	12.1	13.4	14.7	13.1	13.8	21.4	18.0	19.2
8	---	---	---	12.6	11.1	11.8	15.0	12.7	13.8	19.8	18.2	19.1
9	---	---	---	12.9	11.4	12.1	17.4	13.6	15.3	20.5	17.7	18.9
10	---	---	---	13.7	11.1	12.3	17.4	15.7	16.6	23.0	19.4	20.6
11	---	---	---	15.0	12.3	13.3	17.8	15.7	16.6	20.6	17.2	18.4
12	---	---	---	15.3	11.9	13.6	17.6	15.1	16.4	19.0	16.7	17.6
13	---	---	---	14.9	12.1	13.7	17.4	14.4	15.6	19.3	16.2	17.5
14	---	---	---	13.5	11.0	12.2	18.4	15.1	16.4	20.0	17.0	18.4
15	---	---	---	13.5	11.1	12.2	17.3	15.1	16.1	20.9	18.3	19.3
16	---	---	---	11.3	10.6	11.0	18.1	14.7	16.2	21.2	18.3	19.3
17	---	---	---	13.4	10.0	11.4	18.7	16.1	17.2	21.3	17.8	19.3
18	---	---	---	15.0	11.3	12.7	18.9	16.8	17.6	21.7	19.3	20.7
19	---	---	---	15.6	12.3	13.6	19.2	16.6	17.8	22.3	19.8	21.0
20	---	---	---	15.3	13.0	13.8	18.4	17.0	17.7	22.1	19.0	20.5
21	---	---	---	13.9	13.2	13.6	19.0	16.7	18.0	22.5	19.2	20.8
22	---	---	---	13.9	12.8	13.3	19.8	16.7	18.3	23.6	21.0	22.0
23	---	---	---	14.2	12.3	13.1	18.9	16.8	17.9	22.7	20.6	21.6
24	---	---	---	13.5	11.7	12.4	19.9	16.5	17.8	23.5	19.4	21.2
25	---	---	---	14.2	11.8	12.7	18.5	17.3	17.8	24.1	21.9	22.7
26	---	---	---	12.7	12.2	12.4	19.6	16.6	17.7	24.0	20.5	22.2
27	---	---	---	12.5	11.9	12.2	21.3	17.6	18.9	24.4	21.5	23.0
28	---	---	---	13.3	11.2	12.2	20.6	17.8	19.0	23.3	20.8	22.1
29	---	---	---	13.6	11.7	12.7	20.1	17.3	18.5	23.0	20.8	22.0
30	---	---	---	13.7	11.9	12.9	19.8	16.1	17.8	22.4	20.5	21.3
31	---	---	---	12.8	11.6	12.2	---	---	---	23.0	21.2	22.1
		JUNE			JULY			AUGUST			SEPTEMBER	
1	22.4	19.6	21.5	---	---	---	24.7	20.3	22.1	26.7	22.5	24.6
2	23.0	19.6	21.4	---	---	---	25.1	21.5	22.6	26.8	22.2	24.2
3	24.1	21.7	22.8	---	---	---	---	---	---	25.1	22.2	23.5
4	23.7	21.1	22.2	---	---	---	---	---	---	25.6	22.1	23.8
5	24.5	21.9	22.9	---	---	---	---	---	---	25.5	21.9	23.4
6	24.4	21.9	22.9	---	---	---	---	---	---	26.1	21.8	23.7
7	24.2	20.9	22.1	---	---	---	---	---	---	25.4	21.5	23.5
8	22.1	19.3	20.5	---	---	---	---	---	---	25.9	21.4	23.6
9	21.8	19.3	20.2	---	---	---	---	---	---	25.9	21.6	23.6
10	22.3	19.5	20.5	---	---	---	24.4	20.4	22.2	25.3	21.4	23.3
11	22.3	19.6	20.9	---	---	---	25.7	22.3	23.6	24.4	21.8	23.1
12	23.6	19.6	21.5	---	---	---	25.2	21.7	23.0	25.6	21.3	23.3
13	24.6	21.8	23.3	---	---	---	25.3	22.3	23.6	26.2	22.4	24.0
14	23.0	20.1	21.4	---	---	---	25.7	22.8	24.3	25.6	22.2	23.9
15	23.7	20.3	21.9	22.1	19.6	20.7	25.6	23.2	24.3	24.4	22.2	22.9
16	22.4	21.0	21.7	22.5	19.5	20.8	26.5	23.0	24.5	25.7	22.1	23.5
17	22.4	21.3	21.9	23.0	19.8	21.4	25.6	22.4	24.0	25.2	22.5	23.7
18	23.4	19.8	21.5	25.5	20.6	22.9	26.5	22.8	24.6	25.8	22.1	23.8
19	24.1	20.4	22.4	23.9	20.5	22.3	26.7	22.7	24.6	27.2	21.8	24.1
20	25.1	21.9	23.4	23.2	20.6	21.4	26.1	22.3	24.5	25.8	22.6	24.0
21	23.8	20.0	22.5	24.2	21.1	22.2	27.0	24.1	25.5	26.0	22.9	23.9
22	24.5	18.0	21.6	24.5	21.2	22.3	27.4	24.4	25.8	25.3	22.7	23.8
23	24.4	20.9	22.3	25.2	21.8	22.9	27.8	23.9	25.7	26.1	23.3	24.6
24	24.6	21.0	22.6	25.6	22.3	23.4	26.7	23.9	25.1	25.4	23.1	23.5
25	25.0	21.0	23.0	25.9	22.7	23.8	27.7	22.7	24.7	26.4	23.1	24.3
26	25.0	21.2	23.2	24.5	21.4	23.0	27.7	23.1	25.1	27.7	23.6	25.2
27	---	---	---	22.2	20.2	21.2	26.5	23.9	25.2	26.7	23.7	25.1
28	---	---	---	23.2	20.7	21.6	25.9	22.8	24.4	27.7	23.6	25.3
29	---	---	---	23.6	19.5	21.4	24.9	22.9	24.0	25.5	23.6	24.3
30	---	---	---	23.4	20.0	21.4	26.9	23.4	24.6	23.8	21.8	22.8
31	---	---	---	24.1	19.4	21.6	27.2	23.2	25.0	---	---	---

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.

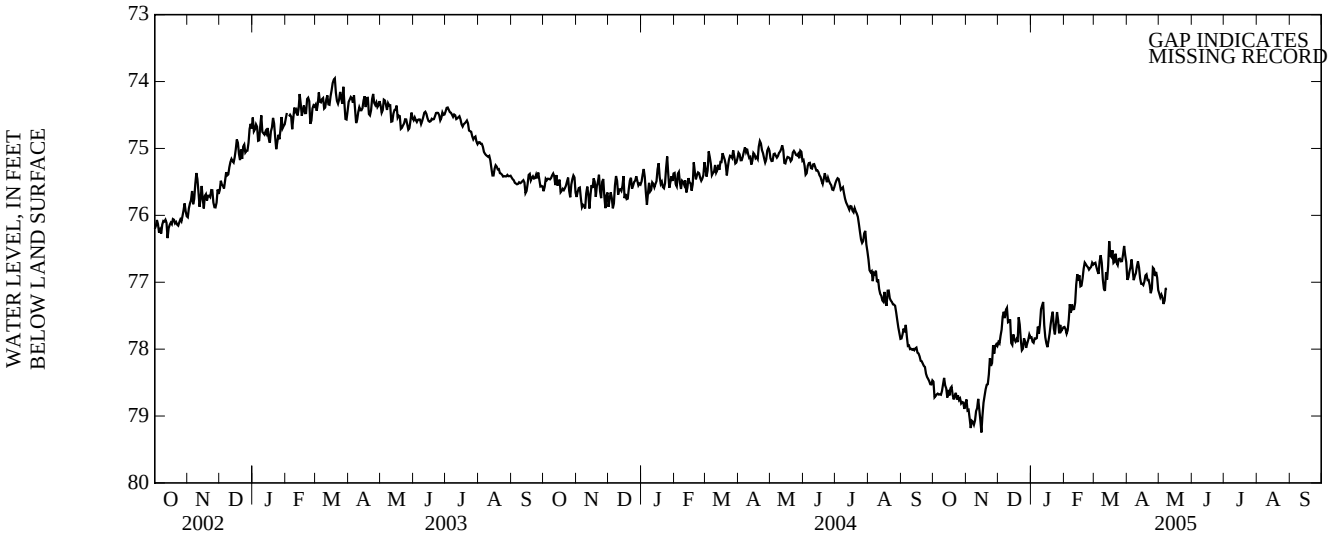
DATUM.--Elevation of land-surface datum is 1,200 ft. Measuring point: top of casing 1.8 ft above land-surface datum.

PERIOD OF RECORD.--1972 to September 1995, October 1998 to May 2005 (discontinued).

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78.49	78.75	77.89	77.82	77.67	76.72	76.96	77.17	---	---	---	---
2	78.72	78.92	77.91	77.89	77.70	76.71	76.93	77.23	---	---	---	---
3	78.70	78.91	77.80	77.91	77.77	76.77	76.84	77.19	---	---	---	---
4	78.68	79.04	77.71	77.84	77.72	76.83	76.78	77.23	---	---	---	---
5	78.66	79.18	77.51	77.85	77.56	76.87	76.66	77.32	---	---	---	---
6	78.68	79.07	77.44	77.84	77.33	76.69	76.82	77.27	---	---	---	---
7	78.68	79.09	77.54	77.66	77.46	76.60	76.97	77.10	---	---	---	---
8	78.68	79.13	77.42	77.77	77.33	76.71	76.91	77.09	---	---	---	---
9	78.63	79.07	77.38	77.63	77.40	76.96	76.86	---	---	---	---	---
10	78.53	78.93	77.60	77.40	77.40	77.10	76.76	---	---	---	---	---
11	78.43	78.88	77.59	77.35	77.31	77.13	76.69	---	---	---	---	---
12	78.54	78.74	77.56	77.29	77.04	76.85	76.78	---	---	---	---	---
13	78.59	78.90	77.91	77.64	76.88	76.96	76.94	---	---	---	---	---
14	78.72	79.06	77.94	77.82	76.98	76.76	77.02	---	---	---	---	---
15	78.61	79.25	77.78	77.91	76.90	76.39	77.02	---	---	---	---	---
16	78.69	79.00	77.85	77.97	77.06	76.60	77.04	---	---	---	---	---
17	78.58	78.80	77.89	77.88	77.05	76.62	76.99	---	---	---	---	---
18	78.56	78.70	77.85	77.77	76.94	76.52	76.90	---	---	---	---	---
19	78.68	78.60	77.90	77.63	76.80	76.71	76.88	---	---	---	---	---
20	78.75	78.53	77.52	77.52	76.71	76.69	76.97	---	---	---	---	---
21	78.70	78.52	77.63	77.44	76.73	76.57	76.97	---	---	---	---	---
22	78.65	78.38	77.86	77.69	76.76	76.71	77.04	---	---	---	---	---
23	78.75	78.14	78.02	77.78	76.78	76.74	77.16	---	---	---	---	---
24	78.69	78.25	77.99	77.61	76.81	76.65	77.10	---	---	---	---	---
25	78.76	78.21	77.84	77.45	76.79	76.65	76.78	---	---	---	---	---
26	78.74	77.94	77.88	77.57	76.77	76.69	76.80	---	---	---	---	---
27	78.81	78.07	77.98	77.76	76.71	76.68	76.91	---	---	---	---	---
28	78.79	77.96	77.92	77.64	76.74	76.58	76.85	---	---	---	---	---
29	78.80	77.93	77.86	77.73	---	76.46	76.93	---	---	---	---	---
30	78.89	77.95	77.78	77.70	---	76.59	77.12	---	---	---	---	---
31	78.81	---	77.82	77.67	---	76.70	---	---	---	---	---	---
MAX	78.89	79.25	78.02	77.97	77.77	77.13	77.16	---	---	---	---	---
MIN	78.43	77.93	77.38	77.29	76.71	76.39	76.66	---	---	---	---	---



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.--Elevation of land-surface datum is 1,155 ft. Measuring point: base of recorder shelter 1.10 ft above land-surface datum.

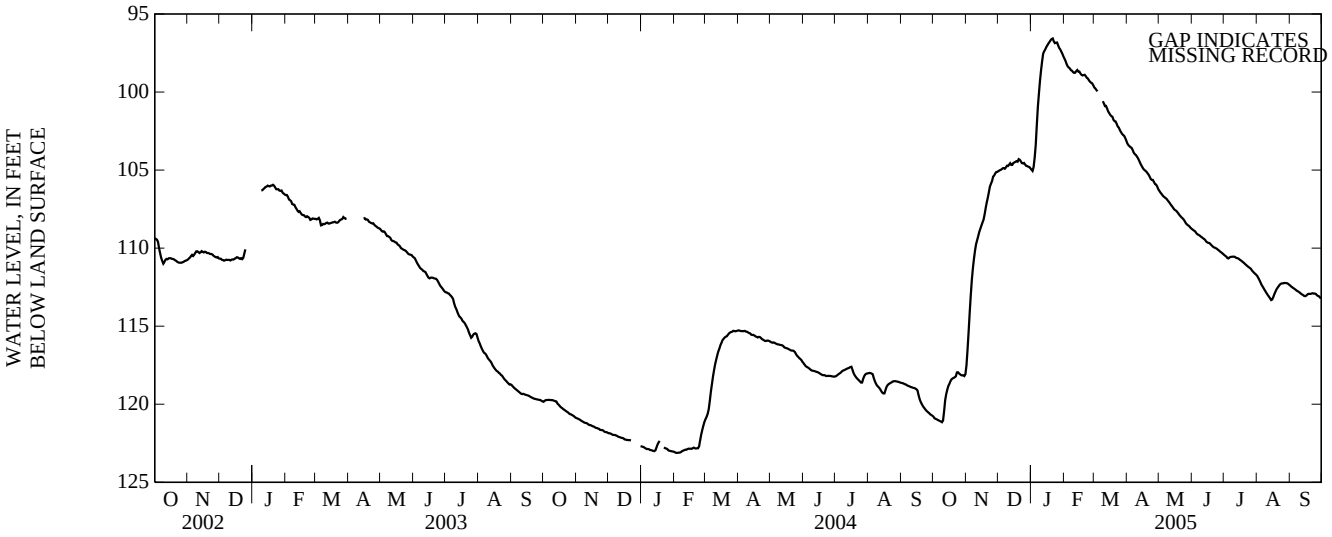
REMARKS.--Well originally 1,707 ft deep.

PERIOD OF RECORD.--December 1958 to August 1997, October 1998 to current year.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120.80	117.51	105.07	104.97	97.86	99.71	103.29	106.32	108.80	110.44	111.79	112.41
2	120.90	116.50	105.02	105.05	98.01	99.77	103.40	106.43	108.85	110.50	111.91	112.47
3	120.93	115.37	104.99	104.81	98.20	99.88	103.47	106.52	108.89	110.55	112.05	112.52
4	120.97	114.16	104.95	104.21	98.35	99.95	103.53	106.61	108.96	110.64	112.19	112.57
5	121.01	113.04	104.89	103.40	98.43	---	103.58	106.69	109.06	110.66	112.34	112.61
6	121.04	112.06	104.87	102.13	98.49	---	103.71	106.74	109.12	110.59	112.46	112.67
7	121.08	111.29	104.91	100.95	98.60	---	103.88	106.80	109.15	110.56	112.58	112.72
8	121.11	110.69	104.83	100.09	98.63	---	103.97	106.86	109.20	110.55	112.69	112.76
9	121.15	110.16	104.72	99.29	98.72	100.59	104.03	106.95	109.26	110.55	112.81	112.80
10	121.04	109.74	104.74	98.62	98.77	100.73	104.13	107.04	109.31	110.55	112.92	112.86
11	120.45	109.49	104.65	98.04	98.76	100.90	104.24	107.13	109.36	110.56	113.02	112.92
12	119.74	109.23	104.56	97.54	98.66	100.89	104.38	107.24	109.41	110.62	113.12	112.97
13	119.35	108.96	104.67	97.38	98.59	101.06	104.54	107.32	109.47	110.64	113.22	113.00
14	119.06	108.76	104.67	97.26	98.69	101.24	104.68	107.42	109.58	110.66	113.33	113.06
15	118.83	108.56	104.54	97.11	98.69	101.35	104.80	107.52	109.63	110.71	113.29	113.08
16	118.69	108.37	104.51	97.00	98.81	101.47	104.92	107.57	109.66	110.76	113.14	113.04
17	118.52	108.18	104.46	96.88	98.90	101.54	104.99	107.62	109.67	110.81	112.96	112.97
18	118.40	107.86	104.43	96.78	98.94	101.59	105.05	107.69	109.74	110.87	112.80	112.93
19	118.35	107.45	104.46	96.68	98.91	101.78	105.11	107.79	109.81	110.92	112.65	112.93
20	118.31	107.08	104.30	96.60	98.90	101.86	105.21	107.88	109.88	110.98	112.54	112.93
21	118.27	106.77	104.34	96.57	98.98	101.89	105.30	107.96	109.94	111.05	112.45	112.91
22	118.21	106.42	104.44	96.76	99.09	102.04	105.43	108.04	109.97	111.11	112.35	112.89
23	117.96	106.05	104.55	96.87	99.14	102.21	105.57	108.10	110.00	111.17	112.29	112.91
24	117.95	105.87	104.57	96.84	99.25	102.28	105.63	108.17	110.04	111.22	112.26	112.91
25	118.03	105.70	104.54	96.83	99.34	102.44	105.63	108.29	110.10	111.27	112.26	112.94
26	118.09	105.42	104.64	97.00	99.40	102.56	105.76	108.41	110.15	111.33	112.23	113.02
27	118.14	105.34	104.73	97.17	99.45	102.67	105.89	108.48	110.21	111.43	112.23	113.06
28	118.15	105.21	104.74	97.27	99.57	102.75	105.93	108.54	110.27	111.51	112.24	113.09
29	118.15	105.12	104.78	97.41	---	102.81	106.04	108.58	110.32	111.58	112.25	113.18
30	118.19	105.11	104.80	97.55	---	102.94	106.22	108.67	110.38	111.65	112.29	113.19
31	118.08	---	104.89	97.72	---	103.11	---	108.74	---	111.71	112.35	---
MAX	121.15	117.51	105.07	105.05	99.57	---	106.22	108.74	110.38	111.71	113.33	113.19
MIN	117.95	105.11	104.30	96.57	97.86	---	103.29	106.32	108.80	110.44	111.79	112.41



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.--Elevation of land-surface datum is 2,335 ft. Measuring point: top of shelf 3 ft above land-surface datum.

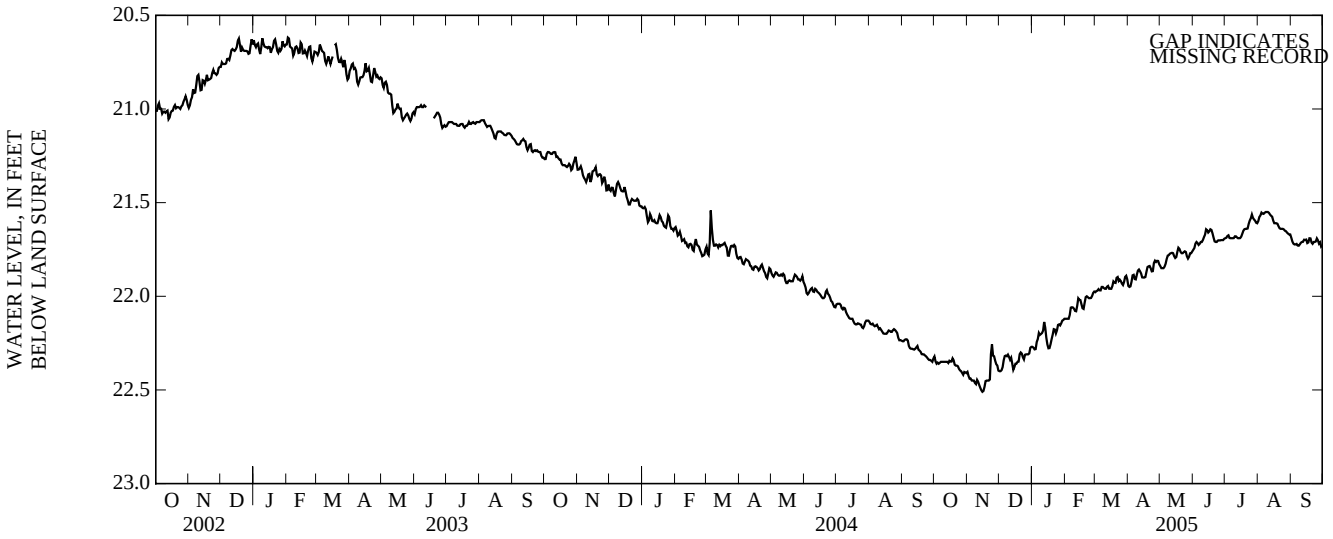
REMARKS.--Digital recorder installed Sept. 30, 1982, mean-daily water levels published thereafter, except Oct. 5, 1993 to Apr. 17, 1994 when bimonthly measurements were made. Satellite telemeter at station since July 10, 2000.

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 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22.32	22.40	22.40	22.27	22.12	21.98	21.94	21.84	21.75	21.69	21.60	21.69
2	22.35	22.43	22.40	22.27	22.12	21.97	21.95	21.85	21.74	21.69	21.58	21.71
3	22.36	22.44	22.39	22.28	22.12	21.97	21.95	21.85	21.72	21.68	21.57	21.72
4	22.35	22.44	22.38	22.28	22.12	21.96	21.92	21.85	21.71	21.67	21.55	21.72
5	22.36	22.45	22.34	22.24	22.10	21.97	21.89	21.84	21.72	21.69	21.56	21.72
6	22.36	22.45	22.32	22.23	22.06	21.97	21.89	21.83	21.73	21.69	21.56	21.72
7	22.35	22.45	22.32	22.20	22.06	21.95	21.91	21.80	21.72	21.69	21.55	21.73
8	22.35	22.46	22.32	22.21	22.06	21.95	21.91	21.78	21.71	21.69	21.55	21.73
9	22.35	22.47	22.31	22.20	22.07	21.96	21.88	21.78	21.71	21.69	21.55	21.72
10	22.35	22.45	22.32	22.20	22.08	21.96	21.86	21.77	21.70	21.68	21.55	21.71
11	22.35	22.46	22.34	22.18	22.08	21.96	21.86	21.77	21.68	21.68	21.55	21.71
12	22.35	22.47	22.33	22.14	22.05	21.95	21.87	21.77	21.67	21.69	21.56	21.71
13	22.35	22.49	22.36	22.17	22.01	21.94	21.88	21.77	21.64	21.69	21.57	21.70
14	22.36	22.50	22.39	22.22	22.02	21.96	21.90	21.79	21.65	21.69	21.57	21.70
15	22.34	22.51	22.38	22.26	22.02	21.96	21.90	21.80	21.66	21.69	21.60	21.70
16	22.35	22.51	22.36	22.28	22.04	21.96	21.90	21.79	21.65	21.68	21.61	21.72
17	22.35	22.48	22.36	22.28	22.06	21.95	21.90	21.76	21.64	21.67	21.61	21.71
18	22.33	22.45	22.35	22.26	22.07	21.92	21.87	21.74	21.65	21.65	21.61	21.69
19	22.34	22.45	22.35	22.23	22.03	21.93	21.84	21.75	21.66	21.64	21.61	21.69
20	22.36	22.45	22.31	22.20	22.00	21.93	21.84	21.76	21.69	21.64	21.63	21.71
21	22.37	22.45	22.30	22.18	22.00	21.90	21.84	21.77	21.71	21.64	21.64	21.72
22	22.37	22.44	22.31	22.18	22.00	21.90	21.85	21.77	21.71	21.64	21.64	21.71
23	22.37	22.31	22.33	22.20	22.01	21.92	21.87	21.76	21.71	21.61	21.64	21.71
24	22.39	22.26	22.34	22.18	22.01	21.91	21.87	21.76	21.70	21.60	21.64	21.71
25	22.40	22.32	22.31	22.15	22.01	21.92	21.82	21.76	21.70	21.58	21.64	21.69
26	22.40	22.32	22.31	22.15	22.00	21.93	21.81	21.79	21.70	21.56	21.65	21.70
27	22.41	22.34	22.31	22.16	21.98	21.94	21.82	21.80	21.70	21.58	21.65	21.72
28	22.42	22.36	22.31	22.14	21.97	21.92	21.81	21.79	21.70	21.59	21.66	21.71
29	22.40	22.37	22.30	22.13	---	21.90	21.81	21.77	21.70	21.60	21.67	21.73
30	22.41	22.40	22.27	22.13	---	21.89	21.83	21.77	21.69	21.61	21.67	21.73
31	22.41	---	22.27	22.12	---	21.91	---	21.76	---	21.61	21.67	---
MEAN	22.37	22.43	22.34	22.20	22.05	21.94	21.87	21.79	21.69	21.65	21.60	21.71
MAX	22.42	22.51	22.40	22.28	22.12	21.98	21.95	21.85	21.75	21.69	21.67	21.73
MIN	22.32	22.26	22.27	22.12	21.97	21.89	21.81	21.74	21.64	21.56	21.55	21.69



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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