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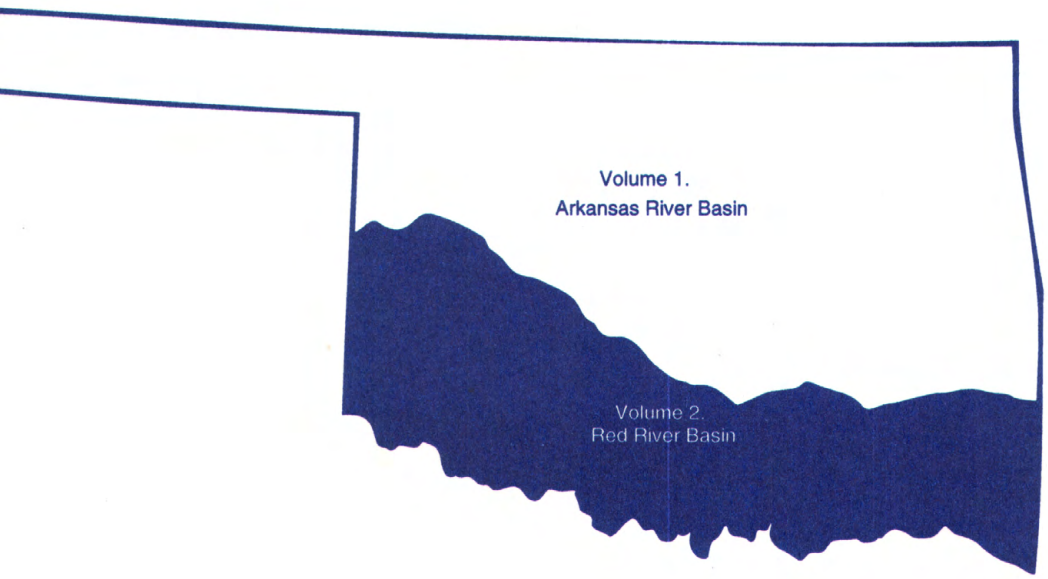
Water Resources Data Oklahoma Water Year 2001

Volume 2. Red River Basin and Ground-Water Wells

Water-Data Report OK-01-2



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

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

CALENDAR FOR WATER YEAR 2001

2000

OCTOBER

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2001

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30						

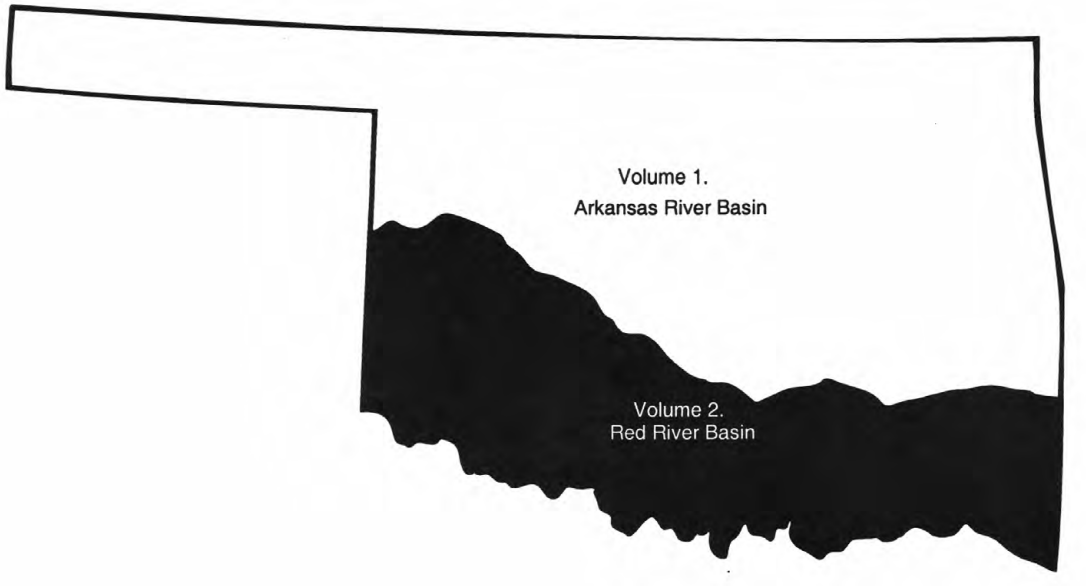
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Oklahoma Water Year 2001

Volume 2. Red River Basin and Ground-Water Wells

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

Water-Data Report OK-01-2



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

U.S. DEPARTMENT OF THE INTERIOR

GALE A. NORTON, ***Secretary***

U.S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in Oklahoma write to
District Chief, Water Resources Division
U.S. Geological Survey
202 N.W. 66 St., Building 7
Oklahoma City, Oklahoma 73116

2002

PREFACE

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 typed 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 Kathy D. Peter, 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 2001 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 135 gaging stations; stage and contents for 16 lakes or reservoirs and 2 gage height stations; water quality for 47 gaging stations; 18 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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UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED	UL

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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
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
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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Sandstone Creek near Cheyenne, OK	07323000	87.1	1952-74
Barnitz Creek near Arapaho, OK	07324500	243	1946-63
Lake Creek near Eakly, OK	07325850	52.0	1970-78
Willow Creek near Albert, OK	07325860	28.0	1971-78
Sugar Creek near Gracemont, OK	07327000	208	1956-74
Spring Creek near Gracemont	07327050	34.4	1991-94
Chetonia Creek Tributary below Cyril, OK	07327445	3.35	1990-91
Little Washita River near Ninnekah, OK	07327490	208	1964-85
Little Washita River at Ninnekah, OK	07327500	227	1952-63
Washita River near Tabler, OK	07328000	4,706	1940-52
Winter Creek near Alex, OK	07328070	33.0	1965-87
Washington Creek near Pauls Valley	07328550	7.56	1991-94
Rush Creek at Purdy	07329000	145	1940-54 1982-94
Rush Creek near Maysville, OK	07329500	206	1955-76
Antelope Spring at Sulphur, OK	07329849	0	1986-89
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

DISCONTINUED SURFACE-WATER DISCHARGE STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Clear Boggy Creek near Wapanucka, OK	07334500	516	1940-43
Clear Boggy Creek near Caney, OK	07335000	720	1943-89
Tenmile Creek near Miller, OK	07336000	68	1956-70
Kiamichi River near Belzoni, OK	07336500	1,423	1926-72
Red River near DeKalb, TX	07336820	47,348	1967-98
Little River near Wright City, OK	07337500	645	1930-31, 1945-89
Little River near Idabel, OK	07338000	1,173	1930-46

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

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

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Prairie Dog Town Fork Red River near Lakeview, TX	07299495	6,794	1987-88
Prairie Dog Town Fork Red River at Estelline, TX	07299505	7,293	1987-88
Jonah Creek near Newlin, TX	07299510	46.3	1987-88
Jonah Creek near Estelline, TX	07299512	57.1	1987-88
Prairie Dog Town Fork Red River near Childress, TX	07299540	7,725	1987-88
Salt Creek near Childress, TX	07299542	113	1987-88
Buck Creek at Loco, TX	07299545	175	1987-88
Buck Creek near Loco, TX	07299548	205	1987-88
Buck Creek near Childress, TX	07299550	222	1987-88
Red River near Hollis, OK	07299565	8,154	1986-88
Red River near Quanah, TX	07299570	8,321	1986-88
Groesbeck Creek near Quanah, TX	07299580	322	1986-88
Bitter Creek near Hollis, OK	07299705	10.4	1986-88
Sandy Creek near Gould, OK	07299707	169	1987-88
Sandy Creek near Louis, OK	072997087	224	1987-88
Tributary to Sandy Creek near Lincoln, OK	07299709	6.32	1987-88
Sandy Creek at Lincoln, OK	072997092		1986-88
Sandy Creek near Lincoln, OK	072997095	255	1987-88
Sandy Creek near Eldorado, OK	07299710	280	1986-88
Sandy Creek at Eldorado, OK	07299712	297	1987-88
Sandy Creek South of Eldorado, OK, formerly published as Sandy Creek in Eldorado Township, OK	07299714	312	1987-88
Sandy Creek Southeast of Eldorado, OK, formerly published as Sandy Creek near OKlahoma-Texas State-line	07299716	320	1986-88
Wanderers Creek near Odell, TX	07299732	156	1986, 1988
Gypsum Creek North of Eldorado, OK, formerly published as Tributary to Gypsum Creek near Jackson Co Line, OK	07299760	2.12	1986-88
Gypsum Creek near Duke, OK	07299764	14	1986-88
Tributary to Gypsum Creek near Eldorado, OK	07299766	4.53	1986-88
Gypsum Creek near Prairie Hill, OK	07299768	28.1	1987-88
Gypsum Creek at Creta, OK	07299770	34.6	1987-88
Gypsum Creek near Creta, OK	07299775	56.1	1987-88

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
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
Red River near Elmer, OK	07301150	16,459	1986-88

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
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
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
North Fork Red River near Tipton, OK	07307028	4,691	1960, 1985-89
East Cache Creek near Elgin, OK	07309000	248	1975-80

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
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
Washita River near Clinton, OK	07325000	1,977	1938-45, 1947-50, 1959-63, 1975, 1987-90

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
Washita River at Carnegie, OK	07325500	3,129	1942-51, 1955-90
Spring Creek near Eakly, OK	07325753		1960-61
Cobb Creek near Eakly, OK	07325800	132	1987-90
Cobb Creek near Fort Cobb, OK	07326000	313	1943-48, 1950-51, 1959-60, 1962-63, 1986-90
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
Rush Creek at Purdy, OK	07329000	145	1938-53, 1985-90

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi^2)	Period of record
RED RIVER BASIN			
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

High flow measurement equipment

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 135 streamflow-gaging stations, and 18 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 47 streamflow-gaging stations; (4) water-level records for 3 observation well.

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-01-2" 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; Oklahoma Gas and Electric Company; the cities of Ada, Henryetta, and Lawton.**

Organizations that supplied data are acknowledged in the station descriptions.

SPECIAL NETWORKS AND PROGRAMS

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

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

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

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, diverse, and geographically distributed part of the Nation's ground- and surface-water resources, and to identify, describe, and explain the major natural and human factors that affect these observed conditions and trends.

Assessment activities have begun in about two-thirds of the study units and ultimately will be conducted in 60 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

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

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

EXPLANATION OF THE RECORDS

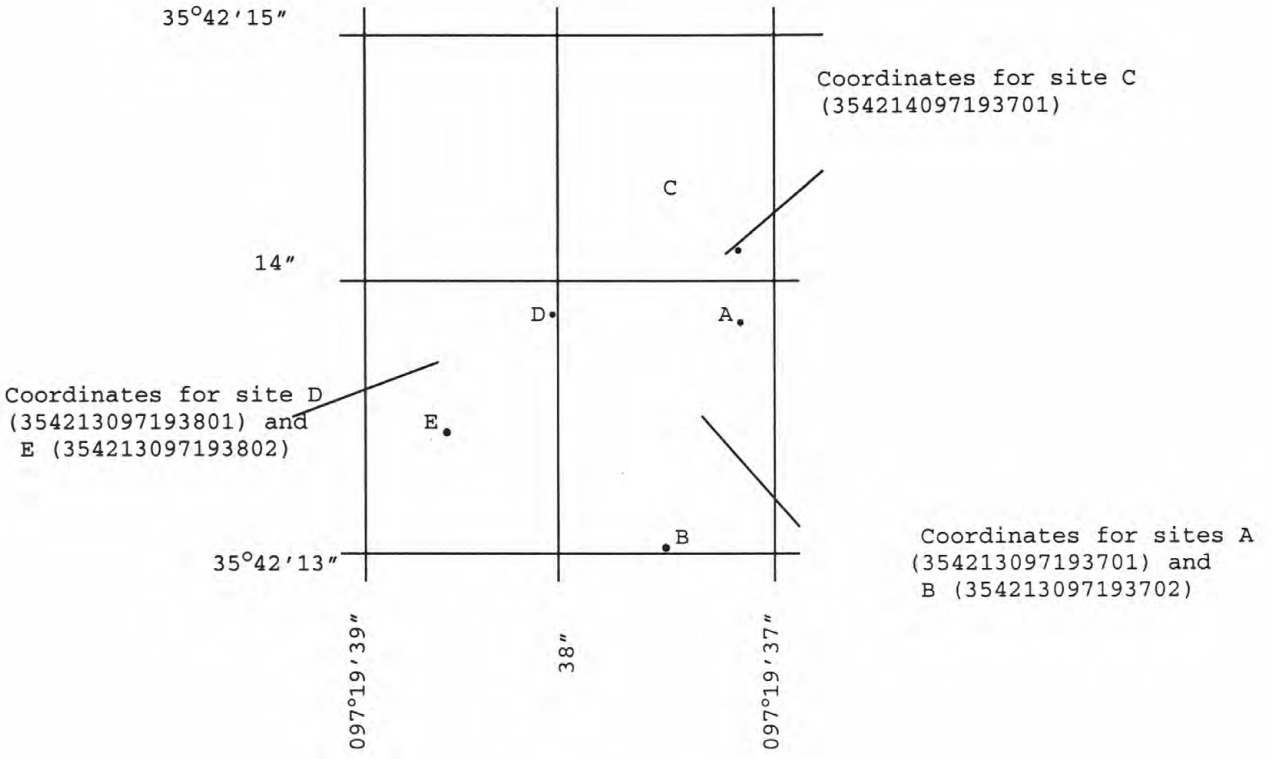
The surface-water and ground-water records published in this report are for the 2001 water year that began Oct. 1, 2000 and ended Sept. 30, 2001. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, 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 1-3. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

Downstream Order System

Since Oct. 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank



System for numbering miscellaneous and ground-water sites (latitude and longitude)

of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete number for each station, such as 07152500, which appears just to the left of the station name, includes the two-digit Part number "07" plus the up to 13-digit downstream-order number "152500." The Part number designates the major river basin; for example, part "07" is the Lower Mississippi River basin.

Latitude-Longitude System

The identification numbers for wells and springs are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the sites within a l-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In instances where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure above.)

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 1.

Data Collection and Computation

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

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

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

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

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

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

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information.

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data

reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a program to reformat the annual water-data report to most current user needs and data preferences.

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

Station Manuscript

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

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

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

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

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

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), 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 will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily discharge table. (See next section, "Identifying Estimated Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph also is used to present information 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, outlet works and spillway, and purpose and use of the reservoir.

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

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

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District Office to determine if the published records were ever revised after the station was discontinued. Of course, if the data were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity

table when daily contents are given.

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

Data Table of Daily Mean Values

The daily table 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 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 also is usually expressed in cubic feet per second per square mile (line headed "CFSM"); or in inches (line headed "IN.") or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion 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 contents are given. These figures are identified by a symbol and corresponding footnote.

Statistics of Monthly Mean Data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed MAX), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period 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. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary Statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS ____-____," will consist of all the station record within the specified water years, inclusive, including complete months of record for partial water year, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. 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 this occurs, 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 there is extensive regulation or diversion of flow in the drainage basin.

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

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

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

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

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

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

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

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

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

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

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

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

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

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

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

10 PERCENT EXCEEDS.--The discharge is exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge is exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge is exceeded 90 percent of the time for the designated period.

Hydrograph

A hydrograph for the current year follows the table for most stations. Streamflow hydrographs are semi-log plot of mean daily values with no flow days showing as blanks. Lake hydrographs are rectangular plot of 2400-hour readings.

Data collected at partial-record stations follow the information for continuous-record sites. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called miscellaneous sites.

Identifying Estimated Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated."

Accuracy of the Records

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

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

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

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of these sites as well as an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Oklahoma District office. Also, most of the daily mean discharges are in computer-readable form.

Records of Surface-Water Quality

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

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be one or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. 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 2.

Arrangement of Records

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

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for on-site measurements and for collecting, treating, and shipping samples are detailed in TWRI Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, and A4. These references are listed in PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS section of this report. Additional guidance is provided in technical memoranda. These methods are consistent with ASTM standards and generally follow ISO standards.

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

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (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, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S. Geological Survey District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at 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.

Sediment

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

Suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow and in predicting long-term sediment-discharge characteristics of the stream. Methods used in the computation of sediment records are described in the TWRI Book 3, Chapters C1 and C3. These methods are consistent with ASTM standards and generally follow ISO standards.

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 (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. Sediment samples are analyzed in Missouri District Sediment Laboratory. All other samples are analyzed in the Geological Survey laboratories in Arvada, Colo. Methods used to analyze sediment samples and to compute sediment records are described in the TWRI, Book 5, Chapter Cl. Methods used by the U.S. Geological Survey laboratories are given in the TWRI, Book 1, Chapter D2; Book 3, Chapter C2; and Book 5, Chapters A1, A3, A4, and A5. These methods are consistent with ASTM standards and generally follow ISO standards.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetic method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. Sulfate values for those years have not been corrected for this bias.

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, and dissolved oxygen then follow in sequence.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. 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 recorder, 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 Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to ensure the most recent updates.

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

Remarks Codes

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

PRINTED OUTPUT	REMARK
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 (nonideal colony count).
L	Biological organism count less than 0.5 percent (organisms 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

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

Blank Samples--Blank samples are collected and analyzed to ensure that environmental samples have not been contaminated by the overall data-collection process. The blank solution used to develop specific types of blank samples is a solution that is free of the analytes of interest. Any measured value signal in a blank sample for an analyte (a specific component measured in a chemical analysis) that was absent in the blank solution is believed to be due to contamination. There are many types of blank samples possible, each designed to segregate a different part of the overall data-collection process. The types of blank samples collected in this disctrict 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 (similiar 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 soltion 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 whose 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 properies are similar to the environmental sample properties.

Replicate Samples--Replicate samples are a set of environmental samples collected in a manner such that the samples are thought to be essentially identical in composition. Replicate is the general case for which a

duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. There are many types of replicate samples possible, each of which may yield slightly different results in a dynamic hydrologic setting, such as a flowing stream. The types of replicate samples collected in this district are:

Sequential samples - a type of replicate samples 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 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.

Dissolved Trace-Element Concentrations

NOTE: Traditionally, dissolved trace-element concentrations have been reported at the microgram per liter (µg/L) level. Recent evidence, mostly from large rivers, indicates that actual dissolved-phase concentrations for a number of trace elements are within the range of 10's and 100's of nanograms per liter (ng/L). Data above the µg/L level should be viewed with caution. Such data may actually represent elevated environmental concentrations from natural or human causes; however, these data could reflect contamination introduced during sampling, processing, or analysis. To confidently produce dissolved trace-element data with insignificant contamination, the U.S. Geological Survey began using new trace-element protocols at all stations in the water year 1994.

Nutrient Calculations

The values for many nitrogen parameters are calculated from other parameters. In some of these calculations, dissolved values are considered equivalent to total values.

Records of Ground-Water Levels

These data are intended to provide a sampling and historical record of water-level changes in the Nation's most important aquifers. Locations of the observation wells in this network in Oklahoma are shown in figure 3.

Although, in this report, records of water levels are presented for fewer than 10 wells, records are obtained through cooperative efforts of many Federal, State, and local agencies for several hundred observation wells throughout Oklahoma and are placed in computer storage. Information about the availability of the data in the water-level file may be obtained from the District chief, Oklahoma District. (See address on back of front page.)

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability. Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table. The secondary identification number is the local well number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or punched tape of the water-stage recorder. The 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 is given in each well description.

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 to water of several hundred feet, the error of 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 to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the station description and the data table of mean daily water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the hydrologic-unit number; the distance and direction from a geographic point of reference.

AQUIFER.--This entry designates by name the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of

casing, plug in pump base and so on), 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 (or below) sea level; it is reported with a precision depending on the method determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It is used to acknowledge the assistance of local (non-Survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

An abbreviated table of mean daily water levels follows the station description for each well equipped with a digital recorder. For wells with no recorder, actual measurements are listed. Water levels are reported in feet below land-surface datum. A rectangular hydrograph of mean daily water levels for the last three years follows the table for recorder wells. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by blanks in place of the water level.

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 at

http://www.water.usgs.gov

Some water-quality and ground-water data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3-1/2 inch floppy disk. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices. (See address on the back of the title page.)

DEFINITIONS OF TERMS

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

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

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

Aquifer is a geologic formation, group of formations or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Aroclor is the registered trade mark for a group of polychlorinated biphenyls which were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific four-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 weight percent of the hydrogen substituted chlorine.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

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

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

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

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

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

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

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m3), and periphyton and benthic organisms in grams per square meter (g/m2).

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

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

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

Bottom material: See Bed material.

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

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

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

Code Numbers have been assigned for agencies collecting and analtysing samples, and are listed in water-quality tables of this report as follows:

1028 Oklahoma District, Water Resources Division (WRD), U.S. Geological Survey

80020 National Water Quality Laboratory, WRD, U.S. Geological Survey

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

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

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

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

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

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

Instantaneous discharge is the discharge at a particular instant of time.

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

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

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

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

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

water.

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

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

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

HWM is a high-water mark or flood mark.

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

Hydrologic unit is a geographic area representing part of all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

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

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

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

Organism is any living entity.

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

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

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

Parameter Code is a 5-digit number used in the U.S. Geological Survey's data system, National Water Information System (NWIS), to uniquely identify a specific constituent. The codes used in NWIS are the same as those used in the U.S. Environmental Protection Agency's data system, STORET.

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

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

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

Classification	Size (mm)		Method of analysis
Clay.....	0.00024 -	0.004	Sedimentation
Silt.....	.004 -	.062	Sedimentation
Sand.....	.062 -	2.0	Sedimentation or sieve
Gravel....	2.0 -	64.0	Sieve

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

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

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

Pesticides are chemical compounds used to control

undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

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

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

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

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

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

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

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

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 release (oxygen method) or the amount of carbon assimilated by the plants (carbon method).

Milligrams of carbon per area or volume per unit time [mg C/m3.time)] for periphyton and macrophytes and [mg C/(m3.time)] for phytoplankton are units for expressing primary productivity. They define the amount of carbon dioxide consumed as measured by radioactive carbon (carbon 14). The carbon 14 method is of greater sensitivity than the oxygen light and dark bottle method, and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Milligrams of oxygen per area or volume per unit time [mg O/(m3.time)] for periphyton and macrophytes and [mg O/m3.time)] for phytoplankton are the units for expressing primary productivity. They define production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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

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

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

Sea level is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "National Geodetic Vertical Datum of 1929 (NGVD of 1929)," "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf or Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

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

characteristics, land usage, and quantity and intensity of precipitation.

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

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

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

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

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

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

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

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

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

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

Solute is any substance that is dissolved in water.

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

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

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

Substrate is the physical surface upon which an organism lives.

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

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

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

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

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total"

amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

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

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

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

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

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

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

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

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

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

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

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, Oct. 1 through Sept. 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 Sept. 30, 1995, is called the "1995 water year."

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

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

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

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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

The reports listed below are for sale by the U.S. Geological Survey, Branch of 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 sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

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

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

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

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

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

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

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, Chapter F1. 1989. 97 pages.

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

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

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

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

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

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

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

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

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

3-Al0. *Discharge ratings at gaging stations,* by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

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

3-A12. *Fluorometric procedures for dye tracing,* Revised, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS- -TWRI Book 3, Chapter A12. 1986. 34 pages.

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

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

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

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

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

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, Chapter A18. 1989. 52 pages.

3-A19. *Levels at streamflow gaging stations,* by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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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, Chapter A1. 1989. 545 pages.

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

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

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

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

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

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

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

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

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

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

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

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

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

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, Chapter C3. 1981. 110 pages.

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

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

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

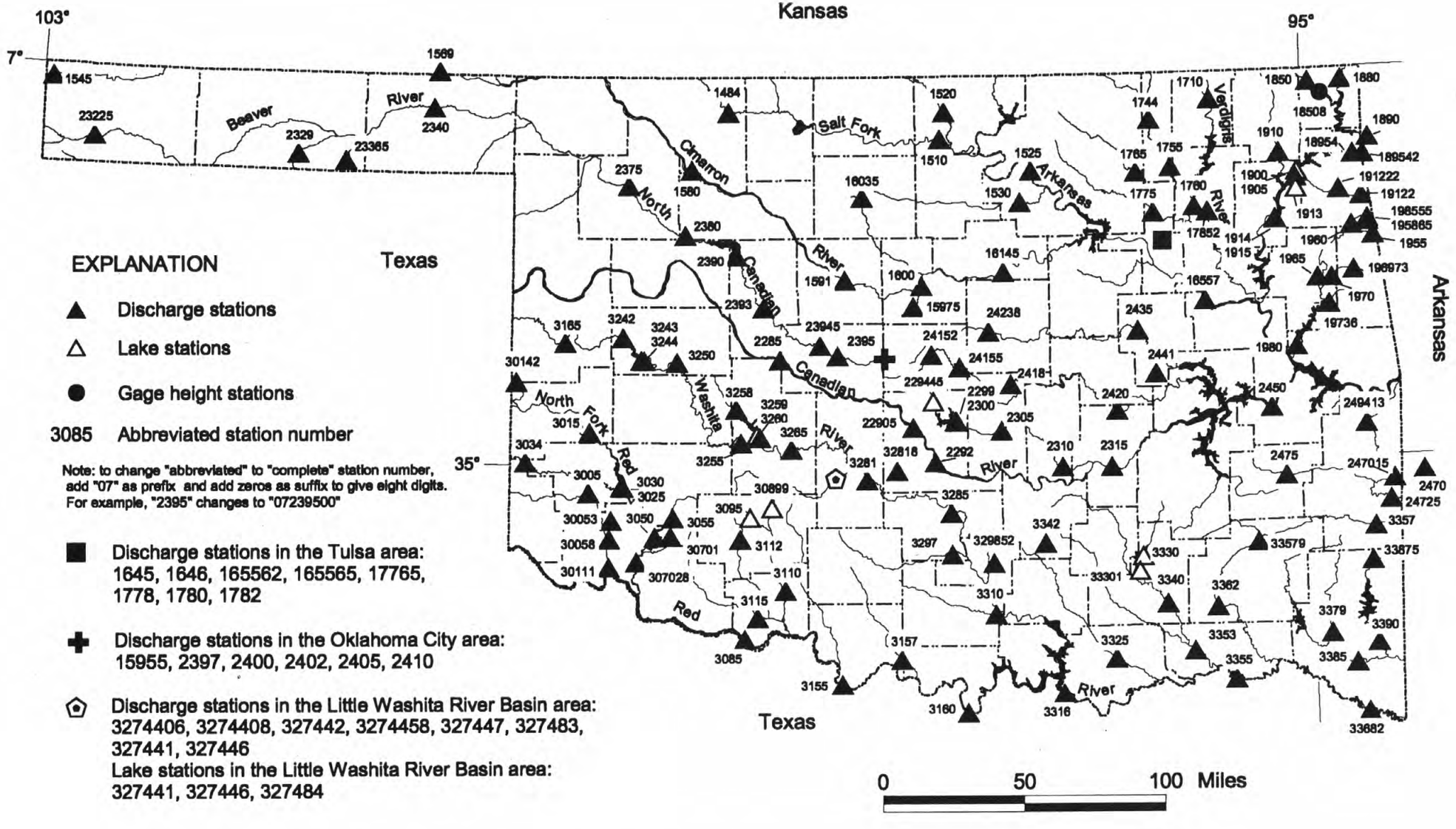


Figure 1.--Locations of continuous surface-water stations for water-year 2001.

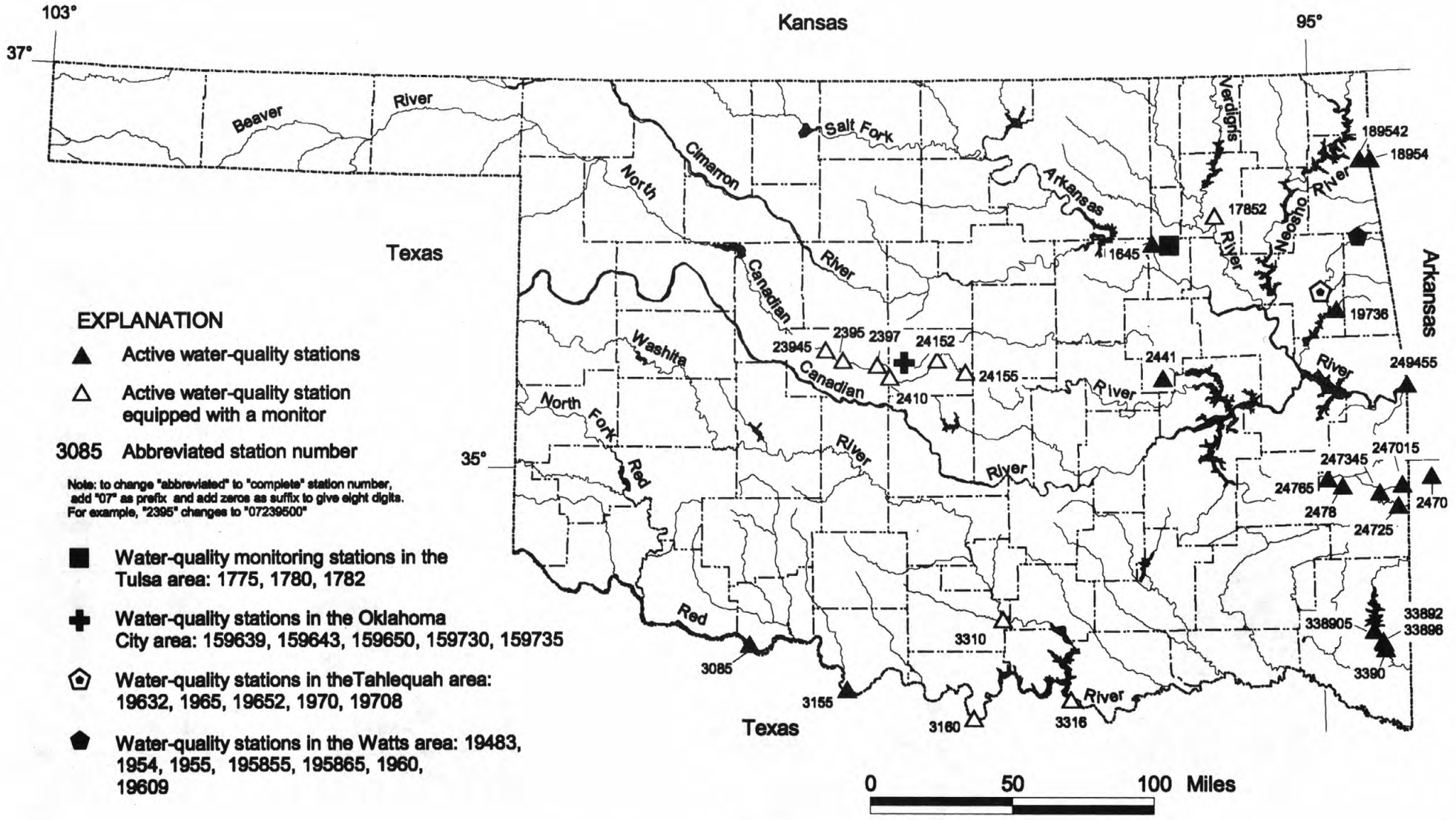


Figure 2.–Locations of water-quality stations for water-year 2001.

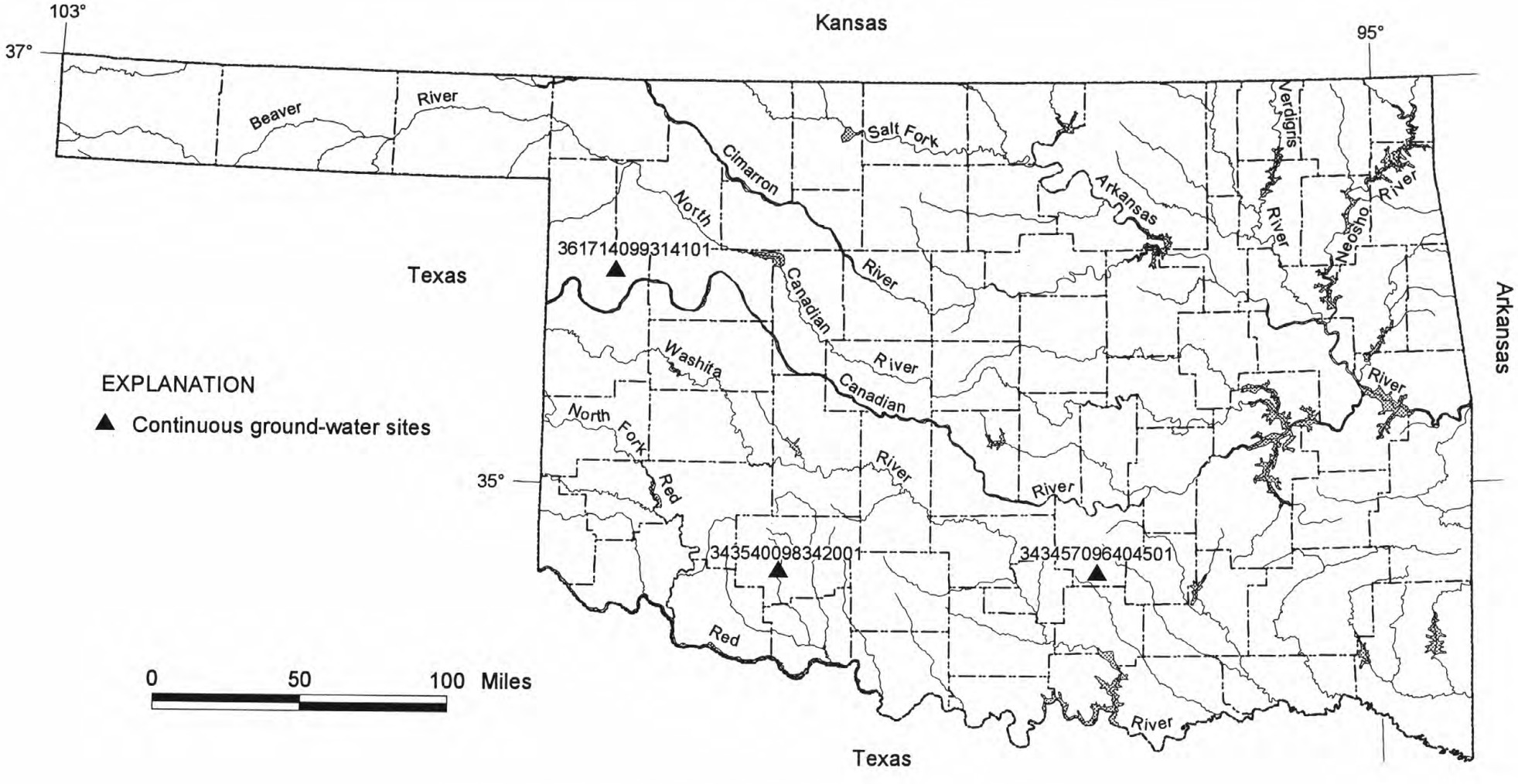


Figure 3.--Locations of ground-water wells for water-year 2001.

07300500 SALT FORK RED RIVER AT MANGUM, OK

LOCATION.--Lat 34°51'30", long 99°30'30", in SW $^1/_4$ SE $^1/_4$ sec.34. T.5 N, R.22 W., Greer County, Hydrologic Unit 11120202, near left bank on downstream side of pier of bridge on State Highway 34, 0.5 mi south of Mangum, 13.0 mi downstream from Fish Creek, and at mile 35.5.

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

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

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

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)

No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	40	23	e29	120	112	88	19	182	.00	.00	.00
2	.00	34	22	e30	107	103	83	17	126	.00	.00	.00
3	.00	33	22	e32	96	102	74	38	97	.00	.00	.00
4	.00	32	23	e40	86	118	69	676	82	.00	.00	.00
5	.00	32	24	e45	78	105	63	1320	63	.00	.00	.00
6	.00	33	25	e50	74	99	61	394	51	.00	.00	.00
7	.00	37	25	e90	69	95	59	284	41	.00	.00	.00
8	.00	45	25	97	69	98	58	184	35	.00	.00	.00
9	e.00	41	26	79	86	112	59	142	31	.00	.00	.00
10	e.00	38	26	70	112	182	67	115	27	.00	.00	.00
11	.00	36	25	68	136	166	63	114	22	.00	.00	.00
12	.00	32	e24	64	113	141	56	119	18	.00	4.9	.00
13	.00	28	e22	66	101	123	56	128	21	.00	.13	.00
14	.00	26	e24	62	97	109	56	108	18	.00	.00	.00
15	.00	26	43	57	92	93	54	77	14	.00	.00	.00
16	.00	24	50	53	86	80	48	61	12	.00	.00	25
17	.00	22	44	52	83	75	45	49	8.9	.00	.00	5.7
18	.00	22	34	51	77	71	45	55	6.1	.00	2.8	3.5
19	.00	20	35	51	73	75	42	358	5.4	.00	5.3	1.9
20	.00	21	32	53	71	81	42	446	4.6	.00	.12	.82
21	.00	21	31	52	72	83	42	301	4.3	.00	.00	.28
22	e1.6	22	31	48	71	84	43	240	3.8	.00	.00	.06
23	1.3	22	29	47	75	80	40	167	5.1	.00	.00	.00
24	9.7	29	28	49	170	75	38	122	6.0	.00	.00	.00
25	65	31	27	48	242	73	35	92	4.9	.00	.00	.00
26	131	27	e27	48	189	74	30	73	3.1	.00	.00	.00
27	115	23	e27	48	136	78	26	65	.50	.00	.00	.00
28	80	23	e29	61	123	87	24	58	.27	.00	.00	.00
29	66	23	e30	86	---	92	21	59	.09	.00	.00	.00
30	43	23	e31	144	---	96	20	192	.01	.00	.00	.00
31	45	---	e30	131	---	92	---	259	---	.00	.00	---
TOTAL	557.60	866	894	1901	2904	3054	1507	6332	893.07	0.00	13.25	37.26
MEAN	18.0	28.9	28.8	61.3	104	98.5	50.2	204	29.8	.000	.43	1.24
MAX	131	45	50	144	242	182	88	1320	182	.00	5.3	25
MIN	.00	20	22	29	69	71	20	17	.01	.00	.00	.00
AC-FT	1110	1720	1770	3770	5760	6060	2990	12560	1770	.00	26	74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

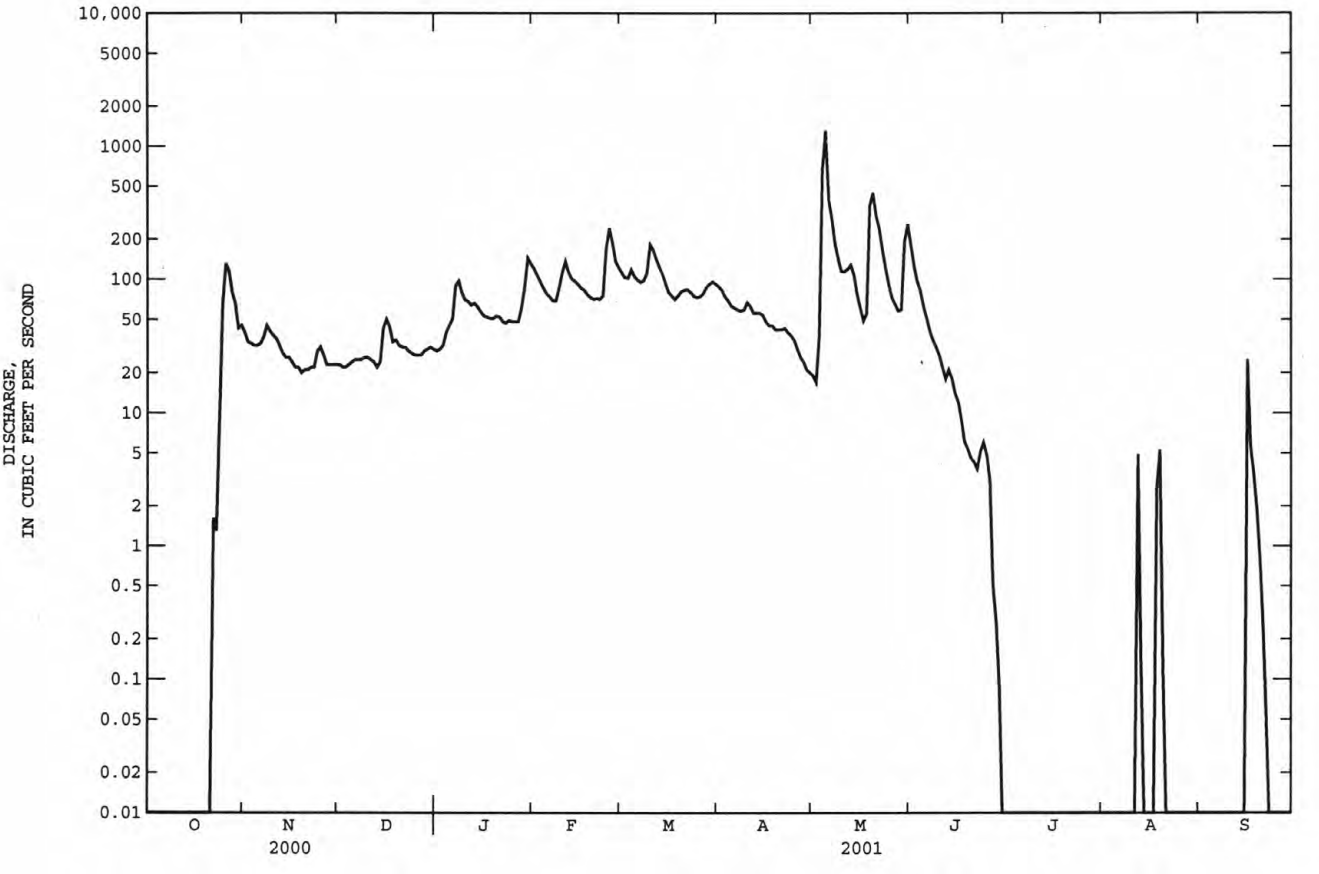
MEAN	76.7	32.0	38.5	47.6	57.4	56.5	105	260	236	64.2	39.6	50.1
MAX	919	196	148	199	263	344	1292	1389	1602	575	539	424
(WY)	1961	1987	1992	1960	1998	1998	1997	1957	1941	1953	1995	1995
MIN	.000	.000	.000	.000	.000	.12	.000	.000	.000	.000	.000	.000
(WY)	1941	1940	1940	1940	1953	1971	1955	1953	1952	1963	1943	1939

e Estimated

07300500 SALT FORK RED RIVER AT MANGUM, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	21249.68		18959.18			
ANNUAL MEAN	58.1		51.9		88.7	
HIGHEST ANNUAL MEAN					277	1941
LOWEST ANNUAL MEAN					12.3	1940
HIGHEST DAILY MEAN	835	Mar 24	1320	May 5	22600	May 28 1978
LOWEST DAILY MEAN	.00	at times	.00	at times	[a].00	Oct 2 1937
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 11	.00	Oct 1	.00	Aug 14 1938
MAXIMUM PEAK FLOW			2790	May 5	72000	May 16 1957
MAXIMUM PEAK STAGE			8.43	May 5	14.70	Jun 16 1938
ANNUAL RUNOFF (AC-FT)	42150		37610		64260	
10 PERCENT EXCEEDS	134		113		130	
50 PERCENT EXCEEDS	27		30		19	
90 PERCENT EXCEEDS	.00		.00		.00	

[a]No flow at times in most years.



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.--42.7 mi^2.

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

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

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

REMARKS.--Records fair. Flow affected by irrigation from Lake Altus.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	7.2	5.0	e4.0	6.3	15	6.0	2.4	25	25	18	8.0
2	2.9	5.9	5.2	e3.9	6.0	15	6.2	2.3	17	22	18	7.4
3	2.7	6.0	5.1	e4.0	6.1	14	5.9	2.8	14	20	21	7.0
4	2.4	6.0	5.1	4.8	6.1	12	5.7	76	12	21	24	21
5	2.3	6.0	5.0	6.0	5.9	12	5.6	136	11	27	25	17
6	2.3	5.8	5.2	8.0	6.0	11	5.7	19	9.2	27	22	12
7	2.4	5.3	4.8	6.6	6.1	11	5.8	10	8.7	19	21	8.8
8	2.6	7.1	4.6	6.0	6.4	11	5.2	9.6	8.3	16	20	7.4
9	2.6	7.0	4.4	5.6	14	12	5.1	7.9	7.9	20	27	6.7
10	2.8	5.9	4.5	5.6	9.8	11	4.8	7.0	7.8	15	43	6.5
11	2.8	5.7	4.2	5.9	7.1	11	4.8	6.5	7.5	23	35	8.9
12	2.8	5.5	e3.7	5.6	6.8	10	4.5	7.0	11	20	45	15
13	2.8	5.3	e3.5	5.6	7.1	10	4.7	6.0	17	17	23	13
14	2.8	5.3	e3.4	5.4	7.3	9.9	4.3	5.1	14	19	13	12
15	3.4	5.4	e4.5	5.2	6.7	9.8	4.4	4.9	12	28	11	22
16	3.6	5.3	5.3	5.2	6.5	8.5	3.9	4.5	12	26	9.6	99
17	2.9	5.2	4.7	5.5	6.1	8.2	3.9	4.0	9.7	24	8.8	23
18	2.6	5.1	4.5	5.3	6.3	8.3	3.9	5.2	7.5	21	46	11
19	2.7	5.0	4.2	5.1	6.4	8.7	3.9	578	10	29	18	8.2
20	2.9	4.9	4.4	4.8	6.6	8.5	3.8	634	10	32	10	7.3
21	3.6	4.8	4.4	5.1	6.2	8.2	3.8	45	12	33	9.5	6.7
22	7.5	5.0	4.2	4.9	5.9	7.8	3.7	17	4.8	26	9.7	5.9
23	14	5.4	4.2	5.0	6.9	7.2	3.8	13	4.6	18	8.6	5.1
24	8.0	7.5	4.2	5.0	346	6.9	3.2	10	5.5	24	15	4.5
25	27	6.2	e4.1	4.9	88	6.5	3.1	8.6	7.9	24	27	4.4
26	30	5.4	e3.9	5.2	26	6.8	2.9	8.1	14	21	63	4.2
27	8.9	5.1	e4.1	5.3	19	7.5	2.8	7.7	22	22	28	3.8
28	6.2	4.9	e4.8	7.7	17	8.1	2.7	58	33	26	12	3.5
29	24	4.9	5.0	16	---	7.6	2.6	75	32	23	11	3.2
30	9.6	4.9	5.0	11	---	6.8	2.4	488	29	23	9.8	3.1
31	6.3	---	e4.6	7.2	---	6.4	---	165	---	17	8.8	---
TOTAL	200.6	169.0	139.8	185.4	654.6	296.7	129.1	2423.6	396.4	708	660.8	365.6
MEAN	6.47	5.63	4.51	5.98	23.4	9.57	4.30	78.2	13.2	22.8	21.3	12.2
MAX	30	7.5	5.3	16	346	15	6.2	634	33	33	63	99
MIN	2.3	4.8	3.4	3.9	5.9	6.4	2.4	2.3	4.6	15	8.6	3.1
AC-FT	398	335	277	368	1300	589	256	4810	786	1400	1310	725

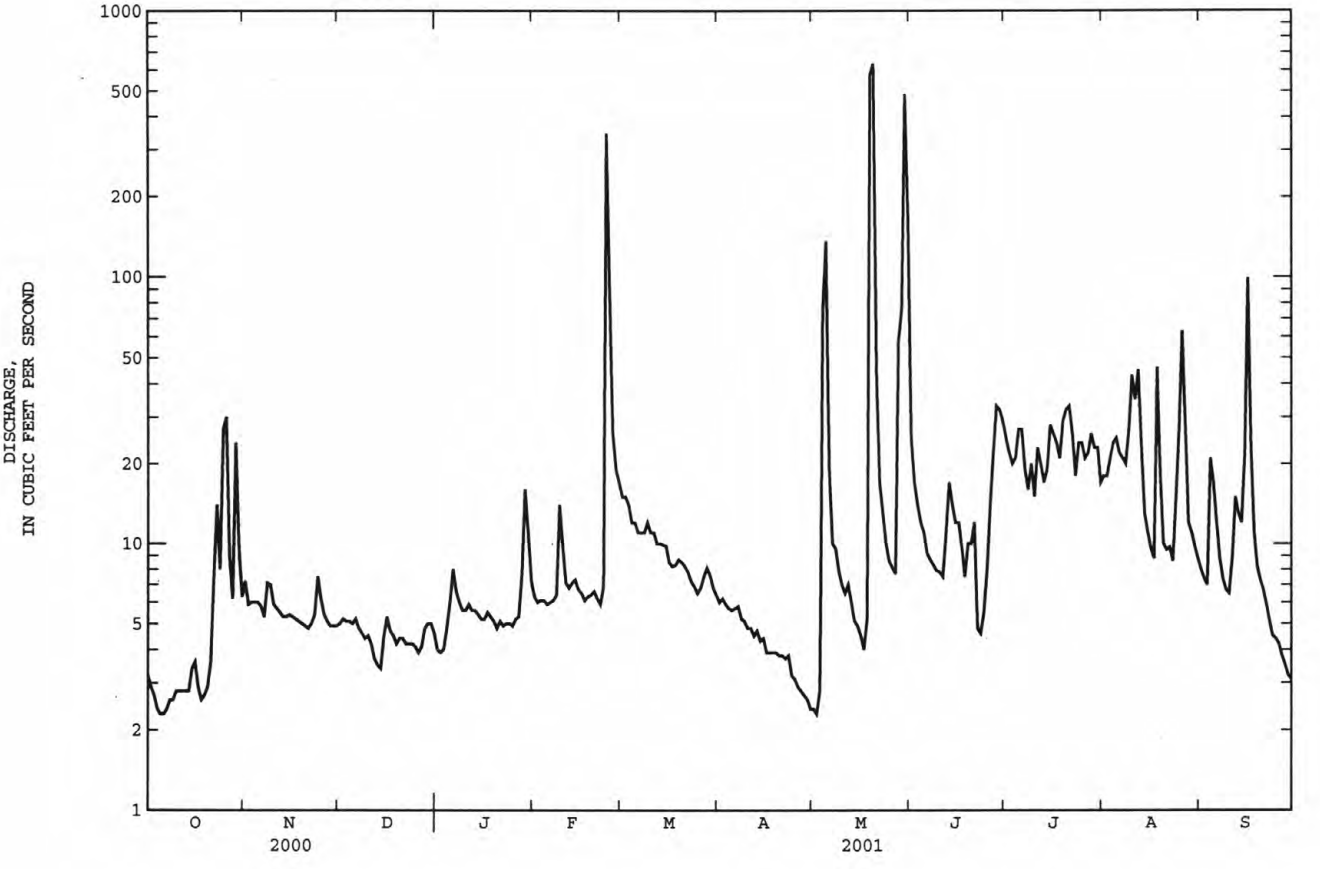
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	5.31	6.24	5.12	4.31	11.4	23.4	14.9	54.1	32.2	21.7	23.9	10.4
MAX	6.47	10.6	7.46	5.98	23.4	55.5	31.6	78.2	82.6	22.8	27.5	12.2
(WY)	2001	1999	2000	2001	2001	2000	2000	2001	1999	2001	2000	2001
MIN	4.35	2.52	3.39	2.92	4.74	5.06	4.30	27.0	13.2	19.7	21.3	8.02
(WY)	2000	2000	1999	2000	1999	1999	2001	2000	2001	2000	2001	1998

e Estimated

07300530 BITTER CREEK NEAR MARTHA, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	6564.5		6329.6			
ANNUAL MEAN	17.9		17.3		18.3	
HIGHEST ANNUAL MEAN					19.8	1999
LOWEST ANNUAL MEAN					17.3	2001
HIGHEST DAILY MEAN	1140	Mar 23	634	May 20	1440	Jun 23 1999
LOWEST DAILY MEAN	2.2	Apr 29	2.3	Oct 5,6, May 2	1.8	Jan 18 1999
ANNUAL SEVEN-DAY MINIMUM	2.5	Oct 3	2.5	Oct 3	1.9	Jan 15 1999
MAXIMUM PEAK FLOW			2170	May 19	4250	Jun 23 1999
MAXIMUM PEAK STAGE			12.34	May 19	13.04	Jun 23 1999
ANNUAL RUNOFF (AC-FT)	13020		12550		13260	
10 PERCENT EXCEEDS	27		25		27	
50 PERCENT EXCEEDS	5.3		6.9		6.1	
90 PERCENT EXCEEDS	2.7		3.7		2.6	



07300580 BITTER CREEK WEST OF ALTUS, OK

LOCATION.--Lat 34°37'24", long 99°22'56", in SW $^1/_4$ sec.23. T.2 N, R.21 W., Jackson County, Hydrologic Unit 11120202, on left bank of creek on county road, 2.8 mi west and 1.0 mi south of Altus, and at mile 7.5.

DRAINAGE AREA.--68.1 mi^2.

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,331.91 ft above sea level.

REMARKS.--Records fair. Flow affected at times by irrigation from Lake Altus.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	13	11	e7.1	14	27	11	4.4	40	e35	e28	12
2	4.5	12	9.9	e7.0	13	26	11	4.2	25	e32	e28	11
3	3.7	12	9.7	e7.2	14	24	11	4.1	24	e30	e28	11
4	3.4	13	9.8	7.8	13	22	11	57	21	e29	e30	16
5	3.2	13	9.6	11	13	20	10	199	20	e29	e31	20
6	3.1	12	9.7	15	13	20	9.9	44	19	e32	e31	16
7	3.2	11	9.6	15	13	19	9.9	18	19	e32	e32	12
8	3.7	15	9.5	11	13	19	9.5	14	18	e26	e32	10
9	3.8	18	9.1	10	23	20	9.1	13	18	e26	e31	9.7
10	4.2	15	9.0	10	24	19	9.0	12	16	e24	e120	9.4
11	4.3	13	8.8	11	16	18	8.6	11	14	e30	58	9.5
12	4.4	12	e8.0	11	15	18	7.5	12	13	e30	54	12
13	4.5	11	e7.9	11	15	17	7.1	11	17	e29	41	15
14	4.4	11	e7.8	10	15	17	7.8	10	19	e28	22	12
15	27	11	e9.0	9.6	15	17	7.1	9.6	19	e38	18	13
16	21	11	10	9.7	14	15	6.7	9.5	15	e35	17	116
17	8.3	10	9.2	9.8	13	15	6.3	9.0	15	e33	15	39
18	5.6	10	9.0	9.9	13	16	6.4	44	13	e34	44	13
19	4.8	10	8.1	9.7	14	16	6.6	166	12	e31	33	10
20	4.9	9.9	8.2	9.3	14	16	6.7	2100	14	e38	16	9.7
21	5.9	9.7	7.9	9.7	14	15	6.5	391	15	e40	14	9.2
22	18	10	7.6	9.9	13	15	6.2	39	11	e40	14	8.8
23	50	11	7.7	9.9	14	14	5.9	25	9.6	e35	13	8.2
24	26	19	7.7	9.9	288	13	5.6	20	8.2	e28	25	7.7
25	62	16	e7.6	9.9	396	12	5.3	17	9.7	e30	30	7.4
26	127	12	e7.0	9.9	51	12	5.1	16	9.9	e30	125	7.3
27	43	11	e7.6	10	35	13	4.8	15	15	e29	55	7.0
28	16	11	e8.6	15	29	14	4.6	72	e35	e30	20	6.5
29	36	10	8.5	29	---	14	4.5	109	e40	e31	15	6.0
30	25	10	8.4	25	---	13	4.5	178	e38	e30	15	6.2
31	15	---	e8.2	16	---	12	---	364	---	e29	16	---
TOTAL	551.3	362.6	269.7	356.3	1137	528	225.2	3997.8	562.4	973	1051	450.6
MEAN	17.8	12.1	8.70	11.5	40.6	17.0	7.51	129	18.7	31.4	33.9	15.0
MAX	127	19	11	29	396	27	11	2100	40	40	125	116
MIN	3.1	9.7	7.0	7.0	13	12	4.5	4.1	8.2	24	13	6.0
AC-FT	1090	719	535	707	2260	1050	447	7930	1120	1930	2080	894

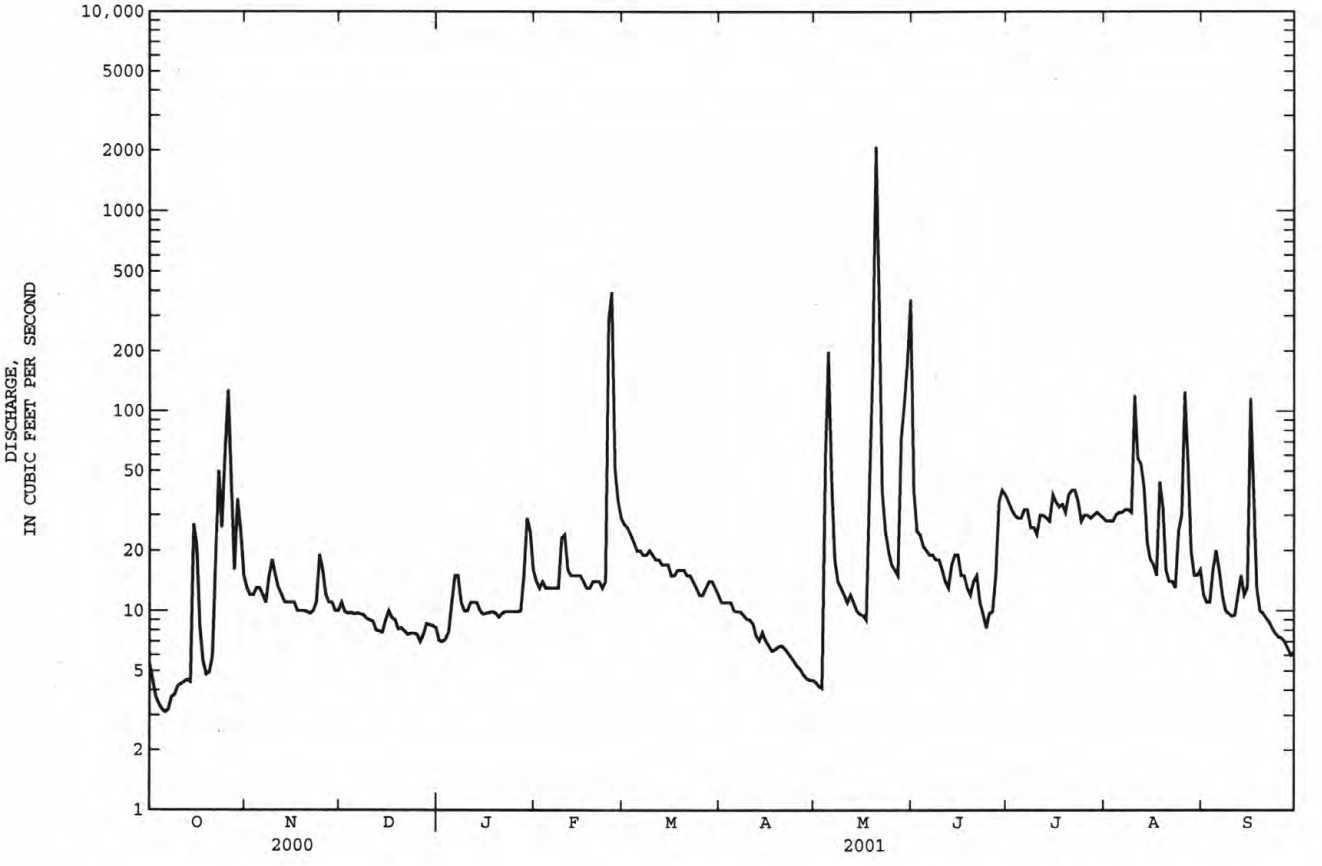
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

MEAN	10.1	10.8	9.82	9.47	18.6	43.4	18.6	90.4	50.3	26.9	32.5	15.2
MAX	17.8	16.1	12.1	13.3	40.6	106	37.5	148	132	31.4	40.4	20.5
(WY)	2001	1999	2000	1999	2001	2000	2000	1999	1999	2001	1999	1999
MIN	5.68	4.14	8.69	3.59	7.25	7.52	7.51	29.1	18.7	22.3	27.7	10.1
(WY)	1999	2000	1999	2000	1999	1999	2001	1998	2001	1999	1998	1998

e Estimated

07300580 BITTER CREEK WEST OF ALTUS, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1998 - 2001	
ANNUAL TOTAL	10648.5		10464.9			
ANNUAL MEAN	29.1		28.7		30.9	
HIGHEST ANNUAL MEAN					36.2	1999
LOWEST ANNUAL MEAN					27.8	2000
HIGHEST DAILY MEAN	1590	Mar 24	2100	May 20	2100	May 20 2001
LOWEST DAILY MEAN	2.5	Feb 20	3.1	Oct 6	2.5	Feb 20 2000
ANNUAL SEVEN-DAY MINIMUM	2.7	Feb 15	3.4	Oct 3	2.7	Oct 22 1999
MAXIMUM PEAK FLOW			2760	May 20	2760	May 20 2001
MAXIMUM PEAK STAGE			14.82	May 20	14.82	May 20 2001
ANNUAL RUNOFF (AC-FT)	21120		20760		22360	
10 PERCENT EXCEEDS	32		35		37	
50 PERCENT EXCEEDS	11		13		12	
90 PERCENT EXCEEDS	3.4		6.6		4.2	



07301110 SALT FORK RED RIVER NEAR ELMER, OK

LOCATION.--Lat 34°28'44", long 99°22'55", in NW $^1/_4$ NE $^1/_4$ sec.15, T.1 S., R.21 W., Jackson County, Hydrologic Unit 11120202, on right bank at bridge on paved county road, formerly State Highway 5, 1.7 mi west of Elmer, and at mile 3.5.

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

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

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

REMARKS.--Records poor. Low flows sustained at times by irrigation returns from Lake Altus.

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)
No peak greater than base discharge.							

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	87	51	e43	187	253	172	68	632	e115	54	34
2	11	82	50	e43	183	222	167	65	334	e107	48	e32
3	10	85	49	e45	166	192	156	65	231	e93	45	e30
4	10	85	49	e50	147	166	147	184	182	e90	50	e30
5	12	75	50	e60	136	176	139	1290	149	e80	52	e150
6	9.6	69	50	e90	127	162	139	1310	129	e75	55	e200
7	9.6	65	50	e110	123	147	135	663	113	e73	43	137
8	9.6	94	51	e130	125	154	133	454	101	e71	68	48
9	9.6	104	50	137	154	159	130	310	89	74	e60	29
10	9.8	85	53	121	150	159	130	238	78	e78	162	23
11	9.8	78	49	113	155	216	127	184	71	e75	147	24
12	9.8	71	e47	104	191	230	130	192	84	e76	127	25
13	9.8	67	e43	101	164	208	118	168	94	e78	126	37
14	11	63	e41	99	153	189	112	164	105	e76	77	e40
15	85	61	46	99	145	171	123	138	102	e75	45	e31
16	235	58	50	94	137	152	119	105	93	e76	e44	90
17	61	55	53	94	130	142	109	83	90	76	e41	221
18	36	54	64	90	127	140	108	239	69	74	143	88
19	25	52	63	85	124	138	106	310	58	74	201	44
20	21	51	56	84	119	139	104	1490	51	77	96	41
21	22	49	55	84	116	138	101	1380	44	101	44	29
22	43	49	51	83	118	138	99	757	43	93	28	25
23	193	52	51	79	132	138	100	500	37	74	44	21
24	82	71	49	80	752	134	95	374	40	89	83	17
25	417	75	e47	77	1290	127	89	281	35	e76	107	16
26	1090	64	e35	79	703	129	87	233	45	e78	349	19
27	748	60	e40	85	400	133	82	201	57	e76	376	18
28	263	57	e41	103	292	142	77	438	67	e68	127	e15
29	251	54	e42	171	---	149	73	366	118	e64	62	e14
30	158	52	40	157	---	158	70	465	120	e60	49	e14
31	116	---	e42	202	---	172	---	848	---	e56	38	---
TOTAL	3990.6	2024	1508	2992	6746	5073	3477	13563	3461	2448	2991	1542
MEAN	129	67.5	48.6	96.5	241	164	116	438	115	79.0	96.5	51.4
MAX	1090	104	64	202	1290	253	172	1490	632	115	376	221
MIN	9.6	49	35	43	116	127	70	65	35	56	28	14
AC-FT	7920	4010	2990	5930	13380	10060	6900	26900	6860	4860	5930	3060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

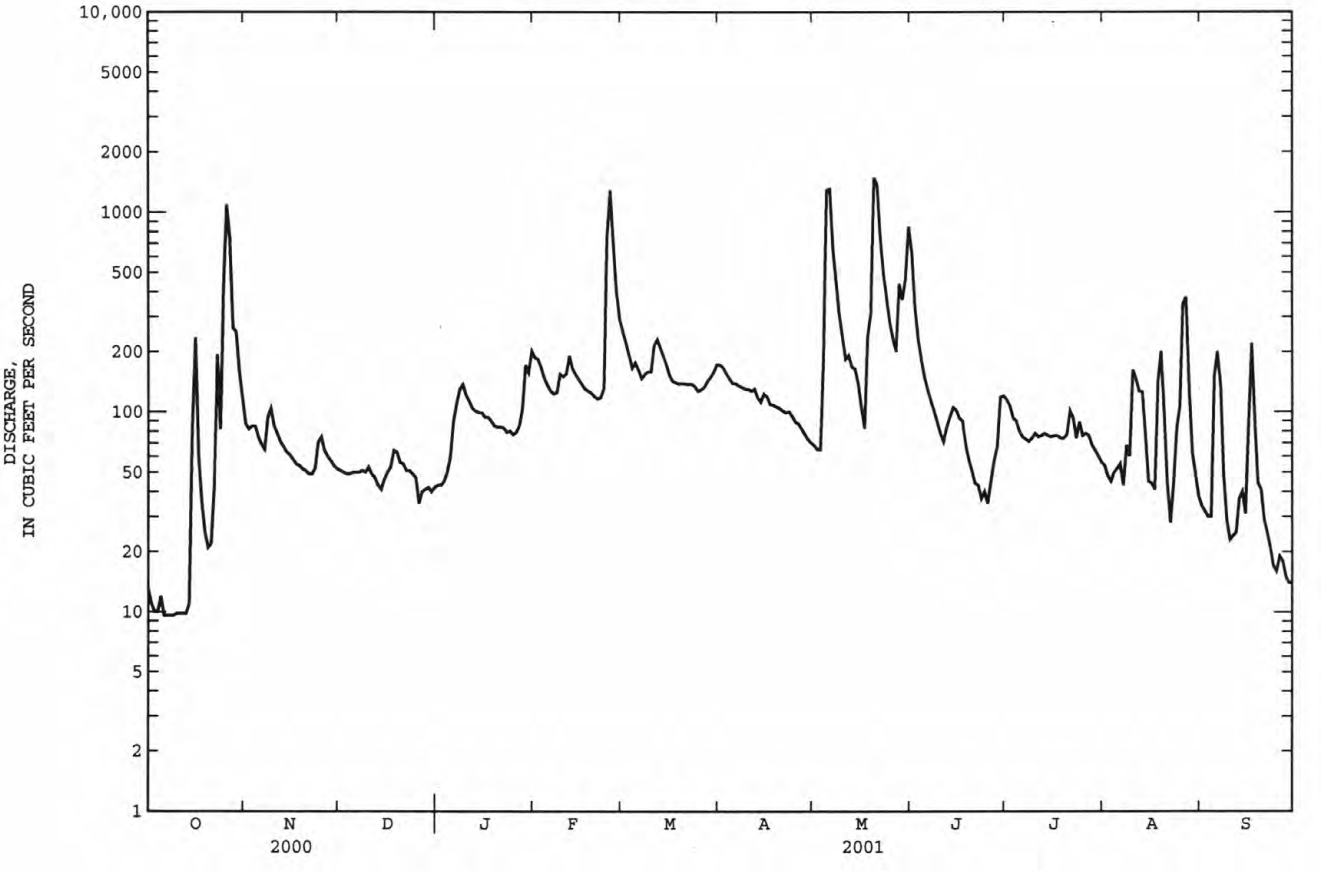
MEAN	241	129	131	124	171	211	272	557	644	185	274	196
MAX	1828	680	701	362	697	1100	2108	2566	2836	641	1681	950
(WY)	1987	1987	1992	1993	1997	1998	1997	1980	1995	1993	1995	1986
MIN	3.79	4.72	16.5	13.3	13.7	21.1	13.9	7.51	61.1	9.25	4.19	7.90
(WY)	1985	1985	1983	1981	1981	1982	1982	1984	1994	1981	1981	1981

e Estimated

07301110 SALT FORK RED RIVER NEAR ELMER, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	49011.6		49815.6			
ANNUAL MEAN	134		136		261	
HIGHEST ANNUAL MEAN					594	1997
LOWEST ANNUAL MEAN					71.2	1983
HIGHEST DAILY MEAN	4460	Mar 24	1490	May 20	28200	Aug 3 1995
LOWEST DAILY MEAN	9.6	Oct 6-9	9.6	Oct 6-9	.08	Sep 4 1981
ANNUAL SEVEN-DAY MINIMUM	9.7	Oct 6	9.7	Oct 6	.12	Aug 30 1981
MAXIMUM PEAK FLOW			1610	May 5	44900	Oct 20 1983
MAXIMUM PEAK STAGE			4.49	May 5	[a]16.06	May 29 1987
ANNUAL RUNOFF (AC-FT)	97210		98810		189400	
10 PERCENT EXCEEDS	232		230		454	
50 PERCENT EXCEEDS	59		85		85	
90 PERCENT EXCEEDS	30		33		16	

[a]From high-water mark.



07301420 SWEETWATER CREEK NEAR SWEETWATER, OK

LOCATION.--Lat 35°25'20", long 99°58'08", in NW $^1/_4$ NE $^1/_4$ sec.20, T.11 N, R.26 W., Roger Mills-Beckham County line, Hydrologic Unit 11120302, on right bank downstream bridge piling of State Highway 152, 0.4 mi downstream from Freezeout Creek, 3.3 mi west of Sweetwater, and at mile 16.0.

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

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	56	28	e17	71	55	45	23	72	12	1.4	1.7
2	1.1	51	28	e16	58	66	45	24	63	11	1.3	1.4
3	1.1	45	28	e20	51	65	44	25	58	11	1.2	1.2
4	1.1	42	28	e28	47	57	43	301	49	11	1.1	1.5
5	1.1	44	29	30	44	51	42	317	47	10	.99	2.6
6	1.2	46	29	49	43	47	42	142	73	9.6	.99	5.0
7	1.3	40	28	65	41	45	47	92	72	8.9	.91	5.8
8	1.6	38	29	69	42	49	52	81	53	8.0	.90	4.5
9	2.0	37	28	65	61	100	44	70	47	7.4	.88	4.5
10	2.2	35	29	59	70	97	41	65	43	7.1	1.1	3.7
11	2.5	34	e22	56	61	76	41	71	37	6.7	1.8	3.5
12	2.8	33	e20	53	58	72	45	68	31	6.4	1.6	3.1
13	3.0	31	e19	51	57	66	40	60	29	6.1	1.9	2.6
14	3.8	31	e18	49	54	60	38	49	28	6.3	1.9	2.2
15	6.8	31	e25	44	50	54	37	43	24	6.6	1.8	2.3
16	11	30	e27	43	48	50	35	38	24	6.7	1.6	3.8
17	14	29	e29	43	45	48	32	35	e22	7.2	1.5	4.8
18	10	29	31	44	43	47	32	45	e22	6.1	2.2	5.1
19	8.9	29	32	43	43	48	33	121	e21	5.3	2.4	4.7
20	8.1	29	33	42	43	49	32	427	e21	4.9	2.2	4.4
21	8.3	29	32	41	41	51	31	325	20	4.4	1.7	4.3
22	12	29	32	41	41	48	31	134	22	4.0	1.2	4.3
23	21	29	31	41	42	46	29	92	19	3.5	1.1	4.1
24	81	29	e24	40	58	43	27	78	18	3.0	1.0	5.5
25	241	29	e21	39	102	41	27	70	17	2.7	.93	5.8
26	339	29	e18	39	72	42	26	61	15	2.4	1.4	4.8
27	126	29	e17	39	60	46	25	55	14	2.3	1.7	4.1
28	86	29	e25	48	56	51	25	53	13	2.1	2.2	3.7
29	79	28	e29	79	---	53	24	133	12	2.1	2.3	3.4
30	67	28	e22	92	---	50	23	142	12	1.8	2.3	3.2
31	58	---	e20	84	---	48	---	96	---	1.6	2.0	---
TOTAL	1203.1	1028	811	1469	1502	1721	1078	3336	998	188.2	47.50	111.6
MEAN	38.8	34.3	26.2	47.4	53.6	55.5	35.9	108	33.3	6.07	1.53	3.72
MAX	339	56	33	92	102	100	52	427	73	12	2.4	5.8
MIN	1.1	28	17	16	41	41	23	23	12	1.6	.88	1.2
AC-FT	2390	2040	1610	2910	2980	3410	2140	6620	1980	373	94	221

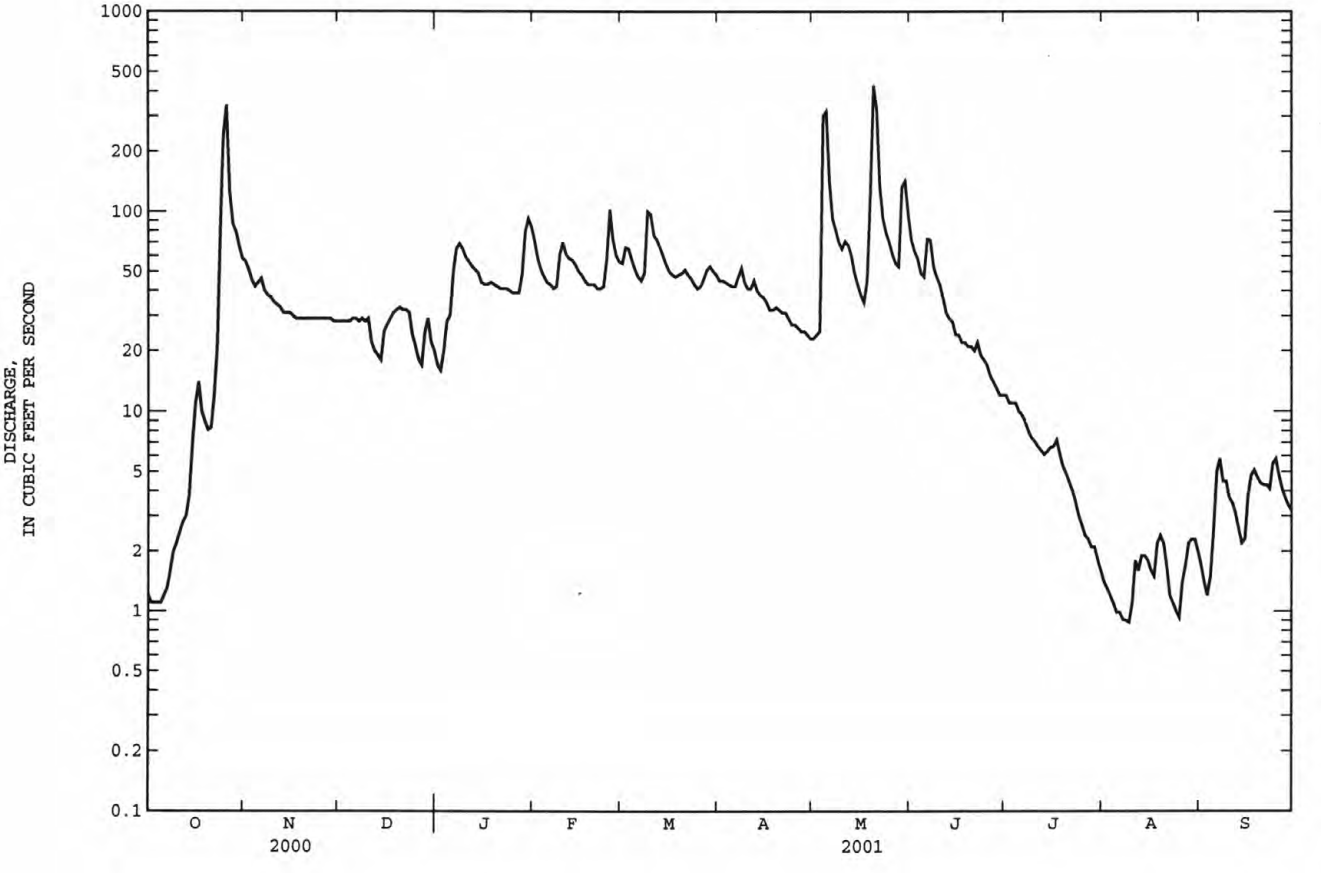
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

MEAN	17.9	22.3	25.4	29.2	31.6	40.1	39.4	45.1	40.3	12.8	7.32	11.2
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	.20	5.23	6.73	11.2	15.2	17.9	16.2	18.1	7.08	.97	.080	.084
(WY)	1995	1995	1995	1995	1995	1991	1991	1991	1994	1994	1994	1994

e Estimated

07301420 SWEETWATER CREEK NEAR SWEETWATER, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1986 - 2001	
ANNUAL TOTAL	10940.64		13493.40			
ANNUAL MEAN	29.9		37.0		27.1	
HIGHEST ANNUAL MEAN					53.0	1997
LOWEST ANNUAL MEAN					10.9	1994
HIGHEST DAILY MEAN	339	Oct 26	427	May 20	755	May 25 1997
LOWEST DAILY MEAN	.62	Sep 12,15	.88	Aug 9	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.63	Sep 14	.98	Aug 4	.00	Sep 28 1994
MAXIMUM PEAK FLOW			515	May 20	1940	Jun 3 1995
MAXIMUM PEAK STAGE			12.17	May 20	15.89	Jun 3 1995
INSTANTANEOUS LOW FLOW					.00	Aug 27 1994
ANNUAL RUNOFF (AC-FT)	21700		26760		19630	
10 PERCENT EXCEEDS	57		70		50	
50 PERCENT EXCEEDS	23		29		21	
90 PERCENT EXCEEDS	1.2		1.9		2.0	



07301500 NORTH FORK RED RIVER NEAR CARTER, OK

LOCATION.--Lat 35°10'05", long 99°30'25", in NW $^1/_4$ SE $^1/_4$ sec.15, T.8 N., R.22 W., Beckham County, Hydrologic Unit 11120302, on left bank on downstream side of roadway on State Highway 34, 3.0 mi south of Carter, 10.8 mi downstream from Timber Creek, and at mile 110.5.

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

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1211: Drainage area.

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

REMARKS.--Records fair. 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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 5	0100	5,790	9.12	May 20	0500	5,830	9.15

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	218	96	e145	254	242	234	119	433	59	1.5	.74
2	.00	187	92	e150	237	268	233	119	316	57	1.2	.32
3	.00	157	90	e160	227	316	235	214	272	54	.73	.00
4	.00	139	92	e170	208	299	230	1810	254	52	.32	.20
5	.00	138	92	e180	197	266	225	4750	234	48	.05	3.1
6	.00	133	93	e200	184	244	219	1480	256	45	.01	32
7	.00	132	94	218	173	231	219	807	293	40	.00	8.3
8	.00	125	96	228	181	240	216	551	301	36	.00	5.3
9	.00	123	96	231	226	347	222	400	262	34	.00	4.0
10	.00	124	98	217	334	467	220	398	227	33	.00	3.2
11	.00	123	e95	202	292	415	215	363	202	30	.53	2.6
12	.00	117	e85	190	272	347	205	566	184	28	1.4	2.3
13	.00	112	e78	182	266	356	215	e450	169	26	2.2	1.8
14	.00	108	e70	168	257	286	206	385	162	26	2.0	1.5
15	.00	101	e95	159	252	269	195	283	142	25	1.8	1.9
16	.00	99	e120	151	248	259	188	254	129	26	7.3	2.0
17	.43	97	e140	143	230	243	178	242	119	26	2.9	2.6
18	1.7	96	130	138	219	223	171	1160	112	18	5.2	2.3
19	2.3	96	118	143	206	226	166	1470	104	e17	19	2.1
20	2.7	97	115	e139	204	225	163	5380	96	e15	14	2.0
21	4.1	97	109	e138	204	223	159	1710	91	e13	5.4	2.4
22	13	94	102	144	203	223	163	780	92	e11	2.5	2.2
23	27	90	103	144	211	218	165	461	109	e9.0	1.3	1.3
24	30	87	e100	144	557	213	162	346	93	6.2	.49	.58
25	257	86	e95	142	457	209	148	296	86	5.5	.00	.13
26	554	90	e90	140	298	207	140	276	81	4.9	3.1	.00
27	335	93	e90	137	292	210	133	250	75	4.3	2.8	.00
28	356	96	e100	159	265	232	128	291	71	4.9	2.1	.00
29	321	98	e145	249	---	253	124	360	64	4.7	1.4	.00
30	296	98	e150	252	---	260	122	1250	61	3.1	1.2	.00
31	215	---	e150	265	---	254	---	769	---	2.2	1.0	---
TOTAL	2415.23	3451	3219	5428	7154	8271	5599	27990	5090	763.8	81.43	84.87
MEAN	77.9	115	104	175	256	267	187	903	170	24.6	2.63	2.83
MAX	554	218	150	265	557	467	235	5380	433	59	19	32
MIN	.00	86	70	137	173	207	122	119	61	2.2	.00	.00
AC-FT	4790	6850	6380	10770	14190	16410	11110	55520	10100	1510	162	168

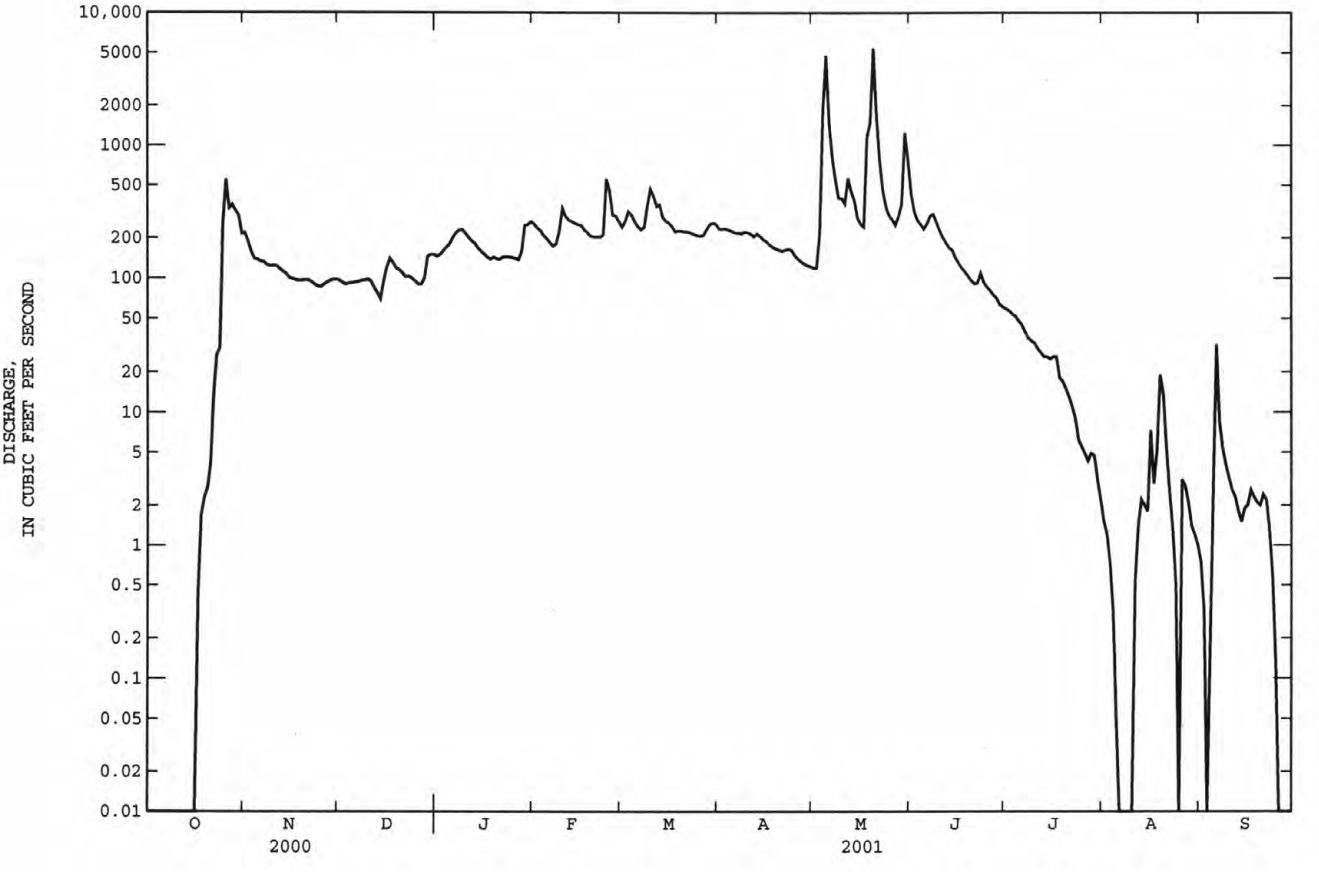
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

MEAN	92.5	60.8	67.8	80.9	105	117	152	414	288	74.0	47.4	55.1
MAX	1195	360	333	362	365	466	1253	2713	1560	828	560	432
(WY)	1987	1987	1998	1998	1960	1998	1997	1977	1995	1950	1995	1996
MIN	.000	.000	.000	.000	.000	.000	.079	.000	.60	.000	.000	.000
(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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	49312.95		69547.33			
ANNUAL MEAN	135		191		130	
HIGHEST ANNUAL MEAN					356	1987
LOWEST ANNUAL MEAN					12.9	1981
HIGHEST DAILY MEAN	2590	Jun 29	5380	May 20	20700	May 26 1959
LOWEST DAILY MEAN	.00	at times	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 4	.00	Oct 1	.00	May 24 1945
MAXIMUM PEAK FLOW			5830	May 20	53400	May 26 1959
MAXIMUM PEAK STAGE			9.15	May 20	15.08	Jun 4 1995
ANNUAL RUNOFF (AC-FT)	97810		137900		94040	
10 PERCENT EXCEEDS	269		307		231	
50 PERCENT EXCEEDS	88		125		38	
90 PERCENT EXCEEDS	.00		.56		.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 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to September 1976.
WATER TEMPERATURE: July 1968 to September 1976.

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

WATER-QUALITY DATA, WATER YEARS OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)
JUL 2001									
05...	1200	1028	1028	2.40	53	--	8.1	3060	30.5
05...	1201	1028	1028	2.40	53	--	8.1	3060	30.5
05...	1202	1028	1028	2.40	53	8.3	8.1	3060	30.5
05...	1203	1028	1028	2.40	53	8.3	8.1	3060	30.5
05...	1204	1028	1028	2.40	53	8.3	8.1	3060	30.5
05...	1205	1028	1028	2.40	53	8.3	8.1	3060	30.5
05...	1206	1028	1028	2.40	53	8.2	8.1	3060	30.5

WATER-QUALITY DATA

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
JUN 2000													
27...	1100	80020	1028	4.39	570	--	6.8	--	8.1	1230	26.0	22.5	390
JUL													
25...	1100	80020	1028	2.89	58	--	8.4	--	8.0	2970	28.0	23.5	920
AUG													
16...	1200	80020	1028	2.23	4.2	--	8.1	--	8.0	2750	35.0	30.0	1100
OCT													
18...	1100	80020	1028	2.06	1.9	--	9.8	--	8.2	3350	20.0	16.5	1400
MAY 2001													
04...	1830	80020	1028	7.34	3600	712	6.9	79	7.9	1580	19.0	18.5	430
JUL													
05...	1300	80020	1028	2.40	53	719	8.3	119	8.1	3060	--	30.5	990
AUG													
16...	1200	80020	1028	2.06	8.8	725	9.2	126	8.2	2210	--	28.5	850

WATER-QUALITY DATA

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	BROMIDE DISSOLVED (MG/L AS BR) (71870)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
JUN 2000													
27...	101	34.4	5.60	2	93.0	34	.19	126	.4	14.5	302	1420	<.020
JUL													
25...	222	90.0	3.84	4	297	41	.24	414	.5	25.8	861	2120	<.020
AUG													
16...	256	108	48.0	5	354	40	.29	508	.6	22.9	1140	2630	.021
OCT													
18...	387	114	1.17	3	265	29	.23	344	.4	14.7	1370	2780	<.041
MAY 2001													
04...	111	36.9	4.43	2	112	36	.08	181	.4	9.1	410	1090	--
JUL													
05...	232	99.3	3.77	4	314	41	.28	391	.5	26.2	904	2260	--
AUG													
16...	225	70.7	4.13	2	164	29	.11	1040	.3	14.5	4060	1710	--

07301500 NORTH FORK RED RIVER NEAR CARTER, OK--Continued

WATER-QUALITY DATA

DATE	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)	NITROGEN DISSOLVED (MG/L AS N) (00602)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3) (71851)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2) (71856)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	IRON, DISSOLVED (UG/L AS FE) (01046)
JUN 2000													
27...	.44	--	.76	.300	1.33	.321	.069	.021	--	.113	.064	.037	30
JUL													
25...	.28	--	.72	--	--	.441	--	<.010	--	--	<.006	<.010	<30
AUG													
16...	.33	.03	--	--	--	<.050	--	<.010	.31	--	E.003	<.010	<30
OCT													
18...	.35	--	--	--	--	<.047	--	<.006	--	--	E.005	<.018	<30
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	M
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	<30
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	<10

WATER-QUALITY DATA

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	2,4,5-T DISSOLVED (UG/L) (39742)	2,4-D, DISSOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBOFURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFLUORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	ALACHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDICARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICARB SULFOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDICARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DISSOLVED (UG/L) (34253)
JUN 2000													
27...	E2.1	<.04	<.11	<.10	<.003	<.34	<.002	<.09	<.002	<.10	<.14	<.46	<.002
JUL													
25...	6.9	<.04	<.11	<.10	<.003	<.11	<.002	<.09	<.002	<.48	<.22	<.21	<.002
AUG													
16...	48.4	<.04	<.11	<.10	<.003	<.11	<.002	<.09	<.002	<.10	<.12	<.21	<.002
OCT													
18...	34.5	<.04	<.11	<.10	<.002	<.01	<.004	<.05	<.002	<.26	<.02	<.56	<.005
MAY 2001													
04...	31.5	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	E8.3	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	33.3	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA

DATE	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BDMC, SURROG, WATER, UNFLTRD REC PERCENT (99835)	BENFLURALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BENTAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BROMACIL, WATER, DISS, REC (UG/L) (04029)	BROMOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBOFURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBOFURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLORAMBEN, METHYL ESTER WATER FLTRD (UG/L) (61188)	CHLOROTHALONIL, WAT,FLT GF 0.7U REC (UG/L) (49306)
JUN 2000													
27...	.025	81	<.002	<.04	<.27	<.04	<.002	<.07	E.006	<.29	<.003	<.14	<.48
JUL													
25...	.013	86	<.002	<.04	<.06	<.04	<.002	<.07	<.003	<.29	<.003	<.14	<.48
AUG													
16...	.007	80	<.002	<.04	<.06	<.04	<.002	<.07	<.003	<.29	<.003	<.14	<.48
OCT													
18...	E.004	87	<.010	<.04	<.09	<.07	<.002	<.02	<.041	<.29	<.020	<.14	<.28
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

07301500 NORTH FORK RED RIVER NEAR CARTER, OK--Continued

WATER-QUALITY DATA

DATE	CHLORPYRIFOS DISSOLVED (UG/L) (38933)	CLOPYRALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DACTHAL MONO-ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DIAZINON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DIAZINON, DISSOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLOBENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLORPROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DIELDRIN DISSOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)
JUN 2000													
27...	<.004	<.23	<.004	<.04	E.002	E.010	100	.007	<.04	<.15	<.03	<.001	<.06
JUL													
25...	<.004	<.23	<.004	<.04	<.002	E.007	118	<.002	<.04	<.07	<.03	<.001	<.06
AUG													
16...	<.004	<.23	<.004	<.04	<.002	E.007	108	<.002	<.04	<.07	<.03	<.001	<.06
OCT													
18...	<.005	<.42	<.018	<.07	<.003	E.006	115	.011	<.04	<.05	<.05	<.005	<.09
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA

DATE	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FENURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	FLUOMETURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	FONOFOS WATER DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DISSOLVED (UG/L) (39341)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)
JUN 2000													
27...	<.017	<.06	<.42	<.002	<.004	<.003	<.13	<.06	<.003	84	<.004	<.09	<.002
JUL													
25...	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003	105	<.004	<.09	<.002
AUG													
16...	<.017	<.06	<.42	<.002	<.004	<.003	<.07	<.06	<.003	86	<.004	<.09	<.002
OCT													
18...	<.021	<.05	<.25	<.018	<.009	<.005	<.21	<.13	<.007	101	<.004	<.02	<.035
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA

DATE	MALATHION, DISSOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	METHIOCARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METHOMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZINPHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METOLACHLOR WATER DISSOLV (UG/L) (39415)	METRIBUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOLINATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROPAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEBURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	NORFLURAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)
JUN 2000													
27...	.933	<.17	<.13	<.10	<.47	<.001	<.006	.007	<.004	<.004	<.003	<.07	<.97
JUL													
25...	.009	<.17	<.13	<.03	<.28	<.001	<.006	<.006	<.004	<.004	<.003	<.07	<.04
AUG													
16...	.010	<.17	<.13	<.03	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04
OCT													
18...	E.006	<.08	<.13	<.07	<.02	<.050	<.006	<.013	<.006	<.002	<.007	<.02	<.12
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

07301500 NORTH FORK RED RIVER NEAR CARTER, OK--Continued

WATER-QUALITY DATA

DATE	ORYZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	P,P' DDE DISSOLV (UG/L) (34653)	PARATHION, DISSOLVED (UG/L) (39542)	PEBULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDIMETHALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PERMETHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PICLORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PROMETON, WATER, DISS, REC (UG/L) (04037)	PRONAMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPACHLOR, WATER, DISS, REC (UG/L) (04024)	PROPANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)
JUN 2000													
27...	<.31	<.02	<.006	<.004	<.004	.014	<.005	<.002	<.05	E.008	<.003	<.007	<.004
JUL													
25...	<.31	<.02	<.006	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004
AUG													
16...	<.31	<.02	<.006	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004
OCT													
18...	<.36	<.47	E.002	<.007	<.002	<.010	<.006	<.011	<.21	<.015	<.004	<.010	<.011
MAY 2001													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
16...	--	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA

DATE	PROPARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PROPHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)	PROPOXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DISSOLVED (UG/L) (39762)	SIMAZINE, WATER, DISS, REC (UG/L) (04035)	TEBUTHIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TERBACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TERBUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIOBENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIALLATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRICLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRIFLURALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 2000												
27...	<.013	<.38	<.19	<.11	.018	.142	<.007	<.013	<.002	<.001	<.25	<.002
JUL												
25...	<.013	<.04	<.08	<.06	E.003	.027	<.007	<.013	<.002	<.001	<.25	<.002
AUG												
16...	<.013	<.04	<.08	<.06	<.005	.019	<.007	<.013	<.002	<.001	<.25	<.002
OCT												
18...	<.023	<.09	<.12	<.03	<.011	.029	<.034	<.017	<.005	<.002	<.07	<.009
MAY 2001												
04...	--	--	--	--	--	--	--	--	--	--	--	--
JUL												
05...	--	--	--	--	--	--	--	--	--	--	--	--
AUG												
16...	--	--	--	--	--	--	--	--	--	--	--	--

07302500 LAKE ALTUS AT LUGERT, OK

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

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

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 152,100 acre-ft, May 21, elevation 1,561.70 ft; minimum, 42,180 acre-ft, Oct, 2, elevation, 1,538.53 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

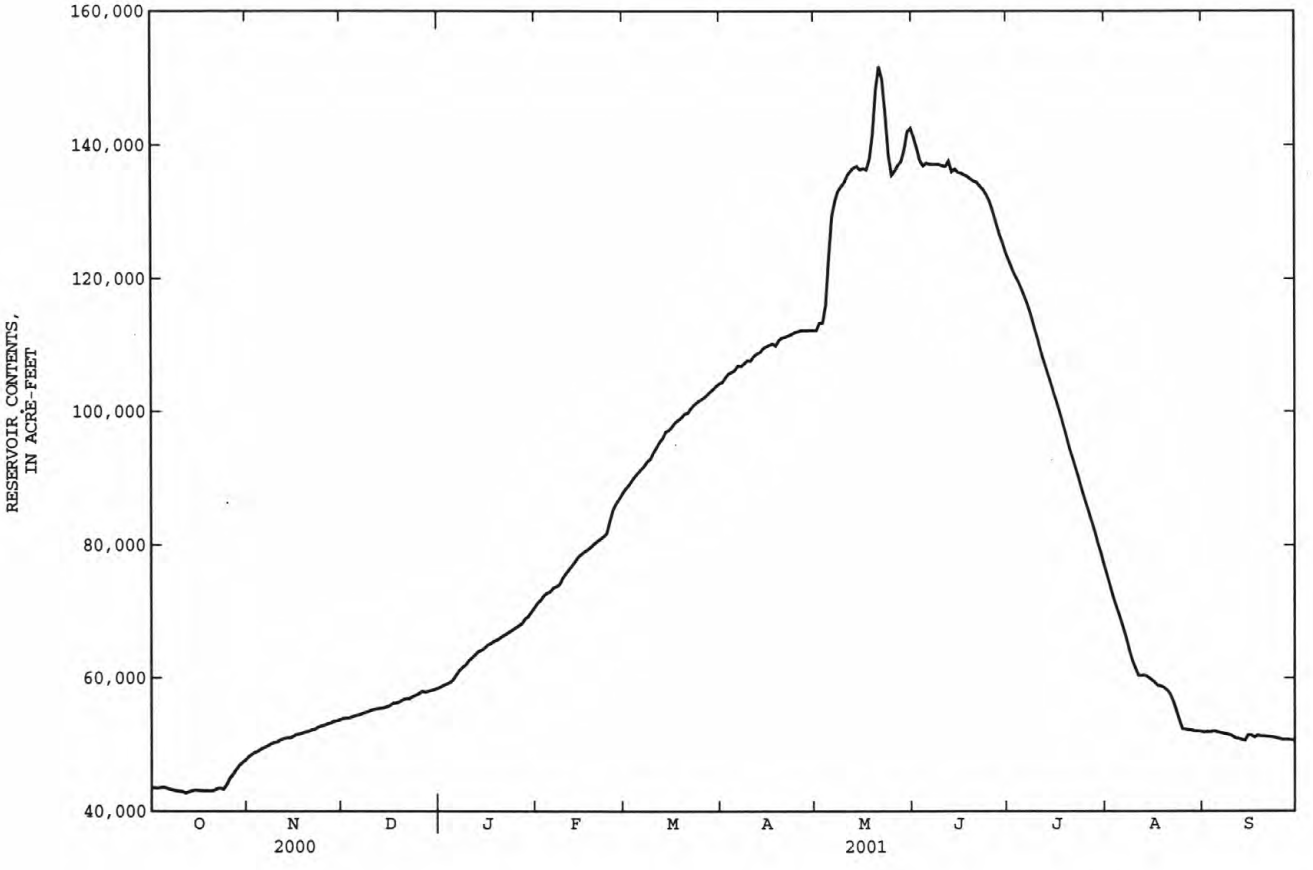
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43380	48140	53880	58610	71280	88410	104400	112200	141100	122700	75380	51850
2	43470	48500	53910	58900	71740	88890	105100	113300	139400	121500	73770	51920
3	43410	48800	53950	59080	72390	89600	105700	113300	137600	120400	72110	51880
4	43530	48970	54190	59300	72770	90270	105900	116000	136900	119500	70670	52020
5	43560	49330	54300	59700	72980	90810	106200	123100	137300	118400	69290	51920
6	43380	49530	54440	60470	73570	91340	106900	129300	137100	117200	67780	51780
7	43250	49760	54610	61110	73730	91820	106800	131600	137100	115900	66160	51680
8	43130	50060	54790	61590	74070	92500	107200	133100	137100	114400	64350	51580
9	43040	50260	54930	61970	75040	92900	107700	133800	137100	112600	62680	51470
10	42980	50330	55140	62600	75680	93890	107600	134400	136900	111000	61480	51270
11	42880	50670	55280	63020	76320	94630	108300	135500	136800	109100	60400	50940
12	42700	50830	55380	63470	76920	95420	108700	136100	137600	107500	60400	50870
13	42880	50970	55450	63970	77530	95980	108900	136600	136000	106000	60440	50700
14	43070	50940	55490	64160	78230	96990	109500	136800	136400	104500	60180	50600
15	43160	51170	55670	64460	78620	97190	109800	136300	135900	102900	59810	51410
16	43100	51470	55880	64960	79010	97740	110000	136500	135800	101400	59450	51410
17	43070	51540	56230	65160	79320	98360	110200	136300	135500	99840	58930	51100
18	43070	51680	56230	65500	79720	98720	109900	137900	135300	98100	58820	51370
19	43040	51850	56410	65700	80160	99120	110700	141600	134900	96380	58610	51240
20	43010	51950	56700	66050	80560	99640	111100	148000	134600	94580	58240	51240
21	43100	52160	56870	66360	80920	99790	111200	151700	134400	93050	57670	51200
22	43380	52260	56840	66630	81280	100500	111400	149900	133800	91490	56630	51140
23	43440	52570	57160	66950	81730	101000	111600	144800	133300	89940	55240	51100
24	43280	52740	57380	67220	83490	101400	111900	138600	132500	88220	53700	50970
25	43970	52880	57560	67540	85230	101700	112000	135500	131500	86670	52360	50870
26	44900	53080	57990	67850	86210	102000	112200	136100	130000	85190	52290	50700
27	45500	53180	57850	68180	86910	102400	112200	137000	128400	83630	52190	50700
28	46200	53460	57960	68890	87700	102900	112200	137500	126700	82130	52160	50700
29	46840	53530	58100	69250	---	103300	112200	139300	125400	80340	51980	50670
30	47270	53670	58240	69940	---	103800	112200	142000	123900	78790	52020	50560
31	47660	---	58420	70590	---	104200	---	142500	---	77010	51950	---
MAX	47660	53670	58420	70590	87700	104200	112200	151700	141100	122700	75380	52020
MIN	42700	48140	53880	58610	71280	88410	104400	112200	123900	77010	51950	50560
(‡)	1540.30	1542.06	1543.40	1546.57	1550.47	1553.76	1555.23	1560.26	1557.26	1548.10	1541.56	1541.15
(‡‡)	+4130	+6010	+4750	+12170	+17110	+16500	+8000	+30300	-18600	-46890	-25060	-1390

CAL YR 2000 MAX 138900 MIN 42700 (‡‡) -8490
WTR YR 2001 MAX 151700 MIN 42700 (‡‡) +7030

(‡) 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 sea level. Mar. 19, 1930 to Dec. 21, 1932, nonrecording gage at former Lugert Dam, 0.7 mi upstream at datum 1,504.31 ft National Geodetic Vertical Datum of 1929, unadjusted.

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

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.22	.29	.26	.21	.35	.91	.73	1430	.82	.19	.20
2	.09	.20	.27	.25	.21	.35	.86	.78	1340	.97	.20	.20
3	.06	.21	.27	.23	.21	.33	.79	1.2	1230	1.2	.19	.21
4	.04	.20	.28	.23	.20	.31	.84	2.9	784	1.2	.17	.25
5	.04	.20	.29	.23	.20	.31	.93	1.3	468	1.1	.17	.39
6	.03	.21	.30	.22	.20	.36	.99	1.1	476	.99	.17	.40
7	.02	.21	.28	.21	.20	.38	.82	1.4	477	1.1	.15	.36
8	.01	.22	.25	.21	.22	.43	.68	.89	472	1.2	.15	.32
9	.03	.21	.25	.21	.26	.50	.67	.73	295	1.1	.12	.27
10	.05	.21	.24	.21	.23	.42	.65	1.9	188	1.1	.16	.26
11	.07	.21	.23	.22	.23	.43	.60	10	171	1.0	.17	.23
12	.09	.21	.23	.22	.24	.53	.54	40	147	1.1	.28	.21
13	.11	.21	.25	.21	.24	.47	.54	75	149	1.1	.95	.20
14	.13	.21	.24	.21	.25	.45	.93	231	134	.95	.69	.17
15	.16	.22	.24	.20	.27	.45	.96	398	121	.97	.57	.47
16	.18	.22	.23	.19	.27	.50	.63	401	93	.80	.52	.44
17	.19	.23	.22	.19	.28	.46	.60	404	81	.85	.50	.23
18	.18	.23	.23	.19	.30	.44	.65	556	56	.89	.72	.22
19	.18	.22	.23	.19	.30	.45	.70	845	42	.95	.51	.20
20	.17	.22	.22	.19	.31	.44	.84	973	29	1.1	.28	.19
21	.18	.22	.22	.19	.31	.44	.72	1740	24	.90	.23	.18
22	.20	.23	.23	.20	.31	.43	.62	2410	8.7	.85	.22	.20
23	.20	.24	.24	.20	.43	.42	.49	3480	4.6	.76	.22	.19
24	.19	.33	.26	.20	2.0	.40	.38	3870	3.3	.79	.23	.18
25	.32	.29	.26	.20	.46	.41	.39	2110	2.3	.83	.23	.16
26	.20	.28	.44	.21	.32	.43	.45	73	1.1	.73	.43	.18
27	.19	.27	.37	.22	.34	1.5	3.7	125	1.4	.42	.36	.17
28	.20	.27	.31	.24	.34	1.6	1.4	208	1.7	.29	.25	.15
29	.20	.28	.29	.25	---	1.2	.85	284	1.3	.24	.23	.14
30	.19	.29	.26	.22	---	1.0	.78	554	.98	.24	.22	.13
31	.20	---	.26	.21	---	1.0	---	1040	---	.20	.20	---
TOTAL	4.20	6.97	8.18	6.61	9.34	17.19	24.91	19839.93	8232.38	26.74	9.68	7.10
MEAN	.14	.23	.26	.21	.33	.55	.83	640	274	.86	.31	.24
MAX	.32	.33	.44	.26	2.0	1.6	3.7	3870	1430	1.2	.95	.47
MIN	.01	.20	.22	.19	.20	.31	.38	.73	.98	.20	.12	.13
AC-FT	8.3	14	16	13	19	34	49	39350	16330	53	19	14

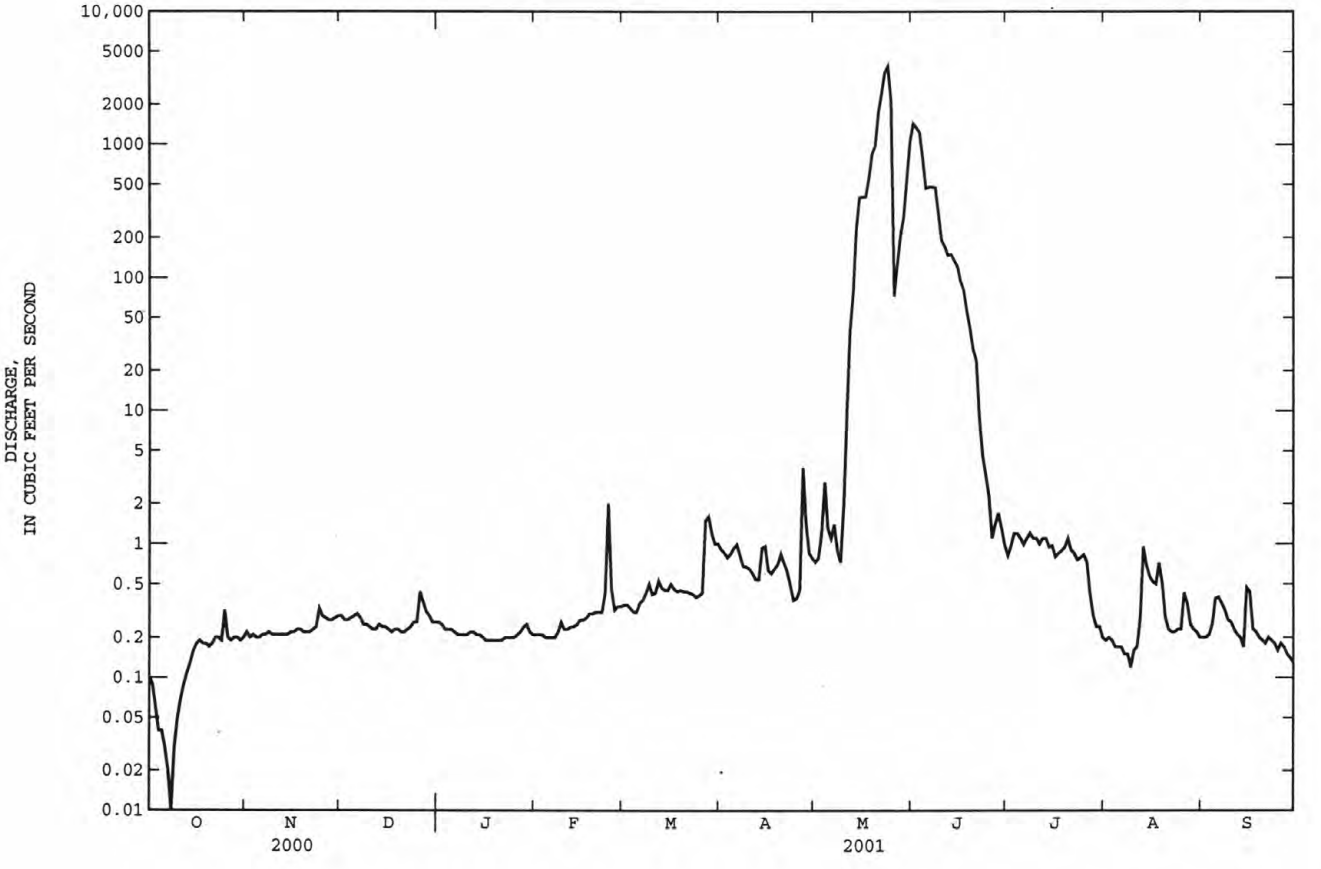
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

MEAN	6.52	42.2	40.2	40.5	65.8	102	129	195	177	11.5	23.5	.61
MAX	101	698	389	324	477	803	1828	1049	1109	69.7	550	2.58
(WY)	1987	1987	1998	1998	1998	1998	1997	1993	1989	1987	1995	1990
MIN	.000	.000	.000	.010	.060	.002	.000	.000	.000	.000	.000	.000
(WY)	1983	1982	1982	1986	1984	1982	1982	1982	1984	1982	1982	1980

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1978 - 2001	
ANNUAL TOTAL	1620.69		28193.23			
ANNUAL MEAN	4.43		77.2		69.3	
HIGHEST ANNUAL MEAN					379	1997
LOWEST ANNUAL MEAN					.022	1982
HIGHEST DAILY MEAN	204	Jul 4	3870	May 24	6300	May 29 1978
LOWEST DAILY MEAN	.01	Oct 8	.01	Oct 8	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.03	Sep 18	.03	Oct 4	.00	May 11 1979
MAXIMUM PEAK FLOW			4210	May 24	[a]6380	May 29 1978
MAXIMUM PEAK STAGE			11.58	May 24	[b]13.76	May 29 1987
ANNUAL RUNOFF (AC-FT)	3210		55920		50190	
10 PERCENT EXCEEDS	.73		63		170	
50 PERCENT EXCEEDS	.33		.29		.77	
90 PERCENT EXCEEDS	.13		.18		.00	

[a]Maximum discharge for period of record, 16,000 ft^3/s, May 18, 1951.
[b]Maximum gage height for period of record, 16.37 ft, May 21, 1977 (backwater from Elm Fork of the North Fork Red River).



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

LOCATION.--Lat 35°00'42", long 99°54'12", in SW $^1/_4$ NW $^1/_4$ sec.12, T.6 N., R.26 W., Harmon County, Hydrologic Unit 11120304, near left bank on downstream side of pier of bridge on State Highway 30, 4.0 mi northeast of Carl, and at mile 54.0.

DRAINAGE AREA.--416 mi^2.

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

REVISED RECORDS.--WSP 1731: Drainage area.

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 4	1000	4,350	6.58	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.5	90	26	e17	43	68	39	17	117	27	6.8	9.5
2	9.5	85	24	e16	40	67	39	20	111	26	6.6	8.5
3	9.7	81	24	e18	38	61	37	47	108	26	6.3	8.4
4	9.8	77	24	e21	36	55	33	1610	104	24	6.3	10
5	9.6	75	25	e24	34	50	32	720	98	22	6.1	52
6	9.5	74	25	e26	33	49	33	363	93	21	5.9	30
7	9.4	72	24	e28	32	48	33	268	88	20	5.8	16
8	9.5	70	24	e30	34	54	30	212	84	19	5.8	12
9	9.8	67	23	31	54	68	27	178	84	17	5.8	10
10	11	66	24	30	53	63	27	156	79	16	6.2	10
11	13	64	23	29	45	61	27	139	73	15	6.3	11
12	13	62	e19	30	44	58	26	137	67	14	6.6	11
13	14	59	e19	28	42	53	24	129	63	14	7.1	11
14	15	58	e21	28	41	53	23	122	62	14	8.0	11
15	16	57	27	26	41	52	23	113	60	13	9.1	11
16	18	55	26	27	39	48	22	107	58	14	16	13
17	19	53	23	28	36	46	22	104	56	50	12	13
18	19	e50	22	28	36	46	21	248	e54	35	14	12
19	19	e48	20	28	36	49	22	279	e51	15	8.5	11
20	19	e46	20	27	35	47	21	904	e49	14	7.1	11
21	21	e44	19	28	35	45	20	314	e46	13	6.3	11
22	31	e42	e17	27	35	45	23	251	e43	12	6.0	11
23	38	e39	e16	28	104	43	31	215	e40	11	6.3	11
24	291	e37	e15	28	292	42	21	190	e37	10	6.1	11
25	954	e35	e15	28	113	40	20	169	e34	9.1	10	10
26	164	e33	e15	28	76	45	19	155	31	9.1	26	11
27	106	e30	e16	31	73	50	18	146	30	8.8	11	10
28	121	28	e15	41	70	52	17	136	28	8.3	9.6	9.5
29	129	26	e16	64	---	51	17	130	28	8.3	10	9.4
30	100	26	e17	57	---	46	17	127	28	8.3	11	9.3
31	92	---	e16	48	---	44	---	122	---	7.5	11	---
TOTAL	2309.3	1649	640	928	1590	1599	764	7828	1904	521.4	269.6	384.6
MEAN	74.5	55.0	20.6	29.9	56.8	51.6	25.5	253	63.5	16.8	8.70	12.8
MAX	954	90	27	64	292	68	39	1610	117	50	26	52
MIN	9.4	26	15	16	32	40	17	17	28	7.5	5.8	8.4
AC-FT	4580	3270	1270	1840	3150	3170	1520	15530	3780	1030	535	763

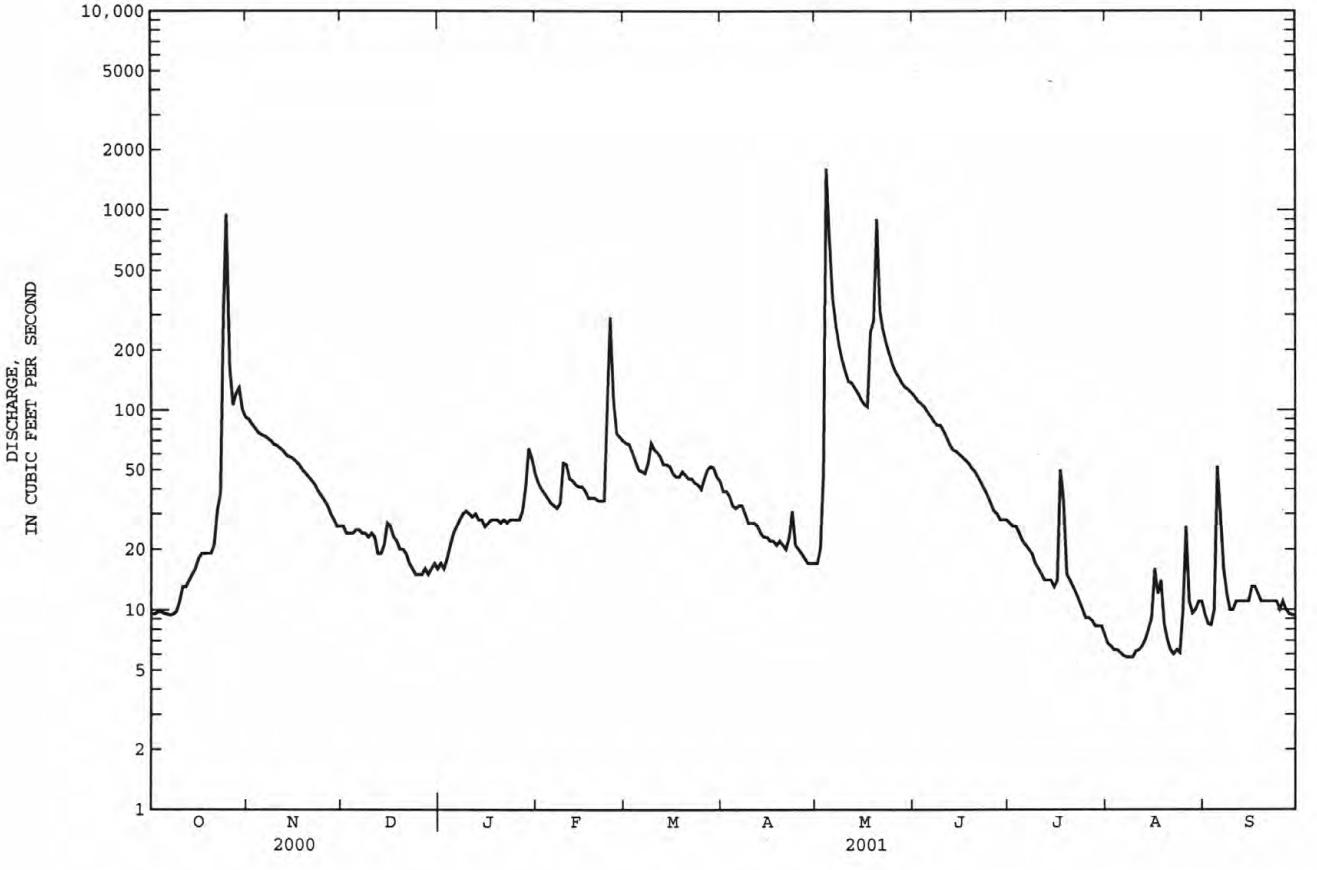
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

MEAN	38.6	29.9	23.3	22.5	26.1	35.6	63.6	101	109	28.6	37.1	47.1
MAX	208	91.0	54.9	61.4	64.7	127	351	662	844	133	171	125
(WY)	1961	1975	1960	1998	1998	1998	1997	1977	1995	1968	1995	1962
MIN	2.61	5.97	7.95	10.0	8.97	7.29	5.77	7.39	4.11	.30	.48	.98
(WY)	1971	1971	1971	1971	1972	1972	1971	1965	1970	1970	1976	1970

e Estimated

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	13980.7		20386.9			
ANNUAL MEAN	38.2		55.9		46.8	
HIGHEST ANNUAL MEAN					107	1995
LOWEST ANNUAL MEAN					10.6	1970
HIGHEST DAILY MEAN	969	Mar 23	1610	May 4	17100	Jun 3 1995
LOWEST DAILY MEAN	6.2	Sep 7,11,16	5.8	Aug 7,8,9	.02	Jul 17 1971
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 5	6.0	Aug 4	.02	Jul 16 1971
MAXIMUM PEAK FLOW			4350	May 4	62300	Jun 3 1995
MAXIMUM PEAK STAGE			6.58	May 4	18.80	Jun 3 1995
ANNUAL RUNOFF (AC-FT)	27730		40440		33890	
10 PERCENT EXCEEDS	70		107		65	
50 PERCENT EXCEEDS	22		28		18	
90 PERCENT EXCEEDS	7.9		9.5		6.0	



07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK

LOCATION.--Lat 34°38'04", long 99°05'47", in NW $^1/_4$ NE $^1/_4$ sec.21, T.2 N., R.18 W., Tillman County, Hydrologic Unit 11120303, near left bank on downstream side of pier of bridge on old U.S. Highway 62, 2.5 mi east of Headrick, 12.9 mi upstream from Otter Creek, and at mile 33.0.

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

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

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

GAGE.--Water-stage recorder. Datum of gage is 1,294.83 ft above sea level. Prior to July 18, 1905, nonrecording gage at site 0.2 mi downstream at different datum. July 18, 1905, to Mar. 30, 1908, nonrecording gage at Navajo damsite 10.4 mi upstream at different datum. Oct. 1, 1937, to Jan. 29, 1969, water-stage recorder at present site at datum 5.0 ft higher.

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	159	64	e42	136	309	147	65	2790	107	40	37
2	13	123	62	e50	118	264	149	61	2220	104	39	36
3	13	111	62	e68	103	237	140	63	1870	103	39	37
4	13	128	62	73	95	223	131	123	1600	99	37	64
5	14	126	62	94	90	214	126	3530	1060	96	36	553
6	13	101	62	102	86	204	126	6780	752	93	36	235
7	14	91	62	111	85	190	122	3520	695	89	35	169
8	15	142	62	103	87	182	121	1090	682	84	33	93
9	16	135	63	98	132	188	118	836	665	e81	31	78
10	17	108	62	100	156	191	116	694	546	e78	31	71
11	18	93	e58	99	180	200	111	671	425	75	32	59
12	18	83	e56	94	166	217	106	536	386	73	40	50
13	19	79	e54	91	135	205	108	476	372	70	60	45
14	21	76	e56	85	118	208	109	524	341	69	162	41
15	30	74	e60	82	105	188	104	493	313	70	165	44
16	33	71	72	80	100	180	113	531	292	68	71	193
17	30	69	69	80	98	191	95	500	259	66	58	751
18	32	68	72	76	96	172	98	544	234	65	72	213
19	31	67	68	73	94	166	97	1300	217	67	60	130
20	31	66	65	73	91	160	91	10300	192	62	58	96
21	36	66	63	71	86	159	88	10000	180	64	80	77
22	54	66	63	71	87	156	84	4410	169	60	60	63
23	114	69	60	71	98	155	83	3490	159	56	48	53
24	54	85	e58	73	196	151	81	3850	150	54	45	47
25	84	81	e56	70	2480	146	78	3900	142	51	38	44
26	877	75	e50	71	967	164	80	1970	134	49	54	45
27	662	70	e42	72	538	145	76	812	131	48	59	43
28	380	68	e41	104	354	146	71	804	122	46	52	40
29	293	66	e40	244	---	150	70	978	118	45	44	38
30	183	65	e40	177	---	152	66	4570	113	44	45	37
31	184	---	e41	154	---	151	---	4580	---	42	40	---
TOTAL	3326	2681	1807	2852	7077	5764	3105	72001	17329	2178	1700	3482
MEAN	107	89.4	58.3	92.0	253	186	104	2323	578	70.3	54.8	116
MAX	877	159	72	244	2480	309	149	10300	2790	107	165	751
MIN	13	65	40	42	85	145	66	61	113	42	31	36
AC-FT	6600	5320	3580	5660	14040	11430	6160	142800	34370	4320	3370	6910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

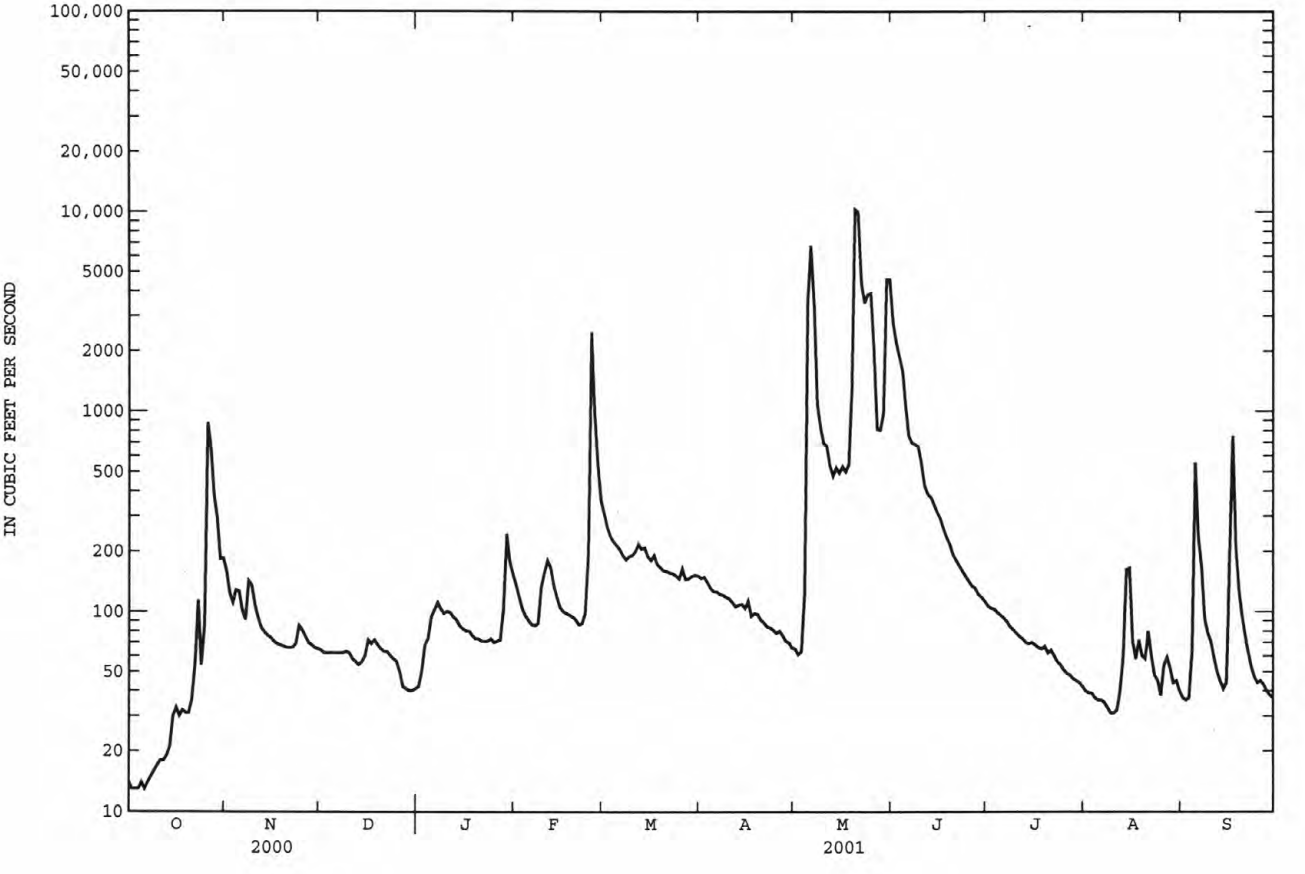
MEAN	358	158	139	118	177	250	342	1020	810	241	177	268
MAX	5608	1743	984	793	1375	2785	5366	6104	4659	2016	2522	1675
(WY)	1987	1987	1998	1998	1997	1998	1997	1977	1995	1950	1995	1965
MIN	.000	.000	.20	.84	4.06	4.27	.64	.31	10.3	.25	.000	.000
(WY)	1953	1953	1955	1953	1953	1955	1971	1953	1966	1970	1952	1952

e Estimated

07305000 NORTH FORK RED RIVER NEAR HEADRICK, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	77008.7		123302			
ANNUAL MEAN	210		338		[a]339	
HIGHEST ANNUAL MEAN					1562	1987
LOWEST ANNUAL MEAN					50.0	1970
HIGHEST DAILY MEAN	9380	Mar 24	10300	May 20	41600	May 10 1993
LOWEST DAILY MEAN	8.8	Sep 20	13	Oct 2,3,4,6	.00	at times
ANNUAL SEVEN-DAY MINIMUM	9.4	Sep 17	13	Oct 1	.00	Aug 2 1946
MAXIMUM PEAK FLOW			13400	May 20	59000	Oct 4 1986
MAXIMUM PEAK STAGE			13.58	May 20	19.07	Oct 4 1986
ANNUAL RUNOFF (AC-FT)	152700		244600		245500	
10 PERCENT EXCEEDS	371		545		602	
50 PERCENT EXCEEDS	71		87		65	
90 PERCENT EXCEEDS	16		39		6.8	

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



07305500 WEST OTTER CREEK AT SNYDER LAKE, NEAR MOUNTAIN PARK, OK

LOCATION.--Lat 34°44'02", long 98°59'10", in SE $^{1}/_{4}$ sec.16, T.3 N., R.17 W., Kiowa County, Hydrologic Unit 11120303, near east end of Snyder Dam, 0.8 mi upstream from small tributary, 3 mi northwest of Mountain Park, and at mile 26.0.

DRAINAGE AREA.--132 mi^2.

PERIOD OF RECORD.--April 1903 to March 1908, October 1951 to September 1971, July 1972 to current year. Published as Otter Creek near Mountain Park 1903-8 and as Otter Creek at Snyder Lake, near Mountain Park 1951-60. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1731: 1960 (M). WSP 1920: 1959-60. WDR OK-78-2: 1977.

GAGE.--Water-stage recorder and broad-crested masonry spillway. Datum of gage is 1,361.06 ft above sea level. April 1903 to March 1908, nonrecording gage at site 1.8 mi downstream at different datum. October 1951 to September 1971 at intake tower at same site and datum. July 1972 to August 1976, 700 ft downstream at datum 1,344.00 ft.

REMARKS.--Records fair. The city of Snyder diverted about 130 acre-ft annually prior to October 1958 and none thereafter. Flow completely regulated since June 1975 by Tom Steed Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.44	.04	.03	.39	.14	.01	.00	76	.00	.00	.00
2	.00	.32	.01	.03	.32	.18	.01	.00	104	.00	.00	.00
3	.00	.31	.00	.03	.29	.19	.02	.00	104	.00	.00	.00
4	.00	.31	.00	.05	.24	.19	.02	.00	49	.00	.00	.00
5	.00	.29	.00	.11	.20	.17	.01	.00	.53	.00	.00	.00
6	.00	.24	.00	.22	.16	.15	.01	.00	.26	.00	.00	.00
7	.00	.17	.00	.29	.14	.14	.01	.00	.16	.00	.00	.00
8	.00	.27	.00	.30	.16	.17	.00	.00	.09	.00	.00	.00
9	.00	.41	.00	.29	.27	.21	.00	.00	.04	.00	.00	.00
10	.00	.39	.00	.31	.23	.20	.00	.00	.00	e.00	.00	.00
11	.00	.35	.00	.38	.25	.22	.00	.00	.00	.00	.00	.00
12	.00	.22	.00	.35	.24	.31	.00	.00	.00	.00	.00	.00
13	.00	.14	.00	.33	.25	.27	.00	.00	.00	.00	.00	.28
14	.00	.12	.00	.27	.26	.25	.00	.00	.00	.00	.00	.26
15	.00	.10	.00	.24	.19	.17	.00	.00	.00	.00	.00	.19
16	.00	.08	.00	.22	.13	.08	.00	.00	.00	.00	.00	.14
17	.00	.05	.00	.21	.10	.07	.00	.00	.00	.00	.00	.09
18	.00	.04	.00	.17	.09	.08	.00	.00	.00	.00	.00	.05
19	.00	.02	.00	.13	.10	.09	.00	11	.00	.00	.00	.02
20	.00	.01	.00	.09	.10	.09	.00	7.3	.00	.00	.00	.00
21	.00	.00	.00	.09	.07	.08	.00	.44	.00	.00	.00	.00
22	.00	.00	.00	.08	.05	.07	.00	.23	.00	.00	.00	.00
23	.00	.00	.00	.07	.08	.06	.00	.21	.00	.00	.00	.00
24	.00	.09	.00	.07	.31	.02	.00	.14	.00	.00	.00	.00
25	.00	.10	.00	.05	.37	.00	.00	.09	.00	.00	.00	.00
26	3.1	.11	.02	.05	.33	.00	.00	.05	.00	.00	.00	.00
27	2.2	.10	.02	.07	.25	.00	.00	.03	.00	.00	.00	.00
28	1.9	.10	.01	.46	.11	.00	.00	.11	.00	.00	.00	.00
29	1.8	.08	.00	1.3	---	.02	.00	.13	.00	.00	.00	.00
30	.83	.05	.01	.70	---	.02	.00	.71	.00	.00	.00	.00
31	.57	---	.02	.44	---	.02	---	9.8	---	.00	.00	---
TOTAL	10.40	4.91	0.13	7.43	5.68	3.66	0.09	30.24	334.08	0.00	0.00	1.03
MEAN	.34	.16	.004	.24	.20	.12	.003	.98	11.1	.000	.000	.034
MAX	3.1	.44	.04	1.3	.39	.31	.02	11	104	.00	.00	.28
MIN	.00	.00	.00	.03	.05	.00	.00	.00	.00	.00	.00	.00
AC-FT	21	9.7	.3	15	11	7.3	.2	60	663	.00	.00	2.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

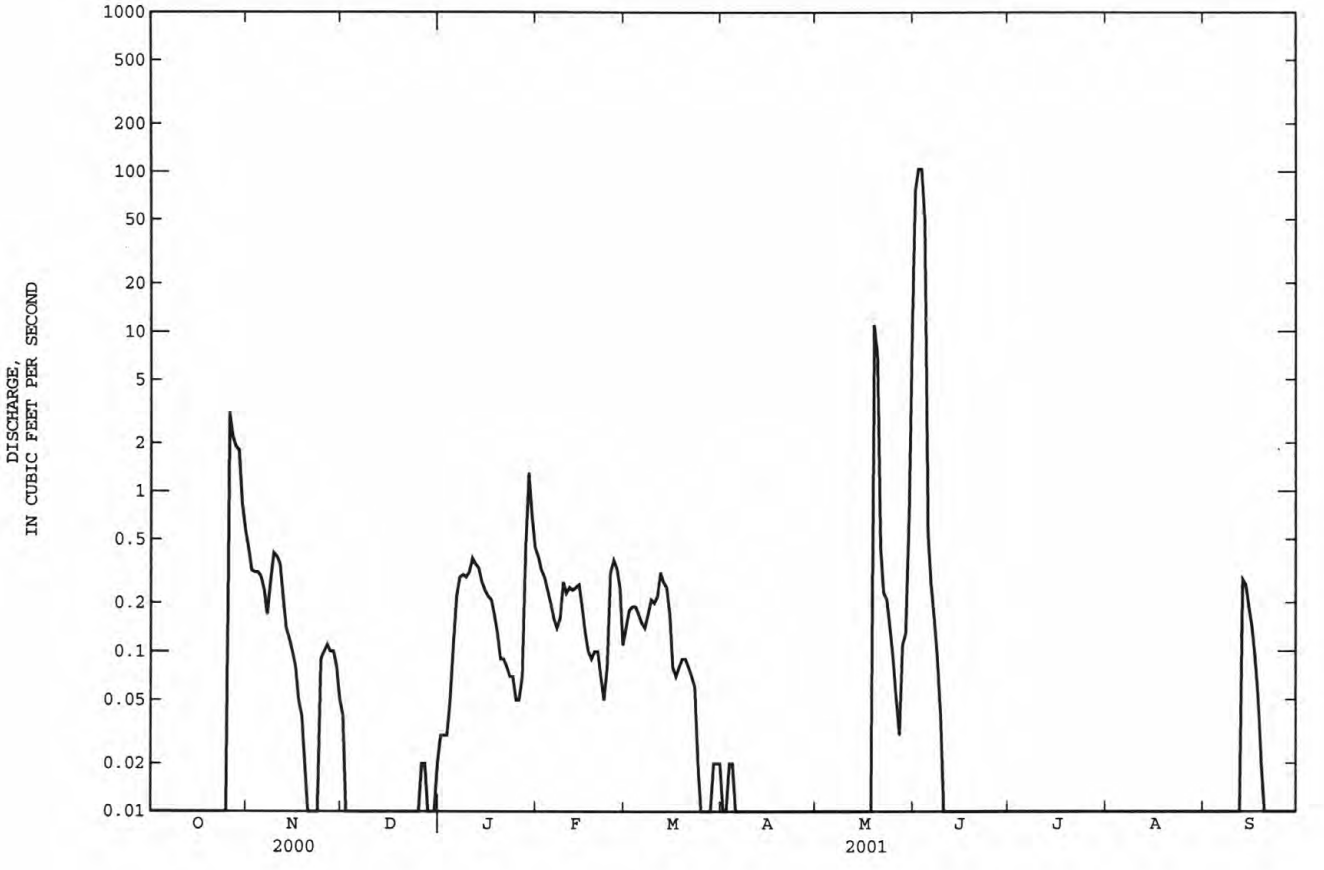
MEAN	8.37	13.8	9.43	2.84	9.54	12.6	4.77	35.2	41.1	4.45	4.97	4.09
MAX	105	252	143	61.9	180	165	39.6	384	421	71.6	123	65.6
(WY)	1987	1987	1993	1993	1987	1988	1998	1987	1987	1982	1995	1995
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1976	1976	1976	1976	1977	1977	1977	1979	1988	1976	1976	1976

e Estimated

07305500 WEST OTTER CREEK AT SNYDER LAKE, NEAR MOUNTAIN PARK, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1976 - 2001	
ANNUAL TOTAL	37.09		397.65			
ANNUAL MEAN	.10		1.09		[a]12.6	
HIGHEST ANNUAL MEAN					125	1987
LOWEST ANNUAL MEAN					.000	1994
HIGHEST DAILY MEAN	6.5	Mar 23	104	Jun 2	3480	May 28 1987
LOWEST DAILY MEAN	.00	at times	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	Oct 1 1975
MAXIMUM PEAK FLOW			107	May 19,Jun 1-4	[b]4300	May 29 1987
MAXIMUM PEAK STAGE			12.52	May 19,Jun 1-4	[c]15.44	May 29 1987
ANNUAL RUNOFF (AC-FT)	74		789		9110	
10 PERCENT EXCEEDS	.20		.31		2.2	
50 PERCENT EXCEEDS	.00		.00		.00	
90 PERCENT EXCEEDS	.00		.00		.00	

[a]Prior to regulation water years 1904-07, 1951-71, 1973-74, 23.0 ft^3/s.
[b]Maximum discharge for period of record, 14,200 ft^3/s, June 6, 1953, from rating curve extended above 1,600 ft^3/s on basis of contracted opening and flow over dam measurments of peak flow.
[c]Maximum gage height for period of record, 19.50 ft, from flood marks, June 6, 1953.



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 to current year. September 1984 to June 2000 operated as high flow site, records available in district office.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.8	47	17	e12	45	26	12	11	199	8.8	.01	5.7
2	e2.6	35	16	e10	37	36	11	18	162	8.8	.04	4.6
3	e2.4	30	16	e10	35	30	11	19	147	8.1	.08	3.2
4	e2.3	30	15	e9.0	33	24	12	93	122	7.9	.38	3.5
5	e2.2	29	15	e9.0	30	21	11	884	35	7.3	.39	6.6
6	e2.2	26	15	e10	28	19	10	165	28	6.7	.44	6.8
7	e2.3	23	14	e11	28	21	10	61	25	6.3	.14	6.2
8	e2.2	30	14	e13	28	19	9.3	44	22	4.6	.00	6.1
9	e2.1	60	15	e14	138	21	9.2	27	21	5.0	.02	5.3
10	e2.0	43	14	e15	94	20	8.8	25	20	5.0	.86	5.5
11	2.0	36	e12	e22	50	20	9.3	24	19	4.2	1.4	5.3
12	1.9	30	e11	31	40	37	8.9	26	18	3.8	3.5	5.0
13	2.2	26	e11	23	37	31	8.7	23	18	3.6	4.4	4.7
14	2.3	24	e12	20	40	22	8.3	18	20	5.9	5.3	4.0
15	4.1	22	13	18	47	18	9.1	17	18	6.1	4.4	5.6
16	6.0	21	14	16	28	16	8.9	15	17	7.1	3.7	6.8
17	e5.8	20	16	20	22	15	8.7	16	15	3.0	4.1	8.1
18	e5.6	19	16	23	20	15	9.3	66	14	e2.0	4.3	6.8
19	e5.5	16	14	23	20	15	9.7	276	14	1.5	5.2	6.5
20	e5.4	15	14	22	20	15	9.5	2740	12	.74	3.9	6.1
21	e25	14	13	22	19	14	8.6	651	12	.49	3.7	4.2
22	201	14	13	21	17	14	8.8	239	13	.85	3.9	3.7
23	2650	14	12	20	19	13	9.2	207	12	1.1	3.5	4.6
24	305	22	12	20	179	12	8.4	137	13	.40	4.7	5.1
25	626	35	e11	20	172	12	7.7	112	12	.23	4.0	4.5
26	1690	27	e10	20	58	12	7.4	86	10	.08	5.1	5.1
27	2020	21	e12	19	36	13	7.6	47	10	.84	5.6	4.3
28	344	21	15	95	29	14	7.9	99	8.0	.65	5.2	4.8
29	709	19	13	594	---	16	7.7	120	8.6	.82	5.0	5.1
30	217	19	16	156	---	15	7.6	727	9.2	.76	5.4	4.5
31	91	---	12	69	---	14	---	400	---	.40	4.9	---
TOTAL	8941.9	788	423	1387.0	1349	590	275.6	7393	1053.8	113.06	93.56	158.3
MEAN	288	26.3	13.6	44.7	48.2	19.0	9.19	238	35.1	3.65	3.02	5.28
MAX	2650	60	17	594	179	37	12	2740	199	8.8	5.6	8.1
MIN	1.9	14	10	9.0	17	12	7.4	11	8.0	.08	.00	3.2
AC-FT	17740	1560	839	2750	2680	1170	547	14660	2090	224	186	314

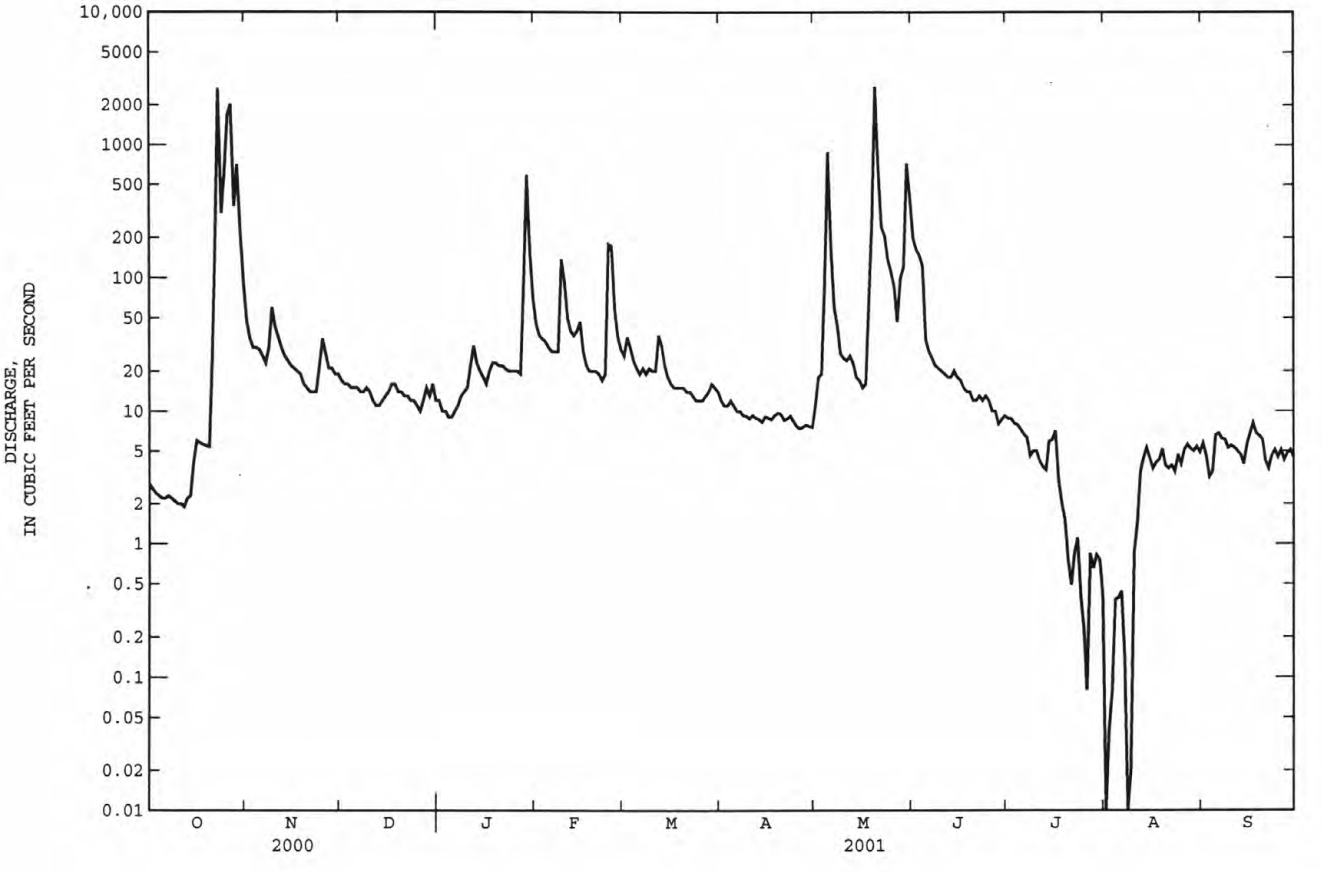
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	288	26.3	13.6	44.7	48.2	19.0	9.19	238	35.1	3.30	1.51	3.12
MAX	288	26.3	13.6	44.7	48.2	19.0	9.19	238	35.1	3.65	3.02	5.28
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001
MIN	288	26.3	13.6	44.7	48.2	19.0	9.19	238	35.1	2.96	.001	.97
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2000

e Estimated

07307010 OTTER CREEK NEAR SNYDER, OK--Continued

SUMMARY STATISTICS	FOR 2001 WATER YEAR		WATER YEARS 2000 - 2001	
ANNUAL TOTAL	22566.22			
ANNUAL MEAN	61.8		61.8	
HIGHEST ANNUAL MEAN			61.8	2001
LOWEST ANNUAL MEAN			61.8	2001
HIGHEST DAILY MEAN	2740	May 20	2740	May 20 2001
LOWEST DAILY MEAN	.00	Aug 8	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.21	Aug 3	.00	Aug 2 2000
MAXIMUM PEAK FLOW	4720	Oct 23	4720	Oct 23 2000
MAXIMUM PEAK STAGE	14.70	Oct 23	14.70	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	44760		44790	
10 PERCENT EXCEEDS	76		45	
50 PERCENT EXCEEDS	14		10	
90 PERCENT	2.4		.00	



07307028 NORTH FORK RED RIVER NEAR TIPTON, OK

LOCATION.--Lat 34°30'25", long 99°12'28", in NW $^1/_4$ NE $^1/_4$ sec.5. T.1 S, R.19 W., Tillman County, Hydrologic Unit 11120303, near left bank on downstream side of bridge pier on State Highway 5, 3.8 mi west of intersection of State Highways 5 and 5C in Tipton, 4.8 mi downstream from Otter Creek, and at mile 15.3.

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

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

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

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

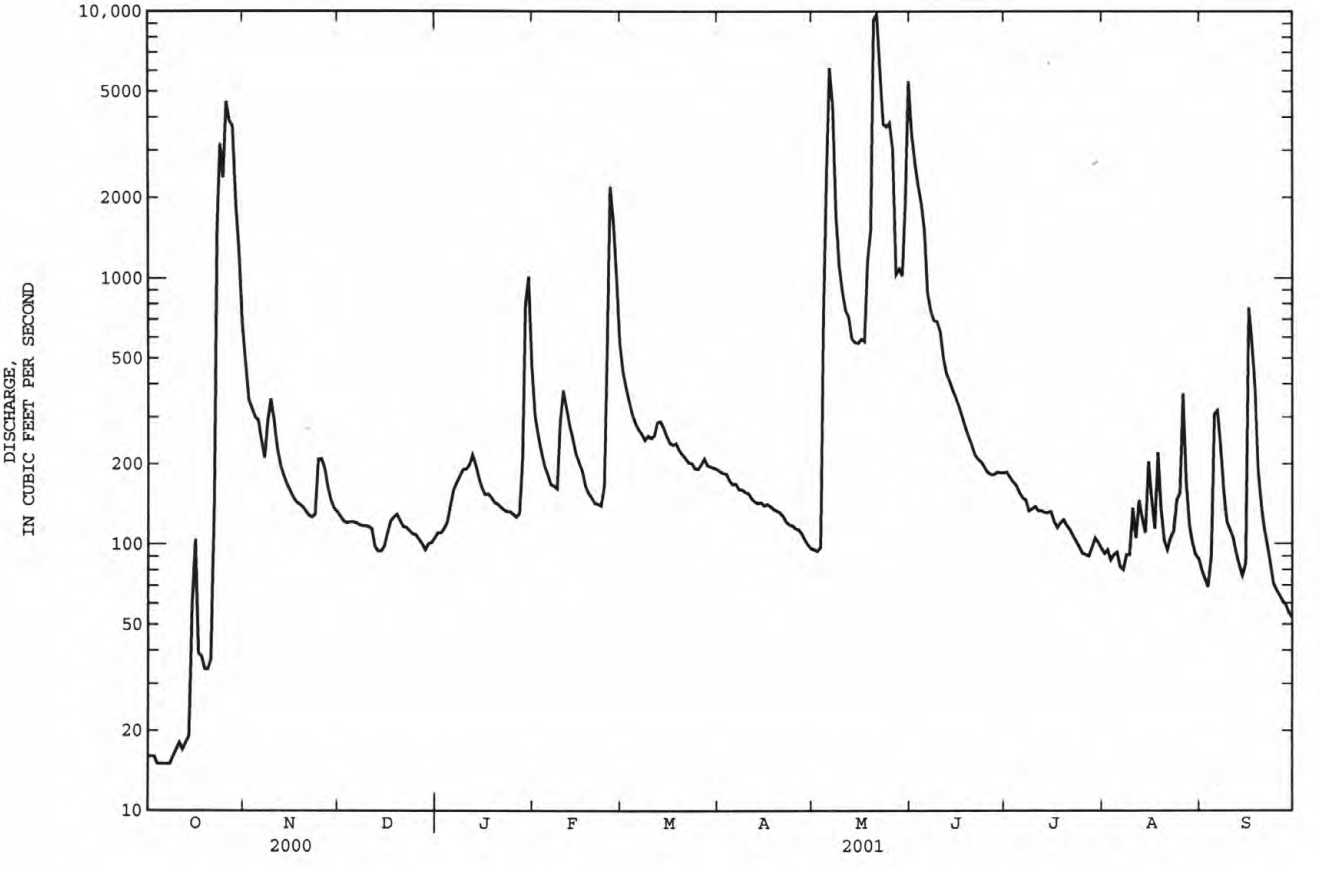
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	479	127	e110	302	446	187	95	3480	186	92	80
2	16	348	122	e110	255	388	184	94	2720	178	95	74
3	16	324	120	e114	221	343	183	97	2220	171	87	69
4	15	300	121	e121	196	307	173	703	1910	166	91	89
5	15	292	121	e140	182	284	167	2380	1500	156	93	309
6	15	245	120	e160	167	269	168	6140	878	149	82	318
7	15	211	118	e170	165	259	160	4460	755	146	80	232
8	15	291	117	e180	161	246	160	1700	693	133	91	157
9	16	351	117	e190	287	255	156	1110	687	135	91	121
10	17	292	116	191	377	250	155	892	630	138	136	113
11	18	230	114	198	325	256	148	756	502	133	105	105
12	17	198	e98	216	279	286	144	715	436	133	146	92
13	18	181	e94	199	249	289	142	591	409	131	124	83
14	19	168	e94	177	218	274	143	574	377	131	110	76
15	60	159	e98	162	202	255	139	569	353	132	204	84
16	104	150	e110	153	188	240	141	590	328	121	148	773
17	39	144	e122	154	165	236	138	578	300	115	114	584
18	38	141	126	149	155	239	135	1160	274	120	221	382
19	34	138	129	143	149	225	133	1510	253	123	135	190
20	34	133	122	141	142	217	131	9290	235	117	103	141
21	37	128	116	137	141	210	127	9740	216	113	95	114
22	139	126	115	134	139	202	121	5990	208	107	105	99
23	1470	129	112	132	164	201	118	3760	203	102	111	84
24	3170	208	109	132	527	192	117	3670	194	97	146	71
25	2370	209	e108	129	2190	191	114	3800	186	92	155	67
26	4580	193	e104	126	1640	199	113	3010	182	91	368	64
27	3870	164	e100	130	1010	209	109	1030	182	90	171	61
28	3700	146	e95	212	573	197	103	1080	186	97	118	59
29	1900	136	e100	804	---	195	99	1020	185	105	101	55
30	1240	132	e101	1010	---	193	96	1950	185	101	91	53
31	668	---	e105	463	---	191	---	5460	---	96	88	---
TOTAL	23681	6346	3471	6587	10769	7744	4204	74514	20867	3905	3897	4799
MEAN	764	212	112	212	385	250	140	2404	696	126	126	160
MAX	4580	479	129	1010	2190	446	187	9740	3480	186	368	773
MIN	15	126	94	110	139	191	96	94	182	90	80	53
AC-FT	46970	12590	6880	13070	21360	15360	8340	147800	41390	7750	7730	9520
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)												
MEAN	724	411	393	299	427	706	683	1273	1467	330	499	575
MAX	5784	2276	1287	1126	1773	3268	5020	5347	5560	738	3932	1796
(WY)	1987	1987	1992	1998	1998	1998	1997	1993	1995	1993	1995	1995
MIN	15.1	30.8	84.6	68.2	70.1	54.8	49.3	62.6	115	49.3	39.5	13.5
(WY)	1985	1985	1986	1986	1995	1986	1986	1984	1994	1984	1985	1984

e Estimated

07307028 NORTH FORK RED RIVER NEAR TIPTON, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	127383		170784			
ANNUAL MEAN	348		468		649	
HIGHEST ANNUAL MEAN					1987	1987
LOWEST ANNUAL MEAN					132	1994
HIGHEST DAILY MEAN	7730	Mar 24	9740	May 21	39100	May 30 1987
LOWEST DAILY MEAN	14	Sep 20,22,23	15	Oct 4-8	3.7	Sep 7 1985
ANNUAL SEVEN-DAY MINIMUM	15	Sep 17	15	Oct 2	4.7	Sep 6 1985
MAXIMUM PEAK FLOW			12300	May 20	57200	Oct 5 1986
MAXIMUM PEAK STAGE			14.72	May 20	19.18	May 10 1993
INSTANTANEOUS LOW FLOW					3.7	Sep 7 1985
ANNUAL RUNOFF (AC-FT)	252700		338800		470200	
10 PERCENT EXCEEDS	658		939		1340	
50 PERCENT EXCEEDS	120		155		186	
90 PERCENT EXCEEDS	36		86		59	



07308500 Red River near Burkburnett, TX

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

DRAINAGE AREA.--20,570 mi^2, of which 5,936 mi^2 probably is noncontributing.

WATER-DISCHARGE RECORDS

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

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	1900	673	619	1620	1700	710	350	8180	313	105	301
2	40	1280	619	597	1300	1530	723	346	4600	354	108	245
3	28	4860	596	586	1080	1430	719	383	3960	341	107	225
4	20	8760	574	575	964	1310	715	578	3340	312	100	225
5	15	3100	561	576	932	1230	713	3590	2930	290	93	257
6	13	2310	561	604	1020	1170	726	12100	2680	268	94	236
7	13	1730	564	648	1030	1110	662	9040	2260	247	95	373
8	15	1680	548	758	996	1120	665	7010	1590	231	96	916
9	15	2220	539	897	1070	1230	649	4690	1330	216	89	664
10	16	1740	529	911	1220	2430	645	3750	1230	210	82	420
11	16	1250	521	928	1320	1730	832	3150	1180	207	82	313
12	16	959	513	967	1350	2380	762	2690	1040	206	90	240
13	16	794	498	923	1290	1780	648	2340	875	200	e172	210
14	20	702	506	871	1280	1480	618	2280	775	195	288	193
15	41	667	517	824	1930	1180	552	2050	726	187	266	188
16	60	597	539	745	2000	1070	506	1900	672	e194	255	193
17	123	567	540	711	1530	1010	476	1800	635	192	285	228
18	292	537	540	698	1260	985	465	1820	567	186	428	383
19	302	506	544	e675	1180	930	450	1860	534	178	273	445
20	207	492	546	e660	1030	894	439	5230	495	162	261	560
21	188	e280	528	e640	951	843	428	14300	467	155	365	589
22	609	e200	516	e610	913	794	409	12500	438	154	359	363
23	3390	e1700	506	e590	931	762	365	7950	408	153	325	282
24	2600	e1000	492	572	1140	724	362	5880	381	157	212	255
25	3320	e700	508	562	1910	704	360	4130	366	161	169	202
26	11300	e480	577	544	4640	725	356	3790	347	149	156	177
27	15600	e740	556	557	2640	753	352	3760	334	144	190	156
28	7100	1110	518	763	2210	762	349	1360	324	133	313	140
29	5170	943	503	1430	---	727	351	1530	351	139	881	119
30	3200	784	539	1690	---	724	349	2180	332	126	793	106
31	2430	---	587	1800	---	708	---	3480	---	112	434	---
TOTAL	56226	44588	16858	24531	40737	35925	16356	127817	43347	6272	7566	9204
MEAN	1814	1486	544	791	1455	1159	545	4123	1445	202	244	307
MAX	15600	8760	673	1800	4640	2430	832	14300	8180	354	881	916
MIN	13	200	492	544	913	704	349	346	324	112	82	106
AC-FT	111500	88440	33440	48660	80800	71260	32440	253500	85980	12440	15010	18260

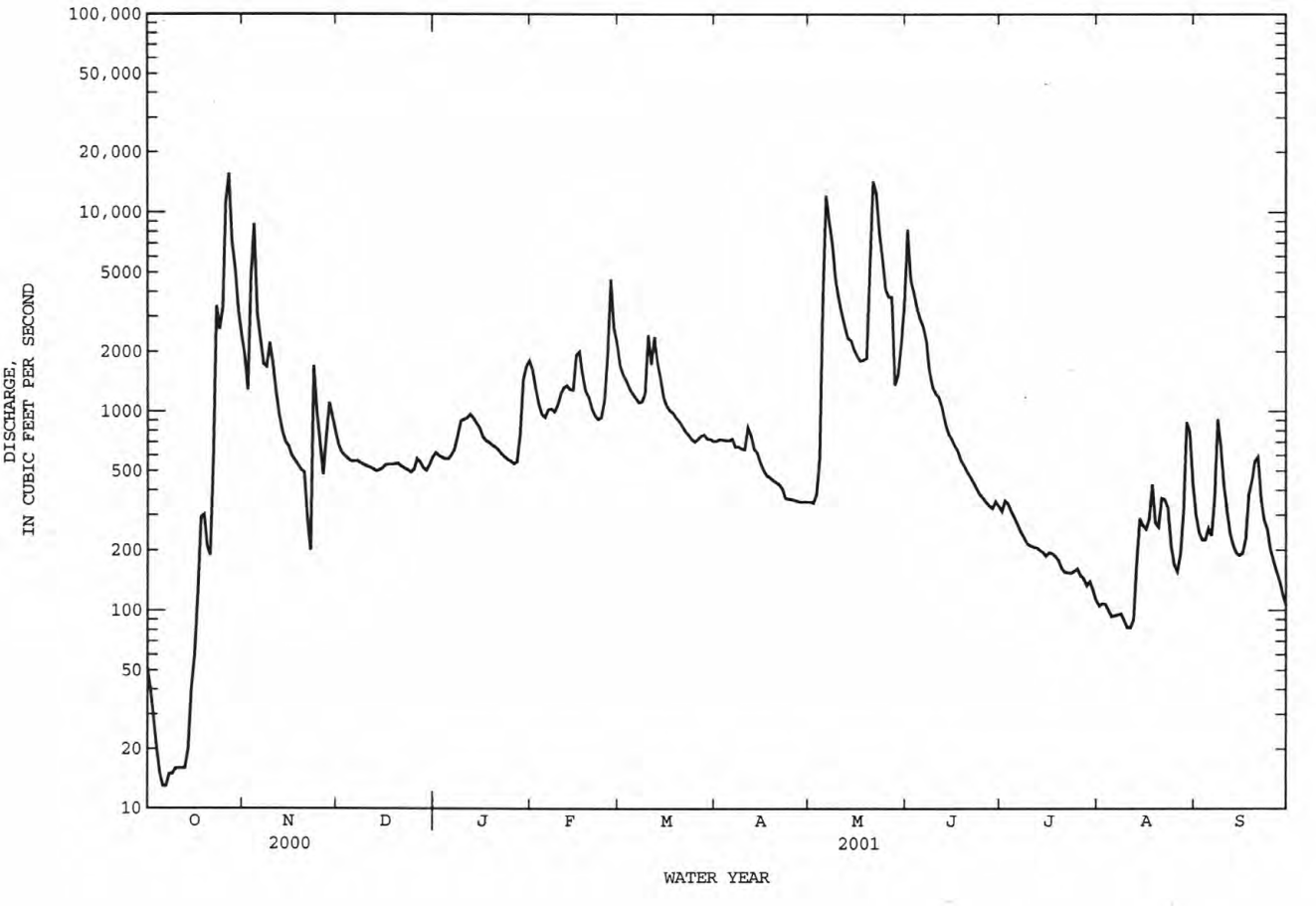
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2001, BY WATER YEAR (WY)

MEAN	1516	700	580	510	736	990	1115	2413	3406	872	870	1336
MAX	14900	4960	4435	2293	4986	10050	13040	12470	24780	5947	10540	6381
(WY)	1987	1987	1992	1998	1998	1998	1997	1977	1995	1975	1995	1996
MIN	21.9	.96	2.98	5.53	8.37	7.97	.15	11.4	148	.058	1.29	32.2
(WY)	1971	1971	1971	1971	1971	1971	1971	1971	1970	1970	1964	1983

e Estimated

07308500 Red River near Burkburnett, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1960 - 2001	
ANNUAL TOTAL	333495		429427			
ANNUAL MEAN	911		1177		1258	
HIGHEST ANNUAL MEAN					4424	1987
LOWEST ANNUAL MEAN					178	1964
HIGHEST DAILY MEAN	18500	Mar 25	15600	Oct 27	144000	Jun 6 1995
LOWEST DAILY MEAN	13	Oct 6	13	Oct 6	.00	Jul 19 1964
ANNUAL SEVEN-DAY MINIMUM	15	Oct 5	15	Oct 5	.00	Jul 19 1964
MAXIMUM PEAK FLOW			18200	Oct 27	174000	Jun 6 1995
MAXIMUM PEAK STAGE			8.04	Oct 27	16.90	Oct 21 1983
INSTANTANEOUS LOW FLOW					.00	Jul 19 1964
ANNUAL RUNOFF (AC-FT)	661500		851800		911200	
10 PERCENT EXCEEDS	2150		2500		2500	
50 PERCENT EXCEEDS	321		587		315	
90 PERCENT EXCEEDS	86		142		55	



07308500 Red River near Burkburnett, TX--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1968 to Sept. 1981, Oct. 1994 to current year.
WATER TEMPERATURE: July 1968 to Sept. 1981, Oct. 1994 to current year.

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

REMARKS.--Records fair. Mean monthly and annual concentrations and loads for selected chemical constituents have been computed using the daily (or continuous) records of specific conductance and a regression relation between each chemical constituent and specific conductance. New regression equations were developed based on data from water years 1991 to 2000. The standard error of estimate for dissolved solids is 3%, chloride is 7%, sulfate is 14% and for hardness is 10%. Regression equations developed for this station may be obtained from the U.S. Geological Survey Texas District Office upon request.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 17,400 microsiemens, July 30, 1972; minimum, 462 microsiemens, Feb. 24, 1997.
WATER TEMPERATURE: Maximum, 38.0°C, July 24, 2001; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 11,400 microsiemens/cm, Sept. 8; minimum, 616 microsiemens/cm, Nov. 3.
WATER TEMPERATURE: Maximum, 38.0°C, July 24; minimum, 0.0°C, Jan. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT													
04...	1535	19	6670	8.1	29.4	8.0	111	1300	1200	328	128	1010	12
NOV													
30...	1400	821	7880	7.8	8.9	10.8	98	1200	1000	311	101	1240	16
DEC													
21...	1245	525	9780	7.6	4.7	12.3	101	1500	1300	398	128	1480	16
JAN													
29...	1415	1700	3320	8.1	6.9	11.2	97	600	490	153	53.8	498	9
FEB													
05...	1200	914	7750	8.1	6.5	9.1	78	1300	1100	343	113	1240	15
MAR													
30...	1120	728	7110	8.3	12.2	11.2	111	1400	1200	349	123	1050	12
APR													
25...	1415	348	7800	8.2	22.6	11.5	140	1500	1400	372	136	1180	13
JUN													
01...	1245	9500	2040	7.2	23.4	8.0	97	470	360	125	37.4	251	5
18...	1120	565	5310	8.1	24.8	7.8	99	1000	950	261	96.5	724	10
JUL													
12...	1240	210	5730	8.0	28.8	7.6	104	1100	1000	260	110	811	11
AUG													
09...	1220	88	5160	7.9	29.1	7.6	104	1100	980	245	111	755	10
SEP													
21...	1020	657	3820	7.9	22.1	7.3	88	660	570	171	56.0	502	9

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, TOTAL (MG/L AS N) (00600)
OCT													
04...	11.4	100	1220	1590	.4	8.6	4350	35	--	<.006	<.047	E.030	--
NOV													
30...	8.65	180	940	2050	.4	10.7	4780	67	1.14	.012	1.16	E.021	1.8
DEC													
21...	1.50	260	1170	2270	.4	8.7	5590	31	1.32	.026	1.35	.092	2.5
JAN													
29...	5.17	112	425	824	.3	6.3	2040	576	1.14	.019	1.16	.090	3.6
FEB													
05...	7.95	183	1050	2030	.4	9.2	4910	178	1.55	.024	1.57	E.027	2.7
MAR													
30...	7.25	190	1150	1760	.4	5.4	4540	93	.605	.012	.617	<.041	1.7
APR													
25...	9.28	97	1320	1900	.4	.7	4970	59	--	<.006	<.047	<.041	--
JUN													
01...	6.06	106	348	378	.3	--	1210	<10	.531	.007	.538	E.021	3.7
18...	8.34	98	928	1150	.4	7.7	3240	500	--	<.006	<.050	<.040	--
JUL													
12...	9.25	94	983	1260	.4	6.6	3500	44	--	<.006	<.050	<.040	--
AUG													
09...	9.48	87	1010	1190	.5	12.3	3380	30	--	<.006	<.050	.065	--
SEP													
21...	7.54	92	535	845	<.8	--	2170	1520	.749	.016	.765	.051	4.4

07308500 Red River near Burkburnett, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
OCT													
04...	--	1.0	E.055	<.060	<.018	--	5	4.4	114	100	<.11	<.14	5
NOV													
30...	--	.59	.125	.080	.072	.221	4	3.1	166	156	<.22	<.28	<1
DEC													
21...	1.0	1.1	E.056	<.060	.028	.086	3	2.3	113	126	<.44	<.14	<1
JAN													
29...	2.4	2.5	.521	.074	--	--	5	E1.7	278	--	.12	<.28	8
FEB													
05...	--	1.1	.236	E.039	.031	.095	4	3.1	146	127	<.33	<.42	8
MAR													
30...	--	1.0	.128	<.060	<.018	--	3	2.5	102	91.9	<.33	<.42	2
APR													
25...	--	.97	.093	<.060	<.018	--	E2	2.1	96.0	86.3	<.14	E.03	2
JUN													
01...	--	3.2	1.36	E.059	.057	.175	13	4.0	577	98.9	.39	<.04	26
18...	--	.79	.113	<.060	<.020	--	4	3.2	174	163	<.11	<.08	<1
JUL													
12...	--	1.0	.088	<.060	<.020	--	4	3.7	147	132	<.11	<.10	2
AUG													
09...	.97	1.0	E.051	<.060	<.020	--	7	5.5	114	103	<.11	<.10	<1
SEP													
21...	3.6	3.7	1.24	<.060	.018	.055	12	2.3	371	103	.44	<.07	17

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)
OCT													
04...	<.8	2.1	E1.3	210	<50	<1	<1.00	65	24.6	<.14	.33	<2	<2.40
NOV													
30...	<.8	2.0	E.9	590	<50	2	<1.00	56	24.3	<.14	<.23	2	<2.40
DEC													
21...	<.8	E.9	<1.3	110	<100	<1	<3.00	53	39.2	<.14	<.23	E1	<2.40
JAN													
29...	1.1	9.6	E.9	7810	<30	10	<1.00	379	39.6	<.10	<.20	13	E1.39
FEB													
05...	<1.6	3.9	<2.6	2300	<100	1	<2.00	108	55.8	<.14	<.23	4	<4.80
MAR													
30...	<.8	E1.8	<2.6	630	<50	<2	<2.00	49	11.3	<.01	<.01	E3	<4.80
APR													
25...	1.6	4.1	6.4	190	<50	<4	.22	41	18.6	<.01	<.01	19	<.03
JUN													
01...	E.5	24.8	3.7	16200	<10	23	E.05	1130	.5	.03	<.01	30	.23
18...	<.8	6.1	6.5	510	<30	<3	<.20	73	4.6	<.01	<.01	9	<.20
JUL													
12...	E.5	3.1	6.2	320	<10	<3	<.20	53	5.0	.01	<.01	5	1.76
AUG													
09...	<.8	3.5	7.3	210	<30	<3	<.20	41	5.9	<.01	<.01	5	<.20
SEP													
21...	E.4	29.4	5.7	14300	<10	23	E.08	1040	<.2	.02	<.01	33	<.10

07308500 Red River near Burkburnett, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ALDRIN, TOTAL (UG/L) (39330)	AROCLOR 1016/ 1242 PCB WATER UNFLTRD (UG/L) (81648)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)
OCT													
04...	3.7	3.1	<.43	<.2	<93	<100	--	--	--	--	--	--	--
NOV													
30...	3.9	3.6	<.86	<.2	<93	<100	--	--	--	--	--	--	--
DEC													
21...	4.1	5.1	<.86	.5	<93	<200	--	--	--	--	--	--	--
JAN													
29...	E1.3	E1.5	<.40	<.2	33	<60	--	--	--	--	--	--	--
FEB													
05...	E2.2	4.5	<.86	<.3	<93	<200	--	--	--	--	--	--	--
MAR													
30...	4.8	3.0	<.86	<.3	<93	<100	--	--	--	--	--	--	--
APR													
25...	4.4	4.0	<.20	<1.0	4	6	--	--	--	--	--	--	--
JUN													
01...	2.2	1.9	.10	<1.0	105	2	<.040	<.10	<1	<.1	<.1	<.1	<.1
18...	5.0	4.1	<.15	<3.0	7	8	<.040	<.10	<1	<.1	<.1	<.1	<.1
JUL													
12...	3.6	4.7	<.15	<3.0	5	5	<.040	<.10	<1	<.1	<.1	<.1	<.1
AUG													
09...	2.6	3.4	<.15	<3.0	6	6	--	--	--	--	--	--	--
SEP													
21...	4.6	3.1	.12	<2.0	322	4	--	--	--	--	--	--	--

DATE	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN SULFATE TOTAL (UG/L) (34351)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ENDRIN ALDE-HYDE TOTAL (UG/L) (34366)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	PCB 207 SUR SCD 1608 WATER UNFLTRD PERCENT (99781)	TOX-APHENE, TOTAL (UG/L) (39400)	ENDO-SULFAN-I WATER WHOLE REC (UG/L) (34361)	ALPHA BHC TOTAL (UG/L) (39337)	ALPHA-HCH-D6 SUR SCD 1608 WATER UNFLTRD PERCENT (99778)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
05...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
01...	<.1	<.020	<.6	<.060	<.2	<.030	<.800	<.030	113	<2	<.1	<.03	107
18...	.7	.215	<.6	.239	<.2	.036	<.800	.092	13	<2	.1	.05	41
JUL													
12...	<.1	<.020	<.6	<.060	<.2	<.030	<.800	<.030	103	<2	<.1	<.03	114
AUG													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
21...	--	--	--	--	--	--	--	--	--	--	--	--	--

07308500 Red River near Burkburnett, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ENDO-SULFAN II TOTAL (UG/L) (34356)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	P,P' DDD, TOTAL (UG/L) (39310)	P,P' DDE, TOTAL (UG/L) (39320)	P,P' DDT, TOTAL (UG/L) (39300)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)
OCT								
04...	--	--	--	--	--	--	--	--
NOV								
30...	--	--	--	--	--	--	--	--
DEC								
21...	--	--	--	--	--	--	--	--
JAN								
29...	--	--	--	--	--	--	--	--
FEB								
05...	--	--	--	--	--	--	--	--
MAR								
30...	--	--	--	--	--	--	--	--
APR								
25...	--	--	--	--	--	--	--	--
JUN								
01...	<.04	<.03	<.1	<.09	<.1	<.04	<.1	<.1
18...	.24	.15	E.1	<.09	E.1	E.04	<.1	E.1
JUL								
12...	<.04	<.03	<.1	<.09	<.1	<.04	<.1	<.1
AUG								
09...	--	--	--	--	--	--	--	--
SEP								
21...	--	--	--	--	--	--	--	--

MONTHLY AND ANNUAL MEANS AND LOADS FOR OCTOBER 2000 TO SEPTEMBER 2001

MONTH	YEAR	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCT-ANCE (MICRO-SIEMENS)	DIS-SOLVED SOLIDS (MG/L)	DIS-SOLVED SOLIDS (TONS)	DIS-SOLVED CHLORIDE (MG/L)	DIS-SOLVED CHLORIDE (TONS)	DIS-SOLVED SULFATE (MG/L)	DIS-SOLVED SULFATE (TONS)	HARDNESS (CA,MG) (MG/L)
OCT.	2000	56226	1570	1010	152800	300	45770	340	51060	380
NOV.	2000	44588	2310	1480	178100	470	56770	470	56020	530
DEC.	2000	16858	7590	4790	217900	1800	83460	1200	54510	1400
JAN.	2001	24531	8000	5030	333200	2000	132500	1200	78400	1400
FEB.	2001	40737	5330	3380	372000	1200	133000	930	102500	1100
MAR.	2001	35925	4170	2660	257800	900	87440	780	75850	900
APR.	2001	16356	8510	5350	236300	2100	93760	1300	55820	1500
MAY	2001	127817	4330	2750	949700	960	329800	790	271600	910
JUNE	2001	43347	3390	2170	253700	710	83280	660	77410	760
JULY	2001	6272	5750	3650	61770	1300	21930	1000	17190	1200
AUG.	2001	7566	5980	3790	77380	1400	28130	1000	20870	1200
SEPT	2001	9204	7950	5000	124400	2000	48840	1200	29890	1400
TOTAL		429427	**	**	3215100	**	1144700	**	891100	**
WTD.AVG.		1180	4370	2770	**	990	**	770	**	890

07308500 Red River near Burkburnett, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	5650	4740	5000	2310	2190	2220	8190	8090	8140	6710	6510	6620
2	6300	5630	5860	2790	2310	2560	8130	7950	8020	8100	6680	7410
3	6850	6290	6510	3100	616	1840	8010	7710	7860	9440	8100	8740
4	7160	6850	6980	1610	801	1110	7710	7150	7410	10000	9440	9590
5	7300	7130	7210	1130	803	933	7360	6980	7180	10500	10000	10300
6	7570	7210	7370	1530	1130	1360	7200	7070	7110	10500	9680	10000
7	7780	7570	7660	1650	1500	1550	7230	7070	7160	10100	9680	9870
8	7810	7600	7680	1780	1640	1720	7190	7130	7150	10400	9990	10200
9	7950	7670	7760	1770	1680	1730	7200	7090	7130	10500	10100	10300
10	8010	7500	7760	1980	1680	1800	7230	7180	7210	10500	9810	10200
11	8040	7910	7980	2400	1980	2190	7280	7180	7250	9830	8050	9150
12	8070	7960	8010	2820	2400	2610	7380	7230	7310	8880	7880	8520
13	8010	7900	7950	2930	2820	2880	7740	7350	7520	8640	7590	8400
14	7910	7460	7720	3150	2920	3020	7800	7710	7750	8740	8360	8630
15	7490	6410	6770	3390	3140	3270	7780	7540	7640	---	---	e8840
16	7110	6430	6830	3600	3390	3500	7550	7130	7230	---	---	e8760
17	6990	5980	6370	3720	3600	3660	7380	7050	7240	9300	8710	9070
18	6490	6080	6270	3810	3720	3760	7300	7120	7220	9340	8740	9210
19	6250	6170	6200	3900	3800	3850	7550	7130	7470	9400	8780	9130
20	6240	2550	5120	3980	3890	3930	7890	7500	7720	9170	8540	8950
21	2550	2530	2540	4010	3960	3980	8550	7890	8370	9070	8420	8860
22	2730	2280	2520	4020	3960	4000	8550	8010	8280	9150	8870	9030
23	2520	919	1360	3970	3250	3920	8320	7910	8070	9020	8570	8770
24	1580	920	1300	---	---	e1290	8490	7940	8310	9200	8660	8990
25	2060	860	1530	---	---	e2400	8370	8040	8250	9210	8600	8990
26	1160	793	944	---	---	e3600	8330	7940	8210	9030	8540	8750
27	1500	967	1310	---	---	e5000	8150	7440	7870	9040	7870	8820
28	2100	1450	1810	6440	5820	6260	7870	7480	7690	9020	6760	7890
29	2100	1710	1860	7240	6440	6790	7560	6860	7400	6760	3240	4470
30	1990	1770	1860	8120	7240	7770	7550	6800	7190	---	---	e4000
31	2210	1990	2150	---	---	---	7290	6570	6900	---	---	e3500
MONTH	8070	793	5100	---	---	3150	8550	6570	7590	---	---	8510

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	e3700	2330	2100	e2220	9010	8080	8530	7990	7730	7810
2	---	---	e4260	2520	2330	2420	9380	9010	9220	8060	7910	8000
3	---	---	e5730	2740	2520	2630	9150	8840	9000	8080	7830	7990
4	---	---	e6790	3020	2740	2870	9000	8740	8880	8020	3020	7160
5	---	---	e7750	3300	3020	3160	8770	8480	8620	7980	1690	3320
6	---	---	e8010	3590	3300	3430	8600	8530	8560	8380	4830	6830
7	8370	7870	8160	3820	3590	3700	8540	8480	8500	5450	2870	3730
8	8380	7980	8270	3920	3820	3870	8700	8510	8610	---	---	e2950
9	---	---	e7550	3850	3700	3800	8830	8650	8760	---	---	e3420
10	---	---	e7000	3700	2640	3210	8800	8740	8770	---	---	e4340
11	---	---	e6340	2640	2520	2560	8760	8580	8640	---	---	e5070
12	---	---	e6240	3610	2630	3010	8650	8510	8550	---	---	e5750
13	---	---	e6440	4230	3610	3960	8540	8480	8500	---	---	e6220
14	7830	6760	7380	---	4230	e4270	8500	8450	8480	---	---	e6710
15	7160	3440	4890	---	---	e4380	8480	8450	8460	---	---	e7070
16	4420	3870	4100	---	---	e4540	8460	8380	8420	---	---	e7310
17	4870	4300	4660	---	---	e4730	8430	8370	8400	---	---	e7500
18	6460	4870	5710	---	---	e4790	8410	8340	8380	---	---	e7600
19	6600	6220	6480	---	---	e4960	8380	8320	8350	---	---	e6160
20	6490	6410	6430	---	---	e5020	8340	8300	8320	---	---	e5520
21	6500	6340	6420	---	---	e5110	---	---	e8970	3660	1480	2040
22	6560	6380	6500	---	---	e5290	---	---	e8640	---	---	e1420
23	6550	6330	6470	---	---	e5500	---	---	e8300	---	---	e2280
24	6470	4940	5850	---	---	e6000	7860	7740	7810	---	---	e3480
25	6510	4740	6120	---	---	e6200	7840	7600	7730	---	---	e4500
26	4770	2650	3540	---	---	e6330	7840	7650	7720	---	---	e5580
27	2650	1940	2240	---	---	e6630	7910	7800	7860	---	---	e6520
28	---	1900	e2130	---	---	e6920	8010	7870	7920	---	---	e7160
29	---	---	---	---	---	e7200	8020	7860	7960	---	---	e6870
30	---	---	---	---	---	e7500	8040	7800	7960	---	---	e6290
31	---	---	---	8080	7750	7870	---	---	---	---	---	e5190
MONTH	---	---	5900	---	---	4650	---	---	8430	---	---	5540

07308500 Red River near Burkburnett, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	e2040	6060	6010	6030	5850	5760	5810	8910	6720	8450
2	---	---	e2490	6050	5990	6020	5900	5740	5820	8780	8120	8340
3	---	---	e2600	6040	5970	6000	5790	5640	5720	8230	8130	8180
4	---	---	e2450	6000	5940	5970	5700	5540	5620	8230	8180	8210
5	---	---	e1860	5980	5920	5940	5600	5450	5530	8230	---	e8180
6	---	---	e2770	5950	5900	5930	5500	5380	5440	---	---	e7620
7	---	---	e4300	5940	5880	5900	5430	5290	5370	7530	4940	6040
8	5180	4700	5000	5920	5860	5890	5340	5210	5270	11400	5080	7960
9	4800	4580	4640	5890	5830	5860	5250	5170	5220	11400	10200	11100
10	4590	4460	4510	5860	5810	5830	5280	5190	5240	10200	9700	9900
11	4460	4340	4400	5840	5790	5820	5300	5230	5270	9820	8620	9270
12	4460	4240	4350	5830	5790	5800	5330	5240	5290	8640	8050	8320
13	4380	4310	4340	5790	5720	5760	---	---	e4910	8190	7830	8010
14	4610	4400	4500	5750	5660	5710	---	---	e3620	8090	7960	8010
15	4810	4600	4720	---	---	e5630	3590	3210	3370	8040	7910	7970
16	5000	4810	4920	---	---	e5510	3480	2560	3230	8370	7460	7760
17	5200	4990	5100	5560	5490	5530	---	---	e3810	9020	8100	8650
18	5310	5200	5270	5550	5470	5520	---	---	e5220	8890	8390	8730
19	6160	5250	5610	5550	5460	5510	---	---	e6010	8770	8490	8680
20	6020	5940	5970	5550	5450	5500	---	---	e6650	8500	8210	8430
21	6000	5800	5880	5540	5430	5490	---	---	e6270	---	---	e5720
22	5930	5830	5870	5530	5420	5480	---	---	e4370	---	---	e4480
23	5960	5870	5910	5500	5370	5440	---	---	e6140	---	---	e5100
24	5930	5860	5890	5440	5330	5390	---	---	e7000	---	---	e5830
25	5980	5880	5910	5460	5380	5420	---	---	e7710	---	---	e6520
26	6050	5980	6010	5510	5440	5480	---	---	e8670	---	---	e7230
27	6070	6020	6040	5560	5490	5530	---	---	e8940	---	---	e7920
28	6090	6040	6060	5610	5520	5570	---	---	e8650	---	---	e8350
29	6100	6040	6070	5670	5590	5630	7800	---	e6880	8920	8320	8730
30	6080	6020	6060	5740	5640	5690	7380	6030	6550	8940	8700	8840
31	---	---	---	5800	5700	5750	8670	6470	6950	---	---	---
MONTH	---	---	4720	---	---	5690	---	---	5820	---	---	7880

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.9	15.7	19.8	21.4	18.4	20.1	11.1	6.9	8.7	1.2	.3	.6
2	26.6	16.2	20.7	19.8	16.2	18.1	7.2	5.3	6.1	2.4	.0	.9
3	27.9	17.6	22.1	17.8	14.8	15.9	7.9	4.1	5.7	5.6	.0	1.9
4	29.9	19.4	23.8	15.3	14.6	15.0	7.8	4.7	5.9	7.1	1.6	3.3
5	29.5	18.1	23.0	16.7	15.3	16.0	7.5	5.7	6.5	8.8	3.5	5.5
6	18.1	11.6	15.0	16.4	13.4	15.1	7.4	5.8	6.8	9.9	4.5	6.8
7	11.6	8.6	9.7	13.4	8.4	10.6	8.9	3.9	6.2	9.7	5.2	7.1
8	16.3	8.6	11.2	8.4	5.6	6.3	8.4	6.0	6.7	9.6	3.9	6.5
9	17.5	6.1	11.1	9.3	5.3	7.0	10.2	6.6	8.1	9.8	4.4	6.9
10	17.4	8.7	12.3	10.8	6.4	8.4	9.6	7.3	8.0	7.1	5.5	6.3
11	20.3	11.1	14.5	10.6	8.1	9.3	8.2	2.4	5.4	7.3	5.1	5.9
12	22.2	13.8	17.6	10.4	6.9	8.7	2.4	.4	1.1	6.3	4.4	5.5
13	20.7	17.2	18.8	9.5	4.9	7.0	2.2	1.3	1.8	11.0	5.7	7.6
14	22.3	17.5	19.4	10.5	4.8	7.5	2.9	2.1	2.5	10.8	5.2	8.0
15	22.8	18.0	20.1	10.1	6.3	8.2	3.7	2.9	3.3	---	---	---
16	25.2	18.4	21.2	11.4	6.7	8.8	6.5	3.6	5.3	6.5	---	---
17	21.5	17.4	19.7	9.5	5.3	7.3	6.1	2.1	3.9	4.9	2.7	3.3
18	23.9	17.5	20.2	11.1	6.3	8.2	6.1	2.7	4.2	6.7	2.3	3.8
19	23.0	17.4	20.2	12.4	6.1	8.9	6.0	2.5	3.8	6.1	1.8	3.7
20	20.3	18.5	19.0	11.2	6.2	8.4	6.1	2.6	4.4	5.3	1.2	2.9
21	19.5	17.5	18.4	12.0	5.0	8.1	5.6	4.1	4.8	6.1	2.3	3.2
22	22.7	18.4	20.1	11.2	7.5	9.3	5.2	2.8	4.4	5.8	2.7	3.8
23	20.9	20.0	20.5	12.5	10.6	11.4	5.8	3.8	4.5	6.5	5.1	6.0
24	21.1	19.6	20.5	11.3	9.1	9.8	6.2	4.5	5.0	7.9	5.9	7.2
25	20.2	18.1	19.4	11.1	7.9	9.3	4.6	3.3	3.6	9.0	7.4	7.9
26	19.0	17.9	18.4	11.5	7.6	9.5	3.7	3.6	3.6	9.1	7.5	8.5
27	21.0	18.5	19.6	11.4	7.7	9.4	3.5	2.7	3.1	9.1	5.7	6.9
28	21.2	20.0	20.5	12.4	7.6	9.8	3.3	2.9	3.1	5.9	4.0	4.9
29	20.1	18.2	19.3	11.9	7.4	9.5	3.8	3.2	3.5	---	3.3	---
30	21.0	17.8	19.4	10.9	6.8	8.6	4.4	2.2	3.9	---	---	---
31	21.3	19.4	20.3	---	---	---	2.2	.4	1.0	---	---	---
MONTH	29.9	6.1	18.6	21.4	4.8	10.3	11.1	.4	4.7	---	---	---

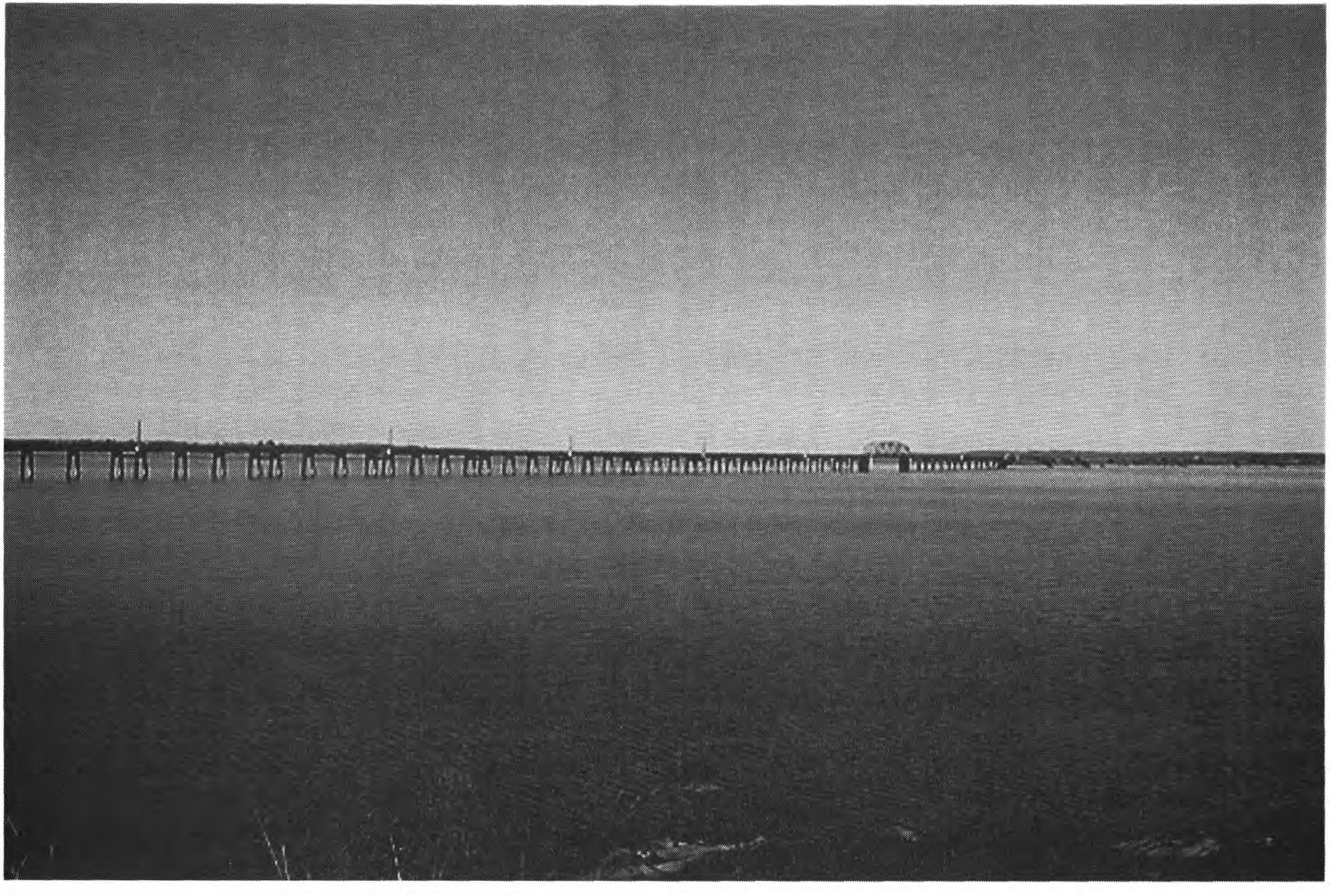
07308500 Red River near Burkburnett, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	10.2	3.4	6.3	17.5	12.9	15.1	27.6	18.4	22.5
2	---	---	---	10.4	6.9	8.5	23.4	15.7	18.9	27.8	19.1	23.0
3	---	---	---	13.1	7.1	9.7	24.2	18.5	21.1	25.1	20.7	22.5
4	---	---	---	15.5	7.8	11.2	25.6	19.8	22.3	22.4	18.4	20.1
5	---	---	---	16.8	8.9	12.4	23.6	21.3	22.5	23.8	18.0	20.3
6	13.7	---	---	16.4	10.6	13.2	22.2	20.2	20.9	24.1	20.0	21.9
7	14.0	8.4	11.0	18.5	11.2	13.9	20.8	17.3	19.2	22.9	20.6	21.5
8	16.5	12.4	14.2	14.5	9.6	11.3	21.2	19.0	19.9	---	---	---
9	---	---	---	16.2	7.7	11.6	22.3	19.9	21.0	26.7	22.4	24.4
10	---	---	---	15.0	10.9	12.6	22.0	20.8	21.3	26.2	22.9	24.4
11	---	---	---	15.9	12.3	13.7	21.1	17.6	19.2	25.3	22.3	23.8
12	---	---	---	17.1	12.1	14.3	18.3	15.5	16.9	27.7	22.3	24.7
13	11.4	8.7	9.8	18.0	11.8	14.6	---	---	---	26.4	23.5	25.1
14	13.6	8.6	11.9	15.9	13.0	14.1	---	---	---	25.9	24.2	25.1
15	8.7	4.7	6.1	---	---	---	---	---	---	25.4	23.1	24.3
16	8.1	3.7	5.3	---	---	---	---	---	---	26.0	23.4	24.7
17	6.7	1.5	3.0	---	---	---	---	---	---	26.9	24.6	25.7
18	8.4	4.3	6.3	---	---	---	---	---	---	27.1	24.2	25.7
19	11.7	5.8	8.6	---	---	---	---	---	---	27.0	24.0	25.6
20	11.3	10.1	10.4	---	---	---	---	---	---	27.9	23.2	25.0
21	11.4	8.2	10.0	---	---	---	---	---	---	---	---	---
22	8.2	6.5	6.9	---	9.2	---	---	---	---	---	---	---
23	7.5	7.0	7.2	---	---	---	---	---	---	---	---	---
24	14.8	7.5	11.1	---	---	---	24.5	14.8	19.5	---	---	---
25	14.2	9.7	11.6	---	---	---	25.8	16.1	20.6	---	---	---
26	12.6	10.0	11.3	---	---	---	25.9	17.4	21.5	---	---	---
27	12.2	7.0	10.9	---	---	---	25.7	17.6	21.5	---	---	---
28	7.0	---	---	---	---	---	24.3	17.8	21.1	---	---	---
29	---	---	---	---	---	---	25.5	17.6	21.3	---	---	---
30	---	---	---	16.4	10.2	13.2	24.3	17.8	20.8	---	---	---
31	---	---	---	19.4	12.6	15.8	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	29.1	25.9	27.5	35.3	25.6	29.8	31.8	24.9	27.9
2	---	---	---	28.8	25.3	27.1	35.1	26.5	29.8	34.0	25.3	29.3
3	---	---	---	29.4	25.6	27.4	34.6	25.4	29.4	32.0	26.2	28.5
4	---	---	---	29.7	25.7	27.8	35.7	25.5	30.0	27.8	25.0	26.1
5	---	---	---	29.6	26.5	28.2	36.9	26.1	30.8	---	23.6	---
6	---	---	---	29.6	26.2	28.0	35.1	26.6	30.3	30.4	---	---
7	---	---	---	29.1	26.0	27.7	34.5	25.5	29.2	30.0	23.0	26.0
8	31.1	26.1	28.3	28.9	25.2	27.1	34.2	26.4	29.8	25.6	22.3	23.8
9	32.1	26.6	29.3	29.5	25.7	27.5	33.9	25.6	28.9	24.8	19.6	22.2
10	33.6	27.5	30.3	30.0	26.9	28.5	35.4	25.7	29.9	26.3	18.9	22.3
11	33.0	27.9	30.2	29.5	26.7	28.3	35.6	26.6	30.0	26.5	20.4	22.8
12	31.9	26.9	29.1	---	---	---	35.2	26.0	29.6	26.8	22.1	24.0
13	30.0	26.9	28.2	---	---	---	---	---	---	29.2	22.4	25.2
14	27.4	25.7	26.5	31.0	26.9	28.7	32.8	---	---	25.7	22.8	24.3
15	28.7	23.9	26.2	---	---	---	33.6	25.5	29.1	25.5	23.6	24.4
16	29.2	24.3	26.6	---	---	---	34.7	26.7	29.2	27.6	22.7	24.6
17	29.3	25.5	27.3	34.2	27.1	30.1	33.4	26.4	29.3	25.5	22.5	24.0
18	27.2	24.6	26.0	35.1	27.5	30.7	32.9	24.0	27.0	25.5	22.5	23.9
19	30.8	24.1	26.7	35.6	27.4	30.9	---	---	---	27.2	22.0	24.3
20	30.9	24.1	27.2	36.3	27.3	31.1	---	---	---	26.9	22.5	24.2
21	30.9	24.5	27.4	37.2	27.8	31.8	---	---	---	27.2	21.1	23.5
22	31.9	23.2	27.1	37.6	27.8	32.0	---	---	---	27.7	21.5	24.2
23	29.5	23.5	26.3	37.4	27.7	31.7	---	---	---	26.5	20.1	23.3
24	31.1	22.3	26.2	38.0	28.9	32.6	33.6	24.6	28.3	21.7	15.4	18.3
25	31.6	23.2	26.9	37.7	28.7	32.5	33.9	24.0	28.3	23.1	14.6	18.5
26	31.1	23.5	27.0	36.2	28.0	31.7	29.0	23.8	26.2	23.2	15.5	18.9
27	30.9	24.4	27.5	36.2	28.0	31.4	34.7	25.4	29.1	24.1	15.6	19.4
28	28.4	24.4	26.4	36.5	28.1	31.3	32.9	26.5	29.3	23.8	16.3	19.7
29	27.8	23.0	25.0	37.4	28.2	31.5	29.5	26.6	28.0	24.5	16.2	19.8
30	28.8	24.1	26.3	35.7	27.2	30.7	28.8	25.8	27.2	25.4	15.7	20.0
31	---	---	---	35.0	25.8	29.7	30.4	25.2	27.2	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---



07331000 Lake Texoma near Denison, Tx

07308990 LAKE ELLSWORTH NEAR ELGIN, OK

LOCATION.--Lat 34°47'10", long 98°22'07", in NW $^1/_4$ NW $^1/_4$ sec.28, T.4 N., R.11 W., Comanche County, Hydrologic Unit 11130202, near right end of dam on East Cache Creek, 4 miles west of Elgin and at mile 59.9.

DRAINAGE AREA.--249 mi^2.

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

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

REMARKS.--Reservoir is formed by concrete dam. Storage began in 1964. Capacity, 189,200 acre-ft, gage height 1,250.00 ft, top of dam; and 72,490 acre-ft, gage height 1,235.00 ft, top of gates; 25,730 acre-ft, gage height 1,225.00 ft, top of spillway. Reservoir is used for municipal water supply and recreation. 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, 41,100 acre-ft, Sept. 30, 1998, gage height, 1,228.71 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 88,970 acre-ft, Oct. 23, gage height 1,237.55 ft; minimum, 52,490 acre-ft, Oct. 20, gage height, 1,231.16 ft.

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

1225	25,730	1240	104,800
1230	46,450	1245	143,700
1235	72,490	1250	189,200

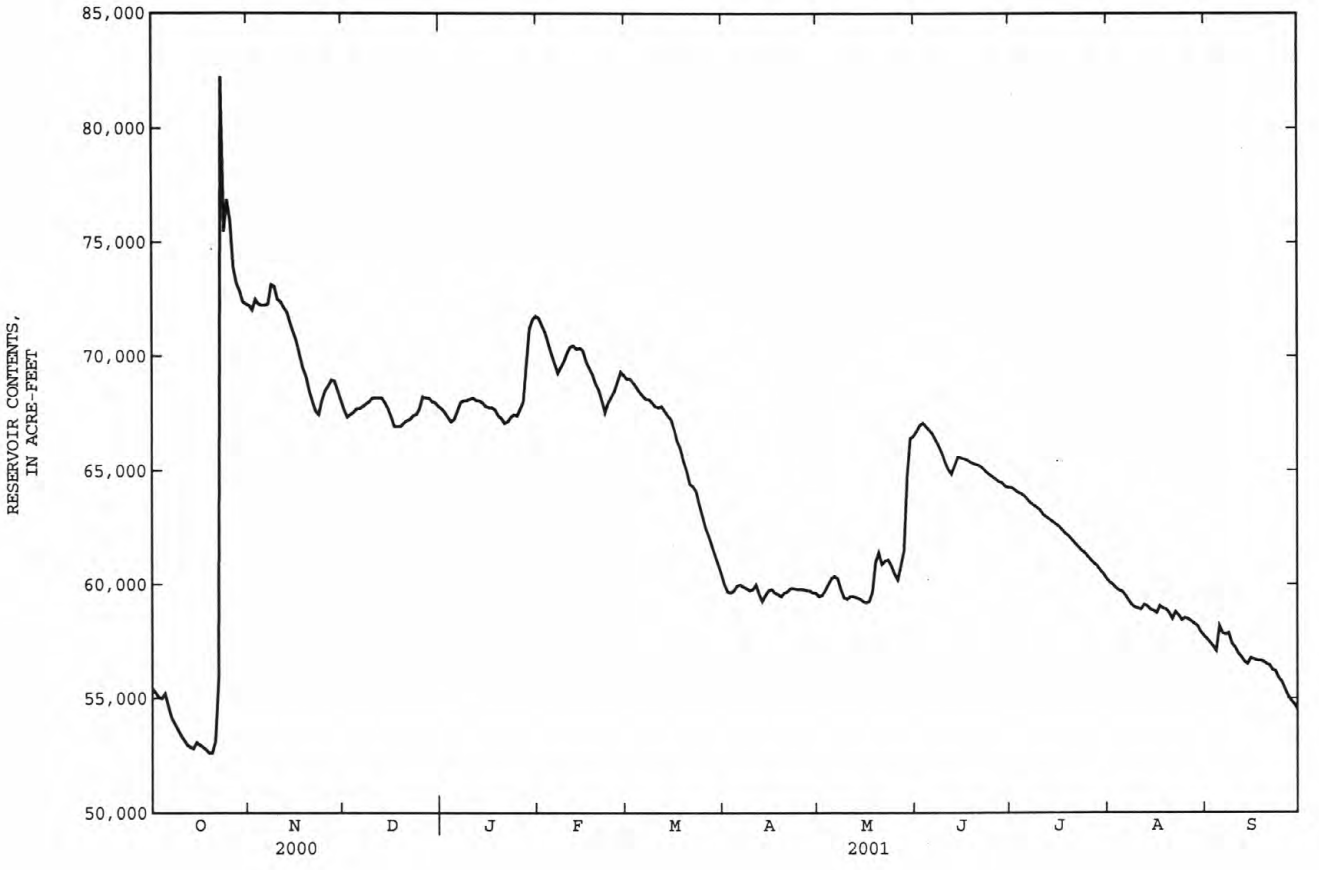
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55410	72230	67650	67700	71660	69000	59990	59470	66710	64260	60090	57600
2	55250	72020	67330	67540	71340	69000	59680	59520	66970	64160	59990	57440
3	55040	72490	67440	67330	71030	68840	59630	59730	67070	64050	59830	57280
4	54990	72280	67540	67130	70560	68640	59730	59990	66920	64000	59730	57070
5	55200	72230	67700	67230	70090	68430	59940	60250	66760	63900	59680	58170
6	54680	72230	67700	67590	69680	68270	59990	60360	66600	63740	59520	57860
7	54160	72280	67800	67960	69260	68120	59890	60250	66340	63580	59310	57800
8	53900	73140	67910	68060	69520	68120	59830	59780	66080	63480	59110	57860
9	53640	73070	68010	68060	69780	67960	59730	59420	65770	63380	59000	57390
10	53380	72490	68170	68120	70150	67800	59780	59370	65360	63270	58950	57230
11	53170	72390	68170	68170	70410	67750	59990	59470	65040	63060	58900	56970
12	52960	72130	68170	68060	70460	67800	59570	59470	64850	62960	59110	56810
13	52860	71920	68170	68060	70300	67590	59260	59420	65200	62860	59050	56610
14	52800	71450	67960	67960	70350	67390	59520	59370	65590	62750	58900	56500
15	53060	71030	67700	67800	70250	67230	59730	59260	65560	62650	58850	56760
16	52960	70620	67330	67750	69780	66810	59780	59210	65510	62540	58740	56710
17	52860	70040	66920	67750	69470	66290	59630	59260	65460	62390	59050	56660
18	52750	69470	66920	67650	69210	65980	59570	59680	65360	62230	58950	56660
19	52600	69100	66920	67390	68790	65410	59470	60980	65300	62130	58900	56610
20	52600	68480	67070	67280	68530	64990	59630	61400	65250	61970	58740	56500
21	53120	68010	67180	67070	68060	64420	59680	60880	65200	61810	58480	56450
22	55820	67590	67230	67130	67540	64310	59830	61030	65090	61660	58790	56240
23	82250	67440	67390	67330	67960	64110	59830	61080	64940	61500	58640	56190
24	75460	68060	67440	67440	68220	63530	59780	60820	64830	61400	58430	55880
25	76880	68480	67700	67390	68480	63010	59780	60460	64730	61240	58530	55720
26	75980	68690	68220	67700	68900	62490	59780	60200	64630	61080	58480	55410
27	73910	68950	68170	68010	69310	62130	59730	60820	64520	60930	58380	55100
28	73200	68900	68170	69630	69160	61710	59730	61500	64470	60820	58270	54890
29	72880	68480	68010	71190	---	61290	59630	64730	64310	60620	58170	54730
30	72390	68060	67960	71600	---	60880	59630	66400	64260	60460	57910	54520
31	72280	---	67800	71760	---	60460	---	66500	---	60250	57750	---
MAX	82250	73140	68220	71760	71660	69000	59990	66500	67070	64260	60090	58170
MIN	52600	67440	66920	67070	67540	60460	59260	59210	64260	60250	57750	54520
(‡)	1234.96	1234.15	1234.10	1234.86	1234.36	1232.69	1232.53	1233.85	1233.42	1232.65	1232.17	1231.55
(‡‡)	+16480	-4220	-260	+3960	-2600	-8700	-830	+6870	-2240	-4010	-2500	-3230

CAL YR 2000 MAX 82250 MIN 50500 (‡‡) +15900
WTR YR 2001 MAX 82250 MIN 52600 (‡‡) -1280

(‡) GAGE HEIGHT, 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 $^1/_4$ NW $^1/_4$ sec.18, T.3 N., R.12 W., Comanche County, Hydrologic Unit 11130202, near left end of dam on Medicine Creek, northwest of Medicine Park and at mile 12.2.

DRAINAGE AREA.--93 mi^2.

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

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 63,600 acre-ft, Mar. 16, 1998, elevation 1,347.27 ft; minimum, 46,300 acre-ft, Oct. 15, 1998, elevation, 1,339.45 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 60,150 acre-ft, Feb. 24, elevation 1,345.79 ft; minimum, 48,100 acre-ft, Oct. 12,13, elevation, 1,340.35 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

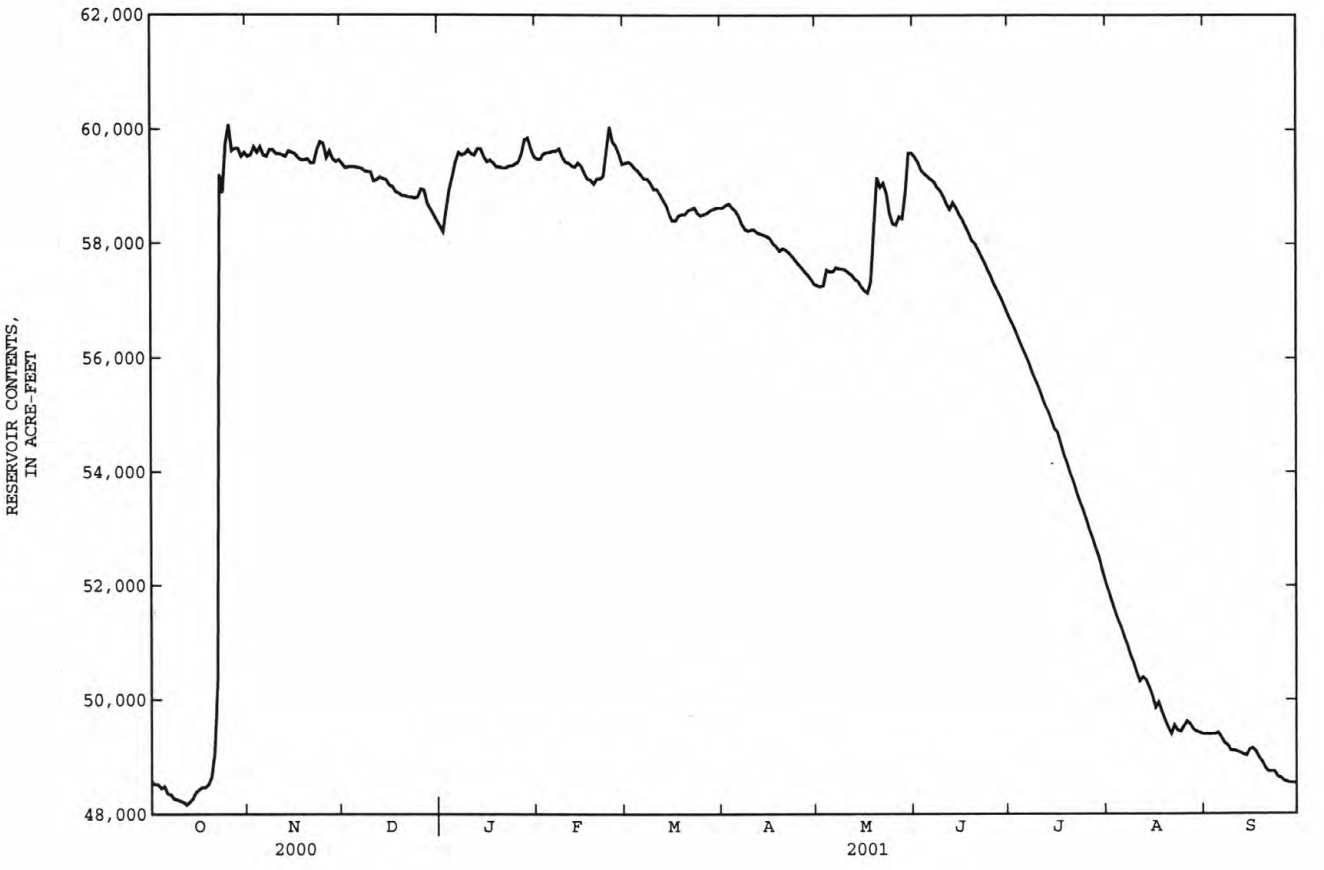
RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48560	59520	59390	e58300	59480	59410	58630	57270	59520	56680	51900	49400
2	48520	59550	59320	e58200	59480	59430	58670	57250	59430	56570	51730	49400
3	48520	59690	59340	58600	59570	59390	58700	57270	59290	56440	51550	49400
4	48450	59590	59340	58950	59590	59320	58630	57540	59230	56300	51400	49400
5	48490	59690	59340	59180	59590	59270	58580	57510	59180	56170	51270	49420
6	48360	59550	59320	59430	59620	59200	58490	57510	59130	56040	51110	49330
7	48340	59520	59320	59590	59620	59130	58350	57580	59090	55910	50960	49240
8	48270	59640	59270	59550	59660	59130	58260	57560	58990	55750	50780	49200
9	48250	59640	59250	59570	59520	59060	58220	57560	58930	55620	50650	49110
10	48230	59570	59250	59640	59430	58950	58240	57540	58830	55490	50470	49110
11	48210	59570	59090	59570	59410	58950	58240	57490	58700	55340	50320	49090
12	48160	59550	59110	59550	59360	58860	58190	57450	58600	55180	50390	49070
13	48210	59520	59160	59660	59340	58760	58170	57380	58720	55070	50340	49040
14	48270	59620	59130	59660	59410	58670	58150	57340	58630	54920	50210	49020
15	48380	59590	59110	59520	59360	58510	58130	57250	58510	54760	50060	49130
16	48430	59570	59020	59430	59230	58400	58090	57180	58420	54700	49860	49150
17	48470	59500	58990	59460	59130	58400	58000	57140	58300	54500	49950	49090
18	48470	59460	58900	59410	59110	58490	57950	57340	58190	54300	49790	48980
19	48520	59460	58880	59340	59040	58510	57870	58280	58060	54150	49640	48910
20	48650	59480	58830	59340	59130	58510	57910	59160	58000	53970	49510	48800
21	49070	59410	58830	59320	59130	58580	57890	58990	57890	53820	49400	48740
22	50320	59410	58810	59320	59180	58600	57840	59060	57780	53640	49550	48740
23	59200	59640	58810	59360	59620	58630	57780	58880	57670	53470	49460	48740
24	58880	59780	58790	59360	60050	58530	57710	58530	57540	53330	49440	48650
25	59750	59750	58810	59390	59780	58490	57640	58350	57430	53160	49530	48630
26	60080	59500	58950	59430	59710	58510	57580	58330	57290	52980	49620	48580
27	59620	59620	58930	59570	59570	58530	57510	58470	57180	52830	49570	48560
28	59660	59480	e58700	59820	59390	58580	57450	58440	57070	52650	49480	48540
29	59660	59430	e58600	59850	---	58600	57380	58900	56940	52500	49440	48540
30	59520	59460	e58500	59660	---	58630	57290	59590	56810	52280	49420	48540
31	59590	---	e58400	59520	---	58630	---	59590	---	52080	49400	---
MAX	60080	59780	59390	59850	60050	59430	58700	59590	59520	56680	51900	49420
MIN	48160	59410	58400	58200	59040	58400	57290	57140	56810	52080	49400	48540
(‡)	1345.55	1345.49	1345.03	1345.52	1345.46	1345.13	1344.53	1345.55	1344.31	1342.16	1340.94	1340.53
(‡‡)	+10990	-130	-1060	+1120	-130	-760	-1340	+2300	-2780	+1270	-2680	-860

CAL YR 2000 MAX 60080 MIN 47700 (‡‡) +8400
WTR YR 2001 MAX 60080 MIN 48160 (‡‡) -60

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 $^1/_4$ SE $^1/_4$ sec.19, T.2 S., R.10 W., Cotton County, Hydrologic Unit 11130202, at right bank on downstream side of bridge on State Highway 53, 1.8 mi east of Walters, 12.2 mi upstream from West Cache Creek, and at mile 19.7.

DRAINAGE AREA.--675 mi^2.

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

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

REMARKS.--No estimated daily discharge. Records good. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	621	463	350	660	691	408	80	1960	28	15	44
2	16	476	463	298	542	670	410	75	466	27	13	43
3	15	3700	461	270	543	582	405	65	331	27	12	41
4	16	7340	235	292	528	544	360	362	278	22	13	43
5	15	2930	122	534	533	512	156	2150	238	24	12	43
6	15	874	106	737	512	478	133	656	281	23	12	74
7	15	558	101	595	519	463	148	177	273	22	13	75
8	16	1150	106	469	506	462	199	121	262	18	12	58
9	18	2690	98	410	658	477	228	356	253	15	12	39
10	20	1420	104	456	1450	486	228	352	246	14	13	33
11	21	1150	90	512	455	463	373	158	234	13	13	30
12	23	752	84	739	279	460	544	93	225	13	12	29
13	23	546	125	612	273	477	435	74	246	13	11	28
14	21	383	184	398	538	451	363	68	261	13	12	28
15	24	457	244	356	1970	434	155	57	114	12	16	28
16	49	470	320	345	1480	445	109	53	88	12	12	77
17	47	481	479	453	822	464	96	58	71	16	12	72
18	25	478	443	396	604	469	91	58	57	19	65	40
19	21	434	365	383	524	473	95	210	49	19	109	33
20	20	423	212	375	504	465	90	2150	36	20	22	37
21	57	416	113	351	502	459	86	6400	31	16	16	40
22	422	414	105	308	495	449	84	3080	29	13	15	38
23	1820	428	92	289	603	418	81	412	27	12	18	39
24	4300	1860	80	145	2570	239	83	245	25	14	94	38
25	9480	2280	73	92	3610	425	80	423	24	18	38	38
26	10800	751	75	85	1880	437	75	404	28	18	58	36
27	9610	440	88	132	631	421	72	276	30	17	322	35
28	7130	330	106	1360	642	424	68	370	25	17	74	34
29	3180	311	159	3150	---	430	68	563	27	14	49	35
30	2640	457	457	3330	---	422	81	1580	27	11	44	34
31	1190	---	488	1310	---	417	---	3140	---	13	43	---
TOTAL	51065	35020	6641	19532	24833	14507	5804	24266	6242	533	1182	1262
MEAN	1647	1167	214	630	887	468	193	783	208	17.2	38.1	42.1
MAX	10800	7340	488	3330	3610	691	544	6400	1960	28	322	77
MIN	15	311	73	85	273	239	68	53	24	11	11	28
AC-FT	101300	69460	13170	38740	49260	28770	11510	48130	12380	1060	2340	2500

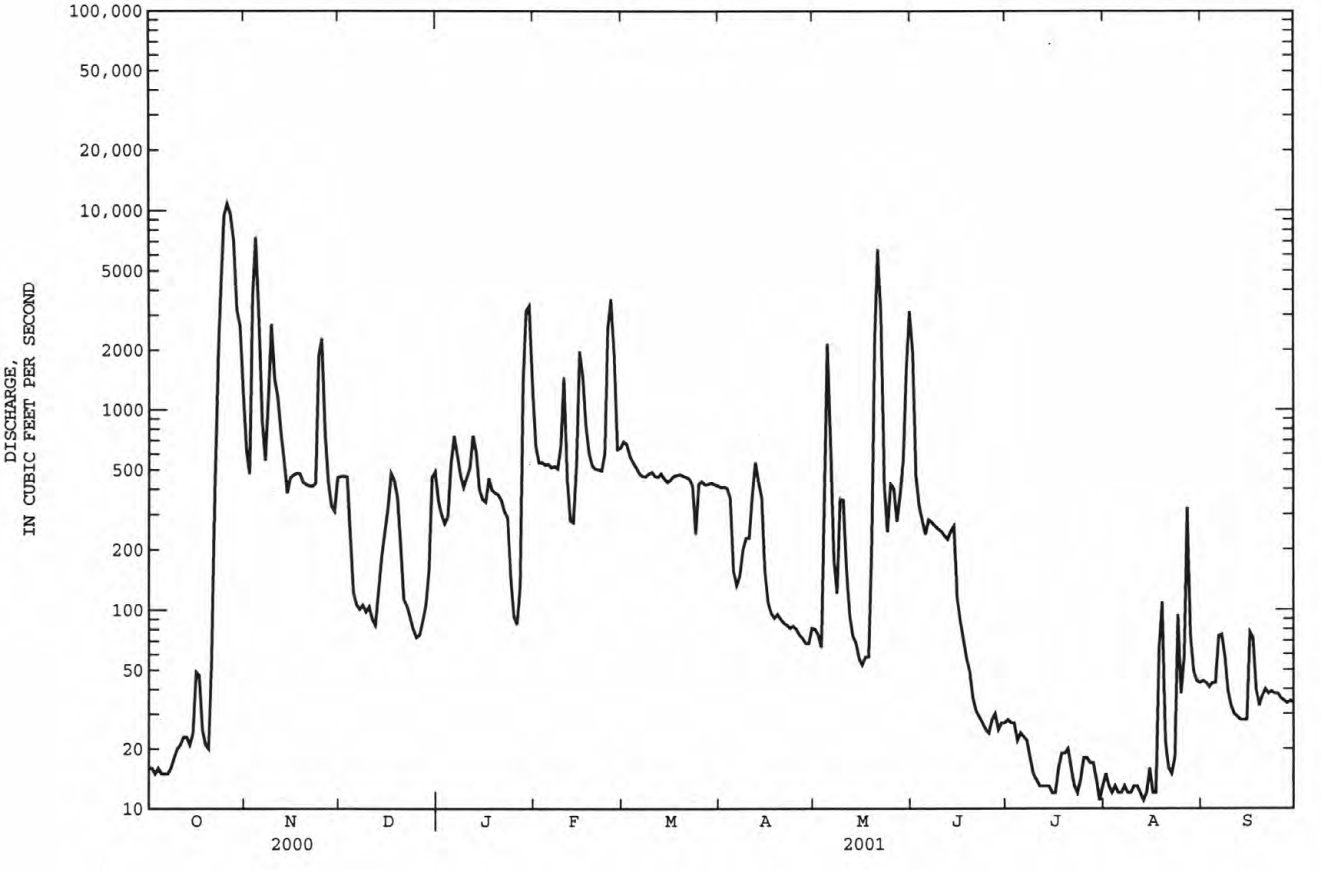
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	257	119	134	113	167	276	248	590	454	101	61.1	149
MAX	2738	1167	1796	916	1356	2120	1243	2654	2619	483	285	1637
(WY)	1984	2001	1992	1998	1987	1998	1990	1987	1962	1975	1971	1986
MIN	.000	.15	.15	.63	2.20	2.09	7.81	5.13	12.6	9.25	3.75	.000
(WY)	1940	1940	1940	1940	1940	1940	1939	1939	1939	1954	1954	1939

07311000 EAST CACHE CREEK NEAR WALTERS, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	123587.2		190887			
ANNUAL MEAN	338		523		224	
HIGHEST ANNUAL MEAN					911	1987
LOWEST ANNUAL MEAN					12.6	1939
HIGHEST DAILY MEAN	10800	Oct 26	10800	Oct 26	34600	Oct 21 1983
LOWEST DAILY MEAN	4.0	Sep 1	11	Jul 30,Aug 13	[a].00	Jul 24 1939
ANNUAL SEVEN-DAY MINIMUM	4.6	Aug 28	12	Aug 8	.00	Aug 1 1939
MAXIMUM PEAK FLOW			11500	Oct 26	50900	Oct 21 1983
MAXIMUM PEAK STAGE			28.32	Oct 26	30.66	Oct 21 1983
ANNUAL RUNOFF (AC-FT)	245100		378600		162200	
10 PERCENT EXCEEDS	477		843		434	
50 PERCENT EXCEEDS	49		184		37	
90 PERCENT EXCEEDS	12		16		11	

[a]No flow at times in 1939-40.



07311200 BLUE BEAVER CREEK NEAR CACHE, OK
(Hydrologic benchmark station)

LOCATION.--Lat 34°37'24", long 98°33'48", in NE $^1/_4$ NE $^1/_4$ sec.28, T.2 N., R.13 W., Comanche County, Hydrologic Unit 11130203, on downstream side of right bank pier on old U.S. Highway 62, 3,000 ft upstream from St. Louis-San Francisco Railway Co. bridge, 4.0 mi east of Cache, and at mile 12.0.

DRAINAGE AREA.--24.6 mi^2.

PERIOD OF RECORD.--July 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,215.26 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Minor regulation by Lake Rush, Lake Jed Johnson, and Lake Ketch, combined surface-area 132 acres.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since about 1907, that of Aug. 28, 1977, according to local resident.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 23	0430	2,300	12.29	May 19	2100	1,560	11.48
Oct 25	1415	2,050	12.05				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	33	13	5.8	58	24	4.6	2.2	27	2.6	.00	.08
2	.00	20	11	5.3	26	20	4.6	2.0	20	2.5	.00	.08
3	.00	144	8.6	5.6	22	18	4.3	2.2	17	2.3	.00	.08
4	.00	86	7.9	12	19	15	4.0	3.1	14	2.0	.00	.08
5	.00	59	7.2	21	17	14	3.9	4.0	32	1.8	.00	.35
6	.00	57	6.9	55	16	13	3.9	3.1	17	1.6	.00	.32
7	.00	29	6.4	23	15	12	3.8	2.8	29	1.5	.00	.17
8	.00	101	6.0	16	15	14	3.6	2.7	17	1.4	.00	.08
9	.00	66	5.9	14	56	18	3.6	2.5	12	1.2	.00	.08
10	.00	60	5.6	14	24	12	3.6	2.3	10	1.0	.00	.08
11	.00	41	5.1	34	19	13	4.0	2.2	9.3	.87	.00	.04
12	.00	29	4.6	51	17	17	3.6	2.0	8.5	.65	.00	.00
13	.00	32	5.1	20	17	17	3.6	2.0	12	.55	.00	.00
14	.00	22	4.7	15	24	11	3.6	1.9	9.7	.66	.00	.00
15	.00	16	5.1	12	68	9.3	3.6	1.8	8.4	.79	.00	.13
16	.00	14	7.7	11	31	8.7	3.3	1.7	7.6	.48	.00	.21
17	.00	12	7.5	12	23	7.4	3.2	1.5	6.8	.29	.00	.08
18	.00	11	6.2	40	21	7.2	10	3.4	6.2	.13	.00	.08
19	.00	9.3	6.3	17	20	7.2	5.4	226	5.7	.08	.00	.08
20	.00	11	5.9	12	18	7.0	4.0	320	5.4	.03	.00	.08
21	.00	20	10	11	24	7.8	3.6	90	5.3	.00	.00	.07
22	38	17	6.5	9.4	48	13	3.4	71	5.0	.00	.75	.04
23	567	10	5.5	8.8	40	7.8	3.2	29	4.5	.00	.35	.02
24	122	41	4.7	33	94	6.3	2.9	21	4.1	.00	.00	.00
25	648	66	4.4	14	82	5.6	2.9	36	3.8	.00	.00	.00
26	619	35	5.2	9.4	36	5.3	2.6	20	3.5	.00	3.9	.00
27	248	28	4.9	10	36	5.2	2.5	15	3.2	.00	.92	.00
28	142	17	4.7	54	54	5.5	2.3	16	3.1	.00	.70	.00
29	190	12	5.7	155	---	5.2	2.3	45	2.9	.00	.38	.00
30	92	15	6.8	77	---	5.0	2.3	85	2.8	.00	.22	.00
31	38	---	6.2	42	---	4.7	---	66	---	.00	.14	---
TOTAL	2704.00	1113.3	201.3	819.3	940	336.2	112.2	1083.4	312.8	22.43	7.36	2.23
MEAN	87.2	37.1	6.49	26.4	33.6	10.8	3.74	34.9	10.4	.72	.24	.074
MAX	648	144	13	155	94	24	10	320	32	2.6	3.9	.35
MIN	.00	9.3	4.4	5.3	15	4.7	2.3	1.5	2.8	.00	.00	.00
AC-FT	5360	2210	399	1630	1860	667	223	2150	620	44	15	4.4

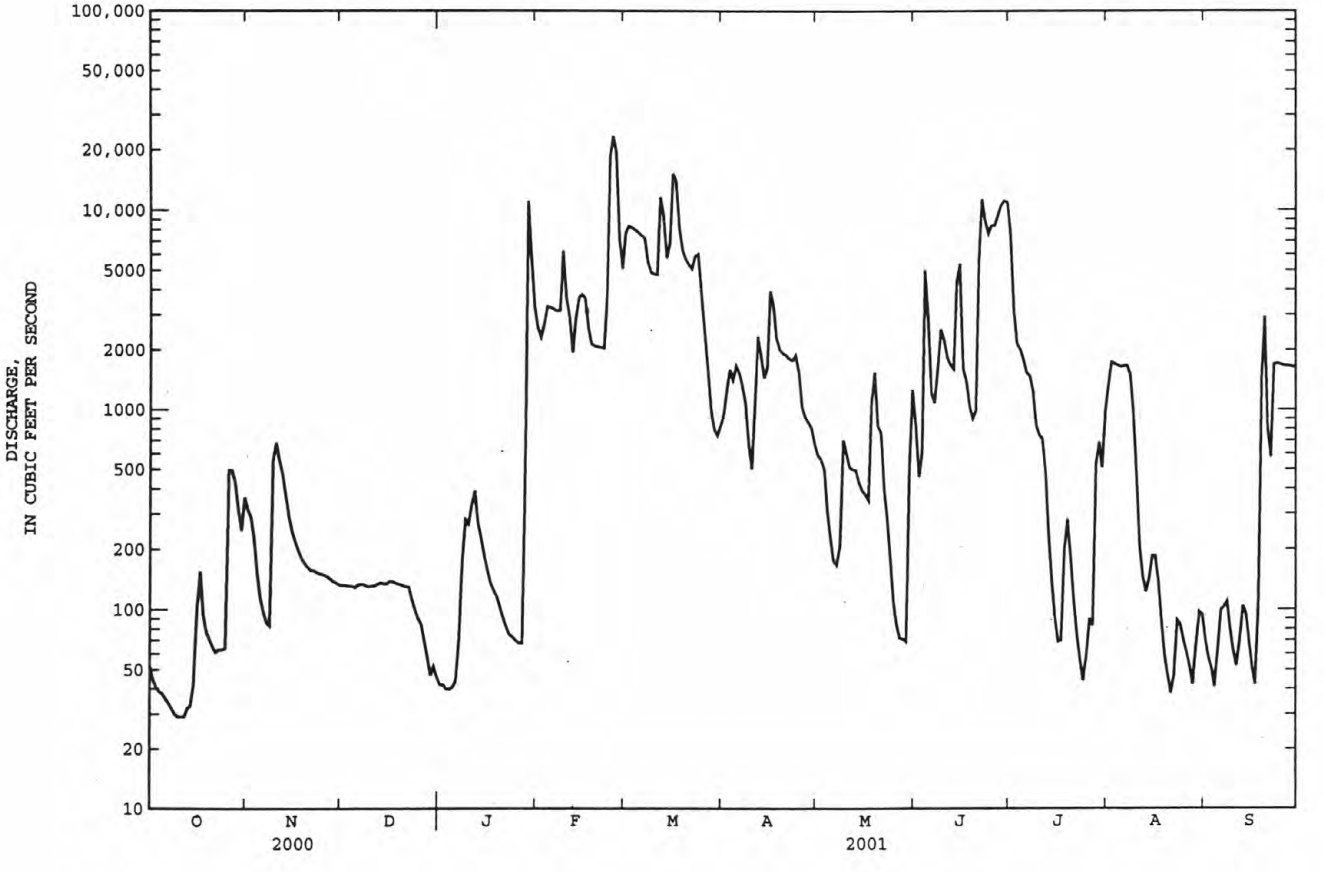
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

MEAN	16.9	8.41	9.63	8.73	13.3	24.2	18.5	33.7	23.6	1.75	2.07	6.79
MAX	193	61.1	108	53.2	67.1	142	88.0	176	125	14.1	27.5	50.9
(WY)	1987	1987	1992	1973	1987	1998	1990	1982	1989	1999	1977	1991
MIN	.000	.000	.000	.000	.000	.000	.017	.026	.012	.000	.000	.000
(WY)	1965	1966	1966	1966	1966	1966	1971	1971	1971	1964	1964	1964

07171000 VERDIGRIS RIVER NEAR LENAPAH, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1967 - 2001	
ANNUAL TOTAL	629643		630168			
ANNUAL MEAN	1720		1726		[a]2779	
HIGHEST ANNUAL MEAN					6227	1999
LOWEST ANNUAL MEAN					301	1996
HIGHEST DAILY MEAN	24300	May 9	23400	Feb 25	76200	Oct 5 1986
LOWEST DAILY MEAN	15	Sep 1	29	Oct 10-12	[b]5.5	Sep 30 1980
ANNUAL SEVEN-DAY MINIMUM	18	Aug 27	31	Oct 8	5.7	Sep 26 1980
MAXIMUM PEAK FLOW			24400	Feb 25	[c]81500	Oct 5 1986
MAXIMUM PEAK STAGE			24.43	Feb 25	[d]38.60	Jul 4 1976
ANNUAL RUNOFF (AC-FT)	1249000		1250000		2013000	
10 PERCENT EXCEEDS	6070		5540		8720	
50 PERCENT EXCEEDS	322		428		644	
90 PERCENT EXCEEDS	36		57		40	

[a]Prior to regulation, water years 1939-59, 2,084 ft^3/s.
[b]Minimum daily discharge for period of record, no flow at times in 1939, 1940, and 1956.
[c]Maximum discharge for period of record, 137,000 ft^3/s, May 20, 1943.
[d]Maximum gage height for period of record, 40.44 ft, May 20, 1943 (from floodmark).



07311500 DEEP RED CREEK NEAR RANDLETT, OK
(Formerly published as Deep Red Run near Randlett)

LOCATION.--Lat 34°13'15", long 98°27'10", in SW $^1/_4$ SW $^1/_4$ sec.10, T.4 S., R.12 W., Cotton County, Hydrologic Unit 11130203, near right bank on downstream side of pier of bridge on U.S. Highway 277, 2.8 mi north of Randlett, and at mile 4.8.

DRAINAGE AREA.--617 mi^2.

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

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

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

REMARKS.--Records fair. Some regulation by numerous flood-retarding structures.

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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 27	0245	11,700	25.15	Jan 30	0415	3,140	20.69
Nov 3	1500	9,630	24.64	Feb 16	0030	2,230	18.42
Nov 9	1400	3,090	20.58	Feb 26	0400	2,180	18.24
Nov 25	0200	3,660	21.59	May 5	1100	2,050	17.71

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	517	77	100	413	407	41	6.6	305	2.4	1.2	.86
2	.00	505	68	73	260	394	39	6.4	98	2.4	1.3	.86
3	e.00	4370	62	61	185	290	39	6.5	62	1.8	1.4	e.75
4	e.00	6020	54	56	133	204	37	193	47	1.5	1.3	.65
5	e.00	2910	48	78	108	140	36	1640	35	1.4	1.2	.98
6	e.00	551	41	152	93	105	35	975	26	1.3	1.1	13
7	e.00	287	40	182	80	90	33	266	19	1.3	.98	6.4
8	e.00	854	39	141	74	82	30	103	14	1.3	.94	4.7
9	e.00	2620	36	100	128	142	28	70	10	1.3	.86	2.5
10	e.00	1730	34	81	430	190	28	55	8.1	1.2	.86	1.5
11	e.00	415	31	289	264	112	232	44	6.6	1.2	.86	1.3
12	e.00	222	27	625	130	88	186	37	6.0	1.2	.86	1.2
13	e.00	137	30	351	100	78	53	32	5.0	1.2	.86	1.1
14	e.00	100	32	202	92	68	35	29	4.2	1.2	.86	1.0
15	e.00	81	34	133	1340	62	29	24	3.8	1.2	.86	1.5
16	e.00	71	63	98	1990	57	24	18	4.2	1.2	.89	12
17	e.00	62	101	83	685	60	20	13	3.6	1.2	.98	7.1
18	e.00	56	73	82	273	52	18	9.9	3.3	1.2	3.9	1.4
19	e.00	52	54	87	155	52	18	12	2.9	1.2	7.5	1.2
20	e.00	46	46	78	112	51	17	148	2.5	1.1	2.3	1.1
21	8.0	41	40	75	92	56	16	1160	2.2	1.0	1.5	.98
22	255	38	33	65	79	53	17	1010	1.9	.98	1.4	.90
23	2010	43	30	59	92	49	15	385	1.6	1.1	1.3	.86
24	3970	1880	28	54	577	49	12	242	1.6	1.1	1.3	e.75
25	4760	3290	25	50	1700	47	9.0	155	1.5	1.0	1.2	e.65
26	7450	1230	30	47	1610	48	8.5	96	1.5	.98	1.1	e.45
27	9050	313	35	48	526	45	8.0	71	1.5	.98	1.0	e.30
28	5430	174	45	541	438	45	7.6	83	1.6	.98	.92	e.15
29	3140	117	78	2110	---	47	7.3	198	1.5	.98	.86	e.05
30	1600	93	144	3010	---	47	7.2	421	1.5	.98	.86	e.00
31	722	---	153	1260	---	45	---	937	---	1.0	.86	---
TOTAL	38395.00	28825	1631	10371	12159	3255	1085.6	8446.4	682.6	38.88	43.31	66.19
MEAN	1239	961	52.6	335	434	105	36.2	272	22.8	1.25	1.40	2.21
MAX	9050	6020	153	3010	1990	407	232	1640	305	2.4	7.5	13
MIN	.00	38	25	47	74	45	7.2	6.4	1.5	.98	.86	.00
AC-FT	76160	57170	3240	20570	24120	6460	2150	16750	1350	77	86	131

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2001, BY WATER YEAR (WY)

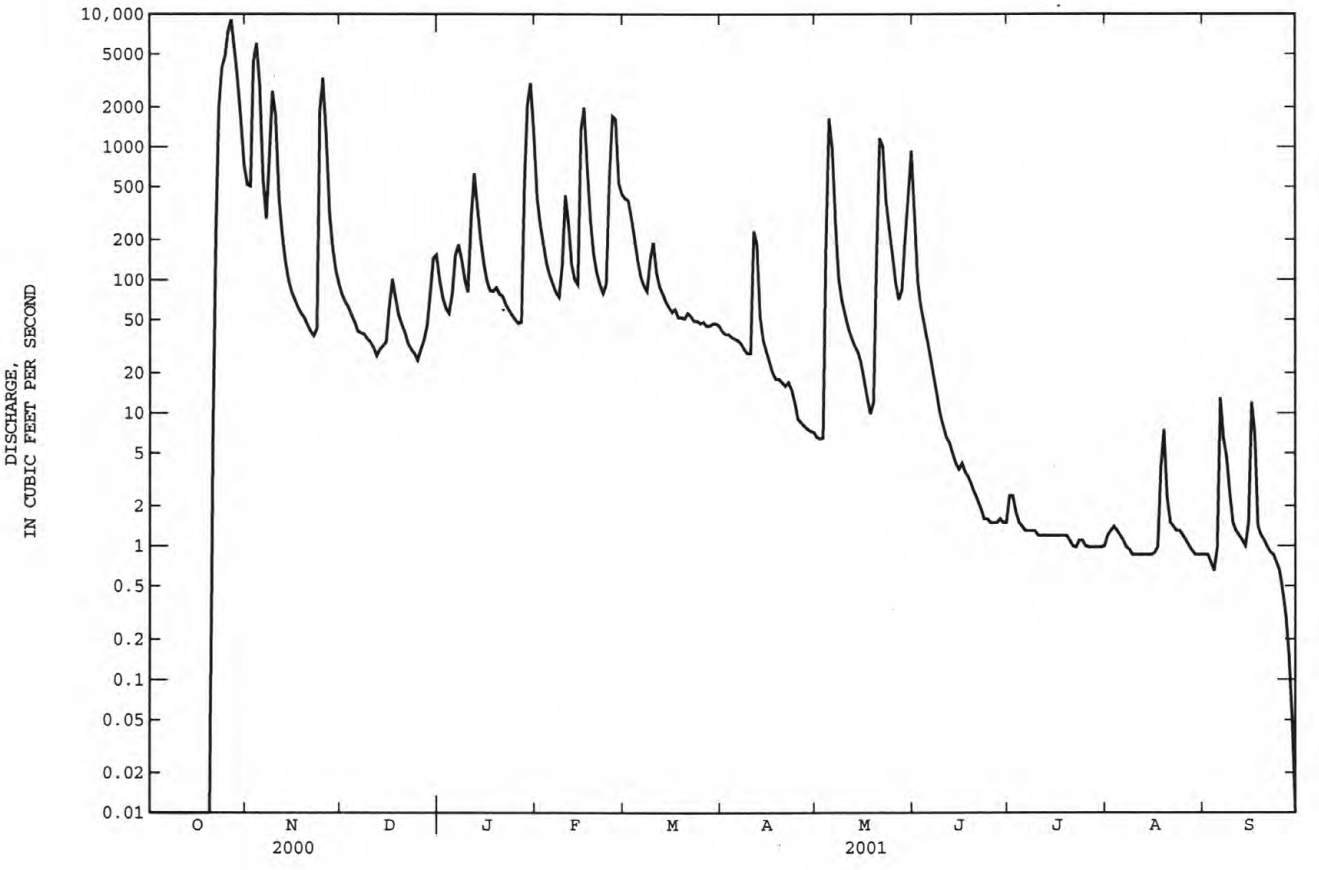
MEAN	269	101	70.8	63.1	88.1	142	135	471	432	59.1	66.7	179
MAX	3345	994	1493	568	1020	1540	1398	2800	4654	795	1109	1453
(WY)	1984	1987	1992	1998	1987	1998	1990	1987	1995	1991	1995	1969
MIN	.000	.000	.000	.000	.022	.10	.003	.061	.000	.000	.000	.000
(WY)	1953	1955	1955	1953	1981	1980	1955	1971	1966	1964	1952	1952

e Estimated

07311500 DEEP RED CREEK NEAR RANDLETT, OK--Continued
(Formerly published as Deep Red Run near Randlett)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1950 - 2001	
ANNUAL TOTAL	73686.69		104998.98			
ANNUAL MEAN	201		288		173	
HIGHEST ANNUAL MEAN					904	1987
LOWEST ANNUAL MEAN					15.1	2000
HIGHEST DAILY MEAN	9050	Oct 27	9050	Oct 27	46300	Oct 20 1983
LOWEST DAILY MEAN	.00	at times	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 16	.00	Oct 1	.00	Oct 3 1951
MAXIMUM PEAK FLOW			11700	Oct 27	72300	Oct 20 1983
MAXIMUM PEAK STAGE			25.15	Oct 27	[a]29.58	May 29 1987
ANNUAL RUNOFF (AC-FT)	146200		208300		125600	
10 PERCENT EXCEEDS	121		521		190	
50 PERCENT EXCEEDS	1.7		35		4.8	
90 PERCENT EXCEEDS	.00		.86		.00	

[a]Due to backwater from West Cache Creek.



07315500 Red River near Terral, OK

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

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

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1211: Drainage area.

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

REMARKS.--Records fair, except those daily discharges from Oct 26 to May 10, which are poor. Since installation of gage in Apr. 1938, at least 10% of contributing drainage area has been regulated by upstream reservoirs. There are many small diversions upstream from station for irrigation, oil field operations, and for municipal uses.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	6520	4210	2820	6270	13900	1550	578	8680	528	301	884
2	103	5420	3910	2680	5080	13200	1660	587	14100	526	282	672
3	99	5430	3720	2380	4180	10100	1740	603	8710	510	263	560
4	101	17300	3550	2180	3600	6240	1820	640	6980	528	271	493
5	124	12600	3380	2040	3280	4700	1890	1080	7520	534	281	454
6	122	9820	3120	2040	2990	3970	2050	16200	7390	503	270	421
7	98	5810	2950	2480	2880	3470	2050	12800	5940	473	257	425
8	93	4540	2740	2930	2710	3100	1870	11100	5020	452	257	437
9	90	7260	2500	2870	2660	3300	1820	8930	3820	427	252	605
10	95	11200	2410	2910	3060	4260	1860	5080	2550	410	252	964
11	92	7780	2320	2930	3710	6170	2060	3670	2170	392	258	934
12	80	5750	2270	2990	4130	6190	2030	2950	2010	363	275	675
13	84	4610	2250	3460	3860	6630	3120	2340	1740	359	305	556
14	85	3750	2180	3720	3710	5610	2760	1920	1430	358	309	475
15	104	3010	2210	3250	5430	4780	2090	1700	1310	351	327	426
16	142	2300	2220	2920	11400	e4320	1650	1520	1190	336	427	400
17	138	2070	2110	2740	9570	e3980	1160	1240	1020	332	451	442
18	146	2170	2270	2620	7130	e3640	916	1100	940	337	495	465
19	187	2110	2390	2670	6460	e3300	791	1200	880	344	583	530
20	333	2090	2310	2630	6090	e3960	706	1630	821	341	684	607
21	516	2060	2120	2590	5520	e2700	672	12300	759	334	558	674
22	671	2070	1880	2460	4880	e2600	664	18500	704	322	491	727
23	856	1870	1670	2390	4580	e2460	627	13300	661	317	510	720
24	7090	5080	1550	2290	4690	1800	589	8540	642	317	494	583
25	8480	11400	1500	2210	5450	1210	571	7190	617	304	463	469
26	e25700	7780	1650	2070	8920	1510	555	6860	594	307	401	424
27	e57800	5920	2180	1910	16200	1230	538	7130	573	307	430	370
28	37800	6730	2910	1910	11200	1100	537	7820	568	306	399	315
29	18400	6040	2520	3720	---	1170	565	6610	548	309	549	273
30	13900	4970	2680	7290	---	1290	575	4720	541	304	594	246
31	7610	---	2600	7440	---	1290	---	5030	---	304	869	---
TOTAL	181261	175460	78280	91540	159640	133180	41486	174868	90428	11835	12558	16226
MEAN	5847	5849	2525	2953	5701	4296	1383	5641	3014	382	405	541
MAX	57800	17300	4210	7440	16200	13900	3120	18500	14100	534	869	964
MIN	80	1870	1500	1910	2660	1100	537	578	541	304	252	246
AC-FT	359500	348000	155300	181600	316600	264200	82290	346900	179400	23470	24910	32180

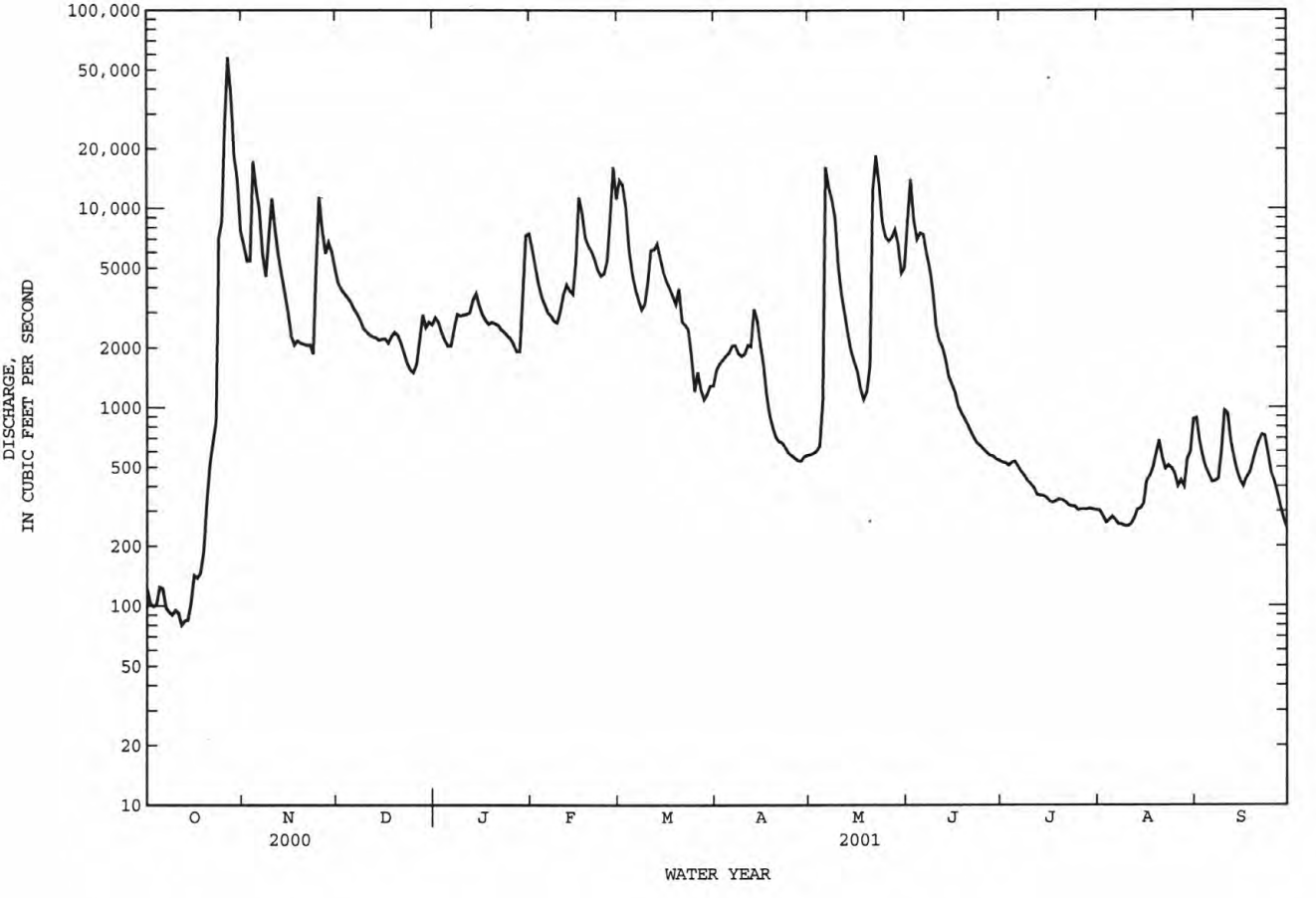
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2001, BY WATER YEAR (WY)

MEAN	3003	1558	1152	971	1422	2076	2607	6526	6200	1650	1320	1988
MAX	23900	9713	11810	5306	9320	14710	18080	43580	37460	8077	14730	9653
(WY)	1987	1987	1992	1992	1987	1998	1990	1957	1941	1950	1995	1986
MIN	108	102	91.2	76.5	136	66.1	142	134	517	158	155	100
(WY)	1953	1940	1939	1940	1953	1940	1971	1971	1966	1964	1970	2000

e Estimated

07315500 Red River near Terral, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1938 - 2001	
ANNUAL TOTAL	726028		1166762			
ANNUAL MEAN	1984		3197		2538	
HIGHEST ANNUAL MEAN					8925	1987
LOWEST ANNUAL MEAN					523	1953
HIGHEST DAILY MEAN	57800	Oct 27	57800	Oct 27	215000	Jun 7 1995
LOWEST DAILY MEAN	54	Sep 25	80	Oct 12	46	Mar 20 1940
ANNUAL SEVEN-DAY MINIMUM	59	Sep 22	88	Oct 8	47	Mar 18 1940
MAXIMUM PEAK FLOW			69800	Oct 27	236000	Jun 7 1995
MAXIMUM PEAK STAGE			19.81	Oct 27	33.60	Oct 22 1983
ANNUAL RUNOFF (AC-FT)	1440000		2314000		1839000	
10 PERCENT EXCEEDS	5000		7410		5640	
50 PERCENT EXCEEDS	535		1910		608	
90 PERCENT EXCEEDS	124		305		178	



07315500 Red River near Terral, OK--Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)
FEB									
08...	1230	2660	3390	7.0	12.2	10.6	104	32	20
APR									
19...	1520	778	4430	8.5	19.5	14.7	170	140	130
MAY									
23...	1100	13800	1220	7.7	20.6	8.1	92.7	1600	2000
AUG									
09...	1020	252	4900	7.6	32.5	8.8	127	13	9

07335500 Red River near Arthur City, Tx May 1990

07315700 MUD CREEK NEAR COURTNEY, OK

LOCATION.--Lat 34°00'15", long 97°34'00", in NW $^1/_4$ SE $^1/_4$ sec.25, T.6 S., R.4 W., Jefferson County, Hydrologic Unit, 11130201, on downstream side of bridge on State Highway 89, 4.0 mi downstream from North Mud Creek, 6.0 mi northwest of Courtney, and at mile 11.5.

DRAINAGE AREA.--572 mi^2.

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

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

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

REMARKS.--Records poor. U.S. Geiological 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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 28	0100	12,500	27.78	Jan 30	0245	3,720	24.61
Nov 6	1930	1,710	22.60	Feb 16	2400	11,000	27.41
Nov 26	0445	5,210	25.45	Feb 25	1500	1,310	20.73
Dec 27	1630	3,070	24.14				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	252	70	298	1370	1190	69	37	55	e10	.00	e.10
2	.00	112	54	144	252	1110	63	35	37	e8.0	.00	e.05
3	.00	150	47	104	137	686	61	34	30	e5.0	.00	e.03
4	.00	398	42	85	102	360	62	35	24	e3.0	.00	.01
5	.00	896	38	81	85	226	59	44	21	e2.5	.00	.04
6	.00	1500	36	86	75	159	56	50	17	e2.0	.00	.04
7	.00	1400	34	90	69	129	53	62	15	e1.5	.00	.11
8	.00	1060	33	80	66	116	51	46	13	e1.2	.00	1.0
9	.00	1460	32	66	80	116	49	37	12	e1.0	.00	5.0
10	.00	1450	31	56	110	119	47	31	11	e.90	.00	24
11	.00	808	30	66	144	118	50	29	10	.80	.00	40
12	.00	124	28	192	103	108	57	28	9.8	.73	.00	30
13	.00	60	29	259	74	99	101	26	9.6	.52	.00	16
14	.00	39	27	138	68	97	78	25	9.9	.48	.00	8.3
15	.00	29	28	91	293	87	178	24	16	.38	.00	5.7
16	.00	22	32	72	5010	77	389	23	16	.27	.00	41
17	.00	18	38	73	8260	71	180	22	11	.17	.00	98
18	.00	15	56	76	3930	66	81	20	13	.11	52	163
19	.00	14	53	85	1950	64	66	21	11	.08	31	210
20	.00	11	40	77	589	62	60	78	10	.05	19	164
21	.00	9.0	33	62	272	62	58	588	9.7	e.02	34	603
22	.00	8.0	29	51	201	61	56	733	9.0	e.01	19	129
23	.00	15	27	47	166	61	56	384	e8.0	e.00	8.8	49
24	4.0	838	26	43	565	199	55	75	e7.0	e.00	4.7	29
25	63	3380	25	42	1250	181	49	55	e6.0	e.00	2.8	17
26	394	4550	524	41	1110	92	45	44	e5.0	e.00	1.6	8.7
27	4520	2340	2390	40	457	68	43	32	e4.0	e.00	1.2	5.8
28	8790	430	1670	98	581	66	42	36	e3.5	e.00	e1.0	4.3
29	4450	136	908	1770	---	72	41	134	e3.0	e.00	e.70	3.6
30	2940	92	824	3170	---	77	39	265	e2.5	e.00	e.40	3.4
31	1290	---	684	2280	---	74	---	99	---	e.00	e.20	---
TOTAL	22451.00	21616.0	7918	9863	27369	6073	2294	3152	409.0	38.72	176.40	1659.18
MEAN	724	721	255	318	977	196	76.5	102	13.6	1.25	5.69	55.3
MAX	8790	4550	2390	3170	8260	1190	389	733	55	10	52	603
MIN	.00	8.0	25	40	66	61	39	20	2.5	.00	.00	.01
AC-FT	44530	42880	15710	19560	54290	12050	4550	6250	811	77	350	3290

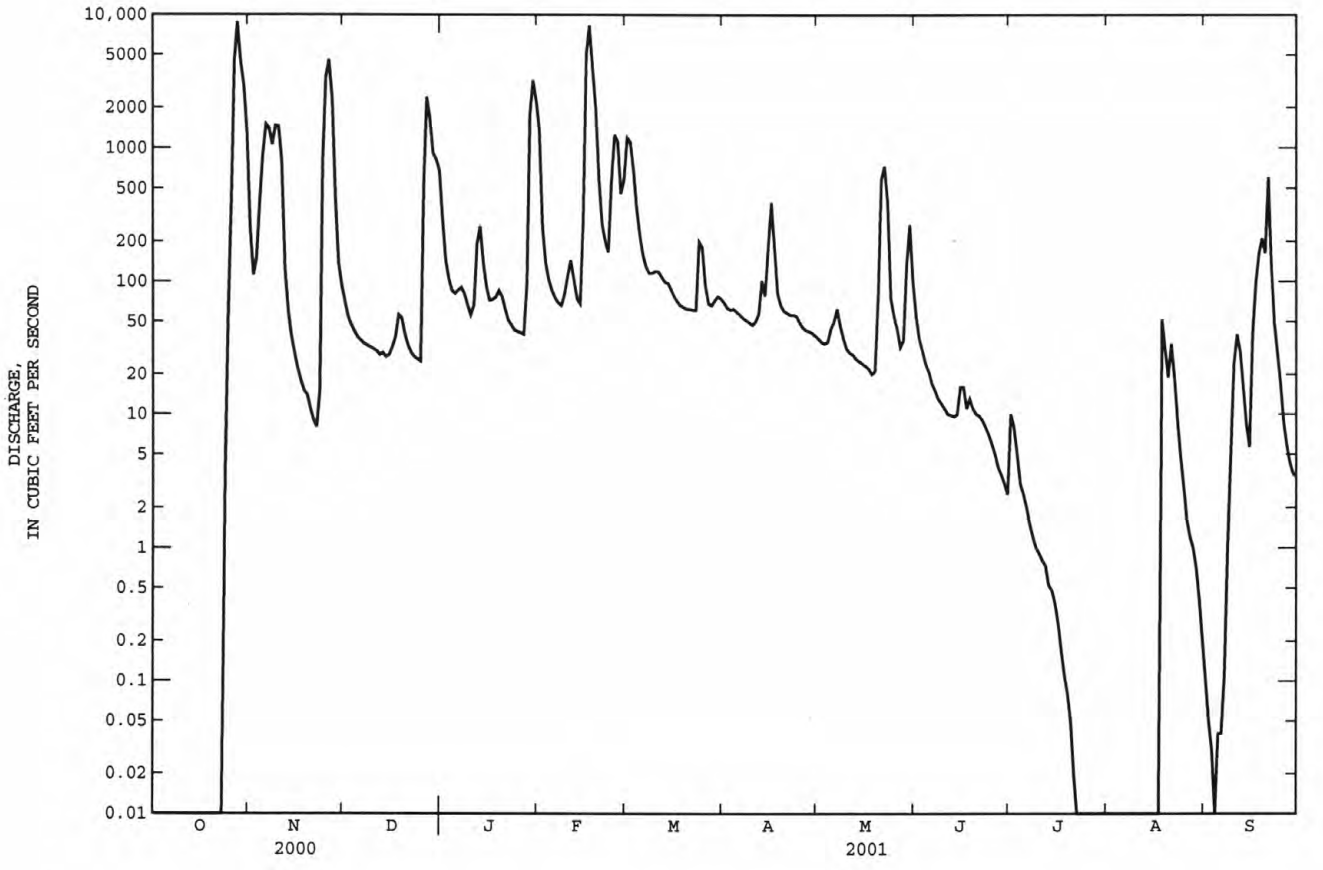
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	108	129	158	105	188	293	286	513	356	39.9	23.0	110
MAX	1216	854	1766	898	1251	1594	3075	3670	1859	279	293	571
(WY)	1982	1974	1992	1985	1997	1998	1990	1982	1989	1975	1964	1989
MIN	.000	.000	.009	.000	.060	.001	.16	.10	.021	.000	.000	.000
(WY)	1964	1978	1979	1964	2000	1980	1980	2000	1972	1964	1980	1963

e Estimated

07315700 MUD CREEK NEAR COURTNEY, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1961 - 2001	
ANNUAL TOTAL	52525.60		103019.30			
ANNUAL MEAN	144		282		192	
HIGHEST ANNUAL MEAN					614	1990
LOWEST ANNUAL MEAN					1.68	2000
HIGHEST DAILY MEAN	8790	Oct 28	8790	Oct 28	37800	May 3 1990
LOWEST DAILY MEAN	.00	Jan 1	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Feb 7	.00	Oct 1	.00	Jul 28 1961
MAXIMUM PEAK FLOW			12500	Oct 28	49600	May 3 1990
MAXIMUM PEAK STAGE			27.78	Oct 28	33.14	May 29 1987
ANNUAL RUNOFF (AC-FT)	104200		204300		139200	
10 PERCENT EXCEEDS	55		595		266	
50 PERCENT EXCEEDS	.10		40		8.1	
90 PERCENT EXCEEDS	.00		.00		.00	



07316000 RED RIVER NEAR GAINESVILLE, TX

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

WATER-DISCHARGE RECORDS

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

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

REVISED RECORDS.--WSP 1211: Drainage area.

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

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

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 28	2400	56,300	23.74	Feb 17	1100	48,300	22.15
Nov 5	1600	31,700	19.08	Mar 1	0100	26,100	17.87
Nov 26	0100	26,500	17.97	May 23	0300	25,800	17.81

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	e13700	5530	e3400	13300	23300	e2900	e800	e6820	2350	e282	550
2	116	e9770	e4700	e2900	9900	e18600	e2800	e780	e8010	1190	e277	695
3	137	e7450	3420	e2400	7310	e15300	e2700	740	16700	931	e271	989
4	e120	8140	3130	e2000	6240	e12300	e2600	700	12600	e825	e264	920
5	115	29100	2840	e1800	5360	e8840	e2500	e1750	e8190	e779	e257	722
6	110	24400	2650	e1650	4270	e7480	e2450	e1750	6650	e751	e237	623
7	98	16300	2450	e1600	3830	e6370	e2400	e13000	e6010	e751	224	497
8	97	10400	2190	e1700	3610	e5570	e2300	e17200	e5220	e741	239	595
9	93	10300	2020	e1800	3500	e5220	e2200	e14000	e4830	e697	225	657
10	92	16900	1830	e1900	3400	e5060	e2100	e10900	e4340	e632	210	534
11	88	17100	1660	e2000	3250	e5160	e3100	e7140	e3800	e567	207	526
12	85	10900	1590	e2100	3700	e6670	2710	e5390	e3380	e523	209	814
13	83	7420	1610	e2400	4760	e8710	e2590	e4090	e3170	e490	253	1110
14	84	5620	1590	e2700	4430	e8600	e2600	e3410	e3300	e469	277	857
15	91	4550	1550	e3300	4370	e7480	e3260	e2940	e3130	e476	286	692
16	111	3790	1520	e3200	24300	e6110	e3560	e2540	e2740	e435	362	737
17	124	3200	1530	e2800	44700	e5250	e2950	e2220	e2530	431	336	1190
18	116	2660	1500	e2600	e29200	e4890	e2390	e2070	e2280	e412	312	668
19	124	2530	1440	e2500	e16500	e4400	e1800	e1780	e1980	e378	416	836
20	187	2430	1540	e2300	e11800	e3970	e1660	e3840	e1830	e363	524	1420
21	270	2290	1590	2140	e7670	e3690	e1510	e2970	e1710	e351	543	3130
22	373	2170	1510	2050	e6430	3500	e1440	e13900	e1610	e358	644	3380
23	638	2180	1410	1950	e6540	e3280	e1380	e24200	1560	e371	653	1580
24	644	4060	1290	1840	e12400	e3330	e1250	e19400	1470	e396	532	1080
25	3690	18500	1240	1750	e9300	e3380	e1100	e13400	1400	e371	469	952
26	13900	23900	4220	1650	e10900	e4410	e1050	e9970	1340	e341	493	824
27	34200	17000	10000	1590	e20400	e4000	e970	e8990	1320	e319	497	668
28	51800	e11200	9050	1660	24300	e3730	e950	e9590	1300	e305	433	562
29	44100	e8000	6940	6640	---	e3390	e900	e10200	1270	e297	377	493
30	27800	e7000	e4900	17300	---	e3260	e830	e9810	1920	e291	369	424
31	18900	---	e3800	17700	---	e3000	---	e8560	---	e285	353	---
TOTAL	198494	302960	92240	103320	305670	208250	62950	228030	122410	17876	11031	28725
MEAN	6403	10100	2975	3333	10920	6718	2098	7356	4080	577	356	958
MAX	51800	29100	10000	17700	44700	23300	3560	24200	16700	2350	653	3380
MIN	83	2170	1240	1590	3250	3000	830	700	1270	285	207	424
AC-FT	393700	600900	183000	204900	606300	413100	124900	452300	242800	35460	21880	56980

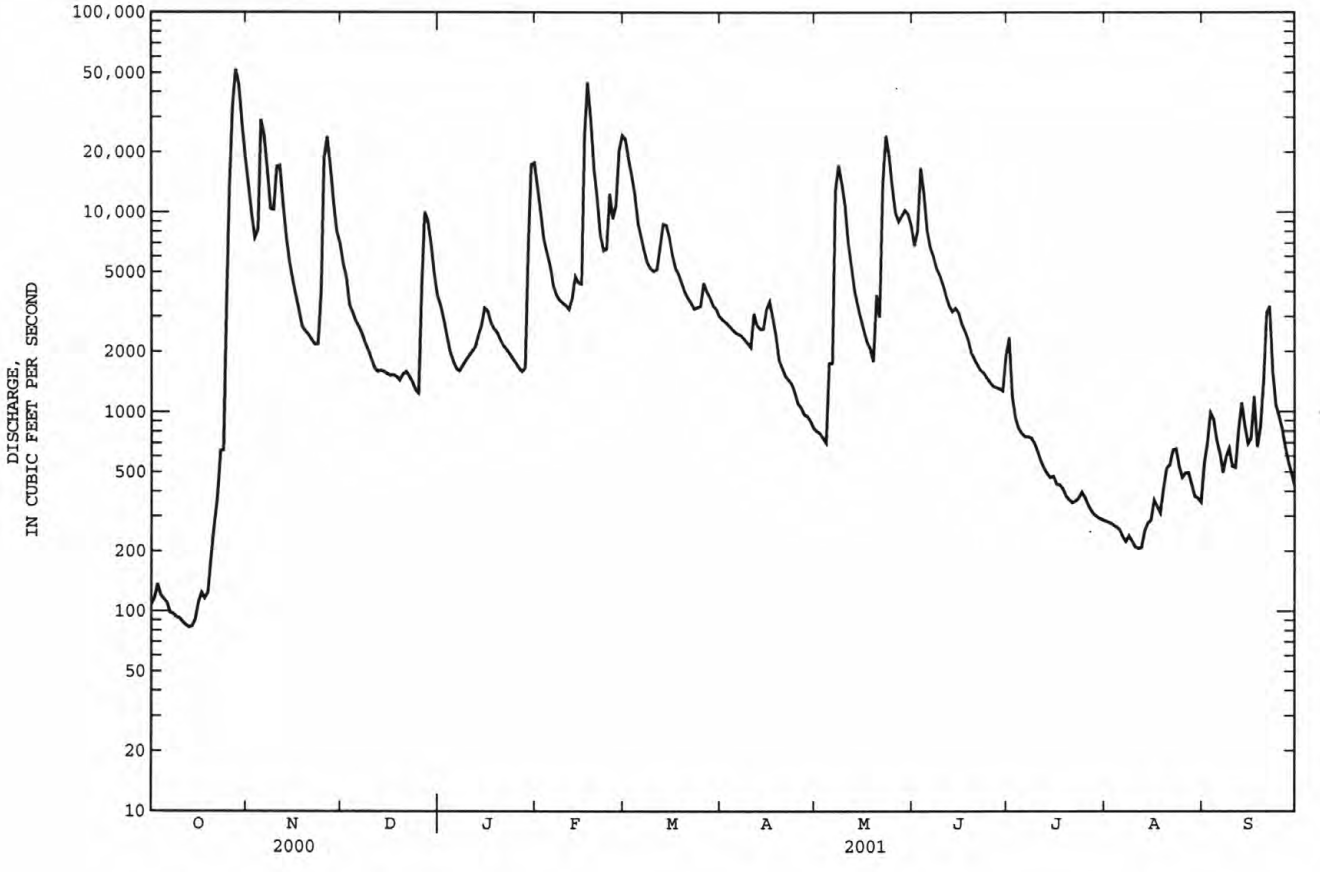
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2001, BY WATER YEAR (WY)

MEAN	3763	2071	1628	1300	1980	2944	3523	8000	8220	2161	1587	2458
MAX	31080	14020	14990	7258	10920	19590	27400	47780	43510	9857	20730	12880
(WY)	1942	1942	1992	1998	2001	1998	1990	1957	1941	1950	1995	1986
MIN	119	137	125	82.4	151	90.5	153	204	640	166	163	108
(WY)	1953	1955	1940	1940	1953	1940	1971	1971	1966	1964	1970	1956

e Estimated

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1937 - 2001	
ANNUAL TOTAL	947806		1681956			
ANNUAL MEAN	2590		4608		3304	
HIGHEST ANNUAL MEAN					11890	1987
LOWEST ANNUAL MEAN					651	1953
HIGHEST DAILY MEAN	51800	Oct 28	51800	Oct 28	232000	May 31 1987
LOWEST DAILY MEAN	83	Oct 13	83	Oct 13	48	Jan 18 1940
ANNUAL SEVEN-DAY MINIMUM	88	Oct 9	88	Oct 9	48	Jan 18 1940
MAXIMUM PEAK FLOW			56300	Oct 28	265000	May 31 1987
MAXIMUM PEAK STAGE			23.74	Oct 28	40.08	May 31 1987
ANNUAL RUNOFF (AC-FT)	1880000		3336000		2394000	
10 PERCENT EXCEEDS	6100		12500		7340	
50 PERCENT EXCEEDS	641		2190		866	
90 PERCENT EXCEEDS	116		286		217	



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, 9,030 microsiemens May 6, 1999; minimum, 402 microsiemens Nov. 14, 1994.
WATER TEMPERATURE: Maximum, 36.5°C July 15, 1998; minimum , -0.5°C Jan. 4, 5, 1999.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded (more than 20% missing record), 6,790 microsiemens Oct. 10; minimum, 474 microsiemens Nov. 7.
WATER TEMPERATURE: Maximum recorded (more than 20% missing record), 34.4°C July 18; minimum, 0.2°C Jan. 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
SEP										
27...	1050	1028	9.54	677	752	9.3	8.5	3030	19.6	30.0
27...	1053	1028	9.54	677	752	9.1	8.5	3030	19.6	60.0
27...	1056	1028	9.54	677	752	9.1	8.5	3040	19.5	115
27...	1059	1028	9.54	677	752	9.1	8.5	3040	19.5	145
27...	1102	1028	9.54	677	752	9.1	8.5	3040	19.5	175
27...	1105	1028	9.54	677	752	9.2	8.5	3040	19.6	205
27...	1108	1028	9.54	677	752	9.4	8.6	3040	19.9	235
27...	1111	1028	9.54	677	752	10.6	8.7	3060	20.3	445
27...	1114	1028	9.54	677	752	9.4	8.6	3030	19.8	475
27...	1117	1028	9.54	677	752	9.6	8.6	3040	20.0	505

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT													
17...	1730	80020	1028	8.02	119	751	117	9.7	8.2	5260	23.7	22.9	950
NOV													
09...	1000	80020	1028	14.17	10100	743	78	9.3	8.0	713	6.1	6.5	160
DEC													
19...	1600	80020	1028	10.25	1440	747	104	12.8	8.2	3770	7.8	5.1	670
JAN													
30...	0915	80020	1028	16.02	17200	739	92	10.9	8.0	1280	10.0	6.6	250
FEB													
28...	1510	80020	1028	17.45	24600	755	93	10.6	8.1	1460	1.6	8.8	340
MAR													
22...	1230	80020	1028	11.61	3480	745	111	10.9	8.5	3180	22.8	14.7	620
APR													
12...	1030	80020	1028	11.29	2980	746	82	7.5	8.2	2960	10.6	18.3	540
MAY													
25...	1130	80020	1028	14.95	13400	747	83	7.1	8.0	1300	26.6	22.0	280
JUN													
06...	1415	80020	1028	12.76	6860	746	110	8.3	8.2	1480	32.3	28.4	340
JUL													
17...	1630	80020	1028	9.02	460	747	125	8.6	8.3	4230	39.7	33.5	760
AUG													
22...	0720	80020	1028	9.34	617	746	72	5.5	8.0	4040	26.9	27.1	790
SEP													
11...	1030	80020	1028	9.16	500	754	92	7.8	7.9	5020	23.2	22.0	780
27...	1125	80020	1028	9.54	677	752	119	10.6	8.6	3060	22.6	19.9	--

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	HARD-NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM AD-SORP-TION RATIO (00931)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT													
17...	840	239	85.9	10.2	10	729	62	107	131	.0	1220	.4	4.0
NOV													
09...	75	43.6	11.3	4.33	3	77.0	51	80	98	.0	117	.2	10.6
DEC													
19...	470	174	57.3	6.39	7	417	57	197	240	.0	803	.4	9.7
JAN													
30...	170	66.6	21.1	3.79	5	165	58	87	106	.0	241	.2	6.2
FEB													
28...	230	90.2	27.7	4.44	5	203	56	107	131	.0	338	.2	7.6
MAR													
22...	440	159	54.0	5.98	7	395	58	184	200	12	692	.4	7.3
APR													
12...	400	134	49.3	5.76	8	411	62	133	162	.0	660	.3	3.7
MAY													
25...	180	78.0	21.0	6.25	4	149	53	104	127	.0	222	.3	10
JUN													
06...	230	92.2	27.3	6.22	4	157	49	116	142	.0	249	.3	10.4
JUL													
17...	650	176	78.7	8.60	9	579	62	111	126	5	924	.4	10.8
AUG													
22...	690	189	75.8	7.85	8	535	59	94	115	.0	852	.5	9.9
SEP													
11...	690	208	62.3	8.80	11	714	66	89	109	.0	1230	.4	6.5
27...	--	--	--	--	--	--	--	118	120	12	--	--	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT													
17...	799	1.3	<.041	--	--	--	--	<.047	--	<.006	--	--	<.060
NOV													
09...	68.5	1.8	E.025	.445	2.2	--	1.97	.455	.033	.010	--	.230	.076
DEC													
19...	458	.95	.057	.941	1.9	.07	4.17	.962	.069	.021	.89	.267	.114
JAN													
30...	129	2.6	.073	.441	3.0	.09	1.95	.454	.043	.013	2.5	.123	E.048
FEB													
28...	210	2.1	.052	.586	2.7	.07	2.59	.600	.046	.014	2.1	.120	.069
MAR													
22...	419	1.3	<.041	.449	1.8	--	1.99	.456	.024	.007	--	.064	<.060
APR													
12...	355	1.6	<.041	--	--	--	--	<.047	--	<.006	--	--	<.060
MAY													
25...	175	2.1	E.040	.387	2.5	--	1.71	.401	.046	.014	--	.172	.079
JUN													
06...	231	1.2	<.040	--	1.7	--	--	.447	--	E.004	--	.233	.098
JUL													
17...	628	1.2	<.040	--	--	--	--	<.050	--	<.006	--	--	<.060
AUG													
22...	701	1.3	<.040	--	--	--	--	<.050	--	<.006	--	--	<.060
SEP													
11...	644	.80	<.040	--	--	--	--	<.050	--	E.003	--	--	<.060
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
17...	<.018	.153	25	4.29	1010	3150	2.9	4	89.6	95.9	<24.0	<.11	2.1
NOV													
09...	.075	.750	770	.52	10500	383	2.2	6	90.0	354	<8.00	E.07	<.8
DEC													
19...	.087	.172	48	2.78	7960	2050	3.2	3	172	194	<24.0	<.22	2.0
JAN													
30...	.040	.823	--	.93	31900	687	E1.0	5	99.1	338	<8.00	.13	<.8
FEB													
28...	.039	.809	1120	1.29	63000	949	2.1	6	158	441	<8.00	.14	<.8
MAR													
22...	.021	.193	136	2.51	17300	1850	2.3	3	163	188	<24.0	.17	<.8
APR													
12...	<.018	.234	272	2.31	13700	1700	E1.4	4	148	196	<24.0	E.05	<.8
MAY													
25...	.056	.917	118	.99	26300	726	2.9	8	95.4	417	<8.00	.16	<.8
JUN													
06...	.076	.463	472	1.15	15700	846	4.3	6	113	248	<8.00	.13	<.8
JUL													
17...	<.020	.081	68	3.36	3070	2470	5.1	6	169	172	<24.0	<.10	.9
AUG													
22...	<.020	.139	46	3.30	4050	2430	5.4	15	145	160	<24.0	<.10	<.8
SEP													
11...	<.020	.111	<20	3.98	3950	2920	3.4	E4	144	160	<16.0	<.30	<.8
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT													
17...	<1	<4.7	<1.8	<30	210	<.16	M	<3.2	117	E.21	<.14	<120	E61
NOV													
09...	13	<4.7	16.2	<10	8420	E.07	16	<3.2	556	<.23	<.14	<53.0	E56
DEC													
19...	1	<30.0	11.8	<30	690	E.07	4	14.4	65	<.23	<.14	<120	<66
JAN													
30...	15	E2.4	16.0	10	11700	.10	17	21.4	687	<.23	<.14	<53.0	<66
FEB													
28...	16	<4.7	16.2	<10	11600	E.07	19	E3.0	644	<.23	<.14	<53.0	<66
MAR													
22...	3	<4.7	3.7	<30	1480	.13	3	E6.2	124	<.23	<.14	<120	<66
APR													
12...	3	<30.0	5.4	<30	2750	.12	5	<3.2	289	<.01	<.01	<120	<66
MAY													
25...	18	<5.0	20.8	<10	12600	E.04	17	<3.0	779	.01	.03	<50.0	<66
JUN													
06...	3	<5.0	10.2	<10	2620	E.07	8	<3.0	354	<.01	.02	<50.0	<66
JUL													
17...	<1	<10.0	1.6	<30	580	<.20	1	14.7	265	<.01	<.05	<160	<66
AUG													
22...	M	<10.0	1.4	<30	470	.49	2	<10.0	194	<.01	<.01	<160	<66
SEP													
11...	<1	<9.0	3.7	<20	500	<.20	<2	12.6	134	<.01	<.01	<110	<66
27...	--	--	--	--	--	--	--	--	--	--	--	--	--

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	ALPHA-HCH-D6 SUR SCD 1608 WATER UNFLTRD PERCENT (99778)	AROCLOR 1016/ 1242 PCB WATER UNFLTRD (UG/L) (81648)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)
OCT													
17...	E2.3	E1.6	<.2	<.43	<60	<93	--	--	--	--	--	--	--
NOV													
09...	<2.4	<2.6	<.2	<.43	<20	33	--	--	--	--	--	--	--
DEC													
19...	2.6	E1.7	<.2	<.43	<60	<31	--	--	--	--	--	--	--
JAN													
30...	<2.4	<2.6	<.2	<.43	<20	38	--	--	--	--	--	--	--
FEB													
28...	E1.9	<2.6	<.2	<.43	<20	50	--	--	--	--	--	--	--
MAR													
22...	<2.4	<2.6	<.2	<.43	<60	<31	--	--	--	--	--	--	--
APR													
12...	<2.4	E1.7	<.2	<.43	E38	E17	<.040	<.03	72	<.10	<1	<.1	<.1
MAY													
25...	<2.0	<3.0	<.2	<.40	E15	54	--	--	--	--	--	--	--
JUN													
06...	<2.0	E1.4	<.2	<.40	<20	E27	--	--	--	--	--	--	--
JUL													
17...	<2.0	<3.0	<.2	<.40	<60	<31	--	--	--	--	--	--	--
AUG													
22...	E1.6	<3.0	<.2	<.40	<60	E22	--	--	--	--	--	--	--
SEP													
11...	E1.5	<5.0	<.3	<1.00	<60	<31	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	<.040	<.03	97	<.10	<1	<.1	<.1

DATE	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN-I WATER WHOLE REC (UG/L) (34361)	ENDO-SULFAN II TOTAL (UG/L) (34356)	ENDO-SULFAN SULFATE TOTAL (UG/L) (34351)	ENDRIN ALDE-HYDE TOTAL (UG/L) (34366)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)
OCT													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
19...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
12...	<.1	<.1	<.03	<.1	<.1	<.1	<.09	<.020	<.1	<.04	<.6	<.2	<.060
MAY													
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
11...	--	--	--	--	--	--	--	--	--	--	--	--	--
27...	<.1	<.1	<.03	<.1	<.1	<.1	<.09	<.020	<.1	<.04	<.6	<.2	<.060

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	ISODRIN SUR SCD 1608 WTR, UNFLTRD PERCENT (90570)	LINDANE TOTAL (UG/L) (39340)	PCB 207 SUR SCD 1608 WATER UNFLTRD PERCENT (99781)	P,P' DDD, TOTAL (UG/L) (39310)	P,P' DDE, TOTAL (UG/L) (39320)	P,P' DDT, TOTAL (UG/L) (39300)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT									
17...	--	--	--	--	--	--	--	--	--
NOV									
09...	--	--	--	--	--	--	--	--	--
DEC									
19...	--	--	--	--	--	--	--	--	--
JAN									
30...	--	--	--	--	--	--	--	--	--
FEB									
28...	--	--	--	--	--	--	--	--	--
MAR									
22...	--	--	--	--	--	--	--	--	--
APR									
12...	<.800	<.030	56	<.030	80	<.1	<.04	<.1	<2
MAY									
25...	--	--	--	--	--	--	--	--	--
JUN									
06...	--	--	--	--	--	--	--	--	--
JUL									
17...	--	--	--	--	--	--	--	--	--
AUG									
22...	--	--	--	--	--	--	--	--	--
SEP									
11...	--	--	--	--	--	--	--	--	--
27...	<.800	<.030	55	<.030	56	<.1	<.04	<.1	<2

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	e6350	706	648	661	2180	1750	2020	1990	1880	1920
2	---	---	e6440	850	706	790	2270	2180	2230	2180	1890	2000
3	---	---	e6530	1020	850	936	2470	2270	2360	2560	2180	2440
4	---	---	e6500	1240	1020	1120	2660	2470	2590	2620	2560	2590
5	---	---	e6500	1280	645	840	2790	2660	2740	2860	2590	2700
6	6600	6320	6500	645	487	551	2810	2790	2800	3120	2860	2990
7	6540	6270	6400	495	474	482	2840	2800	2820	3450	3120	3270
8	6270	6010	6070	581	495	523	2830	2800	2810	4040	3450	3740
9	6290	6000	6080	875	581	730	2960	2800	2850	4420	4040	4280
10	6790	6290	6620	957	826	890	3070	2960	3030	4420	3610	4090
11	6770	6350	6550	826	757	780	3300	3070	3130	3610	3350	3420
12	6350	6080	6200	824	790	799	3550	3300	3490	3630	3430	3570
13	6080	5770	5880	1080	824	940	3550	3490	3520	3910	3630	3820
14	5770	5480	5620	1390	1080	1240	3590	3520	3570	3960	3890	3940
15	5520	5170	5400	1710	1390	1540	3560	3480	3530	3950	3320	3770
16	5280	4960	5150	2070	1710	1890	3540	3470	3510	3320	2960	3080
17	5280	5000	5200	2200	2070	2170	3640	3540	3600	2960	2630	2780
18	5260	4660	4980	2240	2160	2180	3730	3610	3660	3120	2830	2980
19	5120	4650	4820	2680	2240	2450	3900	3730	3760	3340	3120	3240
20	5240	3980	4750	2710	2550	2620	4080	3900	4010	3330	3250	3290
21	4380	3550	4140	2590	2550	2570	3970	3840	3940	3480	3280	3400
22	4230	2840	3450	2610	2560	2600	3840	3580	3680	3550	3400	3460
23	4100	3110	3640	2560	2500	2540	3640	3580	3600	3640	3550	3610
24	3620	3110	3340	2500	929	1730	3800	3640	3730	3630	3560	3590
25	3760	1790	3180	1660	813	1170	3820	3140	3740	3620	3570	3600
26	1790	817	1220	901	609	724	3140	853	1460	3730	3590	3640
27	818	488	687	609	548	566	1630	974	1280	3800	3730	3780
28	554	474	522	742	552	618	1130	878	969	3780	2240	3420
29	552	529	538	1110	742	935	1020	899	935	2240	1010	1500
30	636	537	570	1710	1110	1350	1530	1020	1270	1610	1170	1360
31	666	636	658	---	---	---	1960	1530	1730	1430	946	1100
MONTH	6790	474	4530	2710	474	1300	4080	853	2850	4420	946	3110

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1000	946	980	1190	793	929	3020	2770	2940	4400	4330	4370
2	1220	999	1070	810	762	778	3150	3010	3090	4400	4360	4380
3	1810	1220	1500	1030	810	923	3090	2800	2910	4430	4370	4400
4	2040	1810	1960	1180	1030	1100	2940	2810	2880	4430	1970	4240
5	2200	2040	2110	1450	1180	1280	3090	2940	3020	3520	1970	2700
6	2680	2200	2390	1840	1450	1660	3350	3090	3220	2850	2190	2460
7	3130	2680	2940	2150	1840	2000	3520	3340	3450	4370	2080	2900
8	3170	3130	3150	2380	2150	2280	3500	3440	3480	4910	4370	4790
9	3160	2930	3030	2540	2350	2450	3480	3410	3430	4610	3310	3970
10	2970	2930	2950	2760	2540	2650	3820	3480	3640	3310	2780	2990
11	3030	2930	2960	2830	2740	2780	3820	2120	2640	2780	2630	2710
12	3320	3030	3210	2780	2660	2720	3260	2800	3050	2630	2500	2540
13	3160	2860	3000	3320	2710	3080	3430	3260	3350	2640	2500	2600
14	2860	2350	2480	2910	1900	2180	3430	3300	3360	2800	2640	2700
15	2380	1810	2160	2940	1950	2420	3890	3260	3570	3090	2800	2950
16	2010	814	1200	4570	2940	3880	3260	2580	2890	3430	3090	3260
17	818	518	588	4570	4350	4480	2580	2370	2500	3680	3430	3580
18	557	517	536	4350	3840	4060	2460	2250	2320	3780	3560	3690
19	689	529	607	3840	3500	3650	2770	2460	2640	3810	3150	3760
20	850	689	766	3500	3300	3380	3020	2770	2870	3150	1960	2460
21	1230	850	1010	3300	3190	3230	3250	3020	3170	3050	2620	2890
22	1810	1230	1520	3210	3170	3190	3390	3250	3310	3970	2460	3230
23	1980	526	1700	3190	3140	3170	3550	3260	3380	2380	1490	1840
24	1250	823	989	3170	2860	2990	3830	3550	3720	1490	1300	1370
25	1540	1050	1330	3030	2960	2990	3880	3780	3820	1400	1280	1310
26	1880	1410	1510	3020	2320	2860	4010	3880	3920	1560	1370	1450
27	2050	617	1220	2600	2160	2280	4170	4010	4080	1850	1580	1670
28	1520	895	1260	2760	2600	2700	4260	4170	4210	2210	1860	2050
29	---	---	---	2960	2610	2760	4270	4230	4250	2320	2210	2270
30	---	---	---	3020	2960	2990	4330	4240	4290	2260	2010	2150
31	---	---	---	3000	2760	2920	---	---	---	2010	1610	1820
MONTH	3320	517	1790	4570	762	2610	4330	2120	3310	4910	1280	2890

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	2080	1660	1860	3190	1700	2470	---	---	e5050	---	---	e5680
2	2430	2050	2150	2780	1700	2270	---	---	e5090	---	---	e5630
3	2020	1630	1810	3430	2780	3130	---	---	e5110	---	---	e5710
4	2070	1490	1810	3700	3430	3590	---	---	e5120	---	---	e5900
5	1470	1420	1440	3890	3690	3800	---	---	e5140	---	---	e6190
6	1520	1450	1470	4040	3880	3930	---	---	e5160	---	---	e6390
7	1800	1520	1650	4140	4040	4110	---	---	e5160	---	---	e6440
8	2080	1800	1930	4250	4110	4170	---	---	e5180	---	---	e6330
9	2320	2070	2210	4340	4250	4310	---	---	e5160	---	---	e4600
10	2480	2310	2430	4350	4300	4330	---	---	e5180	---	---	e4230
11	2560	2410	2470	4330	4100	4200	---	---	e5200	---	---	e5030
12	2900	2500	2620	4200	4100	4120	---	---	e5180	---	---	e4900
13	3080	2900	2980	4150	4020	4060	---	---	e5250	---	---	e4770
14	2920	2700	2870	4060	4030	4050	---	---	e5270	---	---	e4650
15	2680	2580	2630	4090	4030	4050	---	---	e5170	---	---	e4520
16	2960	2660	2780	4190	4060	4110	---	---	e5330	---	---	e4390
17	3120	2960	3050	4250	4160	4200	---	---	e5450	---	---	e4260
18	3160	3090	3130	4370	4130	4310	---	---	e5470	---	---	e4130
19	3110	3020	3070	4370	4190	4270	---	---	e3750	---	---	e4010
20	3200	3020	3100	---	---	e4310	---	---	e4110	---	---	e3880
21	3500	3190	3350	---	---	e4270	---	---	e4070	---	---	e3750
22	3580	3500	3530	---	---	e4270	---	---	e4040	---	---	e3620
23	3750	3580	3650	---	---	e4430	---	---	e3820	---	---	e3490
24	3890	3740	3800	---	---	e4580	---	---	e3890	---	---	e3370
25	4060	3880	4000	---	---	e4800	---	---	e4030	---	---	e3240
26	4070	4010	4050	---	---	e4870	---	---	e4370	---	---	e3110
27	4010	3970	3980	---	---	e4850	---	---	e4680	---	---	e3050
28	4050	3950	4020	---	---	e4980	---	---	e5070	---	---	e3220
29	4040	3980	4020	---	---	e5020	---	---	e5460	---	---	e3390
30	4060	672	2810	---	---	e5030	---	---	e5660	---	---	e3560
31	---	---	---	---	---	e5020	---	---	e5700	---	---	---
MONTH	4070	672	2820	4370	1700	4190	---	---	4910	---	---	4510
YEAR	6790	474	3250									

e Estimated

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.9	18.7	21.2	20.5	20.1	20.3	9.7	8.5	9.2	1.4	.6	1.0
2	24.9	18.5	21.5	20.1	19.1	19.6	8.5	7.2	7.9	2.1	.9	1.4
3	26.9	20.1	23.3	19.2	17.9	18.6	7.5	6.4	6.9	2.4	.2	1.3
4	27.8	21.9	24.5	17.9	17.2	17.5	7.0	5.7	6.4	4.2	1.2	2.7
5	27.9	22.6	25.1	17.2	15.9	16.3	7.4	6.1	6.8	5.9	3.0	4.4
6	24.2	18.4	20.5	15.9	15.2	15.7	7.8	6.9	7.4	7.0	4.3	5.7
7	18.4	13.0	14.7	15.2	13.3	14.3	7.8	5.8	6.9	8.2	6.1	7.0
8	14.7	11.2	12.8	13.3	10.3	11.8	8.8	6.7	7.7	8.2	5.9	7.1
9	15.8	9.7	12.6	10.3	9.4	9.9	8.7	7.1	7.9	7.9	5.5	6.8
10	14.8	9.9	12.5	9.7	8.8	9.3	9.7	8.0	8.8	7.1	6.1	6.5
11	16.6	12.2	14.3	9.0	8.1	8.3	9.7	5.0	7.8	6.1	5.7	5.9
12	20.1	14.5	17.1	8.3	7.8	8.2	5.0	1.4	3.2	6.0	5.4	5.7
13	22.2	16.3	19.3	8.2	7.0	7.6	2.0	1.2	1.5	6.5	5.4	5.8
14	22.1	18.7	20.4	8.3	6.9	7.5	3.4	.9	2.1	7.9	5.7	6.7
15	23.3	19.0	21.1	8.3	7.4	7.9	4.7	2.7	3.4	7.8	5.9	6.9
16	24.1	20.2	21.7	9.8	8.2	8.9	5.7	4.5	5.0	7.1	6.5	6.8
17	23.3	19.0	21.1	9.1	7.9	8.6	4.9	3.3	4.1	6.5	5.1	5.6
18	24.8	19.0	21.5	8.7	7.8	8.2	5.4	3.3	4.3	5.1	4.1	4.7
19	23.6	18.4	20.9	9.2	7.2	8.2	5.2	3.4	4.3	5.1	3.5	4.2
20	20.7	17.2	18.4	9.2	7.4	8.3	5.7	3.1	4.3	4.1	2.3	3.3
21	19.0	16.9	17.8	9.1	6.9	8.0	5.5	3.5	4.4	5.3	3.0	4.0
22	21.4	18.0	19.4	9.4	7.7	8.5	4.8	3.0	3.9	6.1	3.3	4.7
23	22.2	20.3	21.1	10.4	9.4	9.9	4.8	3.8	4.2	6.9	5.0	5.9
24	23.1	20.9	21.8	11.0	10.3	10.6	4.2	3.0	3.7	7.9	6.2	6.9
25	21.6	20.3	20.9	10.7	10.1	10.4	4.1	3.3	3.6	8.3	5.9	7.2
26	20.3	19.6	20.0	10.3	9.7	10.0	3.6	2.7	3.1	10.5	7.6	9.0
27	19.6	19.0	19.2	10.1	9.4	9.7	3.6	1.9	2.7	9.6	6.8	7.7
28	20.0	19.0	19.4	10.3	9.1	9.7	2.9	1.8	2.3	7.2	6.5	6.8
29	20.2	19.6	19.9	10.4	9.5	10.0	3.4	2.1	2.6	7.6	5.9	6.7
30	20.7	20.1	20.4	9.7	8.9	9.4	3.0	1.8	2.4	7.3	6.5	6.9
31	20.6	20.0	20.3	---	---	---	2.2	1.0	1.6	7.0	6.0	6.5
MONTH	27.9	9.7	19.5	20.5	6.9	11.0	9.7	.9	4.9	10.5	.2	5.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.8	5.6	6.3	8.1	7.4	7.7	16.7	13.8	15.2	25.9	21.6	23.6
2	7.1	5.8	6.5	8.0	7.4	7.7	19.1	15.8	17.1	26.0	22.2	24.0
3	7.5	5.8	6.7	8.5	8.0	8.2	21.9	18.2	19.8	24.9	22.8	23.8
4	8.8	6.8	7.7	10.0	7.8	8.9	23.8	20.5	21.8	23.8	20.3	22.6
5	9.2	6.9	8.0	11.4	9.3	10.3	23.1	22.0	22.4	21.7	20.1	20.9
6	10.6	7.9	9.1	12.0	10.6	11.3	22.6	21.2	21.9	23.8	20.1	21.6
7	12.5	9.3	10.8	13.9	11.2	12.4	21.7	20.3	21.0	23.2	21.8	22.5
8	14.8	12.5	13.7	13.3	12.0	12.8	22.8	20.5	21.5	23.9	21.8	22.8
9	14.9	9.9	12.7	13.7	10.9	12.3	24.0	20.8	22.3	24.7	22.8	23.7
10	9.9	8.0	8.9	14.0	11.8	12.9	23.1	21.8	22.5	24.8	23.3	24.1
11	8.4	7.3	7.7	13.5	13.1	13.4	22.3	19.6	20.8	25.6	23.7	24.6
12	7.7	7.2	7.5	15.3	13.3	14.2	20.3	18.3	19.5	26.9	23.5	25.1
13	8.9	7.6	8.1	15.1	13.4	14.2	21.4	17.8	19.6	27.4	24.0	25.6
14	11.9	8.9	10.6	14.3	13.7	14.0	20.9	20.1	20.5	27.7	24.7	26.2
15	11.4	7.9	9.5	14.1	12.1	13.4	23.3	19.9	21.4	27.0	24.4	25.7
16	7.9	4.8	5.9	12.9	10.6	11.8	23.1	19.5	21.2	27.8	23.7	25.7
17	4.8	3.9	4.3	12.7	11.1	11.9	21.2	17.4	18.7	28.6	24.8	26.7
18	5.4	4.3	4.8	11.9	10.9	11.4	18.9	16.2	17.6	29.3	25.0	27.2
19	7.3	5.0	6.0	11.6	10.3	11.0	18.1	15.6	16.9	28.6	25.7	27.5
20	9.9	7.3	8.5	13.6	9.9	11.7	21.1	17.8	19.1	26.3	23.1	24.7
21	10.0	9.3	9.8	15.5	11.5	13.4	21.1	20.0	20.5	25.9	21.9	23.5
22	9.8	8.2	9.1	17.5	13.5	15.4	22.2	19.6	20.9	22.5	19.9	21.5
23	10.3	8.9	9.2	19.4	15.5	17.4	22.2	19.4	20.9	22.1	20.9	21.6
24	11.6	9.4	10.5	18.6	14.3	16.5	23.0	18.5	20.6	22.9	21.4	22.0
25	12.7	11.0	11.7	14.3	11.7	12.8	23.6	18.7	21.1	23.6	21.5	22.5
26	12.7	11.3	12.0	11.7	9.8	10.6	24.5	19.8	22.1	24.0	22.0	23.1
27	12.4	10.7	11.6	9.8	8.7	9.2	25.0	20.6	22.8	26.2	23.0	24.5
28	10.7	8.1	9.3	9.0	8.4	8.7	25.4	21.0	23.1	26.2	24.3	25.2
29	---	---	---	9.9	8.8	9.3	25.5	21.3	23.4	25.9	24.0	25.0
30	---	---	---	13.3	9.4	11.2	24.8	21.7	23.4	26.6	24.4	25.3
31	---	---	---	16.4	12.2	14.2	---	---	---	27.0	24.9	26.0
MONTH	14.9	3.9	8.8	19.4	7.4	11.9	25.5	13.8	20.7	29.3	19.9	24.2

07316000 RED RIVER NEAR GAINESVILLE, TX--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	27.8	24.5	26.0	29.0	26.1	27.3	---	---	---	---	---	---
2	27.4	24.9	26.3	31.0	26.3	28.4	---	---	---	---	---	---
3	27.5	26.1	27.0	31.9	27.2	29.4	---	---	---	---	---	---
4	27.8	25.5	26.7	33.3	27.7	30.4	---	---	---	---	---	---
5	27.5	25.8	26.6	33.3	28.1	30.7	---	---	---	---	---	---
6	27.8	25.7	26.7	34.1	28.6	31.4	---	---	---	---	---	---
7	28.2	26.1	27.1	33.1	29.0	31.1	---	---	---	---	---	---
8	29.1	26.4	27.6	33.1	28.6	30.7	---	---	---	---	---	---
9	30.5	26.9	28.6	34.4	28.6	31.3	---	---	---	---	---	---
10	31.2	27.4	29.2	34.4	29.4	31.9	---	---	---	---	---	---
11	31.1	27.6	29.2	34.3	29.4	31.9	---	---	---	---	---	---
12	30.4	27.0	28.9	34.2	29.1	31.6	---	---	---	---	---	---
13	29.5	26.7	28.1	34.2	28.9	31.1	---	---	---	---	---	---
14	28.6	25.5	26.9	32.0	28.4	30.1	---	---	---	---	---	---
15	29.6	24.5	26.6	33.2	26.3	29.4	---	---	---	---	---	---
16	30.3	26.1	28.0	33.3	27.4	30.1	---	---	---	---	---	---
17	30.5	26.6	28.5	33.6	27.6	30.2	---	---	---	---	---	---
18	29.8	26.1	27.9	34.4	27.4	30.7	---	---	---	---	---	---
19	30.0	25.9	28.0	33.5	27.9	30.8	---	---	---	---	---	---
20	30.8	26.6	28.7	---	---	---	---	---	---	---	---	---
21	30.9	27.4	29.2	---	---	---	---	---	---	---	---	---
22	30.4	26.1	28.3	---	---	---	---	---	---	---	---	---
23	29.3	25.7	27.4	---	---	---	---	---	---	---	---	---
24	29.7	24.9	27.1	---	---	---	---	---	---	---	---	---
25	29.6	25.4	27.4	---	---	---	---	---	---	---	---	---
26	30.4	25.8	28.0	---	---	---	---	---	---	---	---	---
27	28.7	26.8	27.4	---	---	---	---	---	---	---	---	---
28	27.5	25.2	26.1	---	---	---	---	---	---	---	---	---
29	27.4	24.0	25.4	---	---	---	---	---	---	---	---	---
30	28.1	20.8	25.3	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	31.2	20.8	27.5	34.4	26.1	30.4	---	---	---	---	---	---
YEAR	34.4	.2	15.9									

07316500 WASHITA RIVER NEAR CHEYENNE, OK

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

DRAINAGE AREA.--794 mi^2.

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

REVISED RECORDS.--WSP 1211: Drainage area.

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

REMARKS.--Records good. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	50	31	e22	78	79	64	38	93	14	.41	.00
2	.00	45	30	e21	72	84	63	38	79	14	.30	.00
3	.00	41	30	e30	69	84	64	40	70	13	.13	.00
4	.00	38	30	e43	66	80	62	102	66	12	.05	.00
5	.00	40	30	49	63	75	62	216	301	9.7	.00	.00
6	.00	41	30	53	61	72	63	174	165	9.0	.00	.00
7	.00	39	31	58	59	69	69	124	152	8.7	.00	.39
8	.00	36	31	61	60	70	66	98	109	7.9	.00	.68
9	.00	35	31	61	83	79	63	82	82	7.2	.00	.60
10	.00	34	32	60	86	83	60	71	67	6.7	.00	.66
11	.00	33	e29	61	83	83	62	65	56	5.6	.00	.55
12	.22	33	e27	59	80	87	58	61	49	5.2	.00	.41
13	.81	32	e26	58	78	82	56	57	46	5.2	.00	.20
14	3.5	31	e24	54	76	79	53	53	40	5.0	.00	.25
15	11	31	32	51	72	75	52	50	35	8.6	.00	.42
16	24	31	34	50	68	72	49	46	32	8.4	.00	1.2
17	10	30	32	50	64	69	49	44	29	6.6	.00	3.6
18	7.8	30	34	50	62	68	48	46	28	5.4	.03	2.5
19	6.8	30	32	49	62	69	48	71	25	4.4	.07	2.0
20	6.4	30	32	48	61	69	48	175	24	3.4	.00	1.7
21	7.5	30	32	48	60	68	47	253	23	2.8	.00	1.5
22	12	30	31	47	57	68	50	189	22	2.3	.00	1.3
23	11	31	e30	48	61	66	51	134	20	1.9	.00	1.8
24	28	32	e26	47	81	64	45	98	19	1.6	.00	1.5
25	138	32	e23	46	83	62	44	81	18	1.4	.00	1.5
26	201	32	e20	46	83	62	44	71	17	1.2	.00	1.6
27	124	31	e19	47	83	64	41	67	16	1.1	.00	1.3
28	89	31	e28	58	78	66	38	70	15	1.0	.00	.97
29	86	30	e31	79	---	67	37	89	14	.92	.00	1.1
30	66	30	e26	85	---	67	37	115	13	.66	.00	1.2
31	55	---	e25	81	---	65	---	116	---	.49	.00	---
TOTAL	888.03	1019	899	1620	1989	2247	1593	2934	1725	175.37	0.99	28.93
MEAN	28.6	34.0	29.0	52.3	71.0	72.5	53.1	94.6	57.5	5.66	.032	.96
MAX	201	50	34	85	86	87	69	253	301	14	.41	3.6
MIN	.00	30	19	21	57	62	37	38	13	.49	.00	.00
AC-FT	1760	2020	1780	3210	3950	4460	3160	5820	3420	348	2.0	57

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

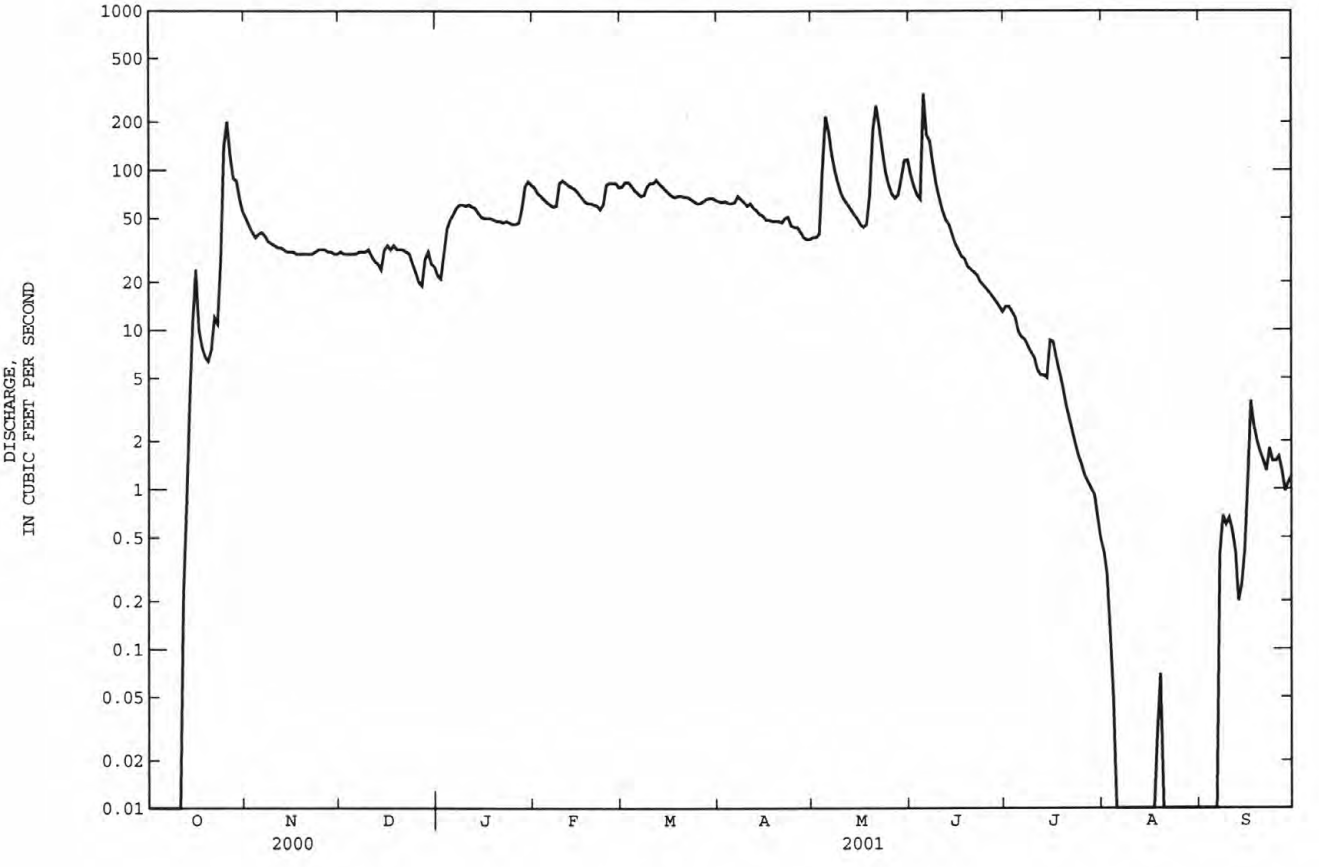
MEAN	8.92	10.0	12.1	15.7	20.2	27.7	33.6	51.2	41.4	8.66	4.60	5.69
MAX	72.9	64.3	67.7	80.7	71.0	138	146	348	203	61.7	32.8	44.7
(WY)	1987	1987	1998	1998	2001	1998	1997	1977	1982	1982	1995	1997
MIN	.000	.000	.000	.026	1.50	2.22	1.08	.000	.005	.000	.000	.000
(WY)	1964	1964	1964	1973	1973	1967	1971	1971	1970	1964	1963	1964

e Estimated

07316500 WASHITA RIVER NEAR CHEYENNE, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	10583.14		15119.32			
ANNUAL MEAN	28.9		41.4		[a]20.0	
HIGHEST ANNUAL MEAN					64.0	1997
LOWEST ANNUAL MEAN					2.60	1972
HIGHEST DAILY MEAN	286	Mar 23	301	Jun 5	1560	Apr 23 1990
LOWEST DAILY MEAN	.00	Aug 28-Oct. 11	.00	several days	.00	most years
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 28	.00	Oct 1	.00	Oct 1 1961
MAXIMUM PEAK FLOW			504	Jun 5	[b]7250	Apr 22 1990
MAXIMUM PEAK STAGE			11.64	Jun 5	[c]16.60	Apr 22 1990
ANNUAL RUNOFF (AC-FT)	20990		29990		14460	
10 PERCENT EXCEEDS	55		82		44	
50 PERCENT EXCEEDS	24		33		7.6	
90 PERCENT EXCEEDS	.00		.00		.00	

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



07324200 WASHITA RIVER NEAR HAMMON, OK

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

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

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

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

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

REMARKS.--Records fair. Flow regulated since 1961 by numerous flood-retarding structures. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	103	58	e47	122	191	137	75	372	86	15	8.1
2	1.7	100	57	e46	117	207	136	73	306	80	13	7.8
3	1.4	89	56	e59	115	197	134	77	257	76	13	7.5
4	1.1	82	57	e84	111	184	130	1180	222	71	13	8.3
5	.98	78	57	118	108	172	128	2170	210	65	13	9.7
6	1.3	91	58	133	105	165	128	1050	1300	60	13	13
7	1.6	86	59	140	103	159	135	780	905	56	12	13
8	1.8	81	59	139	102	156	139	574	736	52	12	11
9	2.3	78	60	103	120	163	133	457	570	49	11	9.0
10	2.8	74	61	104	136	169	128	388	458	47	13	8.6
11	3.3	71	e58	105	136	174	125	339	366	45	13	8.4
12	4.4	70	e55	105	133	184	126	299	281	42	14	8.2
13	5.3	68	e53	104	129	182	119	261	249	39	14	7.9
14	11	66	e50	103	128	175	115	231	224	40	14	7.6
15	55	65	67	98	126	169	111	208	204	41	13	8.1
16	223	64	77	97	121	162	107	190	186	42	11	58
17	100	63	97	96	115	155	104	175	171	39	11	31
18	59	62	73	96	112	149	103	212	159	36	11	17
19	43	61	66	94	111	150	102	230	148	33	9.8	14
20	35	60	65	91	110	151	101	374	138	31	9.4	13
21	30	60	63	92	108	149	99	390	131	30	9.3	12
22	72	61	61	90	108	146	97	403	129	28	8.0	12
23	66	61	e60	90	123	142	102	358	125	26	7.6	12
24	55	63	e55	89	376	137	99	291	118	24	8.2	11
25	59	63	e51	89	299	134	94	231	111	21	8.4	11
26	86	63	e47	88	204	133	89	204	109	19	9.8	11
27	159	61	e45	88	190	136	85	188	105	18	9.8	11
28	145	60	e56	95	187	141	82	224	105	17	9.4	10
29	126	59	e61	115	---	143	78	385	96	17	8.7	9.4
30	116	58	e54	128	---	142	76	678	91	17	8.5	9.0
31	102	---	e52	128	---	141	---	461	---	15	8.3	---
TOTAL	1571.88	2121	1848	3054	3955	4958	3342	13156	8582	1262	344.2	377.6
MEAN	50.7	70.7	59.6	98.5	141	160	111	424	286	40.7	11.1	12.6
MAX	223	103	97	140	376	207	139	2170	1300	86	15	58
MIN	.98	58	45	46	102	133	76	73	91	15	7.6	7.5
AC-FT	3120	4210	3670	6060	7840	9830	6630	26090	17020	2500	683	749

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

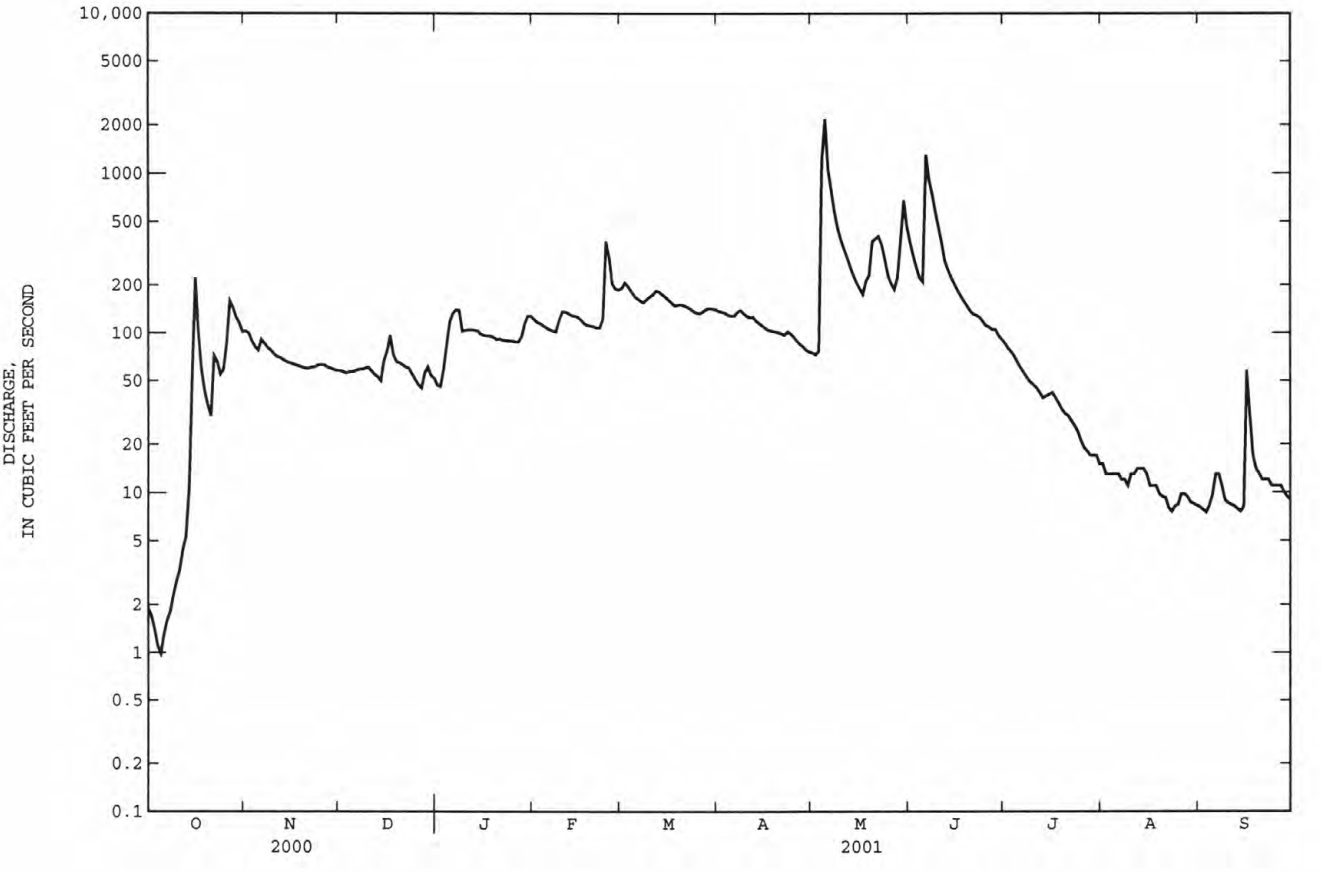
MEAN	38.0	42.3	36.4	44.9	53.1	78.7	97.7	166	134	37.7	29.2	36.1
MAX	384	253	258	342	299	548	528	755	502	158	170	450
(WY)	1987	1987	1998	1998	1998	1998	1997	1982	1997	1997	1997	1997
MIN	.000	.000	.000	.000	.000	.000	.000	.012	.001	.028	.000	.001
(WY)	1973	1972	1973	1973	1972	1972	1972	1971	1972	1970	1972	1976

e Estimated

07324200 WASHITA RIVER NEAR HAMMON, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	28263.08		44571.68			
ANNUAL MEAN	77.2		122		66.1	
HIGHEST ANNUAL MEAN					262	1997
LOWEST ANNUAL MEAN					.49	1972
HIGHEST DAILY MEAN	759	Mar 23	2170	May 5	4340	May 17 1982
LOWEST DAILY MEAN	.98	Oct 5	.98	Oct 5	.00	at times
ANNUAL SEVEN-DAY MINIMUM	1.4	Oct 2	1.4	Oct 2	.00	Jul 13 1970
MAXIMUM PEAK FLOW			2870	May 5	[a]6000	May 17 1982
MAXIMUM PEAK STAGE			[b]21.37	May 5	23.44	May 17 1982
ANNUAL RUNOFF (AC-FT)	56060		88410		47920	
10 PERCENT EXCEEDS	144		223		155	
50 PERCENT EXCEEDS	61		86		22	
90 PERCENT EXCEEDS	3.2		9.6		.10	

[a]From rating curve extended above 2,500 ft^3/s on basis of slope-area measurement.
[b]From crest stage gage.



RED RIVER BASIN
07324300 FOSS RESERVOIR NEAR FOSS, OK

LOCATION.--Lat 35°32'20", long 99°11'09", in S $^{1}/_{2}$ sec.2, T.12 N., R.19 W., Custer County, Hydrologic Unit 11130301, near right end of dam on Washita River, 0.5 mi upstream from Oak Creek, 3.5 mi west of Stafford, 6.0 mi north of Foss, and at mile 474.4.

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

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

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

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

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

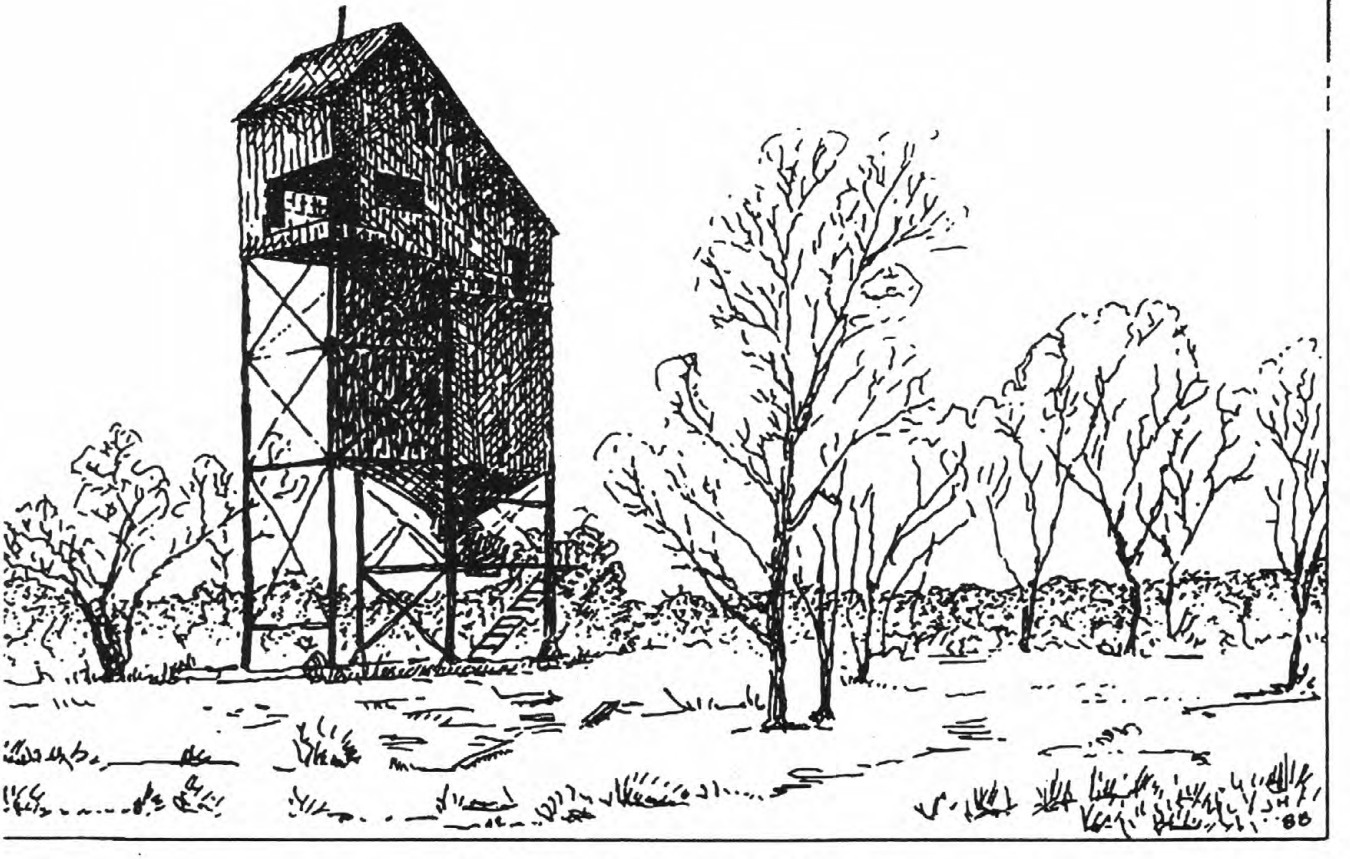
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 226,200 acre-ft, June 16, 1997, elevation, 1,648.47 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 190,100 acre-ft, May 12-14, elevation, 1,643.75 ft; minimum, 164,100 acre-ft, Oct. 12, 13, elevation, 1,639.90 ft.

> MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1640.19	166,000	-	-
Oct. 31	1640.66	169,000	+3,000	242
Nov. 30	1641.11	172,000	+3,000	237
Dec. 31	1641.54	174,800	+2,800	238
CAL YR 2000	-	-	+4,800	2,902
Jan. 31	1641.58	175,100	+300	234
Feb. 28	1641.73	176,100	+1,000	207
Mar. 31	1641.92	177,400	+1,300	269
Apr. 30	1641.51	174,600	-2,800	312
May 31	1642.84	183,700	+9,100	169
June 30	1641.28	173,100	-10,600	190
July 31	1640.87	170,400	-2,700	390
Aug. 31	1640.24	166,300	-4,100	292
Sept. 30	1639.95	164,400	-1,900	292
WTR YR 2001	-	-	-1,600	3,072

*Elevation at 0800 on the following day.



Ore loader in the Tar Creek arena

07324400 WASHITA RIVER NEAR FOSS, OK

LOCATION.--Lat 35°32'20", long 99°10'10", in SW $^1/_4$ SW $^1/_4$ sec.1, T.12 N., R.19 W., Custer County, Hydrologic Unit 11130302, on right bank at downstream side county road bridge, 0.4 mi downstream from Oak Creek, 0.9 mi downstream from Foss Dam, 2.5 mi west of Stafford, 6.0 mi north of Foss, and at mile 473.5.

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

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

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

REMARKS.--Records good. Flow completely regulated since 1961 by Foss Reservoir (station 07324300), except for 55 mi^2 intervening area. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	8.1	5.8	6.0	174	187	197	8.7	591	14	8.7	6.2
2	3.8	6.3	5.7	6.0	174	186	198	8.4	781	14	8.6	6.0
3	3.9	5.7	5.7	6.0	175	185	197	10	654	13	8.3	14
4	4.3	5.6	5.6	6.1	175	184	197	189	785	13	8.2	8.9
5	4.3	6.2	5.7	6.2	174	183	198	314	998	13	8.3	6.8
6	4.0	6.0	5.8	6.3	176	184	200	266	1010	13	8.0	6.4
7	3.7	6.1	5.8	6.2	175	184	204	414	987	13	7.9	6.1
8	4.0	5.8	5.8	6.1	177	184	204	567	968	13	7.8	6.1
9	4.1	5.8	5.7	6.0	186	186	204	554	962	12	7.5	6.2
10	4.4	5.8	5.8	6.0	179	185	204	550	956	12	7.7	6.0
11	4.6	5.9	e5.3	89	177	186	205	491	949	12	7.9	5.8
12	4.6	5.9	e5.0	166	177	188	207	455	944	12	7.7	5.8
13	4.9	5.8	e4.8	166	177	187	207	418	944	12	7.5	5.7
14	4.7	5.9	e5.3	165	177	188	207	561	939	12	7.2	5.6
15	4.9	5.8	5.9	166	177	190	206	652	936	12	7.1	5.7
16	5.5	6.1	5.9	166	177	191	206	641	934	12	7.0	6.5
17	5.1	6.4	6.0	167	176	190	205	639	932	11	6.8	5.8
18	5.0	6.5	6.0	167	177	191	205	693	737	11	6.4	5.6
19	9.0	6.4	5.6	167	178	190	205	682	435	10	6.3	5.6
20	5.7	6.6	5.6	168	178	192	205	443	120	10	6.2	5.7
21	6.0	6.8	5.7	168	178	140	205	640	17	10	6.4	5.7
22	7.3	6.7	5.8	168	179	197	205	763	17	10	6.4	5.6
23	6.2	6.4	5.8	169	200	196	206	921	17	9.7	6.1	5.5
24	7.1	6.4	e5.6	168	257	196	204	895	17	9.8	6.1	5.6
25	6.0	6.4	e5.4	168	194	196	204	886	17	9.7	6.3	5.6
26	5.8	6.3	e5.0	167	188	196	205	883	16	9.7	6.8	5.7
27	5.6	6.1	e5.4	167	189	196	128	883	16	9.5	6.9	5.7
28	5.9	5.6	6.3	171	187	197	8.7	710	15	9.4	6.2	5.5
29	6.5	5.7	6.2	175	---	198	8.5	630	15	9.2	6.0	5.6
30	5.9	5.8	6.1	176	---	198	8.7	658	15	9.1	5.9	5.5
31	5.6	---	6.0	175	---	197	---	340	---	9.0	5.9	---
TOTAL	162.6	184.9	176.1	3519.9	5108	5848	5443.9	16765.1	16724	349.1	220.1	186.5
MEAN	5.25	6.16	5.68	114	182	189	181	541	557	11.3	7.10	6.22
MAX	9.0	8.1	6.3	176	257	198	207	921	1010	14	8.7	14
MIN	3.7	5.6	4.8	6.0	174	140	8.5	8.4	15	9.0	5.9	5.5
AC-FT	323	367	349	6980	10130	11600	10800	33250	33170	692	437	370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

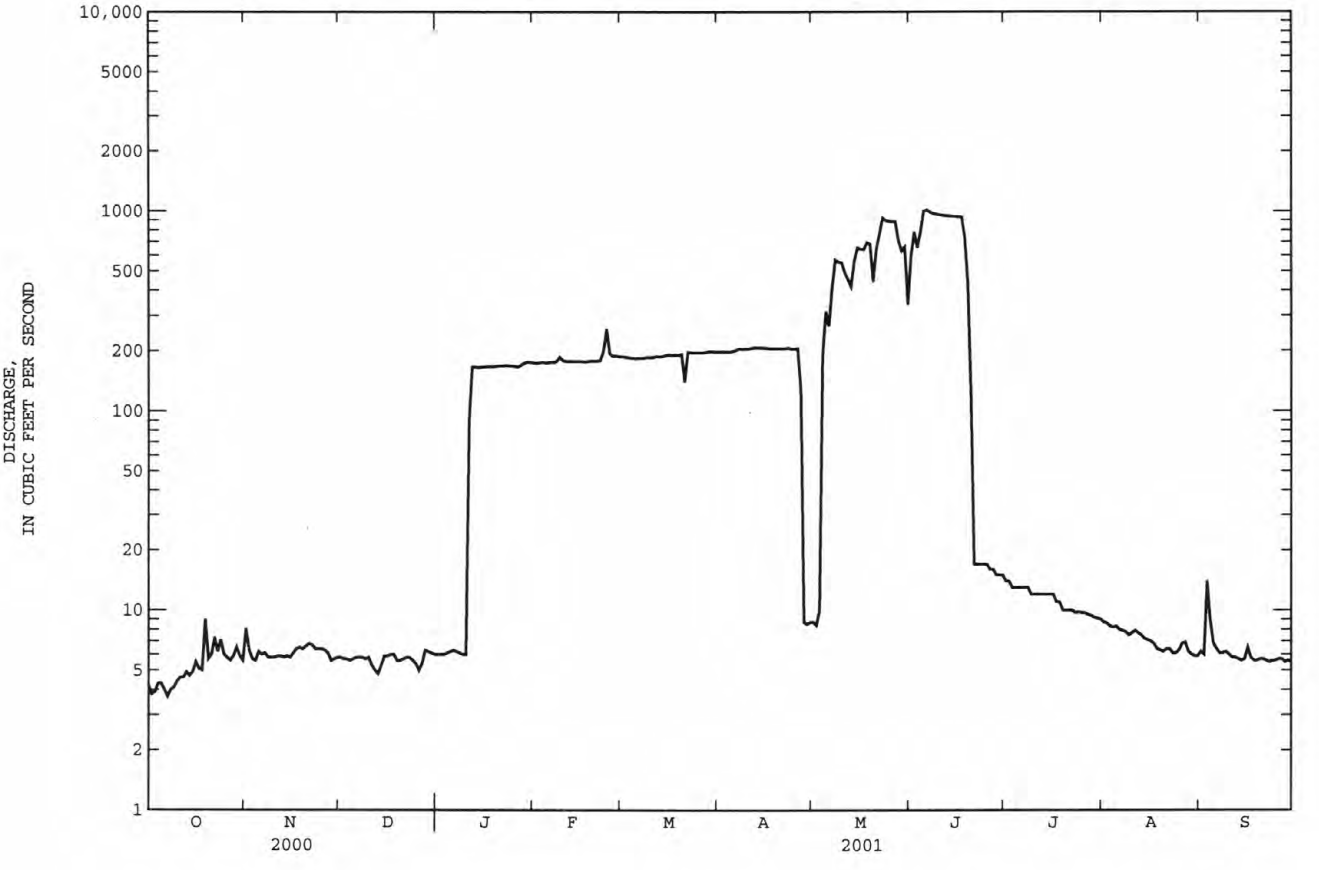
MEAN	53.5	27.8	27.4	42.3	44.9	52.9	73.7	108	146	57.5	53.0	31.3
MAX	598	278	298	633	342	297	607	622	763	385	579	444
(WY)	1998	1999	1997	1998	1998	2000	1998	1997	1982	1997	1997	1996
MIN	.15	.28	.36	.56	.60	.57	1.62	1.08	1.28	2.27	3.12	.46
(WY)	1968	1968	1968	1968	1968	1968	1967	1967	1966	1967	1973	1966

e Estimated

07324400 WASHITA RIVER NEAR FOSS, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	25375.9		54688.2			
ANNUAL MEAN	69.3		150		59.8	
HIGHEST ANNUAL MEAN					373	1997
LOWEST ANNUAL MEAN					3.87	1963
HIGHEST DAILY MEAN	626	Mar 28	1010	Jun 6	1370	Sep 15 1996
LOWEST DAILY MEAN	3.5	Sep 19	3.7	Oct 7	[a].06	Oct 2 1967
ANNUAL SEVEN-DAY MINIMUM	3.9	Sep 14	4.0	Oct 2	.08	Sep 28 1967
MAXIMUM PEAK FLOW			1080	May 30	[b]3010	Aug 26 1969
MAXIMUM PEAK STAGE			15.59	May 30	21.56	Oct 3 1986
ANNUAL RUNOFF (AC-FT)	50330		108500		43340	
10 PERCENT EXCEEDS	342		552		200	
50 PERCENT EXCEEDS	6.5		11		7.1	
90 PERCENT EXCEEDS	4.5		5.6		2.0	

[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 $^1/_4$ NE $^1/_4$ sec.11, T.12 N., R.17 W., Custer County, Hydrologic Unit 11130302, on downstream side of pier of bridge on U.S. Highway 183, 0.5 mi north of Clinton, 0.8 mi upstream from Beaver Creek, 4.8 mi downstream from Barnitz Creek, and at mile 447.4.

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

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

REVISED RECORDS.--WSP 1221: Drainage area.

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

REMARKS.--Records good. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	92	34	e17	236	303	259	69	1130	75	e25	27
2	12	176	34	e16	230	345	254	64	1180	73	e25	27
3	12	85	34	e18	228	321	253	75	994	69	e25	26
4	12	63	34	e22	225	300	251	227	870	66	e24	59
5	12	57	34	e40	222	285	252	943	1040	66	e24	47
6	12	63	35	e58	221	280	253	538	1130	e62	e24	39
7	13	57	36	57	218	279	251	421	1120	e57	e23	32
8	13	47	36	55	221	280	249	598	1060	e55	e23	28
9	13	44	36	54	275	287	244	597	1030	e53	e23	26
10	14	41	36	60	292	283	242	587	1010	e52	28	26
11	14	39	e32	64	254	281	239	563	1000	51	e27	25
12	15	38	e22	150	246	295	236	506	984	49	e27	25
13	16	37	e18	198	243	290	230	471	979	50	e26	25
14	16	36	e17	201	240	282	230	463	968	51	e26	24
15	23	36	e19	199	238	277	233	643	954	52	28	31
16	153	35	e22	197	233	270	229	659	948	49	33	39
17	82	36	e20	198	228	264	226	671	945	44	36	31
18	33	36	e23	200	225	261	225	836	908	40	41	28
19	25	36	e26	200	226	264	225	910	618	38	34	26
20	24	36	e29	198	226	266	226	985	345	37	32	26
21	27	35	e27	199	224	262	225	758	165	36	30	25
22	43	35	e29	200	227	218	226	802	110	35	29	24
23	76	36	e30	200	267	251	229	918	110	33	29	23
24	93	36	e23	201	675	248	219	932	103	32	29	22
25	118	37	e22	200	560	243	216	918	94	31	29	22
26	73	37	e20	200	381	243	214	913	92	32	42	22
27	53	36	e19	201	337	247	211	911	87	33	46	22
28	49	36	e22	218	317	253	136	888	107	34	32	21
29	64	35	e25	248	---	257	74	1060	88	33	29	21
30	57	34	e21	256	---	256	69	3070	77	32	28	21
31	42	---	e19	241	---	259	---	1850	---	27	27	---
TOTAL	1222	1447	834	4566	7715	8450	6626	23846	20246	1447	904	840
MEAN	39.4	48.2	26.9	147	276	273	221	769	675	46.7	29.2	28.0
MAX	153	176	36	256	675	345	259	3070	1180	75	46	59
MIN	12	34	17	16	218	218	69	64	77	27	23	21
AC-FT	2420	2870	1650	9060	15300	16760	13140	47300	40160	2870	1790	1670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

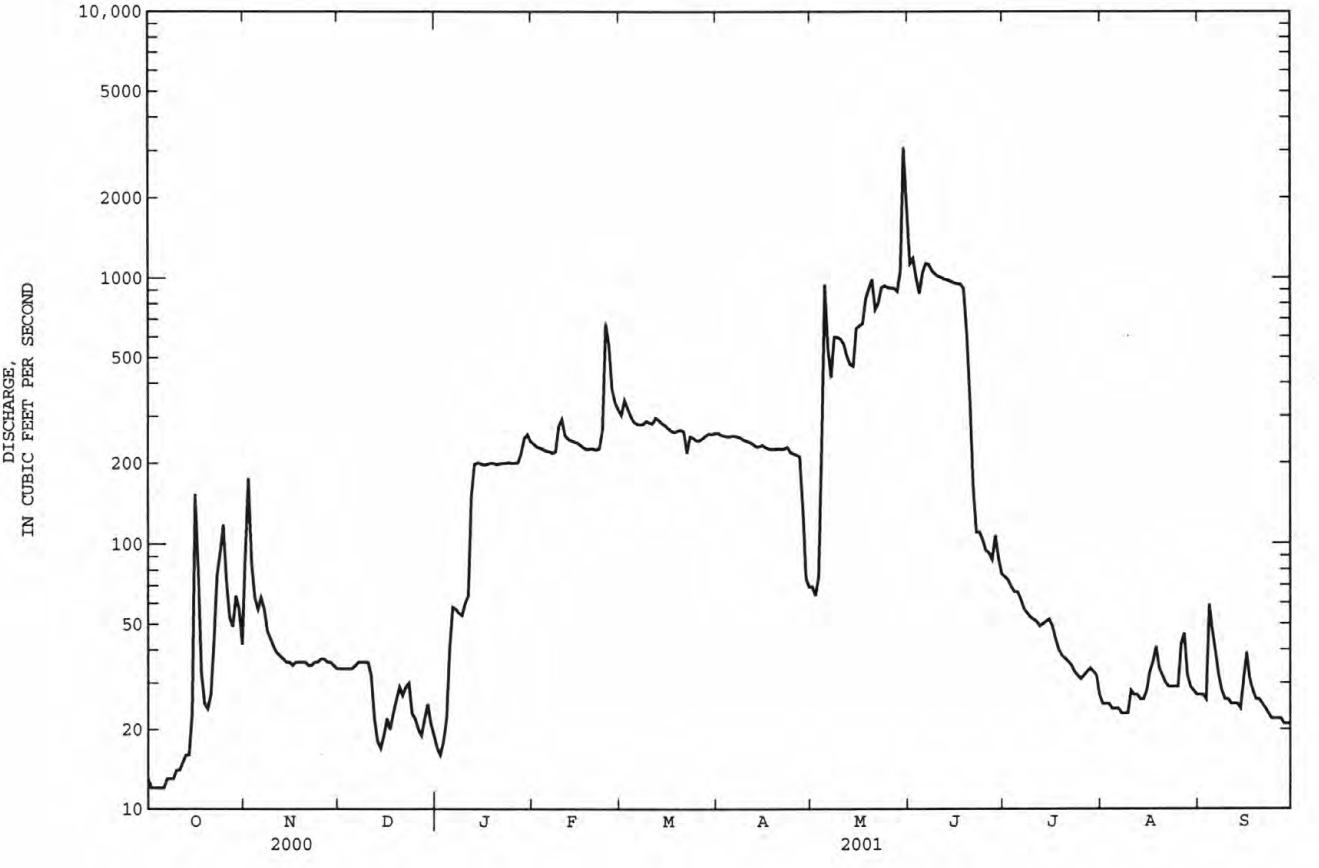
MEAN	117	80.0	65.8	78.2	94.1	116	143	239	267	114	113	122
MAX	1477	494	504	742	574	654	1112	1256	1190	705	1061	1519
(WY)	1987	1987	1997	1998	1997	1998	1997	1997	1997	1989	1995	1996
MIN	3.30	4.23	5.68	4.78	7.00	6.24	9.64	4.10	4.44	6.42	6.01	5.87
(WY)	1967	1964	1964	1971	1967	1968	1971	1967	1966	1966	1965	1964

e Estimated

07325000 WASHITA RIVER NEAR CLINTON, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	46609		78143			
ANNUAL MEAN	127		214		[a]129	
HIGHEST ANNUAL MEAN					696	1997
LOWEST ANNUAL MEAN					13.8	1967
HIGHEST DAILY MEAN	1910	Mar 23	3070	May 30	7710	Oct 3 1986
LOWEST DAILY MEAN	11	Sep 21	12	Oct 2	[b].00	Jul 26 1964
ANNUAL SEVEN-DAY MINIMUM	12	Sep 18	12	Oct 1	.04	Jul 23 1964
MAXIMUM PEAK FLOW			3260	May 30	[c]10800	Sep 15 1996
MAXIMUM PEAK STAGE			21.50	May 30	[d]26.24	Sep 15 1996
ANNUAL RUNOFF (AC-FT)	92450		155000		93580	
10 PERCENT EXCEEDS	404		649		380	
50 PERCENT EXCEEDS	42		66		32	
90 PERCENT EXCEEDS	15		22		8.2	

[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 $^1/_4$ NW $^1/_4$ sec.3, T.7 N., R.13 W., Caddo County, Hydrologic Unit 11130302, on downstream side of left abutment of bridge on State Highway 9, 1,300 ft upstream from Running Creek, 2.7 mi east of Carnegie, and at mile 353.9. Records include flow of Running Creek.

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

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

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

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

REMARKS.--Records fair. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e50	484	196	214	e550	736	461	267	5010	310	e105	e82
2	e50	408	191	196	e500	688	460	249	3040	283	e104	e81
3	e50	374	186	194	e447	665	460	251	2250	268	e103	e80
4	50	410	183	205	e450	660	452	332	1930	256	e102	e79
5	e50	354	182	197	e448	617	445	1300	1570	243	e101	e78
6	e49	317	182	234	444	585	438	1190	1370	236	e100	79
7	e49	292	182	349	439	561	437	1310	1470	227	e100	135
8	e49	273	181	391	436	552	438	853	1470	216	e97	150
9	e49	274	180	341	545	562	430	706	1370	207	105	e119
10	e49	295	179	323	908	580	424	747	1280	200	120	e107
11	e48	307	176	302	687	574	419	713	1220	187	e100	e99
12	e48	273	167	292	598	e573	408	839	1180	182	227	e96
13	e48	246	141	286	540	e572	402	722	1150	179	193	e92
14	e48	226	119	302	511	571	398	611	1180	176	707	e90
15	e48	216	173	356	497	544	399	571	1140	179	459	110
16	e47	206	207	349	484	526	405	566	1080	182	326	479
17	e47	199	218	345	464	510	390	673	1040	181	223	802
18	143	193	197	343	449	493	385	984	1020	171	180	375
19	229	185	191	342	441	488	381	1920	995	161	163	230
20	161	181	181	341	437	488	381	3180	916	151	151	187
21	127	177	184	339	434	488	384	4580	740	145	121	152
22	179	175	177	336	427	483	384	3400	593	138	e127	128
23	593	177	173	333	432	474	381	1880	454	e134	e118	e119
24	727	194	170	334	647	441	376	1640	391	e130	e110	e115
25	901	294	167	333	2940	452	374	1570	368	e127	e105	e110
26	1470	294	130	332	1900	452	366	1390	346	e123	e103	e105
27	1260	243	122	332	1130	452	360	1290	330	e119	e100	e100
28	779	221	166	356	851	457	355	1370	319	e116	e97	e97
29	972	209	196	853	---	466	348	1410	318	e114	e93	e92
30	888	200	215	1270	---	469	326	2550	299	e112	e87	e88
31	576	---	226	730	---	465	---	5040	---	e109	e84	---
TOTAL	9834	7897	5538	11450	19036	16644	12067	44104	35839	5562	4911	4656
MEAN	317	263	179	369	680	537	402	1423	1195	179	158	155
MAX	1470	484	226	1270	2940	736	461	5040	5010	310	707	802
MIN	47	175	119	194	427	441	326	249	299	109	84	78
AC-FT	19510	15660	10980	22710	37760	33010	23930	87480	71090	11030	9740	9240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

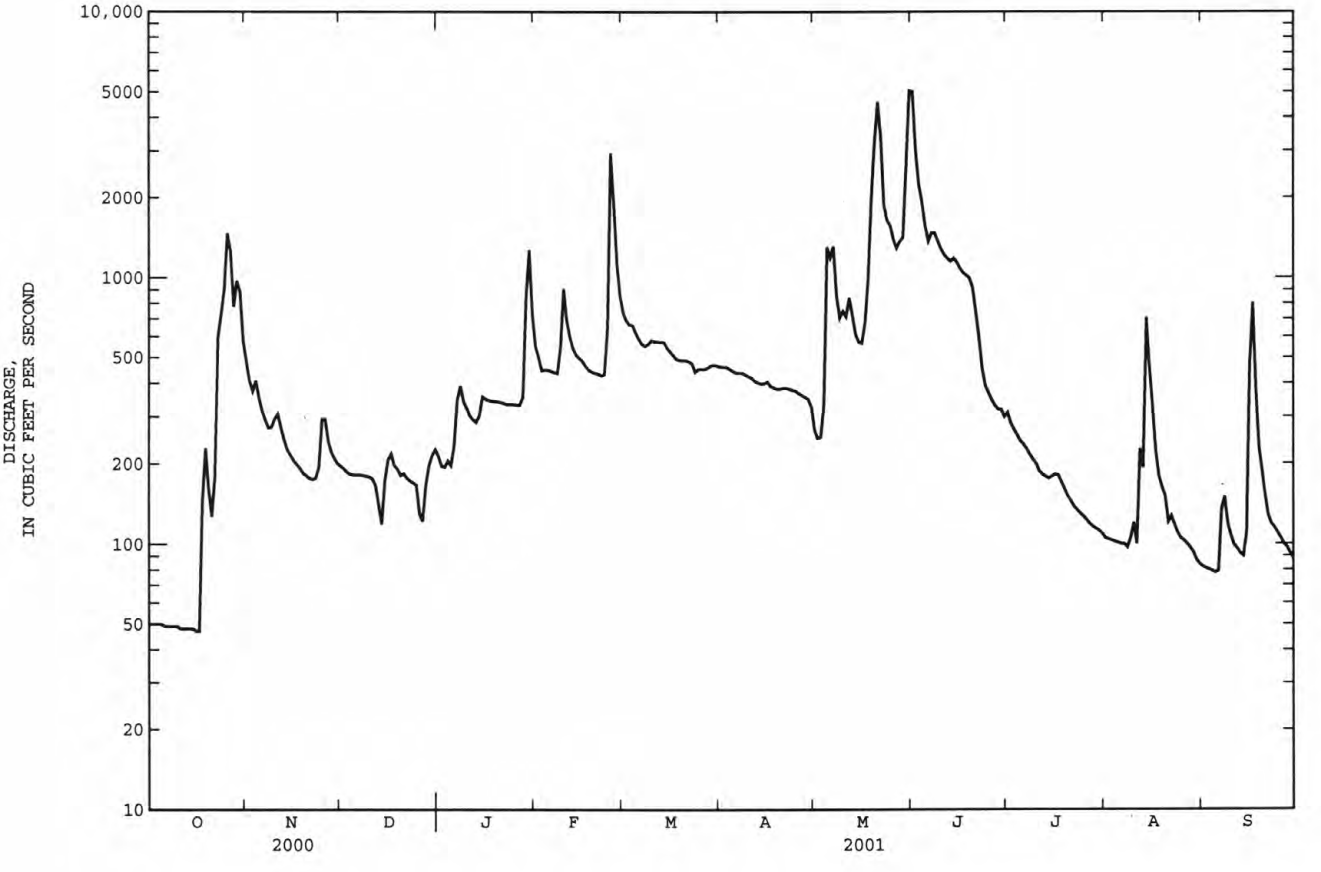
MEAN	428	296	232	219	250	400	410	859	853	285	259	369
MAX	5311	1471	1032	1100	1127	2255	2832	5356	4994	1150	1760	2468
(WY)	1987	1987	1993	1998	1997	1998	1997	1993	1995	1975	1995	1996
MIN	21.8	27.3	33.6	36.0	36.6	34.2	11.1	10.0	94.0	7.10	14.6	15.6
(WY)	1973	1971	1964	1971	1971	1971	1971	1971	1984	1964	1972	1984

e Estimated

07325500 WASHITA RIVER AT CARNEGIE, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	171462		177538			
ANNUAL MEAN	468		486		[a]405	
HIGHEST ANNUAL MEAN					1432	1987
LOWEST ANNUAL MEAN					72.8	1967
HIGHEST DAILY MEAN	8120	Mar 25	5040	May 31	28500	Jun 5 1995
LOWEST DAILY MEAN	39	Sep 21	47	Oct 16,17	[b].00	Jul 20 1964
ANNUAL SEVEN-DAY MINIMUM	44	Sep 17	48	Oct 11	.00	Jul 20 1964
MAXIMUM PEAK FLOW			5370	Jun 1	[c]40600	Oct 20 1983
MAXIMUM PEAK STAGE			17.44	Jun 1	31.70	Oct 20 1983
ANNUAL RUNOFF (AC-FT)	340100		352100		293700	
10 PERCENT EXCEEDS	974		1130		902	
50 PERCENT EXCEEDS	192		326		140	
90 PERCENT EXCEEDS	53		100		38	

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



07325800 COBB CREEK NEAR EAKLY, OK

LOCATION.--Lat 35°17'26", long 98°35'38", in NW $^1/_4$ NE $^1/_4$ 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.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.1	31	23	30	31	44	29	21	227	15	e8.8	9.9
2	7.8	28	24	30	30	42	29	21	207	15	e8.7	9.8
3	7.6	28	23	29	29	39	28	35	111	14	e8.7	e9.3
4	7.4	27	24	30	29	36	28	238	59	13	e8.4	9.8
5	7.7	26	24	33	29	34	28	202	45	13	e8.3	10
6	7.9	27	25	38	29	33	28	54	44	12	e8.4	11
7	8.6	26	25	40	29	32	28	39	35	12	e8.3	10
8	9.0	30	25	37	29	34	27	36	31	11	e8.2	9.9
9	9.3	31	25	34	69	40	27	30	29	11	e8.0	9.8
10	9.7	27	25	34	42	34	27	28	27	11	e7.9	9.8
11	10	25	25	35	36	33	26	26	25	11	e7.8	e9.2
12	9.8	25	25	33	33	41	25	25	23	11	11	e9.1
13	10	24	e24	32	33	34	24	24	22	11	11	e9.0
14	11	24	e23	31	33	32	25	23	28	12	e9.7	e8.8
15	12	24	29	29	33	31	25	21	29	13	e9.3	9.6
16	17	24	32	29	31	32	25	20	24	12	e9.2	11
17	12	24	30	29	30	27	24	19	22	11	10	11
18	12	24	28	29	29	28	24	378	21	e9.7	11	12
19	11	23	29	28	29	29	24	105	20	e9.3	11	12
20	11	23	27	28	29	29	24	110	20	e9.1	10	11
21	13	23	26	28	30	29	24	62	19	12	e9.8	11
22	44	24	26	28	30	28	26	46	19	e9.5	e9.6	11
23	308	25	26	28	36	28	29	38	18	e9.2	e9.4	10
24	168	27	26	28	416	28	27	33	17	e9.1	e9.1	10
25	228	26	26	27	133	27	25	32	17	e9.0	e8.9	10
26	207	25	36	27	69	27	24	30	16	e8.9	10	10
27	101	24	52	28	52	28	23	31	16	10	10	10
28	73	24	37	50	46	30	22	162	16	e9.5	e9.4	9.5
29	166	24	32	72	---	30	22	108	15	e9.4	10	9.5
30	49	24	31	44	---	29	21	1130	15	e9.4	10	9.6
31	37	---	30	34	---	30	---	311	---	e9.0	9.8	---
TOTAL	1592.9	767	863	1032	1474	998	768	3438	1217	341.1	289.7	302.6
MEAN	51.4	25.6	27.8	33.3	52.6	32.2	25.6	111	40.6	11.0	9.35	10.1
MAX	308	31	52	72	416	44	29	1130	227	15	11	12
MIN	7.4	23	23	27	29	27	21	19	15	8.9	7.8	8.8
AC-FT	3160	1520	1710	2050	2920	1980	1520	6820	2410	677	575	600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2001, BY WATER YEAR (WY)

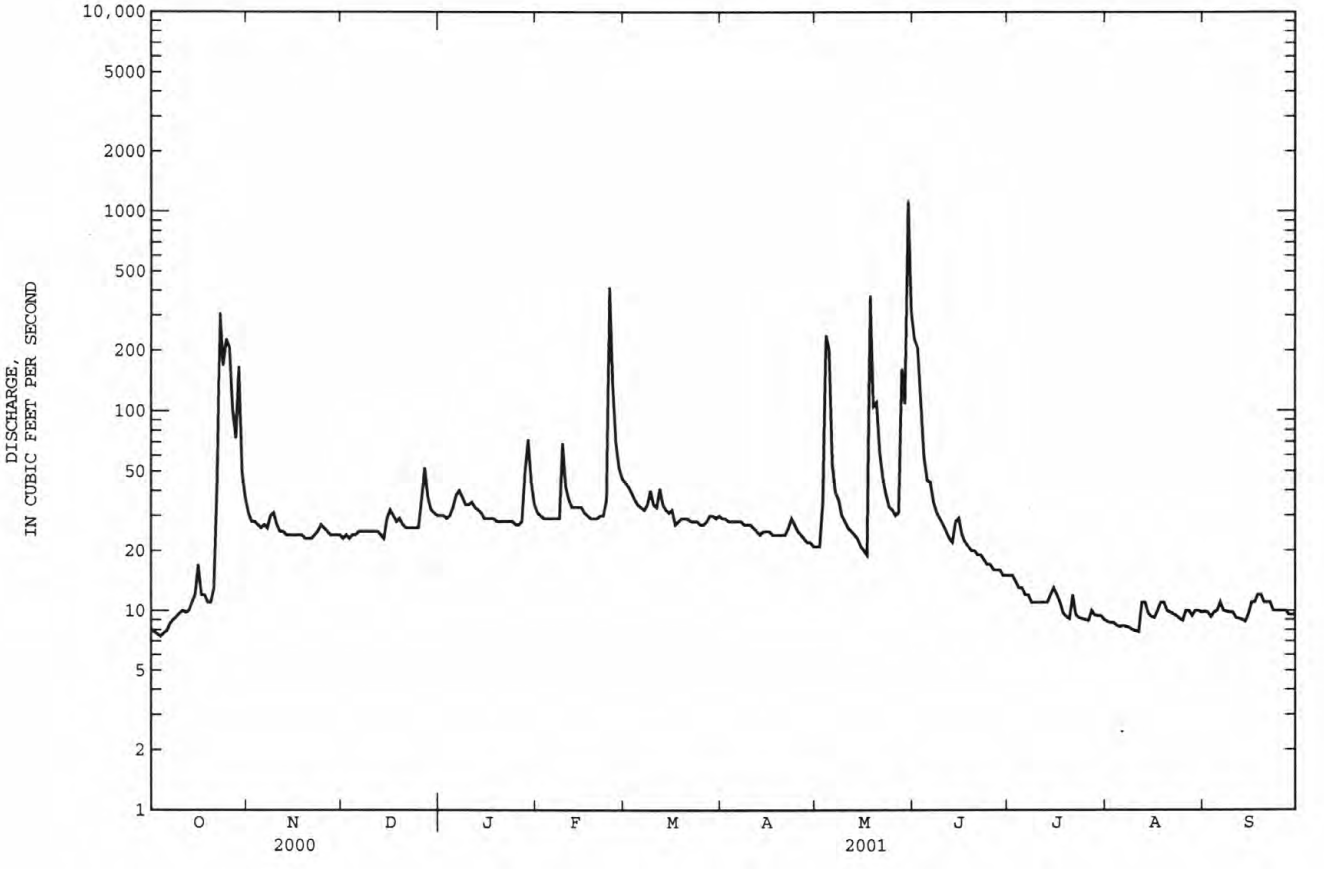
MEAN	29.5	27.6	25.2	20.7	21.6	32.9	29.4	62.7	52.0	15.9	18.0	20.8
MAX	317	104	84.9	50.2	55.1	138	140	303	291	85.1	86.0	161
(WY)	1987	1993	1993	1993	1997	1998	1997	1993	1995	1975	1974	1986
MIN	4.34	6.11	4.88	8.78	8.99	8.38	5.27	2.79	7.84	1.01	.90	2.15
(WY)	1973	1979	1979	1981	1981	1971	1971	1971	1984	1974	1972	1972

e Estimated

07325800 COBB CREEK NEAR EAKLY, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1969 - 2001	
ANNUAL TOTAL	15112.0		13083.3			
ANNUAL MEAN	41.3		35.8		29.7	
HIGHEST ANNUAL MEAN					91.0	1987
LOWEST ANNUAL MEAN					10.1	1979
HIGHEST DAILY MEAN	1190	Mar 23	1130	May 30	3750	Sep 29 1986
LOWEST DAILY MEAN	5.7	Sep 15	7.4	Oct 4	[a].00	Aug 18 1970
ANNUAL SEVEN-DAY MINIMUM	5.9	Sep 14	7.9	Oct 1	.04	May 24 1971
MAXIMUM PEAK FLOW			2160	May 30	12000	Jun 4 1995
MAXIMUM PEAK STAGE			15.69	May 30	24.38	Sep 29 1986
ANNUAL RUNOFF (AC-FT)	29970		25950		21540	
10 PERCENT EXCEEDS	46		44		39	
50 PERCENT EXCEEDS	23		25		15	
90 PERCENT EXCEEDS	8.0		9.4		4.8	

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



07325900 FORT COBB RESERVOIR NEAR FORT COBB, OK

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

DRAINAGE AREA.--304 mi^2.

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

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

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

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

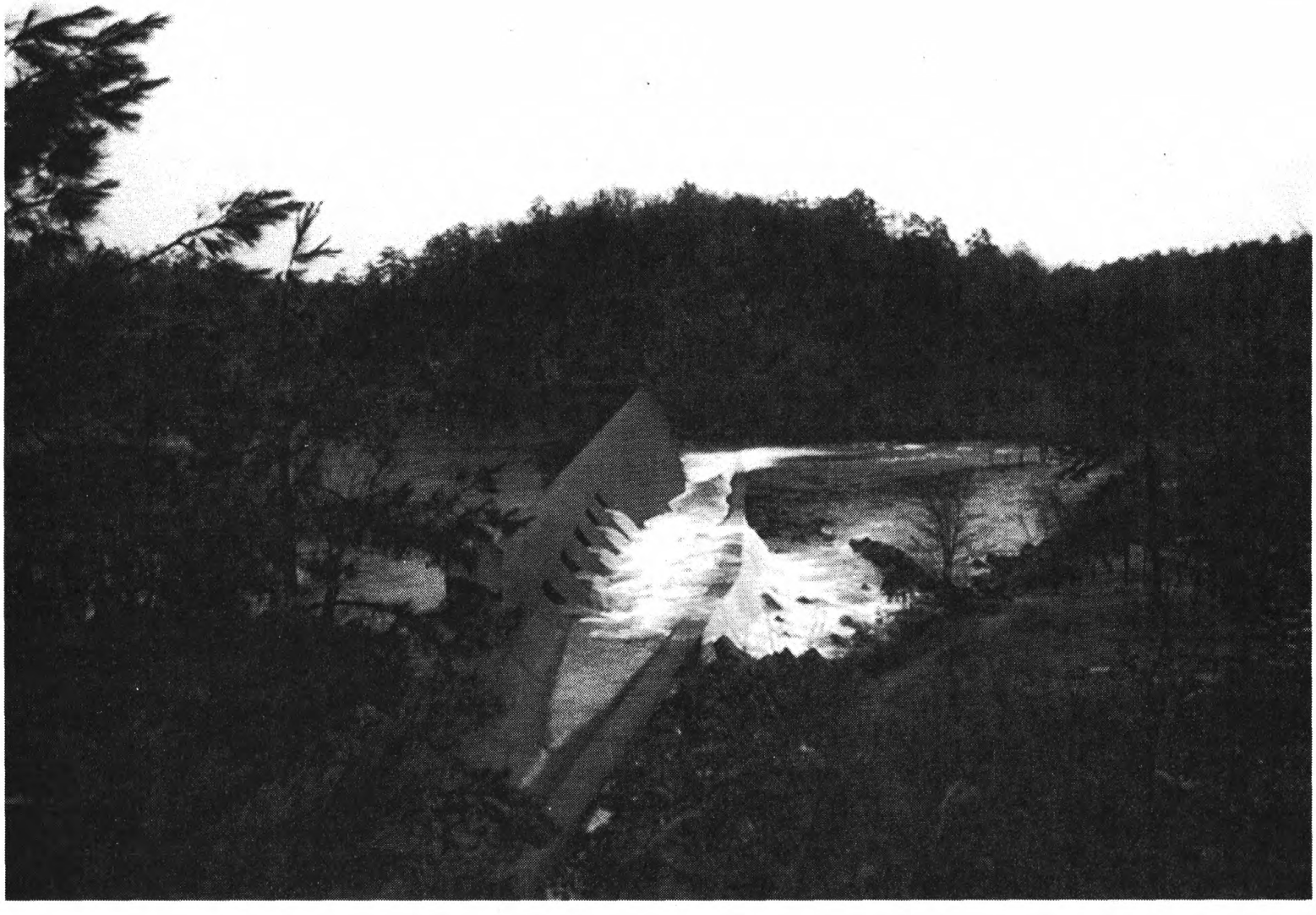
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 121,400 acre-ft, June 13, 1995, elevation, 1,352.25 ft; minimum since conservation pool was first filled, 54,650 acre-ft, Oct. 19, 1972, elevation 1,335.06 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 84,420 acre-ft, June 2, elevation, 1,344.62 ft; minimum, 67,028 acre-ft, Oct. 11, elevation 1,340.13 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30	1340.45	68,160	-	926
Oct. 31	1341.95	73,650	+5,490	845
Nov. 30	1342.36	75,230	+1,580	1,333
Dec. 31	1342.46	75,620	+390	954
CAL YR 00	-	-	+930	12,720
Jan. 31	1342.44	75,550	-70	968
Feb. 28	1342.85	77,140	+1,590	945
Mar. 31	1342.10	74,220	-2,920	781
Apr. 30	1342.31	75,040	+820	987
May 31	1344.47	83,790	+8,750	1,119
June 30	1342.30	75,000	-8,790	1,279
July 31	1341.40	71,600	-3,400	1,209
Aug. 31	1341.22	70,930	-670	1,265
Sept. 30	1340.61	68,730	-2,200	1,022
WTR YR 01	-	-	+570	13,633

*Elevation at 2400



Mt. Fork Reregulation Dam near Broken Bow

07326000 COBB CREEK NEAR FORT COBB, OK

LOCATION.--Lat 35°08'37", long 98°26'33", in NE $^1/_4$ NE $^1/_4$ sec.27, T.8 N., R.12 W., Caddo County, Hydrologic Unit 11130302, on left bank 10 ft upstream from county road bridge, 0.3 mi upstream from Punjo Creek, 1.2 mi downstream from Fort Cobb Dam, 3.0 mi north of Fort Cobb, and at mile 5.8.

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

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

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

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

REMARKS.--Records poor. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	e4.3	e4.3	4.5	98	3.7	3.8	3.5	48	2.5	2.4	2.4
2	2.4	e4.3	e4.2	49	99	3.5	3.8	3.5	247	2.5	2.5	2.5
3	2.7	e4.4	e4.2	116	100	3.5	3.7	3.7	236	2.5	2.5	2.5
4	2.7	e4.3	e4.2	115	100	3.5	3.5	4.0	352	2.5	2.5	2.5
5	2.8	e4.4	e4.2	115	100	3.5	3.3	3.9	456	2.5	2.5	2.5
6	2.8	e4.4	e4.1	114	101	3.6	3.3	3.5	452	2.5	2.6	2.5
7	3.0	e4.1	e4.1	114	101	50	3.4	92	452	2.4	2.6	2.4
8	3.0	e4.5	e4.1	113	102	102	3.4	198	451	2.4	2.6	2.3
9	3.0	e4.3	e4.1	113	104	102	3.5	210	451	2.4	2.7	2.2
10	2.8	e4.1	e4.1	113	103	102	3.6	210	447	2.7	2.9	2.1
11	2.8	e4.3	e4.1	113	104	102	3.8	211	445	2.9	2.7	2.1
12	3.1	e4.2	e4.1	113	104	102	3.9	210	399	2.5	e2.7	2.1
13	3.3	e4.2	e4.3	63	104	103	3.9	210	232	2.5	2.7	2.1
14	3.3	e4.2	e4.2	4.5	105	181	3.9	138	232	2.5	2.7	2.1
15	3.2	e4.1	e4.2	4.2	107	246	3.9	4.4	190	2.5	2.7	2.1
16	3.1	e4.0	e4.1	4.2	89	246	3.8	3.9	7.4	2.5	2.7	2.1
17	3.1	e4.0	e4.1	4.3	6.3	247	3.8	3.7	5.8	2.5	2.6	2.1
18	3.1	e4.1	83	4.3	4.8	249	3.7	e4.1	5.3	2.4	2.7	2.2
19	3.1	e4.2	148	4.9	3.8	249	3.7	e4.3	5.1	2.4	2.7	2.1
20	3.4	e4.3	147	4.0	4.0	183	3.6	e4.2	4.9	2.4	2.6	2.0
21	3.4	e4.2	147	3.8	4.0	122	3.4	e4.2	4.7	2.4	2.7	2.1
22	e3.8	e4.0	79	e3.4	3.6	117	3.6	4.2	4.4	2.3	2.7	2.1
23	e3.8	e4.3	4.7	3.0	3.8	57	3.4	4.1	4.3	2.3	2.7	2.1
24	e3.8	e4.6	4.3	e3.4	e3.8	4.9	3.5	3.9	4.0	2.3	2.7	2.0
25	e3.9	e4.3	4.6	e4.0	3.7	4.3	3.5	3.9	e3.5	2.4	2.7	2.0
26	e3.9	e4.2	5.5	e4.4	3.5	4.1	3.5	3.9	e3.1	2.4	3.2	2.1
27	e4.0	e4.1	4.9	4.7	3.6	4.3	3.5	e3.9	2.7	2.4	2.7	2.1
28	e4.0	e4.2	4.6	4.7	3.7	4.2	3.4	e3.9	2.6	2.4	2.5	2.1
29	e4.1	e4.3	4.6	4.4	---	4.1	3.5	e3.9	2.6	2.4	2.5	2.1
30	e4.1	e4.2	4.5	48	---	3.9	3.4	e3.9	2.6	2.4	2.5	2.2
31	e4.1	---	4.8	98	---	3.8	---	e3.9	---	2.4	2.5	---
TOTAL	102.2	127.1	717.2	1467.7	1669.6	2614.9	108.0	1569.4	5153.0	76.1	82.0	65.8
MEAN	3.30	4.24	23.1	47.3	59.6	84.4	3.60	50.6	172	2.45	2.65	2.19
MAX	4.1	4.6	148	116	107	249	3.9	211	456	2.9	3.2	2.5
MIN	2.4	4.0	4.1	3.0	3.5	3.5	3.3	3.5	2.6	2.3	2.4	2.0
AC-FT	203	252	1420	2910	3310	5190	214	3110	10220	151	163	131

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

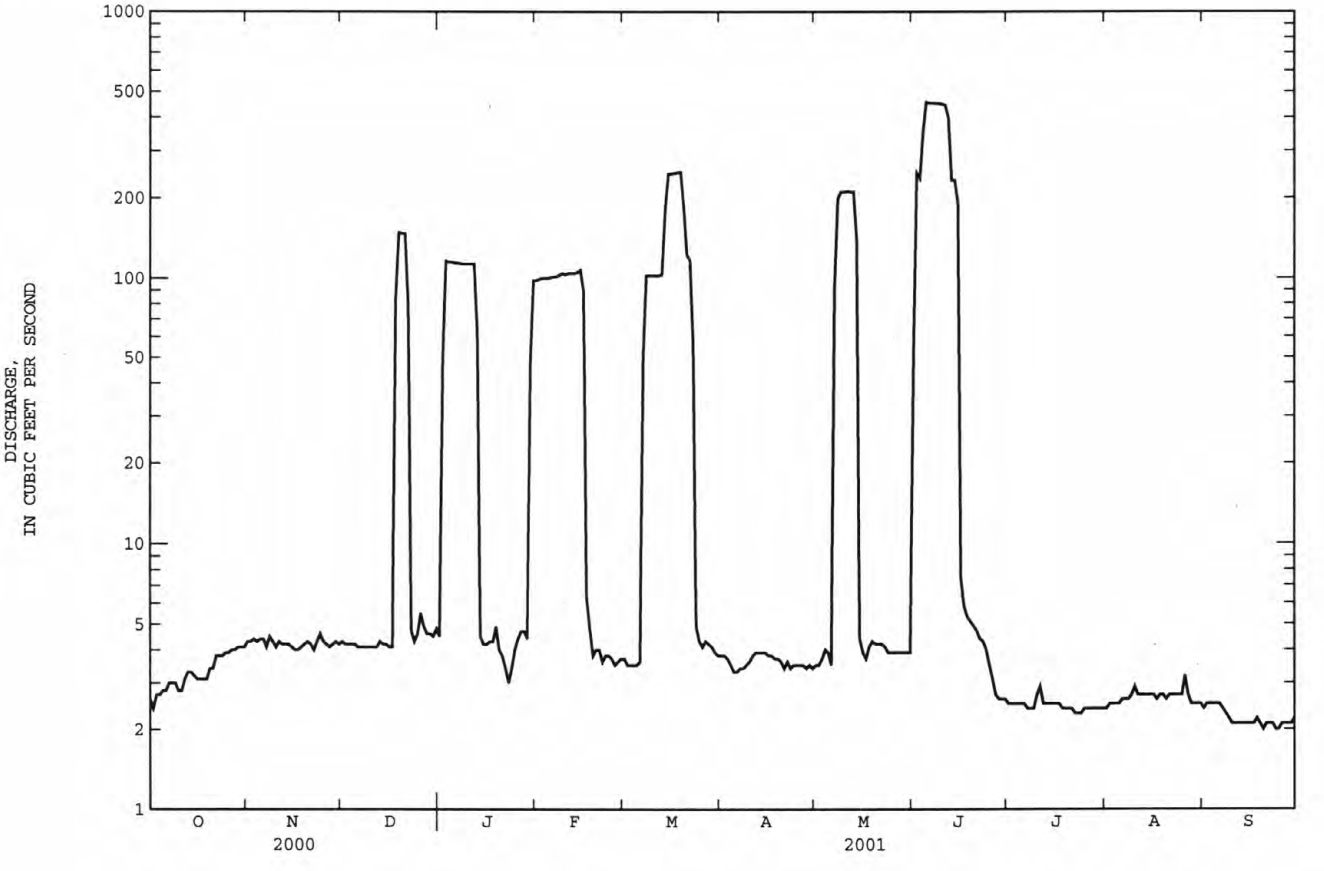
MEAN	26.0	26.8	24.3	27.7	29.5	38.8	47.0	72.3	113	37.3	19.1	19.6
MAX	345	538	194	139	131	312	240	676	779	262	211	157
(WY)	1987	1987	1993	1969	1975	1990	1945	1949	1987	1995	1975	1965
MIN	1.41	1.62	1.57	1.99	2.14	2.12	1.97	1.50	1.49	.78	1.18	.52
(WY)	1985	1973	1973	1977	1981	1977	1959	1985	1959	1985	1956	1956

e Estimated

07326000 COBB CREEK NEAR FORT COBB, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1940 - 2001	
ANNUAL TOTAL	20576.5		13753.0			
ANNUAL MEAN	56.2		37.7		[a]40.0	
HIGHEST ANNUAL MEAN					176	1987
LOWEST ANNUAL MEAN					2.34	1981
HIGHEST DAILY MEAN	558	May 10	456	Jun 5	9840	May 18 1949
LOWEST DAILY MEAN	1.4	Mar 25	2.0	Sep 20,24,25	[b].20	Sep 20 1956
ANNUAL SEVEN-DAY MINIMUM	1.5	Mar 13	2.1	Sep 19	.20	Jul 20 1981
MAXIMUM PEAK FLOW			467	Jun 6	[c]1280	Jun 23 1987
MAXIMUM PEAK STAGE			9.55	Jun 6	[d]20.50	Jun 4 1995
ANNUAL RUNOFF (AC-FT)	40810		27280		29010	
10 PERCENT EXCEEDS	193		114		65	
50 PERCENT EXCEEDS	3.2		3.9		4.2	
90 PERCENT EXCEEDS	1.8		2.4		2.1	

[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 $^1/_4$ sec.15, T.7 N., R.10 W., Caddo County, Hydrologic Unit 11130302 on right downstream bank at bridge on U.S. Highway 281 at north edge of Anadarko, 8.1 mi upstream from Sugar Creek, and at mile 305.2.

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

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

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

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

REMARKS.--Records fair. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e72	689	251	275	870	915	e535	360	4570	357	122	124
2	e70	570	246	260	730	805	e540	309	4010	367	119	115
3	69	489	246	267	663	751	e538	286	2810	335	116	113
4	e68	448	e270	323	634	724	536	291	2430	e309	113	110
5	e67	453	e260	342	616	716	e535	425	2250	e285	111	112
6	e65	404	231	357	604	682	e520	1240	2030	e260	110	117
7	e64	361	229	399	592	656	e524	1260	1950	e245	107	110
8	e65	352	228	477	591	678	e518	1310	1960	230	106	123
9	e66	348	227	524	650	729	e514	1050	1930	218	104	174
10	e67	339	227	473	788	722	e494	926	1830	210	102	142
11	e69	332	e230	466	1040	735	e490	957	1750	202	138	120
12	73	340	e240	441	807	736	469	929	1700	189	187	110
13	74	315	e315	424	717	733	461	1060	1620	181	195	107
14	78	293	e260	379	678	735	455	948	1540	177	225	103
15	82	275	e245	329	660	816	448	789	1560	178	696	104
16	81	264	e240	373	646	830	445	675	1440	182	600	109
17	81	255	e239	380	618	803	448	664	1270	202	415	382
18	82	249	e250	378	528	783	431	818	1210	184	295	862
19	85	244	e300	374	505	770	425	1390	1180	174	223	471
20	122	e240	e380	369	498	766	424	2220	1140	166	191	272
21	129	e235	344	367	490	709	424	3720	1040	157	174	208
22	186	e200	343	361	484	674	436	4080	865	151	159	176
23	3650	e205	303	357	499	675	e428	2770	704	147	145	153
24	1570	e265	233	353	581	615	e420	1880	562	142	132	135
25	1200	e285	227	350	1380	524	e415	1700	496	138	123	123
26	1580	e290	e225	350	2590	534	e405	1600	453	135	146	113
27	1770	e285	e201	352	1630	538	e400	1470	443	134	147	107
28	1360	289	e182	398	1130	e540	e395	1680	418	130	132	101
29	1060	263	e210	495	---	e542	e382	1660	399	128	141	98
30	1240	255	226	1080	---	e541	379	2250	388	130	133	98
31	1020	---	247	1230	---	e538	---	3420	---	126	130	---
TOTAL	16265	9832	7855	13303	22219	21515	13834	44137	45948	6169	5837	5192
MEAN	525	328	253	429	794	694	461	1424	1532	199	188	173
MAX	3650	689	380	1230	2590	915	540	4080	4570	367	696	862
MIN	64	200	182	260	484	524	379	286	388	126	102	98
AC-FT	32260	19500	15580	26390	44070	42680	27440	87550	91140	12240	11580	10300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2001, BY WATER YEAR (WY)

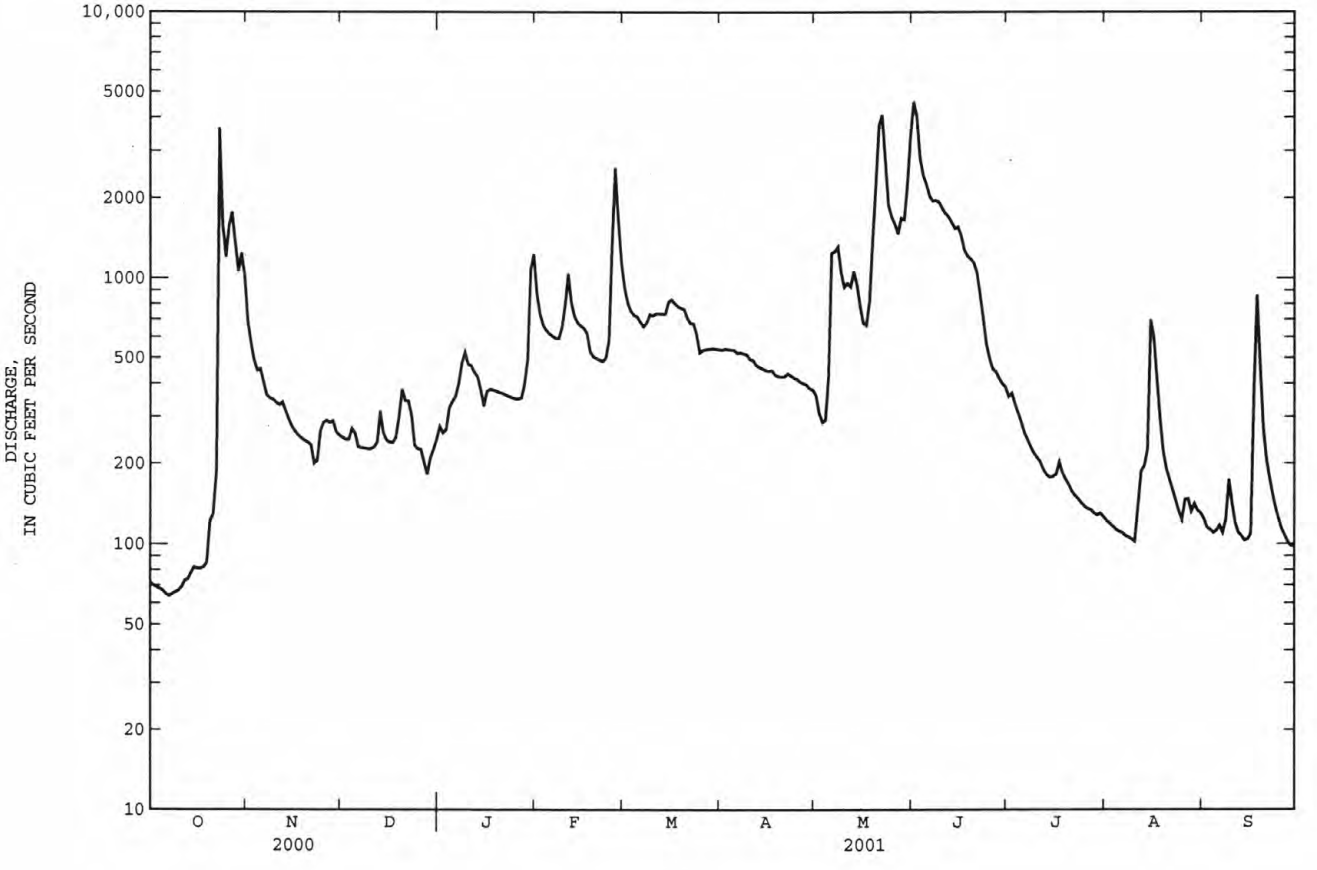
MEAN	501	365	297	286	320	501	507	977	1100	393	324	410
MAX	5480	2205	1352	1213	1269	2981	3003	5601	5843	1459	2223	2654
(WY)	1987	1987	1993	1998	1997	1998	1997	1993	1995	1989	1995	1996
MIN	21.2	37.0	41.6	52.0	55.4	50.6	16.7	9.57	85.7	12.6	19.7	32.2
(WY)	1973	1971	1971	1971	1971	1971	1971	1971	1967	1964	1972	1984

e Estimated

07326500 WASHITA RIVER AT ANADARKO, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1964 - 2001	
ANNUAL TOTAL	217122		212106			
ANNUAL MEAN	593		581		[a]499	
HIGHEST ANNUAL MEAN					1788	1987
LOWEST ANNUAL MEAN					72.7	1971
HIGHEST DAILY MEAN	7030	May 2	4570	Jun 1	37700	Oct 21 1983
LOWEST DAILY MEAN	48	Sep 21	64	Oct 7	.00	Aug 1 1964
ANNUAL SEVEN-DAY MINIMUM	56	Sep 17	66	Oct 4	.77	Jul 19 1964
MAXIMUM PEAK FLOW			5310	Oct 23	52800	Jun 6 1995
MAXIMUM PEAK STAGE			16.05	Oct 23	25.37	Jun 6 1995
ANNUAL RUNOFF (AC-FT)	430700		420700		361300	
10 PERCENT EXCEEDS	1450		1370		1160	
50 PERCENT EXCEEDS	252		374		189	
90 PERCENT EXCEEDS	75		112		52	

[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 $^1/_4$ SW $^1/_4$ sec. 10, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on right downstream bank of county road, 3 mi west of Cyril, and at mile 29.6.

DRAINAGE AREA.--3.44 mi^2.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	e5.5	1.5	e9.5	2.3	2.2	2.2	1.5	3.0	1.3	.40	.15
2	.04	e4.9	1.5	e3.3	2.2	2.1	2.1	1.5	2.9	1.2	.43	.15
3	.03	e4.6	1.5	e2.9	2.2	2.1	2.0	1.5	2.7	1.2	.38	.16
4	.03	e5.4	1.5	e2.7	2.2	2.0	2.0	1.7	2.6	1.1	.32	.17
5	.05	e4.8	1.5	e3.0	2.2	2.0	1.9	1.5	2.5	1.1	.31	.20
6	.08	e4.3	1.5	2.8	2.1	2.0	1.9	1.4	2.5	1.1	.26	.18
7	.06	e4.0	1.5	2.5	2.1	2.0	1.9	1.5	2.4	1.0	.22	.16
8	.08	e5.4	e1.5	2.2	2.1	2.2	2.0	1.4	2.4	1.0	.20	.15
9	.08	e4.1	e1.5	2.2	2.9	2.1	2.0	1.4	2.3	.97	.19	.15
10	.08	e3.6	e1.5	2.2	2.1	2.1	1.9	1.3	2.3	.95	.20	.15
11	.08	e3.1	e1.5	2.1	2.1	2.3	2.1	1.3	2.2	.91	.26	.15
12	.09	e2.7	e1.5	2.1	2.0	2.5	1.8	1.3	2.1	.87	.29	.15
13	.09	e2.5	e2.2	2.1	2.0	2.2	1.9	1.3	2.2	.89	.24	.15
14	.10	e2.4	e4.1	2.1	2.1	2.3	2.1	1.2	2.0	.87	.23	.15
15	.19	e2.5	e2.6	2.0	2.0	2.2	1.9	1.3	2.0	.87	.22	.17
16	.09	e2.3	e2.7	2.0	2.0	2.2	1.9	1.2	1.9	.85	.22	.18
17	.08	e2.0	e2.8	2.1	1.9	2.4	1.9	1.2	1.9	.81	.41	.18
18	.08	e1.7	e4.2	2.0	2.0	2.3	1.9	1.3	1.8	.76	.18	.18
19	.08	e1.7	e3.6	2.0	1.9	2.3	2.0	2.4	1.7	.75	.17	.17
20	.09	e1.6	e3.2	2.0	1.9	2.4	2.0	2.9	1.7	.73	.16	.16
21	.16	e1.6	e3.5	2.0	2.0	2.4	1.9	1.4	1.7	.70	.16	.15
22	20	e1.6	e3.4	2.0	1.9	2.4	1.9	1.3	1.6	.70	.25	.15
23	471	e1.6	e4.5	2.0	3.1	2.4	1.8	1.2	1.5	.64	.17	.14
24	e21	e2.0	e3.6	1.9	6.6	2.3	1.7	1.1	1.5	.64	.16	.14
25	e28	e1.8	e3.4	2.0	2.9	2.3	1.7	1.1	1.5	.61	.15	.14
26	e21	e1.6	e2.7	2.0	2.5	2.3	1.6	1.1	1.4	.59	.18	.18
27	e18	e1.6	e2.0	2.0	2.3	2.3	1.6	1.6	1.4	.57	.17	.19
28	e13	e1.5	e3.0	2.4	2.2	2.3	1.6	3.2	1.4	.53	.16	.19
29	e9.6	1.5	e4.1	3.7	---	2.3	1.5	9.8	1.4	.52	.16	.19
30	e7.4	1.6	e3.7	2.4	---	2.3	1.5	17	1.3	.49	.18	.19
31	e6.1	---	e4.0	2.3	---	2.3	---	3.5	---	.47	.18	---
TOTAL	616.81	85.5	81.3	78.5	65.8	69.5	56.2	72.4	59.8	25.69	7.21	4.92
MEAN	19.9	2.85	2.62	2.53	2.35	2.24	1.87	2.34	1.99	.83	.23	.16
MAX	471	5.5	4.5	9.5	6.6	2.5	2.2	17	3.0	1.3	.43	.20
MIN	.03	1.5	1.5	1.9	1.9	2.0	1.5	1.1	1.3	.47	.15	.14
AC-FT	1220	170	161	156	131	138	111	144	119	51	14	9.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

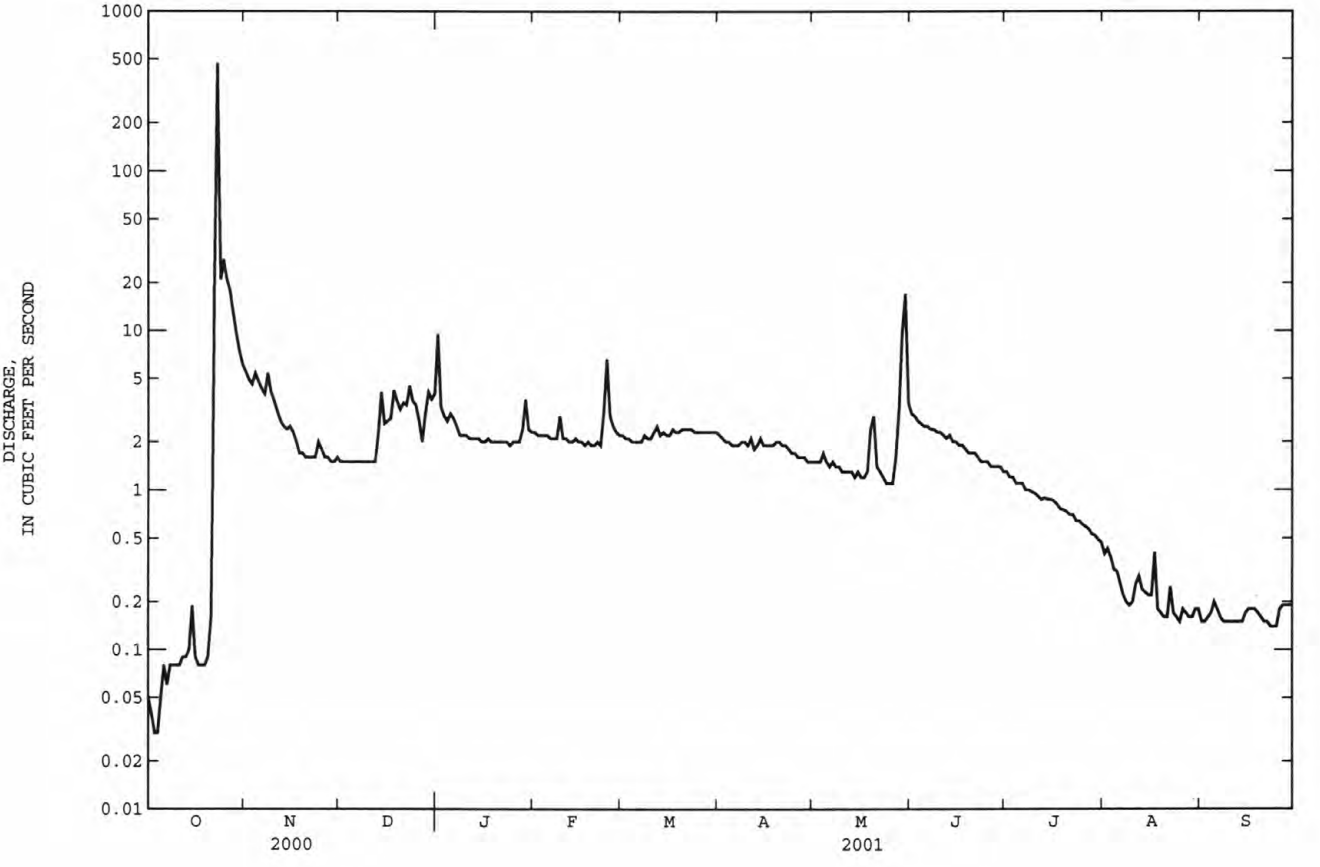
MEAN	4.65	1.72	1.47	2.10	2.27	3.65	2.44	3.08	4.49	1.79	1.36	.69
MAX	19.9	3.34	2.62	7.18	4.39	11.9	3.73	10.9	21.6	4.81	3.74	1.91
(WY)	2001	1999	2001	1998	1998	1998	1995	1995	1995	1997	1995	1996
MIN	.23	.26	.71	.42	.50	.63	.59	.29	.58	.36	.081	.083
(WY)	2000	2000	2000	2000	2000	1996	1996	1996	2000	2000	2000	2000

e Estimated

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	998.98		1223.63			
ANNUAL MEAN	2.73		3.35		2.08	
HIGHEST ANNUAL MEAN					3.39	1998
LOWEST ANNUAL MEAN					.69	2000
HIGHEST DAILY MEAN	471	Oct 23	471	Oct 23	471	Oct 23 2000
LOWEST DAILY MEAN	.03	Oct 3,4	.03	Oct 3,4	.03	Oct 3,4 2000
ANNUAL SEVEN-DAY MINIMUM	.05	Oct 1	.05	Oct 1	.05	Oct 1 2000
MAXIMUM PEAK FLOW			2280	Oct 23	2280	Oct 23 2000
MAXIMUM PEAK STAGE			[a]14.26	Oct 23	14.26	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	1980		2430		1510	
10 PERCENT EXCEEDS	3.1		3.4		2.8	
50 PERCENT EXCEEDS	.50		1.8		1.1	
90 PERCENT EXCEEDS	.05		.16		.25	

[a]From high-water mark.



073274408 LITTLE WASHITA RIVER TRIBUTARY NEAR CYRIL, OK

LOCATION.-- Lat 34°55'33", long 98°14'00", in SE $^1/_4$ NE $^1/_4$ NE $^1/_4$ sec. 10, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on right bank of county road, 1.7 mi west of Cyril, 6.8 mi east of Apache, and at mile 1.6.

DRAINAGE AREA.--1.10 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 1,372.05 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.58	e.29	.35	.31	e.34	.51	.09	.20	.00	.00	.00
2	.00	e.54	e.29	.30	.27	e.33	.53	.08	.11	.00	.00	.00
3	.00	e.52	e.28	.30	.28	e.32	.44	.09	.11	.00	.00	.00
4	.00	e.50	e.28	.31	.37	e.32	.40	.20	.12	.00	.00	.00
5	.00	e.49	e.28	1.3	.39	e.31	.42	.12	.16	.00	.00	.00
6	.00	e.49	.29	2.8	.38	.31	.43	.08	.20	.00	.00	.00
7	.00	.48	.30	.63	.38	.32	.52	.08	.14	.00	.00	.00
8	.00	e1.2	.31	.46	e.45	.42	.60	.07	.09	.00	.00	.00
9	.00	e.95	.33	.44	e.39	.37	.60	.06	.06	.00	.00	.00
10	.00	e.77	.31	.44	e.35	.37	.57	.06	.06	.00	.00	.00
11	.00	e.69	.27	.41	e.33	.41	.74	.05	.06	.00	.00	.00
12	.00	e.60	.24	.37	e.31	.47	.65	.02	.06	.00	.00	.00
13	.00	.54	.31	.42	e.30	.30	.52	.02	.11	.00	.00	.00
14	.00	e.51	.29	.35	e.29	.30	.61	.03	.09	.00	.00	.00
15	.00	e.49	.41	.25	e.29	.36	.49	.02	.09	.00	.00	.00
16	.00	e.45	.41	.28	e.29	.48	.45	.02	.05	.00	.00	.00
17	.00	e.44	.40	.37	e.30	.50	.33	.03	.03	.00	.00	.00
18	.00	e.43	.52	.36	e.30	.54	.36	.13	.01	.00	.00	.00
19	.00	e.43	.38	.30	e.29	.52	.36	2.4	.01	.00	.00	.00
20	.00	e.39	.40	.29	e.29	.49	.37	1.5	.01	.00	.00	.00
21	.00	e.38	.37	.32	e.28	.54	.28	.04	.01	.00	.00	.00
22	e12	e.38	.39	.32	e.28	.56	.26	.05	.00	.00	.00	.00
23	229	e.37	.38	.31	e.28	.60	.22	.06	.00	.00	.00	.00
24	e3.8	e.73	.31	.30	e.94	.62	.17	.04	.00	.00	.00	.00
25	e2.9	e.54	.32	.28	e.65	.69	.24	.03	.00	.00	.00	.00
26	e2.0	e.43	.43	.27	e.47	.69	.21	.03	.00	.00	.00	.00
27	e1.6	e.37	.47	.69	e.38	.70	.11	.45	.00	.00	.00	.00
28	e1.3	e.34	.46	2.2	e.36	.69	.11	.49	.00	.00	.00	.00
29	e1.0	e.32	.42	2.8	---	.65	.12	5.4	.00	.00	.00	.00
30	e.74	e.30	.40	.48	---	.67	.10	10	.00	.00	.00	.00
31	e.65	---	.38	.39	---	.54	---	.36	---	.00	.00	---
TOTAL	254.99	15.65	10.92	19.09	10.20	14.73	11.72	22.10	1.78	0.00	0.00	0.00
MEAN	8.23	.52	.35	.62	.36	.48	.39	.71	.059	.000	.000	.000
MAX	229	1.2	.52	2.8	.94	.70	.74	10	.20	.00	.00	.00
MIN	.00	.30	.24	.25	.27	.30	.10	.02	.00	.00	.00	.00
AC-FT	506	31	22	38	20	29	23	44	3.5	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

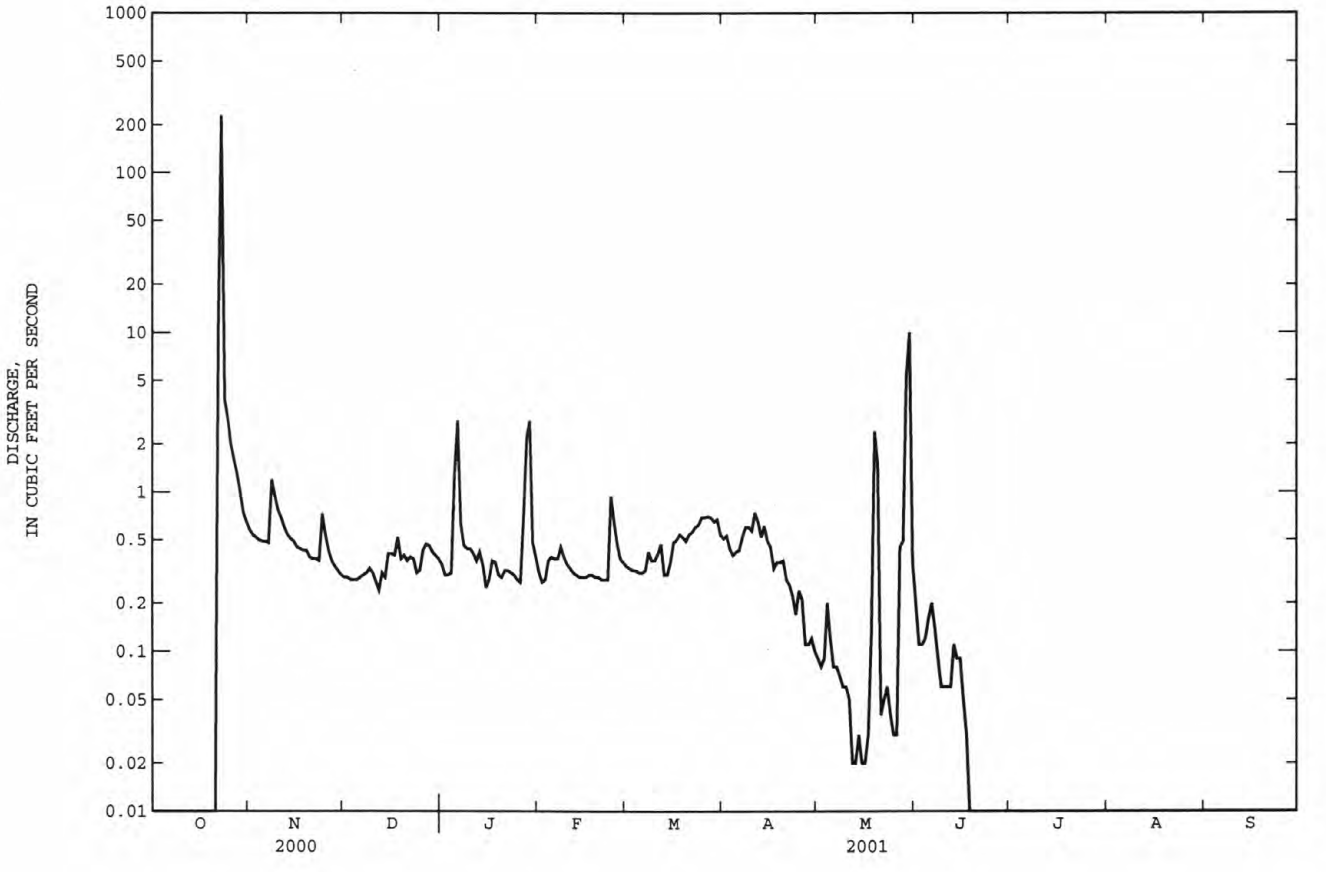
MEAN	1.61	.39	.36	.44	.44	.78	.58	.39	.55	.32	.13	.10
MAX	8.23	.74	.72	1.54	.96	2.84	1.04	.71	2.59	1.47	.42	.27
(WY)	2001	1997	2000	1998	1998	1998	1999	2001	1995	1997	1995	1995
MIN	.000	.000	.022	.000	.052	.26	.27	.040	.007	.000	.000	.000
(WY)	2000	2000	1999	2000	2000	1997	1996	1996	2000	1998	1999	1998

e Estimated

073274408 LITTLE WASHITA RIVER TRIBUTARY NEAR CYRIL, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	327.46		361.18			
ANNUAL MEAN	.89		.99		.48	
HIGHEST ANNUAL MEAN					.99	2001
LOWEST ANNUAL MEAN					.19	2000
HIGHEST DAILY MEAN	229	Oct 23	229	Oct 23	229	Oct 23 2000
LOWEST DAILY MEAN	.00	at times	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 1	.00	May 19 1996
MAXIMUM PEAK FLOW			[a]1920	Oct 23	1920	Oct 23 2000
MAXIMUM PEAK STAGE			[b]13.50	Oct 23	13.50	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	650		716		347	
10 PERCENT EXCEEDS	.45		.61		.64	
50 PERCENT EXCEEDS	.00		.28		.11	
90 PERCENT EXCEEDS	.00		.00		.00	

[a]From theoretical rating.
[b]From high-water mark.



07327441 SCS POND NO. 26 NEAR CYRIL, OK

LOCATION.--Lat 34°54'09", long 98°14'22", in SW $^1/_4$ SE $^1/_4$ sec.15, T.5 N., R.10 W., Caddo County, Hydrologic Unit 11130302, on north face of dam, on Little Washita River, 2.2 mi west of Cyril, and at mile 28.4.

DRAINAGE AREA.--6.64 mi^2 (Agricultural Research Service).

PERIOD OF RECORD.--November 1993 to current year.

REVISED RECORDS.--WDR OK-96-2: 1994, 1995.

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

REMARKS.--Reservoir is formed by earthen dam, construction completed November 1976. Emergency spillway elevation is 1,352.55 ft, contents 1,520 acre-ft; principal spillway elevation is 1,328.95 ft, contents 142 acre-ft; drain value elevation 1,295.25 ft. Figures herein represent total contents. Reservoir is used for flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,225 acre-ft, Oct. 23, 2000, elevation 1,348.38 ft (from HWM); minimum after initial storage, 166 acre-ft, at times, elevation 1,320.48 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,225 acre-ft, Oct. 23, elevation 1,348.38 ft (from HWM); minimum, 167 acre-ft, at times, elevation 1,320.55 ft.

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

1320	159.0	1338	582.0
1326	246.0	1344	909.0
1332	376.0	1350	1370.0

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

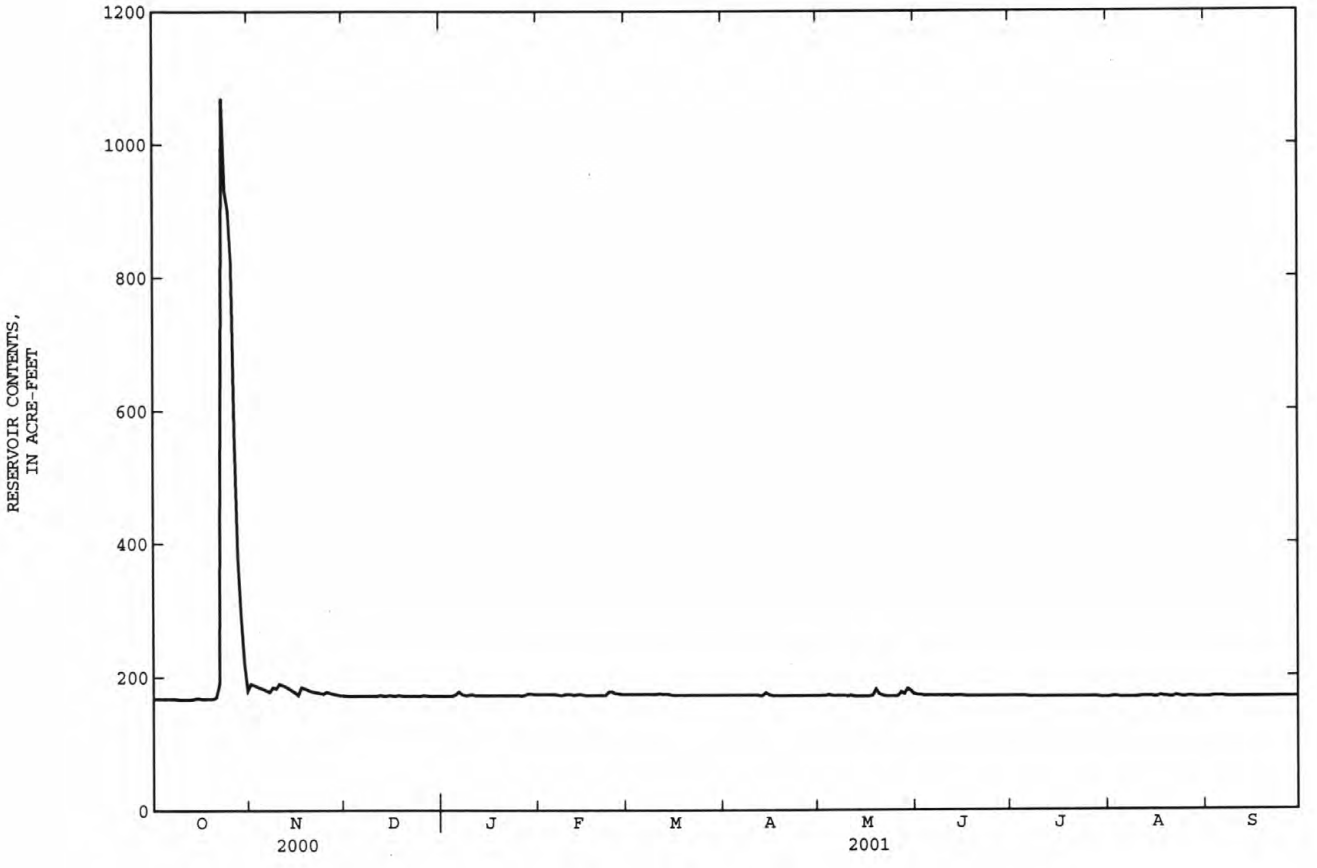
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	168	e190	172	172	174	174	173	172	173	171	169	169
2	168	e188	172	172	174	174	173	172	173	171	170	169
3	168	e186	172	172	174	174	173	172	172	171	170	170
4	168	e184	172	172	174	174	173	173	172	171	169	170
5	168	e182	172	174	174	174	173	172	172	171	169	170
6	168	e180	172	178	174	174	173	172	172	170	169	170
7	e168	e178	172	174	173	174	173	172	172	170	169	169
8	e168	e185	172	173	173	174	173	172	172	170	169	169
9	e167	e183	172	173	174	174	173	172	172	170	169	169
10	e167	e190	172	174	174	174	173	171	172	170	169	169
11	167	e188	172	173	174	175	173	172	172	170	170	169
12	167	e186	173	173	173	174	172	171	171	170	170	169
13	167	e183	172	173	174	174	172	171	172	170	170	169
14	168	e180	172	173	174	174	176	171	172	170	170	169
15	169	e177	173	173	173	173	173	171	172	170	169	169
16	168	e173	172	173	173	173	172	171	171	170	169	169
17	168	e185	172	173	173	173	172	171	171	170	171	169
18	168	e183	173	173	173	173	172	172	e171	170	170	169
19	168	e181	172	173	173	173	172	181	e171	170	170	169
20	168	e179	172	173	173	173	172	174	171	170	169	169
21	170	e178	172	173	173	173	172	172	171	170	169	169
22	e190	e177	172	173	173	173	172	171	171	170	171	169
23	e1070	e176	172	173	178	173	172	171	171	170	170	169
24	e930	e175	172	173	178	173	172	171	171	170	169	169
25	e900	e178	172	173	175	173	172	171	171	170	169	169
26	e820	e176	173	172	175	173	172	171	171	170	170	169
27	e560	e175	172	173	174	173	172	177	171	170	170	169
28	e380	e174	172	175	174	173	172	174	171	170	169	169
29	e290	173	172	175	---	173	172	182	171	169	169	169
30	e220	173	172	174	---	173	172	179	171	169	169	169
31	e180	---	172	174	---	173	---	174	---	169	169	---
MAX	1070	190	173	178	178	175	176	182	173	171	171	170
MIN	167	173	172	172	173	173	172	171	171	169	169	169
(‡)	--	1320.91	1320.88	1321.00	1321.03	1320.94	1320.86	1321.01	1320.82	1320.69	1320.70	1320.68
(‡‡)	+12	-7	-1	+2	0	-1	-1	+2	-3	-2	0	0

CAL YR 2000 MAX 1070 MIN 166 (‡‡) +2
WTR YR 2001 MAX 1070 MIN 167 (‡‡) +1

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

e Estimated

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 $^1/_4$ NW $^1/_4$ sec. 23, T.5N., R.10W., Caddo County, Hydrologic Unit 11130302, on left bank 300 ft downstream from county road, 1.7 mi west of Cyril, 6.8 mi east of Apache, and at mile 28.0.

DRAINAGE AREA.--11.6 mi^2.

PERIOD OF RECORD.-- October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,259.29 ft above sea level.

REMARKS.--Records 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	10	6.5	5.6	9.4	11	9.3	7.0	11	3.6	.92	.68
2	.13	8.8	6.4	5.6	9.1	11	9.4	6.9	11	3.6	.97	.65
3	.12	9.7	6.4	5.6	9.1	11	9.3	6.9	9.8	3.3	1.0	1.0
4	.12	9.2	6.5	5.9	8.9	10	9.3	7.9	9.0	3.0	1.0	.87
5	.14	8.5	6.4	7.0	8.7	10	9.2	8.4	8.4	2.9	.92	.95
6	.23	8.2	6.5	9.0	8.7	10	9.1	7.1	8.1	2.8	.85	.86
7	.17	7.8	6.3	9.1	8.8	9.9	9.1	7.0	8.0	2.6	.84	.73
8	.13	9.7	6.3	7.1	8.9	10	8.8	6.9	7.7	2.5	.84	.66
9	.13	9.6	6.2	6.4	14	10	8.8	6.5	7.5	2.4	.79	.64
10	.17	8.6	6.3	6.4	10	10	8.8	6.3	7.2	2.3	.79	.61
11	.20	9.8	6.1	6.6	9.6	10	11	6.2	6.9	2.2	.92	.63
12	.22	8.6	6.1	6.4	9.5	13	8.9	6.1	6.5	2.0	1.2	.64
13	.24	8.0	e6.1	6.4	9.4	10	8.4	6.0	7.4	2.0	1.1	.62
14	.27	7.7	6.1	6.1	9.8	10	11	6.0	6.7	2.1	.94	.61
15	.48	7.3	6.2	6.0	9.9	9.9	11	5.9	6.6	2.1	.86	.66
16	.66	7.1	6.4	6.0	9.3	9.7	8.5	5.9	6.2	2.0	.84	.72
17	.43	7.4	6.1	6.2	8.9	9.7	7.8	5.8	6.0	2.0	1.0	.71
18	.34	7.7	6.2	6.1	8.9	9.8	7.8	8.6	5.8	1.7	1.3	.77
19	.34	7.3	6.2	6.0	9.0	9.8	7.8	14	5.7	1.6	.98	.73
20	.46	7.0	6.2	5.9	9.0	9.6	7.9	19	5.8	1.5	.84	.70
21	.59	6.8	6.0	5.8	8.9	9.6	7.8	9.6	5.8	1.5	.74	.68
22	4.8	6.8	5.9	5.8	8.8	9.6	7.8	7.4	5.8	1.4	1.7	.66
23	416	7.1	5.9	5.8	15	9.6	7.6	6.8	5.7	1.3	1.3	.66
24	60	8.6	5.8	5.8	23	9.4	7.4	6.2	5.5	1.3	.78	.58
25	89	7.7	5.8	6.7	13	9.3	7.4	5.8	5.3	1.2	.67	.58
26	68	7.2	6.3	8.4	12	9.5	7.4	5.8	5.1	1.2	.96	.62
27	41	6.9	5.9	8.7	11	9.7	7.1	6.1	4.9	1.2	.83	.60
28	34	6.8	5.8	13	11	9.9	7.1	14	3.9	1.1	.74	.60
29	31	6.6	5.8	15	---	9.7	6.9	29	4.0	1.1	.70	.61
30	27	6.6	5.7	11	---	9.6	6.9	51	3.8	1.0	.71	.62
31	19	---	5.7	9.7	---	9.4	---	14	---	.95	.70	---
TOTAL	795.53	239.1	190.1	225.1	291.6	309.7	254.6	310.1	201.1	61.45	28.73	20.65
MEAN	25.7	7.97	6.13	7.26	10.4	9.99	8.49	10.0	6.70	1.98	.93	.69
MAX	416	10	6.5	15	23	13	11	51	11	3.6	1.7	1.0
MIN	.12	6.6	5.7	5.6	8.7	9.3	6.9	5.8	3.8	.95	.67	.58
AC-FT	1580	474	377	446	578	614	505	615	399	122	57	41

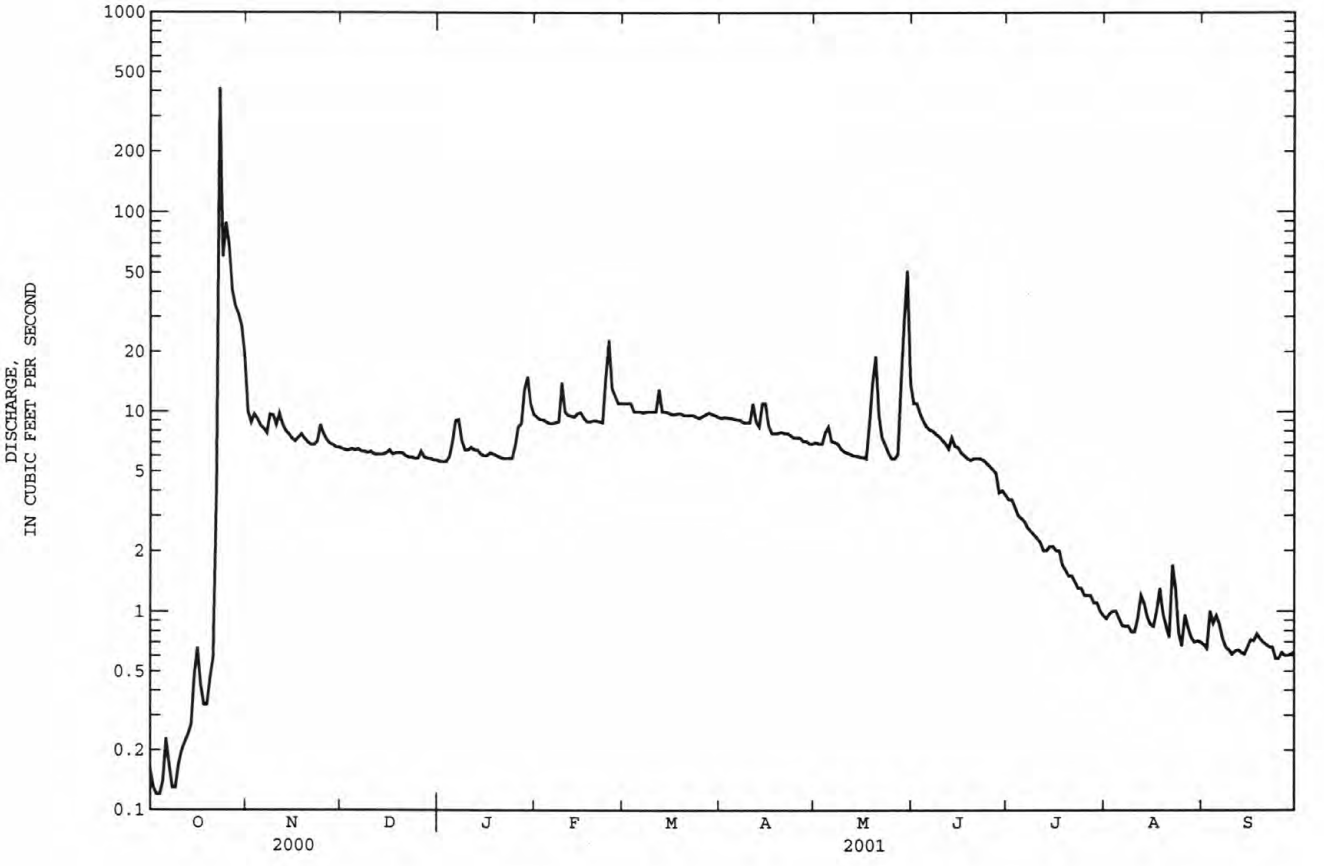
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

MEAN	6.23	5.15	6.18	6.27	6.93	8.84	8.34	8.36	9.23	3.98	2.61	2.28
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	.71	.92	2.25	1.40	1.51	3.11	2.51	1.72	1.29	.56	.17	.14
(WY)	1999	2000	2000	2000	2000	1996	1996	2000	2000	2000	2000	2000

e Estimated

07327442 LITTLE WASHITA RIVER NEAR CYRIL, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1993 - 2001	
ANNUAL TOTAL	1675.62		2927.76			
ANNUAL MEAN	4.58		8.02		6.19	
HIGHEST ANNUAL MEAN					13.2	1993
LOWEST ANNUAL MEAN					1.57	2000
HIGHEST DAILY MEAN	416	Oct 23	416	Oct 23	416	Oct 23 2000
LOWEST DAILY MEAN	.03	Sep 20	.12	Oct 3,4	.03	Sep 20 2000
ANNUAL SEVEN-DAY MINIMUM	.05	Sep 12	.15	Oct 2	.05	Sep 12 2000
MAXIMUM PEAK FLOW			1930	Oct 23	1930	Oct 23 2000
MAXIMUM PEAK STAGE			18.09	Oct 23	18.09	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	3320		5810		4490	
10 PERCENT EXCEEDS	6.9		10		12	
50 PERCENT EXCEEDS	1.4		6.4		3.8	
90 PERCENT EXCEEDS	.13		.66		.80	



073274458 LITTLE WASHITA RIVER TRIBUTARY NEAR CEMENT, OK

LOCATION.-- Lat 34°51'58", long 98°08'30", in NW $^1/_4$ NW $^1/_4$ sec. 34, T.5N., R.9W., Caddo County, Hydrologic Unit 11130302, on left bank 30 ft downstream from I-44 bridge near mile marker 64, 4 mi south of Cement, and at mile 2.1.

DRAINAGE AREA.--6.5 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 1,237.18 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	e2.5	e1.9	1.6	2.7	3.0	2.0	2.0	3.0	1.5	.88	1.6
2	.75	e2.2	e1.8	1.6	2.5	2.8	2.1	2.0	2.6	1.5	.87	1.5
3	.74	e2.6	e1.7	1.6	2.4	2.8	2.1	2.0	2.5	1.5	.94	1.5
4	.75	e2.3	e1.7	1.7	2.2	2.8	2.1	6.3	2.4	1.4	.85	1.6
5	.74	e2.2	e1.6	1.9	2.2	2.8	2.1	4.2	2.2	1.6	.83	1.5
6	.78	e2.2	e1.7	1.9	2.2	2.7	2.1	2.5	2.2	2.0	.80	1.5
7	.78	e2.2	1.6	1.8	2.1	2.6	2.0	2.4	2.1	1.4	.83	1.5
8	.81	e3.1	1.5	1.7	2.1	2.7	2.0	2.2	2.1	1.3	.92	1.5
9	.83	e2.5	1.5	1.7	2.6	2.7	2.0	2.1	2.0	1.2	.99	1.5
10	.88	e2.2	1.5	1.7	2.2	2.6	2.1	2.0	2.0	1.2	1.0	1.5
11	.91	e2.1	1.5	1.8	2.2	2.7	2.8	1.9	2.0	1.2	1.1	1.5
12	.93	e2.1	1.5	1.7	2.1	3.5	2.3	1.8	1.9	1.1	1.3	1.5
13	.94	e2.1	1.7	1.6	2.2	2.6	2.2	1.8	2.2	1.1	1.3	1.4
14	1.0	e2.1	1.5	1.6	2.2	2.4	3.2	1.7	2.2	1.2	1.2	1.4
15	1.6	e2.1	1.6	1.5	2.3	2.3	3.3	1.7	2.1	1.2	1.2	1.5
16	1.3	e2.0	1.6	1.5	2.2	2.2	2.3	1.7	1.9	1.2	1.1	1.6
17	1.1	e2.2	1.5	1.6	2.1	2.3	2.1	1.7	1.9	1.1	1.4	1.6
18	1.0	e2.1	1.6	1.6	2.0	2.3	2.1	4.9	1.8	1.1	2.4	1.7
19	.96	e2.0	1.5	1.5	1.9	2.4	2.1	2.8	1.7	1.1	1.9	1.7
20	1.0	e1.8	1.6	1.5	1.8	2.4	2.1	6.5	1.6	1.0	1.8	1.6
21	1.2	e1.8	1.7	1.5	1.8	2.3	2.2	2.4	1.5	1.1	1.6	1.6
22	3.9	e1.9	1.7	1.5	1.8	2.2	2.2	2.1	1.5	1.1	2.1	1.6
23	319	e2.0	1.7	1.5	20	2.2	2.2	2.0	1.5	1.0	1.9	1.6
24	7.6	e2.7	1.7	1.5	7.8	2.1	2.1	1.9	1.6	1.0	1.7	1.5
25	14	e2.1	1.7	1.5	4.0	1.9	2.1	1.8	1.5	1.1	1.6	1.5
26	87	e1.8	1.9	1.5	3.5	1.9	2.0	1.7	1.5	1.1	1.8	1.5
27	e6.0	e1.7	1.8	1.7	3.1	2.0	2.0	1.8	1.6	1.1	1.7	1.5
28	e4.0	e1.6	1.8	2.1	3.0	2.1	2.0	5.9	1.5	1.1	1.6	1.5
29	e2.9	e1.6	1.7	4.2	---	2.1	2.0	3.2	1.6	1.0	1.6	1.5
30	e2.5	e1.7	1.7	3.0	---	2.0	2.0	21	1.5	1.0	1.7	1.5
31	e2.4	---	1.7	2.7	---	2.1	---	3.7	---	.92	1.6	---
TOTAL	469.08	63.5	51.2	55.8	89.2	75.5	65.9	101.7	57.7	37.42	42.51	46.0
MEAN	15.1	2.12	1.65	1.80	3.19	2.44	2.20	3.28	1.92	1.21	1.37	1.53
MAX	319	3.1	1.9	4.2	20	3.5	3.3	21	3.0	2.0	2.4	1.7
MIN	.74	1.6	1.5	1.5	1.8	1.9	2.0	1.7	1.5	.92	.80	1.4
AC-FT	930	126	102	111	177	150	131	202	114	74	84	91

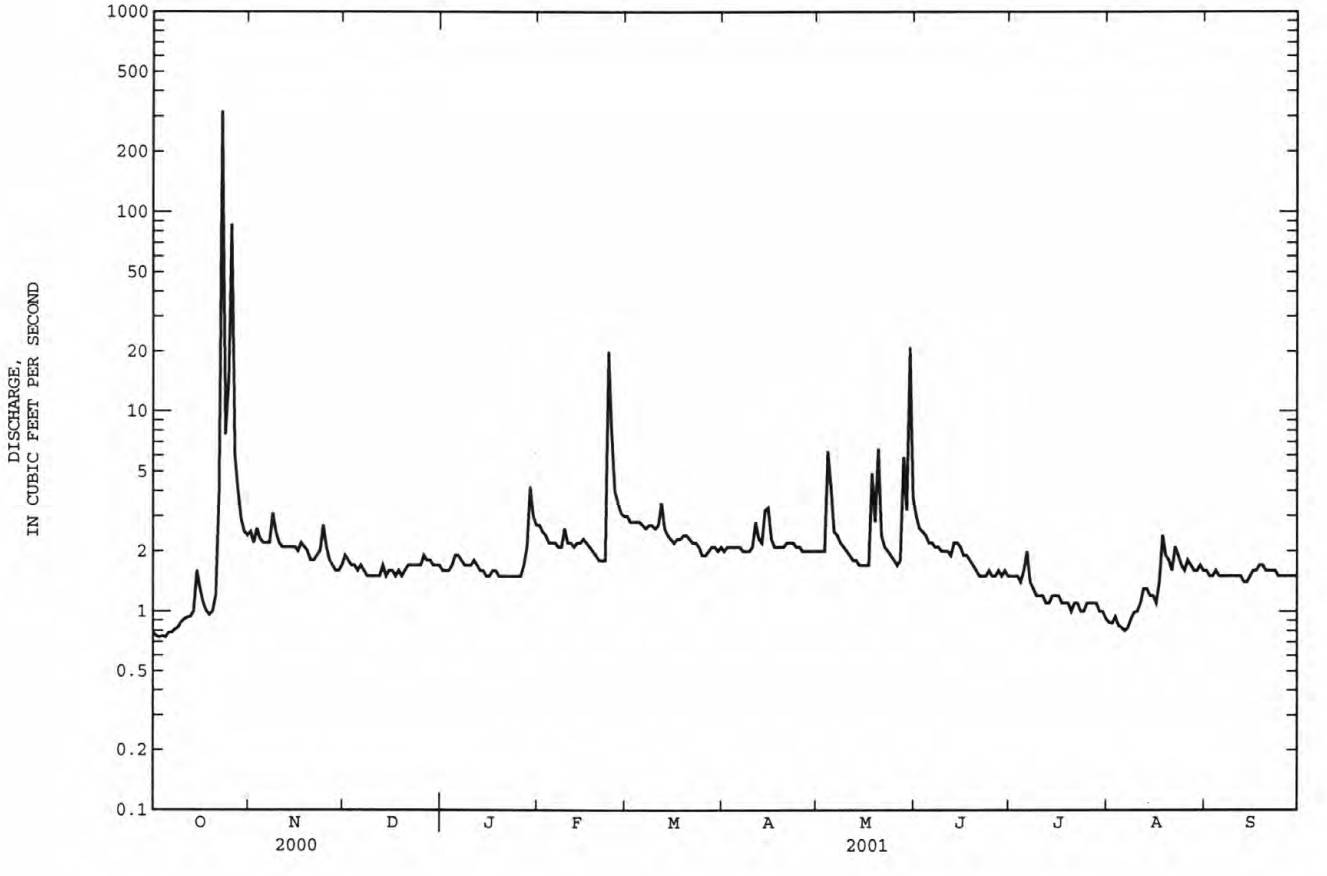
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

MEAN	4.29	2.29	2.24	2.82	2.56	3.05	3.25	2.66	2.25	1.20	1.47	1.32
MAX	15.1	4.01	2.82	7.55	3.19	6.90	5.45	4.61	3.01	1.73	2.72	1.99
(WY)	2001	1999	1999	1998	2001	1998	1999	1997	1999	1997	1995	1996
MIN	1.35	1.83	1.65	1.59	1.71	1.30	1.98	1.16	1.49	.81	.73	.77
(WY)	2000	1997	2001	2000	2000	1996	1996	1996	2000	1996	2000	1998

e Estimated

073274458 LITTLE WASHITA RIVER TRIBUTARY NEAR CEMENT, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	987.79		1155.51			
ANNUAL MEAN	2.70		3.17		2.42	
HIGHEST ANNUAL MEAN					3.20	1998
LOWEST ANNUAL MEAN					1.57	2000
HIGHEST DAILY MEAN	319	Oct 23	319	Oct 23	319	Oct 23 2000
LOWEST DAILY MEAN	.71	Aug 10	.74	Oct 3,5	.55	Jul 6 1996
ANNUAL SEVEN-DAY MINIMUM	.71	Aug 10	.76	Oct 1	.61	Jul 3 1996
MAXIMUM PEAK FLOW			1630	Oct 23	1630	Oct 23 2000
MAXIMUM PEAK STAGE			12.58	Oct 23	12.58	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	1960		2290		1760	
10 PERCENT EXCEEDS	2.3		2.7		3.0	
50 PERCENT EXCEEDS	1.5		1.8		1.7	
90 PERCENT EXCEEDS	.75		1.1		.92	



07327446 SCS POND NO. 31 NEAR CEMENT, OK

LOCATION.--Lat 34°51'07", long 98°08'27", in NW $^1/_4$ NW $^1/_4$ sec.3, T.4 N., R.9 W., Comanche County, Hydrologic Unit 11130302, on north edge of pond, on Little Washita River Tributary, 4.6 mi south of Cement, and at mile 2.1.

DRAINAGE AREA.--7.62 mi^2 (Agricultural Research Service).

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

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

REMARKS.--Reservoir is formed by earthen dam. Emergency spillway elevation is 1,253.2 ft, contents 1,680 acre-ft; principal spillway elevation is 1,237.3 ft, contents 347 acre-ft; drain value elevation 1,220.8 ft. Figures herein represent total contents. Reservoir is used for flood control. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 628 acre-ft, Oct. 23, 2000, elevation 1,242.53 ft; minimum after initial storage, 313 acre-ft, at times, elevation 1,236.46 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 628 acre-ft, Oct. 23, elevation 1,242.53 ft; minimum, 357 acre-ft, July 31, Aug. 1,2,22, elevation 1,237.56 ft.

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

1234	225.0	1240	475.0
1236	295.0	1245	792.5
1238	375.0	1250	1260.0

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

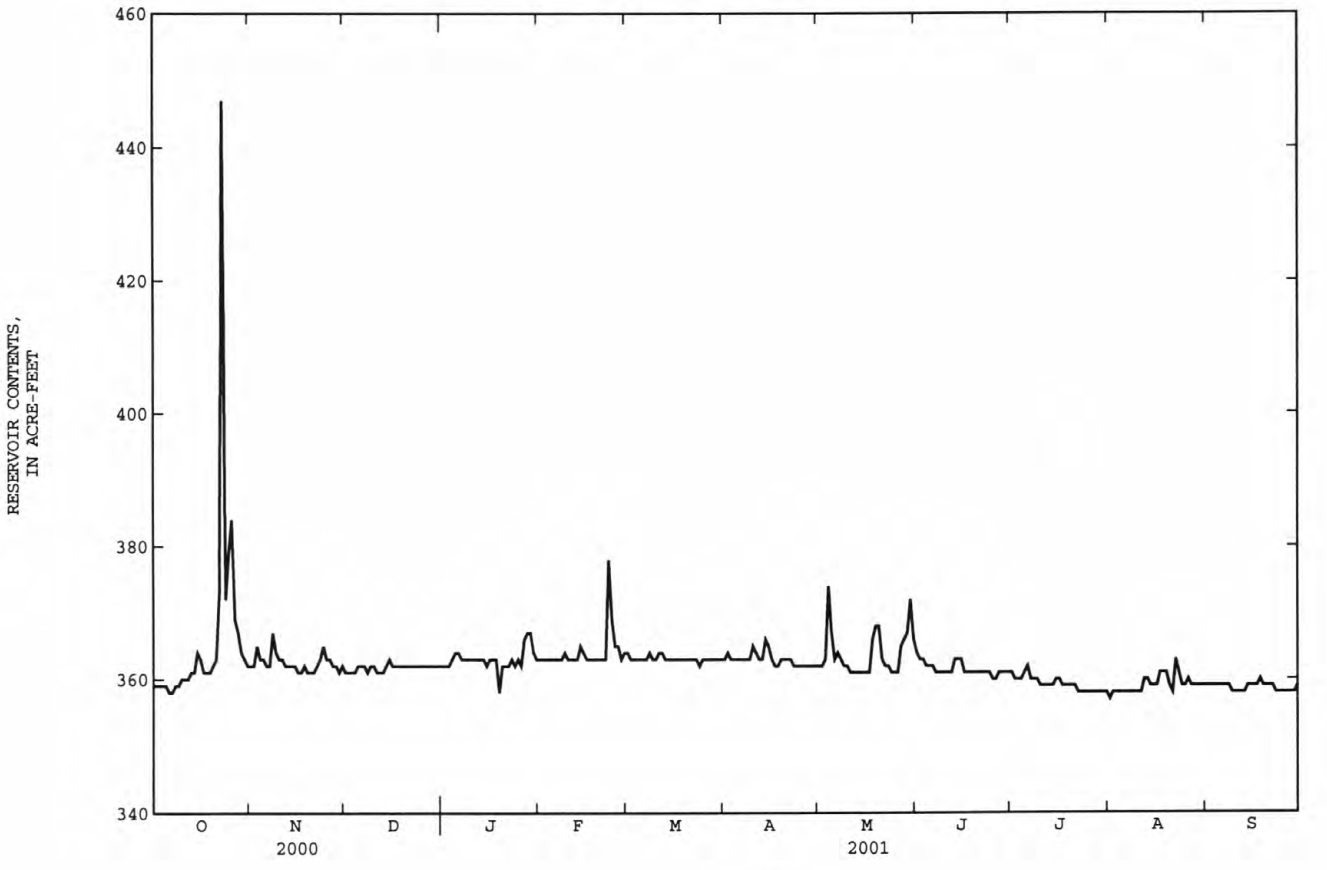
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	359	362	361	362	363	364	363	362	364	361	357	359
2	359	362	361	362	363	363	364	362	363	360	358	359
3	359	365	361	362	363	363	363	363	363	360	358	359
4	359	363	361	363	363	363	363	374	362	360	358	359
5	359	363	362	364	363	363	363	367	362	361	358	359
6	358	362	362	364	363	363	363	363	362	362	358	359
7	358	362	362	363	363	363	363	364	361	360	358	359
8	359	367	361	363	363	364	363	363	361	360	358	359
9	359	364	362	363	364	363	363	362	361	360	358	358
10	360	363	362	363	363	363	365	362	361	359	358	358
11	360	363	361	363	363	364	364	361	361	359	358	358
12	360	362	361	363	363	364	363	361	361	359	360	358
13	361	362	361	363	363	363	363	361	363	359	360	358
14	361	362	362	363	365	363	366	361	363	359	359	359
15	364	362	363	362	364	363	365	361	363	360	359	359
16	363	361	362	363	363	363	363	361	361	360	359	359
17	361	361	362	363	363	363	362	361	361	359	361	359
18	361	362	362	363	363	363	362	366	361	359	361	360
19	361	361	362	358	363	363	363	368	361	359	361	359
20	362	361	362	362	363	363	363	368	361	359	359	359
21	363	361	362	362	363	363	363	363	361	359	358	359
22	373	362	362	362	363	363	363	362	361	358	363	359
23	447	363	362	363	378	363	362	362	361	358	361	358
24	372	365	362	362	369	362	362	361	361	358	359	358
25	379	363	362	363	365	363	362	361	360	358	359	358
26	384	363	e362	362	365	363	362	361	360	358	360	358
27	369	362	e362	366	363	363	362	365	361	358	359	358
28	367	362	e362	367	364	363	362	366	361	358	359	358
29	364	361	362	367	---	363	362	367	361	358	359	358
30	363	362	362	364	---	363	362	372	361	358	359	359
31	362	---	362	363	---	363	---	366	---	358	359	---
MAX	447	367	363	367	378	364	366	374	364	362	363	360
MIN	358	361	361	358	363	362	362	361	360	358	357	358
(‡)	1237.68	1237.67	1237.68	1237.71	1237.72	1237.70	1237.67	1237.77	1237.64	1237.57	1237.60	1237.59
(‡‡)	+3	0	0	+1	+1	-1	-1	+4	-5	-3	+1	0

CAL YR 2000 MAX 447 MIN 349 (‡‡) +2
WTR YR 2001 MAX 447 MIN 357 (‡‡) 0

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

e Estimated

07327446 SCS POND NO. 31 NEAR CEMENT, OK--Continued



07327447 LITTLE WASHITA RIVER NEAR CEMENT, OK

LOCATION.--Lat 34°50'16", long 98°07'27", in NW $^1/_4$ NW $^1/_4$ sec.11, T.4 N., R.9 W., Comanche County, Hydrologic Unit 11130302, on left bank near downstream side of county road bridge, 5 mi south of Cement, 7 mi east northeast of Fletcher, 8 mi northeast of Sterling, and at mile 23.7

DRAINAGE AREA.--61.9 mi^2.

PERIOD OF RECORD.--February 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,183.72 ft above sea level.

REMARKS.--Records fair. Flow affected by numerous flood retention reservoirs. U.S. Geological Survey's satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	32	21	22	34	42	42	22	e44	10	2.7	2.0
2	1.4	26	21	21	32	41	44	22	e35	10	2.8	e2.5
3	1.4	36	21	21	30	40	45	22	e29	9.5	4.0	e2.9
4	1.1	43	22	22	30	38	48	e35	26	8.9	3.8	e2.6
5	1.2	32	22	27	29	36	49	e55	23	8.5	3.6	e2.7
6	1.4	28	23	38	29	36	47	e35	23	9.1	3.3	3.1
7	1.3	25	24	47	28	36	44	33	22	8.2	3.1	2.7
8	1.3	40	24	32	30	38	42	30	22	6.9	3.2	2.1
9	1.1	47	23	27	e50	41	40	23	22	6.5	2.9	2.0
10	2.0	35	23	27	e40	38	38	21	22	6.4	2.8	1.6
11	2.4	33	22	32	e35	39	51	19	21	6.1	3.3	1.6
12	2.8	31	19	29	e34	61	37	19	21	5.7	5.4	1.8
13	3.0	27	e20	28	33	43	31	18	27	5.5	6.0	1.9
14	3.5	25	23	27	35	39	40	17	21	6.3	5.2	1.8
15	6.0	24	23	26	40	38	68	16	20	6.9	4.4	2.5
16	10	23	26	25	33	36	31	16	17	6.6	3.9	3.2
17	7.3	21	23	28	29	36	23	16	15	6.7	4.0	3.2
18	4.5	24	22	27	29	38	23	55	14	5.8	8.6	4.3
19	3.5	23	23	27	30	39	23	e57	12	5.1	6.7	4.2
20	4.3	22	22	25	30	38	24	155	12	4.6	5.1	3.5
21	5.9	22	22	25	30	38	25	54	12	4.4	4.0	3.2
22	24	23	21	24	29	38	25	e30	12	4.2	7.9	3.1
23	1020	24	21	25	84	39	24	e24	11	3.9	12	3.0
24	572	39	21	25	183	39	22	21	11	3.7	3.5	2.5
25	507	38	21	24	92	37	22	20	9.9	7.2	2.1	2.3
26	709	28	27	25	53	39	22	18	9.8	5.2	4.0	2.5
27	323	25	25	26	45	41	21	e17	9.8	4.4	4.0	2.7
28	e140	24	23	68	42	43	21	e60	10	4.0	2.7	2.8
29	e130	23	23	e110	---	43	22	e130	11	3.9	2.1	3.0
30	104	22	22	59	---	42	22	356	11	3.6	2.2	3.3
31	70	---	22	40	---	42	---	110	---	3.2	2.3	---
TOTAL	3666.0	865	695	1009	1218	1234	1016	1526	555.5	191.0	131.6	80.6
MEAN	118	28.8	22.4	32.5	43.5	39.8	33.9	49.2	18.5	6.16	4.25	2.69
MAX	1020	47	27	110	183	61	68	356	44	10	12	4.3
MIN	1.1	21	19	21	28	36	21	16	9.8	3.2	2.1	1.6
AC-FT	7270	1720	1380	2000	2420	2450	2020	3030	1100	379	261	160

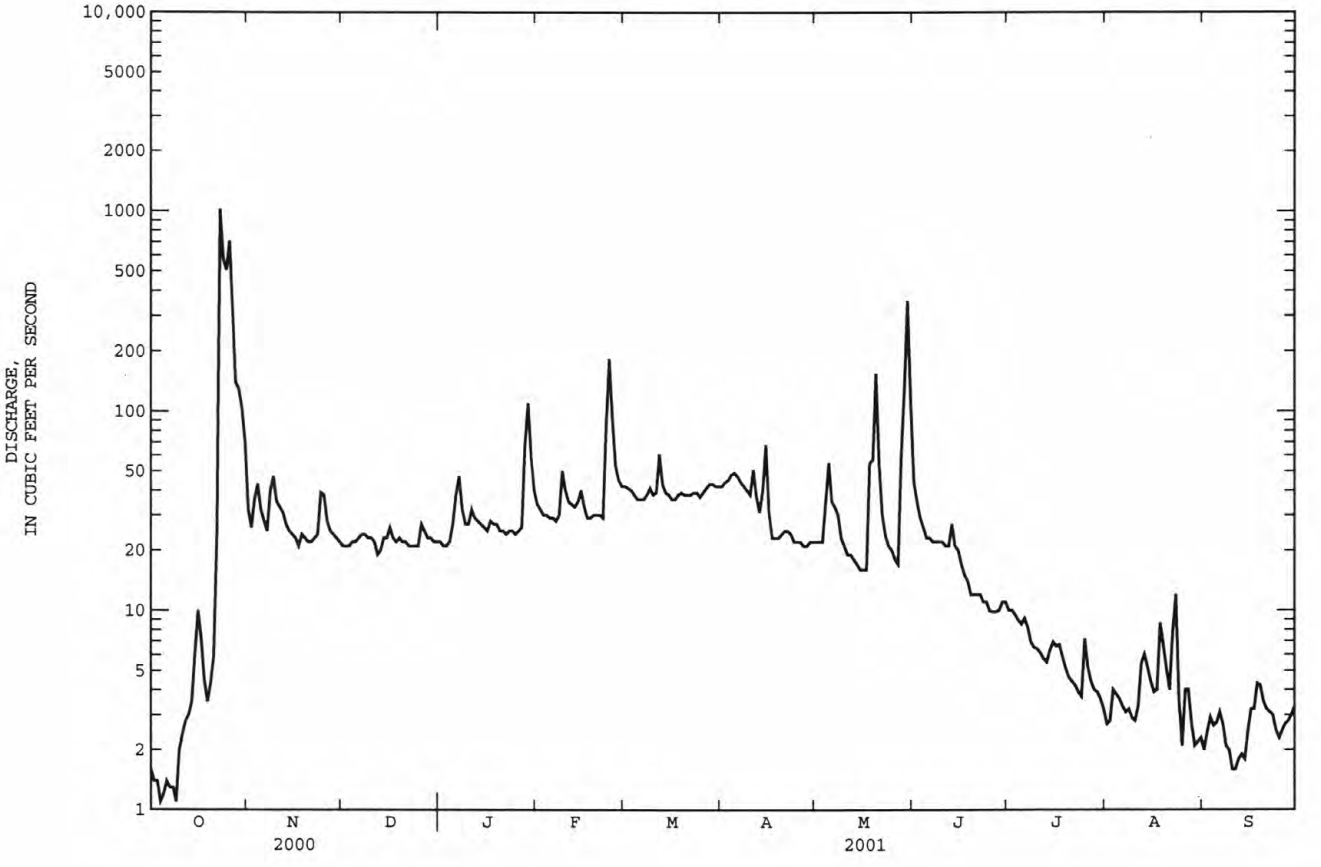
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	28.3	19.8	25.3	27.0	30.4	38.1	41.8	44.6	40.4	21.2	13.6	11.4
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	4.69	8.35	13.0	10.8	12.3	14.7	13.3	8.24	11.8	4.96	1.28	1.34
(WY)	1999	2000	1999	2000	2000	1997	1996	1996	1994	2000	2000	2000

e Estimated

07327447 LITTLE WASHITA RIVER NEAR CEMENT, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	8199.42		12187.7			
ANNUAL MEAN	22.4		33.4		27.2	
HIGHEST ANNUAL MEAN					51.6	1993
LOWEST ANNUAL MEAN					10.8	2000
HIGHEST DAILY MEAN	1020	Oct 23	1020	Oct 23	1020	Oct 23 2000
LOWEST DAILY MEAN	.67	Sep 2	1.1	Oct 4,9	.67	Sep 2 2000
ANNUAL SEVEN-DAY MINIMUM	.70	Aug 31	1.3	Oct 3	.70	Aug 31 2000
MAXIMUM PEAK FLOW			2020	Oct 23	2020	Oct 23 2000
MAXIMUM PEAK STAGE			17.66	Oct 23	17.66	Oct 23 2000
ANNUAL RUNOFF (AC-FT)	16260		24170		19720	
10 PERCENT EXCEEDS	26		44		50	
50 PERCENT EXCEEDS	10		22		17	
90 PERCENT EXCEEDS	1.0		2.8		5.2	



07327483 BOGGY CREEK NEAR NINNEKAH, OK

LOCATION.--Lat 34°53'03", long 97°59'43", in SE $^1/_4$ SW $^1/_4$ sec.24, T.5 N., R.8 W., Grady County, Hydrologic Unit 11130302, on the right side of culvert, 7.5 mi north and 2.6 mi west of Rush Springs, 3.3 mi south and 4.1 mi west of Ninnekah and at mile 1.2.

DRAINAGE AREA.--1.66 mi^2.

PERIOD OF RECORD.--April 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1142.36 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.15	e.28	.30	.56	e.80	.51	.27	e.38	.20	.00	.00
2	e.00	e.12	e.23	.30	.50	e.80	.56	.27	e.32	.20	.00	.00
3	e.00	e.20	e.24	.32	.51	e.80	.52	.27	e.25	.19	.00	.00
4	.00	e.16	e.26	.42	.49	e.85	.49	.41	e.22	.18	.00	.01
5	e.00	e.12	e.29	.49	.51	e.90	.47	.71	e.19	.17	.00	.00
6	e.00	e.12	.28	.49	.55	e.79	.48	.39	.18	.17	.00	.01
7	e.00	e.14	.28	.34	.60	.59	.50	.31	.18	.15	.00	.00
8	e.00	e.25	.29	.29	.65	.62	.51	.31	.16	.14	.00	.00
9	e.00	e.17	.28	.27	1.2	.66	.49	.29	.16	.15	.00	.00
10	e.00	e.13	.27	.30	.82	.54	.43	.28	.16	.15	.00	.00
11	e.00	e.12	.25	.37	.75	.54	.51	.29	.15	.13	.00	.00
12	e.00	e.11	.25	.28	.73	.61	.51	.28	.15	.11	.01	.00
13	e.00	e.11	.29	.29	.80	.46	.47	.28	.18	.10	.00	.00
14	e.00	e.11	.27	.28	.93	.39	.47	.28	.17	.11	.00	.00
15	e.00	e.12	.31	.28	1.4	.55	.71	.27	.17	.14	.00	.04
16	e.00	e.12	.37	.27	.81	.73	.45	.27	.16	.14	.00	.04
17	e.00	e.14	.28	.32	.71	.73	.38	.28	.16	.13	.00	.04
18	e.00	e.26	.37	.32	.68	.74	.35	.44	.15	.12	.00	.05
19	e.00	e.16	.34	.32	.69	.74	.37	.39	.15	.08	.00	.04
20	e.00	e.15	.30	.26	.70	.69	.41	1.3	.15	.01	.00	.04
21	.01	e.15	.26	.25	.67	.63	.43	.57	.15	.00	.00	.03
22	.25	e.16	.25	.26	.61	.61	.48	.45	.16	.00	.01	.03
23	2.1	e.17	.26	.26	2.0	.57	.43	.36	.16	.00	.01	.03
24	e.14	e.52	.25	.26	e1.6	.55	.34	.32	.16	.00	.00	.03
25	e.22	e.52	.25	.26	e.90	.55	.31	e.30	.16	.00	.00	.03
26	e.16	e.40	.30	.25	e.75	.59	.29	e.28	.16	.00	.01	.03
27	e.13	e.42	.27	.45	e.70	.63	.29	e.80	.17	.00	.00	.03
28	e.12	e.31	.32	1.2	e.80	.68	.28	e1.5	.19	.00	.00	.03
29	e.15	e.29	.35	1.4	---	.65	.28	e.60	.21	.00	.00	.03
30	e.12	e.31	.33	.74	---	.60	.28	e2.0	.20	.00	.00	.03
31	e.12	---	.31	.64	---	.54	---	e.40	---	.00	.00	---
TOTAL	3.52	6.21	8.88	12.48	22.62	20.13	13.00	15.17	5.51	2.77	0.04	0.57
MEAN	.11	.21	.29	.40	.81	.65	.43	.49	.18	.089	.001	.019
MAX	2.1	.52	.37	1.4	2.0	.90	.71	2.0	.38	.20	.01	.05
MIN	.00	.11	.23	.25	.49	.39	.28	.27	.15	.00	.00	.00
AC-FT	7.0	12	18	25	45	40	26	30	11	5.5	.08	1.1

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

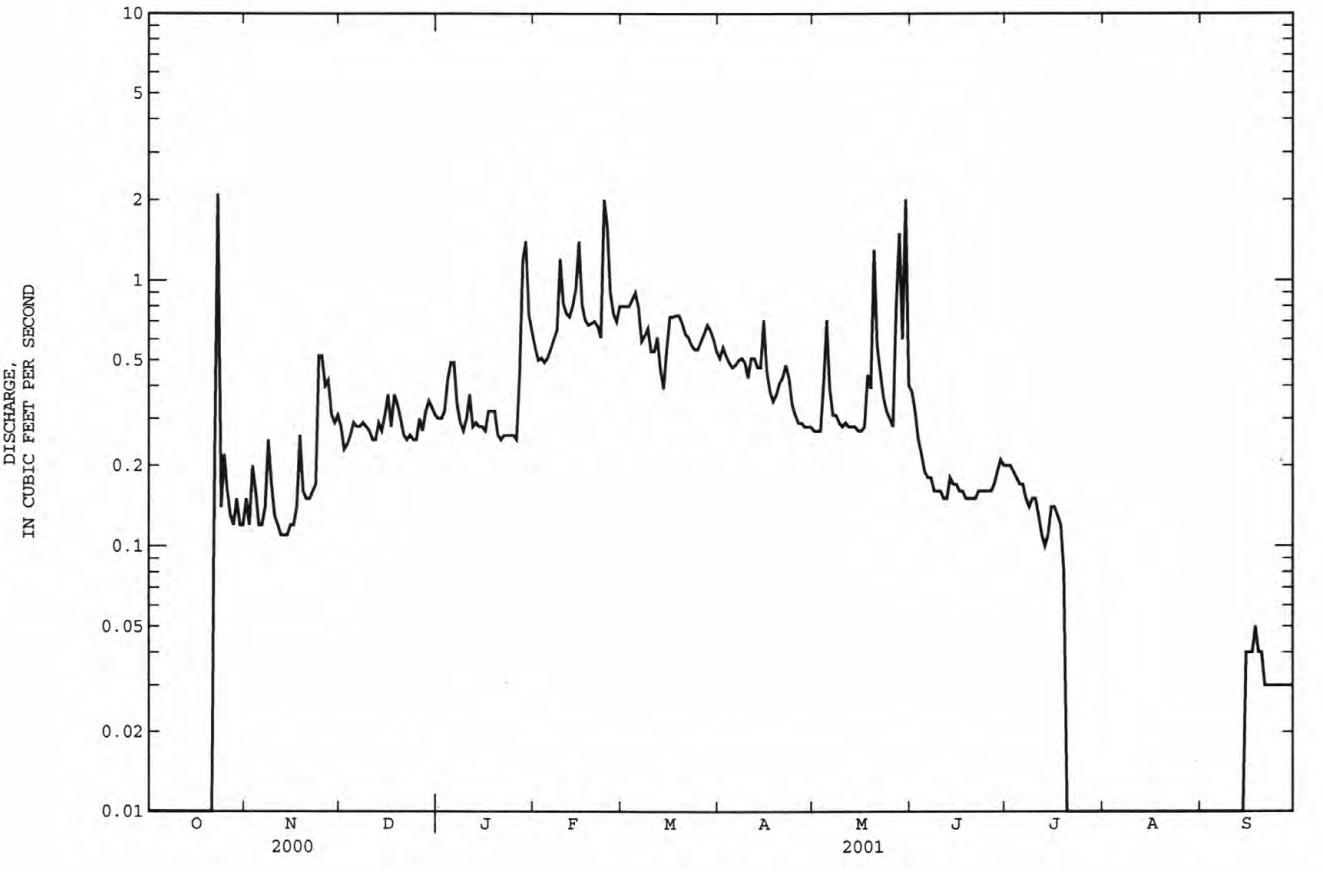
MEAN	.40	.48	.66	.78	.78	.86	.79	.55	.49	.19	.16	.23
MAX	1.06	.95	.99	1.44	1.28	1.42	1.56	1.79	1.54	.76	.63	1.01
(WY)	1997	1997	1997	1998	1997	1998	1997	1997	1997	1997	1996	1996
MIN	.11	.14	.29	.40	.32	.53	.41	.093	.14	.064	.001	.000
(WY)	2001	1999	2001	2001	2000	2000	1996	2000	2000	1998	2001	2000

e Estimated

07327483 BOGGY CREEK NEAR NINNEKAH, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1996 - 2001	
ANNUAL TOTAL	84.13		110.90			
ANNUAL MEAN	.23		.30		.52	
HIGHEST ANNUAL MEAN					1.02	1997
LOWEST ANNUAL MEAN					.26	2000
HIGHEST DAILY MEAN	3.3	Mar 23	2.1	Oct 23	17	May 30 1997
LOWEST DAILY MEAN	.00	Aug 11	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 11	.00	Oct 1	.00	Aug 11 2000
MAXIMUM PEAK FLOW			11	Oct 23	[a]64	May 30 1997
MAXIMUM PEAK STAGE			9.96	Oct 23	11.94	May 30 1997
ANNUAL RUNOFF (AC-FT)	167		220		380	
10 PERCENT EXCEEDS	.52		.69		1.1	
50 PERCENT EXCEEDS	.14		.26		.31	
90 PERCENT EXCEEDS	.00		.00		.03	

[a]From rating based on step-backwater analysis.



07327484 SCS POND NO. 11 NEAR NINNEKAH, OK

LOCATION.--Lat 34°53'41", long 98°59'48", in SW $^1/_4$ NE $^1/_4$ sec.24, T.5 N., R.8 W., Grady County, Hydrologic Unit 11130302, near west end of pond, on Boggy Creek, 4.5 mi southwest of Ninnekah.

DRAINAGE AREA.--2.07 mi^2 (Agricultural Research Service).

PERIOD OF RECORD.--April 1996 to current year.

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

REMARKS.--Reservoir is formed by earthen dam. Emergency spillway elevation is 1,163.3 ft, contents 492 acre-ft; principal spillway elevation is 1,147.6 ft, contents 80 acre-ft; drain value elevation 1,136.4 ft. Figures herein represent total contents. Reservoir is used for flood control.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128 acre-ft, May 30, 1997, elevation 1,151.16 ft; minimum daily, 55 acre-ft, Oct. 11-21, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 98 acre-ft, May 28, elevation 1,149.08 ft; minimum daily, 55 acre-ft, Oct. 11-21.

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

1144	46.0	1150	110.0
1146	64.0	1152	141.0
1148	84.0	1154	179.0

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 2400 HOURS

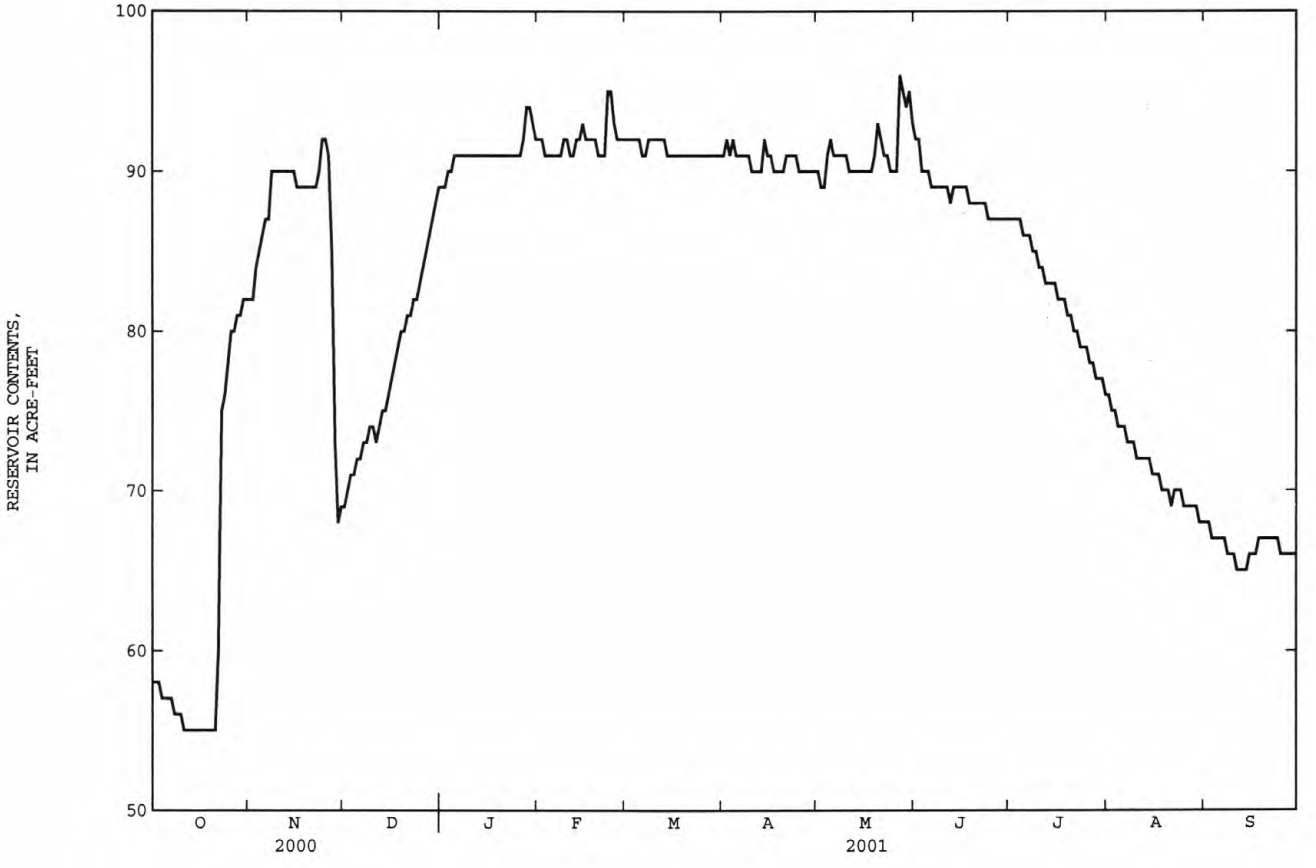
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e58	82	69	89	92	92	91	90	92	87	76	68
2	e58	82	70	89	92	92	92	89	92	87	75	68
3	e58	84	71	90	91	92	91	89	90	87	75	67
4	57	85	71	90	91	92	92	91	90	87	74	67
5	e57	86	72	91	91	92	91	92	90	86	74	67
6	e57	87	72	91	91	91	91	91	89	86	74	67
7	e57	87	73	91	91	91	91	91	89	86	73	67
8	e56	90	73	91	91	92	91	91	89	85	73	66
9	e56	90	74	91	92	92	91	91	89	85	73	66
10	e56	90	74	91	92	92	90	91	89	84	72	66
11	55	90	73	91	91	92	90	90	89	84	72	65
12	55	90	74	91	91	92	90	90	88	83	72	65
13	55	90	75	91	92	92	90	90	89	83	72	65
14	55	90	75	91	92	91	92	90	89	83	72	65
15	55	90	76	91	93	91	91	90	89	83	71	66
16	55	89	77	91	92	91	91	90	89	82	71	66
17	55	89	78	91	92	91	90	90	89	82	71	66
18	55	89	79	91	92	91	90	90	88	82	70	67
19	55	89	80	91	92	91	90	91	88	81	70	67
20	55	89	80	91	91	91	90	93	88	81	70	67
21	55	89	81	91	91	91	91	92	88	80	69	67
22	60	89	81	91	91	91	91	91	88	80	70	67
23	75	90	82	91	95	91	91	91	88	79	70	67
24	76	92	82	91	95	91	91	90	87	79	70	67
25	78	92	83	91	93	91	90	90	87	79	69	66
26	80	91	84	91	92	91	90	90	87	78	69	66
27	80	85	85	92	92	91	90	96	87	78	69	66
28	81	73	86	94	92	91	90	95	87	77	69	66
29	81	68	87	94	---	91	90	94	87	77	69	66
30	82	69	88	93	---	91	90	95	87	77	68	66
31	82	---	89	92	---	91	---	93	---	76	68	---
MAX	82	92	89	94	95	92	92	96	92	87	76	68
MIN	55	68	69	89	91	91	90	89	87	76	68	65
(‡)	1147.79	1146.68	1148.35	1148.61	1148.62	1148.55	1148.46	1148.70	1148.23	1147.20	1146.41	1146.17
(‡‡)	+24	-13	+20	+3	0	-1	-1	+3	-6	-11	-8	-2

CAL YR 2000 MAX 95 MIN 55 (‡‡) -1
WTR YR 2001 MAX 96 MIN 55 (‡‡) +8

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

e Estimated

07327484 SCS POND NO. 11 NEAR NINNEKAH, OK--Continued



07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK

LOCATION.--Lat 34°57'48", long 97°53'57", in NW $^1/_4$ SW $^1/_4$ sec.25, T.6 N., R.7 W., Grady County, Hydrologic Unit 11130302, on downstream right bank at bridge on county road 1.5 mi northeast of Ninnekah.

DRAINAGE AREA.--236 mi^2.

PERIOD OF RECORD.--February 1992 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,041.16 ft.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	64	42	e47	103	96	65	e34	106	23	e5.4	8.6
2	e5.0	50	39	e42	98	94	67	e32	78	22	5.3	8.1
3	e4.0	72	38	e46	95	88	69	e30	63	23	e5.2	7.7
4	e2.7	95	39	50	91	82	67	e33	53	22	e7.2	8.6
5	2.3	66	39	68	83	77	66	105	46	21	e5.6	11
6	e2.8	57	41	87	69	79	65	74	42	20	e5.4	12
7	e4.1	48	41	87	67	77	63	78	41	20	e5.1	11
8	6.8	91	40	69	68	77	59	71	39	17	e5.3	8.2
9	6.9	106	38	61	105	94	60	52	37	16	e5.0	7.6
10	7.9	74	39	58	94	84	59	44	37	e15	e4.5	6.9
11	8.8	60	37	72	79	82	75	37	35	e14	e4.3	5.9
12	9.4	58	e36	67	76	99	70	33	e33	e13	e4.2	5.8
13	9.8	51	e33	77	75	91	73	e29	40	e12	e8.2	5.8
14	12	47	e42	73	77	81	73	e26	e39	e12	12	5.5
15	e16	46	53	68	115	78	102	e23	e36	e13	10	9.3
16	28	44	60	67	92	70	83	e21	e32	e14	8.8	10
17	25	41	53	59	78	68	57	e20	e28	e13	e8.0	9.7
18	22	41	49	59	73	69	50	52	e26	e11	11	14
19	17	42	48	57	74	73	50	64	e23	e9.8	16	14
20	15	43	46	52	72	72	52	178	e22	e9.0	12	12
21	20	41	44	51	70	70	53	118	23	e8.4	9.7	11
22	45	42	42	50	67	68	e51	66	e23	e7.6	9.2	9.4
23	1950	46	41	49	174	66	e50	46	23	e7.1	26	8.7
24	617	95	39	51	335	64	e45	38	22	e6.6	16	7.8
25	451	92	e38	48	193	e58	e45	32	21	e10	9.2	7.6
26	737	65	e37	48	121	e60	e39	29	20	e8.9	11	7.2
27	442	55	e42	49	100	66	e38	29	20	e7.6	15	6.9
28	196	54	53	171	94	72	e36	224	21	e6.4	11	6.5
29	174	50	54	250	---	73	e35	118	23	e6.1	8.9	6.2
30	137	44	50	150	---	71	e34	456	23	e5.8	8.4	6.3
31	112	---	48	104	---	69	---	196	---	e5.6	8.5	---
TOTAL	5093.0	1780	1341	2287	2838	2368	1751	2388	1075	399.9	281.4	259.3
MEAN	164	59.3	43.3	73.8	101	76.4	58.4	77.0	35.8	12.9	9.08	8.64
MAX	1950	106	60	250	335	99	102	456	106	23	26	14
MIN	2.3	41	33	42	67	58	34	20	20	5.6	4.2	5.5
AC-FT	10100	3530	2660	4540	5630	4700	3470	4740	2130	793	558	514

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

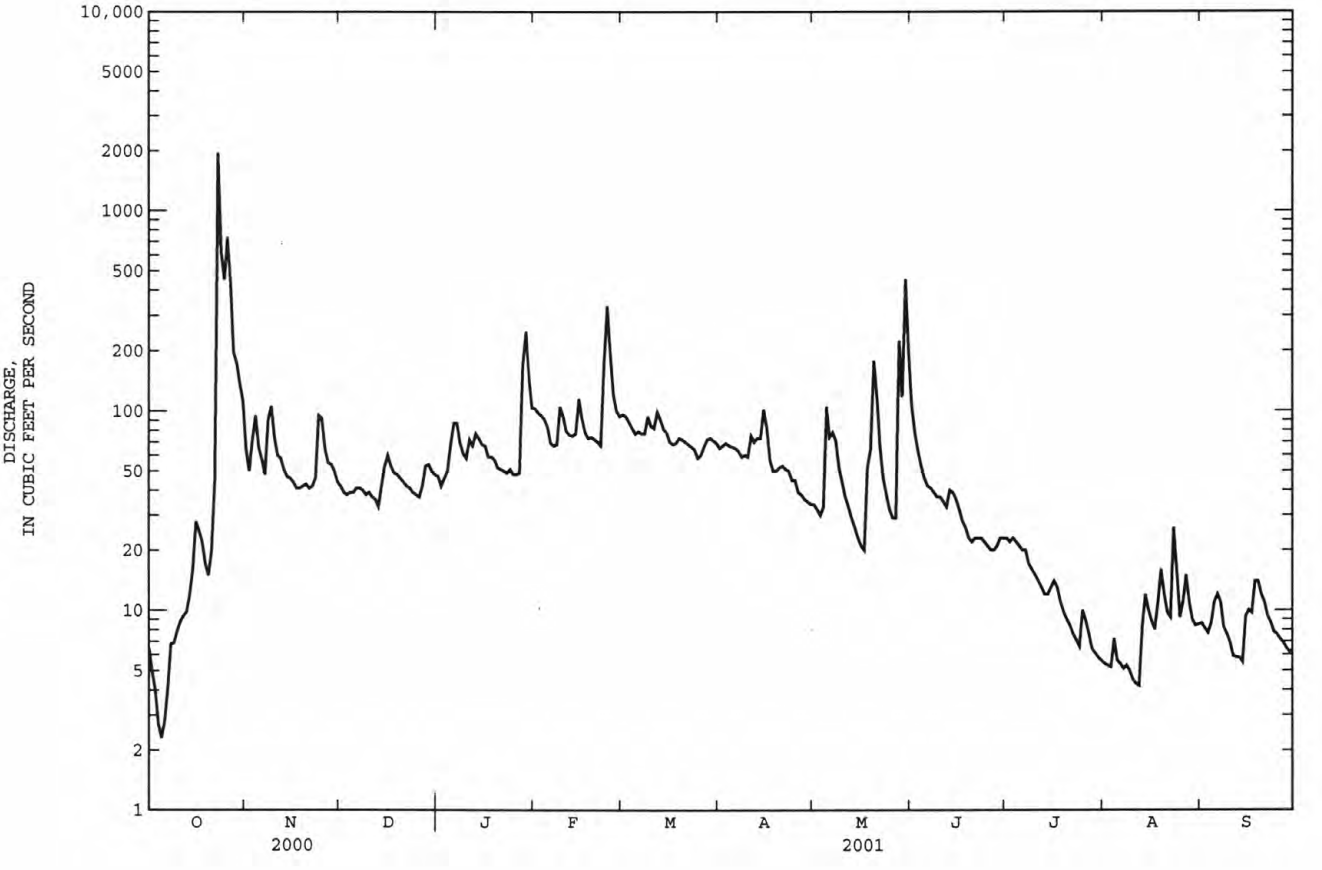
MEAN	53.4	56.1	69.6	79.6	89.2	102	106	130	117	47.4	33.6	34.0
MAX	164	105	185	264	196	320	181	325	352	126	92.7	85.4
(WY)	2001	1993	1993	1998	1993	1998	1998	1993	1995	1992	1992	1992
MIN	9.75	16.0	32.2	25.2	29.4	50.5	37.5	18.1	35.8	12.9	2.77	4.94
(WY)	1999	2000	1999	1999	2000	1997	2000	1996	2001	2001	2000	2000

e Estimated

07327550 LITTLE WASHITA RIVER EAST OF NINNEKAH, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	15777.7		21861.6			
ANNUAL MEAN	43.1		59.9		73.7	
HIGHEST ANNUAL MEAN					137	1993
LOWEST ANNUAL MEAN					26.6	2000
HIGHEST DAILY MEAN	1950	Oct 23	1950	Oct 23	3570	May 30 1997
LOWEST DAILY MEAN	1.5	Sep 2	2.3	Oct 5	1.5	Sep 2 2000
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 12	3.9	Oct 1	1.8	Aug 12 2000
MAXIMUM PEAK FLOW			3530	Oct 23	[a]9920	May 9 1993
MAXIMUM PEAK STAGE			14.82	Oct 23	[b]20.70	May 9 1993
ANNUAL RUNOFF (AC-FT)	31300		43360		53400	
10 PERCENT EXCEEDS	60		95		142	
50 PERCENT EXCEEDS	28		42		47	
90 PERCENT EXCEEDS	3.0		7.2		11	

[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 sea level. Oct. 1, 1988 to Sept. 30, 2000, datum 5.00 ft higher. Prior to Oct. 1, 1988, datum 10.00 ft higher.

REMARKS.--Records fair. Some regulation since March 1959 by Fort Cobb Reservoir (station 07325900), since February 1961 by Foss Reservoir (07324300), and by numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telementer at station.

COOPERATION.--Records furnished by Agricultural Research Service prior to January 1978.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

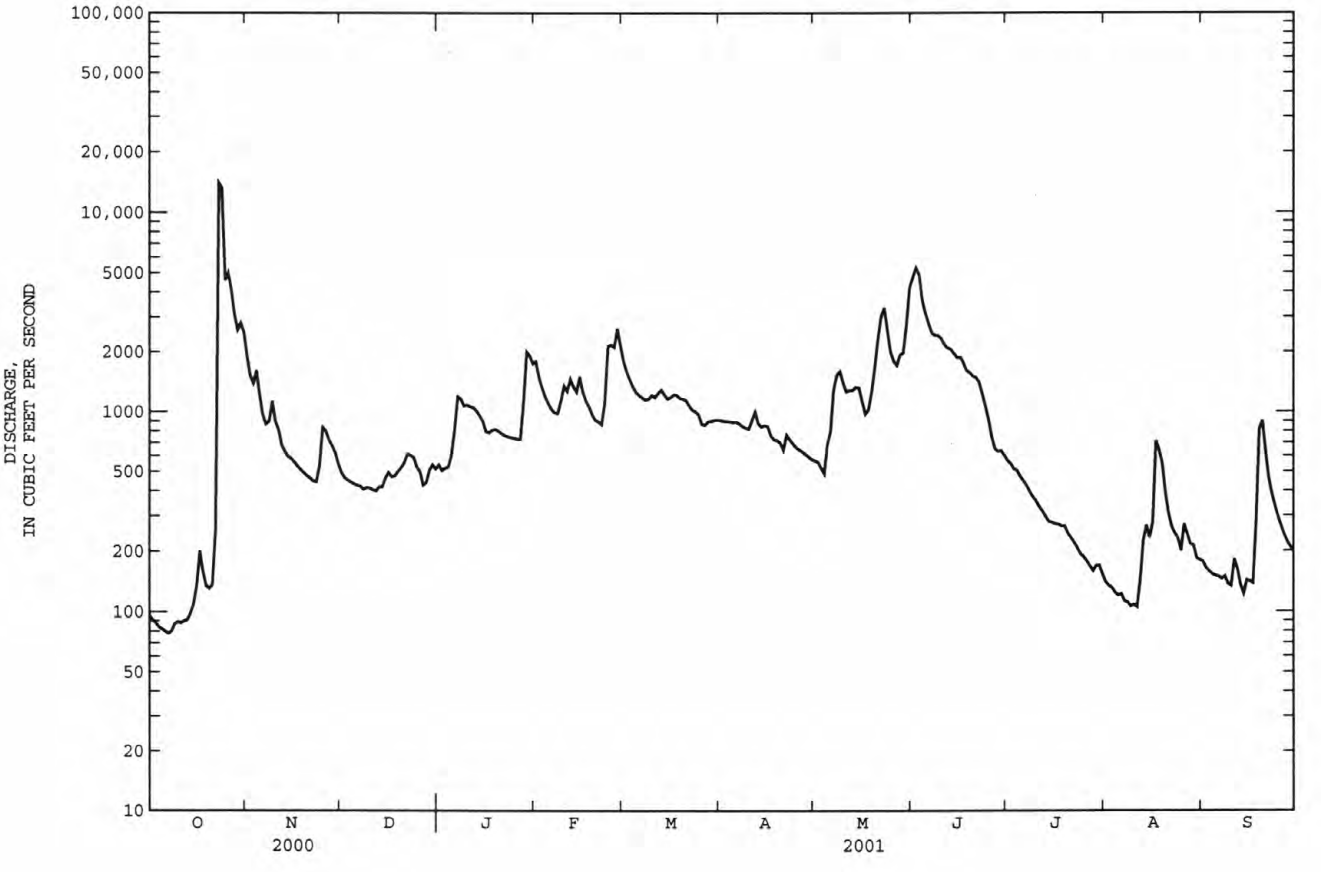
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	e1910	493	540	1790	1790	905	566	4720	566	140	177
2	91	e1520	465	505	1490	1590	898	558	5250	547	134	164
3	88	e1390	452	520	1320	1450	895	519	4890	514	131	158
4	84	e1610	441	525	1190	1330	892	488	3620	504	124	153
5	82	e1220	433	603	1100	1250	885	688	3120	470	120	150
6	80	e961	425	810	1030	1210	889	788	2770	447	122	149
7	78	868	422	1190	989	1170	870	1290	2490	424	112	145
8	80	e895	407	1160	983	1150	843	1530	2420	393	111	149
9	87	e1130	415	1070	1130	1160	829	1590	2410	371	106	137
10	89	e895	412	1080	1350	1210	819	1400	2330	353	108	134
11	88	e816	403	1060	1270	1180	906	1260	2170	331	105	182
12	90	e681	399	1050	1460	1240	998	1280	2090	315	142	162
13	91	e632	419	1010	1340	1290	872	1280	2060	296	225	135
14	98	e595	418	955	1260	1220	839	1330	1960	280	268	122
15	109	582	464	898	e1500	1160	853	1320	1870	277	232	143
16	135	558	494	796	1260	1180	845	1130	1880	272	277	141
17	201	533	471	785	1130	1220	758	973	1760	271	713	138
18	159	511	475	808	1060	1210	724	1020	1610	265	641	280
19	135	493	500	816	966	1170	718	1250	1570	266	551	816
20	131	476	522	800	906	1160	696	1660	1510	244	392	900
21	136	463	553	777	892	1140	642	2320	1480	232	308	638
22	256	448	613	758	863	1070	763	3010	1410	220	264	468
23	14000	444	601	750	1110	1020	724	3320	1230	207	244	388
24	13200	535	589	741	2130	1000	692	2550	1070	193	231	336
25	4580	835	526	736	2170	967	662	1990	912	187	200	297
26	e5000	801	499	727	2110	866	644	1790	749	178	272	267
27	e4100	720	427	726	2620	857	629	1710	651	168	242	241
28	e3100	674	439	1110	2150	893	611	1930	629	159	216	222
29	e2580	621	507	2000	---	895	593	1970	635	169	213	209
30	e2790	546	540	1920	---	908	575	2730	601	169	184	199
31	e2520	---	515	1750	---	910	---	4190	---	153	180	---
TOTAL	54354	24363	14739	28976	38569	35866	23469	49430	61867	9441	7308	7800
MEAN	1753	812	475	935	1377	1157	782	1595	2062	305	236	260
MAX	14000	1910	613	2000	2620	1790	998	4190	5250	566	713	900
MIN	78	444	399	505	863	857	575	488	601	153	105	122
AC-FT	107800	48320	29230	57470	76500	71140	46550	98040	122700	18730	14500	15470
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)												
MEAN	587	497	479	436	491	749	789	1367	1483	528	404	535
MAX	4441	1672	2615	2057	1829	4446	3598	6916	6865	1678	2325	3345
(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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1965 - 2001	
ANNUAL TOTAL	329200		356182			
ANNUAL MEAN	899		976		694	
HIGHEST ANNUAL MEAN					1902	1993
LOWEST ANNUAL MEAN					120	1971
HIGHEST DAILY MEAN	14000	Oct 23	14000	Oct 23	22500	Oct 21 1983
LOWEST DAILY MEAN	49	Sep 21	78	Oct 7	.00	[a]Aug 13 1970
ANNUAL SEVEN-DAY MINIMUM	57	Sep 17	83	Oct 3	.01	Aug 12 1970
MAXIMUM PEAK FLOW			23100	Oct 23	25000	Jun 8 1995
MAXIMUM PEAK STAGE			20.12	Oct 23	[b]33.70	Oct 21 1983
ANNUAL RUNOFF (AC-FT)	653000		706500		503100	
10 PERCENT EXCEEDS	2060		1960		1620	
50 PERCENT EXCEEDS	470		718		315	
90 PERCENT EXCEEDS	90		142		75	

[a]No flow Aug. 13, 18, 1970, Aug. 30 to Sept. 1, 1971.
[b]Present datum.



07328180 NORTH CRINER CREEK NEAR CRINER, OK

LOCATION.--Lat 34°58'17", long 97°35'04", in SE $^1/_4$ SE $^1/_4$ sec.23, T.6 N., R.4 W., McClain County, Hydrologic Unit 11130303, near left bank on downstream side of county road bridge, 1.2 mi west of Criner, and at mile .83.

DRAINAGE AREA.--7.33 mi^2

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1023.66 ft above sea level.

REMARKS.--Records 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.6	1.7	2.5	4.6	e6.1	e5.9	1.1	5.6	.26	.10	.05
2	.00	2.2	1.6	2.4	4.2	e5.3	e7.0	1.1	4.3	.22	.11	.03
3	.00	5.0	1.4	2.1	4.2	e4.9	e7.0	1.0	3.4	.15	.12	.24
4	.00	3.8	1.4	2.3	4.2	e4.7	e6.6	1.9	2.9	.06	.10	.11
5	.00	3.1	1.4	3.0	4.0	e4.6	e7.0	4.6	2.4	.05	.09	.13
6	.00	3.2	1.6	3.0	3.8	e4.4	e6.5	3.7	2.0	.10	.07	.10
7	.00	2.2	1.5	3.0	3.6	e4.6	e6.1	3.2	1.8	.08	.09	.11
8	.00	6.4	1.5	2.1	3.7	e4.8	e5.9	2.9	1.6	.05	.09	.10
9	.00	4.4	1.4	1.9	5.4	e5.0	e5.3	2.4	1.6	.05	.07	.02
10	.00	3.2	1.5	2.0	4.4	e4.7	e5.1	1.9	1.6	.07	.05	.01
11	.00	2.7	1.5	2.5	3.9	e5.0	e12	1.6	1.5	.04	.13	.01
12	.00	2.4	1.3	2.1	3.7	e5.7	e9.4	1.2	1.3	.02	1.1	.01
13	.00	1.9	2.1	2.0	3.6	e5.2	e7.3	1.0	1.3	.05	.16	.01
14	.00	1.6	1.9	1.9	4.2	e5.0	e6.2	.85	1.3	.10	.10	.00
15	.13	1.5	1.9	1.7	6.9	e5.9	e6.0	.68	1.2	.14	.08	.67
16	.09	1.5	1.8	1.7	5.5	e5.5	e4.4	.56	1.1	.08	.07	.17
17	.00	1.3	2.0	1.9	4.6	e5.3	e3.6	.56	.89	.06	.20	.13
18	.00	1.2	2.0	1.9	4.1	e5.1	3.2	1.1	.77	.05	.15	5.0
19	.00	1.1	1.9	2.0	4.0	e5.4	3.0	.99	.69	.04	.09	4.0
20	.00	1.0	1.9	1.8	3.9	e5.3	2.9	2.3	.60	.08	.06	4.8
21	.45	.98	1.8	1.7	3.8	e5.4	2.7	1.8	.54	.07	.03	3.5
22	.11	1.1	1.7	1.5	3.6	e5.5	3.0	.86	.52	.06	.03	2.3
23	12	1.5	1.6	1.5	6.9	e5.9	3.3	.55	.46	.05	.09	1.6
24	.54	3.2	1.6	1.4	e20	e6.8	2.5	.32	.44	.05	.05	1.4
25	2.6	3.0	1.7	1.3	e11	e6.9	2.1	.23	.35	.10	.02	1.1
26	7.2	2.2	2.6	1.5	e8.0	e6.6	1.8	.25	.36	.10	.22	.87
27	22	1.7	2.6	1.7	e6.6	e6.9	1.5	.32	.41	.10	.07	.65
28	5.0	1.5	e2.3	4.3	e6.0	e7.4	1.3	3.0	.45	.08	.15	.57
29	6.0	1.4	e2.2	12	---	e7.1	1.2	2.4	.39	.11	.09	.50
30	3.3	1.3	2.5	6.8	---	e7.0	1.0	15	.32	.10	.05	.39
31	2.4	---	2.5	5.5	---	e6.7	---	7.4	---	.11	.06	---
TOTAL	61.82	70.18	56.4	83.0	152.4	174.7	140.8	66.77	42.09	2.68	3.89	28.58
MEAN	1.99	2.34	1.82	2.68	5.44	5.64	4.69	2.15	1.40	.086	.13	.95
MAX	22	6.4	2.6	12	20	7.4	12	15	5.6	.26	1.1	5.0
MIN	.00	.98	1.3	1.3	3.6	4.4	1.0	.23	.32	.02	.02	.00
AC-FT	123	139	112	165	302	347	279	132	83	5.3	7.7	57

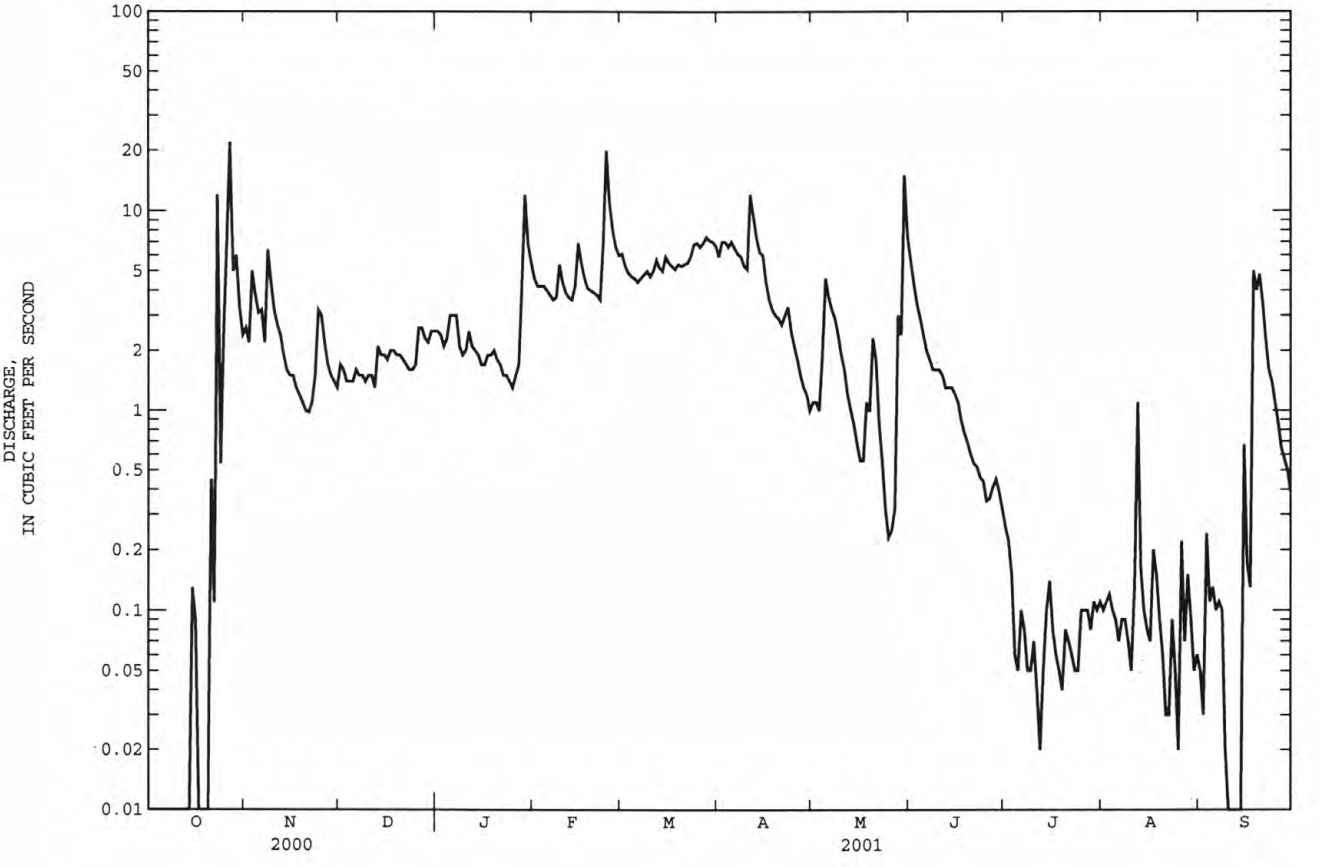
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

MEAN	1.34	2.15	2.66	2.50	3.41	4.46	4.97	6.27	3.45	1.67	1.82	1.51
MAX	3.68	7.23	9.59	7.37	9.67	12.5	14.7	23.1	9.93	5.98	11.1	5.91
(WY)	1997	1997	1993	1993	1993	1998	1990	1993	1992	1992	1996	1996
MIN	.12	.46	.33	.16	.77	.86	.50	.78	.42	.086	.009	.016
(WY)	2000	2000	1991	2000	2000	1991	2000	1996	1994	2001	2000	2000

e Estimated

07328180 NORTH CRINER CREEK NEAR CRINER, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	404.10		883.31			
ANNUAL MEAN	1.10		2.42		3.02	
HIGHEST ANNUAL MEAN					6.65	1993
LOWEST ANNUAL MEAN					.70	2000
HIGHEST DAILY MEAN	22	Oct 27	22	Oct 27	151	May 2 1990
LOWEST DAILY MEAN	.00	Jun 8	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 10	.00	Oct 1	.00	Jun 21 1994
MAXIMUM PEAK FLOW			134	Oct 23	605	May 23 1993
MAXIMUM PEAK STAGE			6.60	Oct 23	11.24	May 23 1993
ANNUAL RUNOFF (AC-FT)	802		1750		2190	
10 PERCENT EXCEEDS	2.6		5.9		6.6	
50 PERCENT EXCEEDS	.49		1.6		1.3	
90 PERCENT EXCEEDS	.00		.05		.16	



07328500 WASHITA RIVER NEAR PAULS VALLEY, OK

LOCATION.--Lat 34°45'17", long 97°15'04", in NE $^1/_4$, SE $^1/_4$ sec.1. T.3 N., R.1 W., Garvin County, Hydrologic Unit 11130303, on downstream right bank near end of bridge on U.S. Highway 77, 2.0 mi northwest of Pauls Valley, 6.0 mi downstream from Owl Creek, 7.0 mi upstream from Washington Creek, and at mile 146.5.

DRAINAGE AREA.--5,330 mi^2.

PERIOD OF RECORD.--May to December 1899 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "at Pauls Valley, Indian Territory" in 1899.

GAGE.--Water-stage recorder. Datum of gage is 854.61 ft above sea level. During 1899, nonrecording gage at site 9 mi downstream, at different datum. Mar. 29, 1938, to Jan. 25, 1939, nonrecording gage and Jan. 26, 1939, to Oct. 6, 1948, water-stage recorder at site 0.7 mi upstream, at datum 1.53 ft higher. Mar. 11, 1975, to Jan. 26, 1981, water-stage recorder at site 200 ft upstream, and at same datum.

REMARKS.--Records poor. 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Stream is reported to have receded to no flow in 1882 and in 1897 (information provided by local resident).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e125	e3250	e918	852	2810	2930	1030	769	4810	754	e157	e202
2	e103	e2960	e770	779	2350	2400	1020	744	5410	667	146	e197
3	e99	e3220	e695	727	1920	2130	1030	737	5550	619	e138	e196
4	e92	e4470	e635	715	1670	1930	1030	755	4500	589	e131	e220
5	e89	e4350	e607	810	1480	1740	998	1150	3510	558	e120	e406
6	e87	e3550	e590	931	1380	1640	983	1150	3020	535	e112	480
7	e88	e2570	e565	1180	1300	1590	956	1150	2690	501	e106	e423
8	e90	e2900	e555	1620	1240	1530	943	1760	2450	473	e98	409
9	e91	e3610	e550	1460	1430	1530	956	1830	2490	444	92	e400
10	e90	e3160	e545	1390	1590	1580	959	1760	2470	416	e91	e381
11	89	2570	e550	1530	1640	1640	1260	1570	2400	397	e89	e387
12	e97	2040	e540	1460	1610	1800	1360	1440	2240	378	e86	e349
13	e100	1850	e555	1350	1710	1770	1160	1460	2170	e350	e109	e292
14	e106	1720	e555	1280	1600	1760	1480	1400	2130	e330	e143	e263
15	e109	1630	e570	1170	3810	1640	1350	1470	2000	e310	e183	665
16	e113	1540	e575	1080	3100	1550	1160	1370	1950	e295	e238	1000
17	e120	1430	e625	968	2350	1550	1090	1180	1910	e288	e214	824
18	e151	e1370	e595	972	1940	1510	971	1090	1710	e284	425	1970
19	e236	e1330	e610	1000	1670	1480	895	1160	1540	e281	632	1110
20	e210	e1280	e680	968	1460	1480	877	1480	1490	e270	591	1490
21	256	e1160	e735	938	1320	1480	874	2410	1460	e253	478	1190
22	302	e1050	e900	904	1270	1440	832	3170	1460	e238	359	810
23	1940	1210	e1030	896	1510	1340	964	4210	1400	e225	e298	634
24	14800	1890	e1050	900	3910	1270	919	3970	1250	e213	e228	504
25	9190	2220	e945	890	4550	1230	852	2870	1110	e202	e217	407
26	5810	2100	e860	871	3320	1150	830	2520	955	e189	e236	334
27	6940	e1750	e810	867	3850	1050	824	2410	825	e178	e224	e320
28	5180	e1530	778	1180	3700	1050	798	3020	745	e168	e213	e280
29	4770	e1300	1010	3430	---	1100	788	2790	725	e160	e209	e260
30	3920	e1060	1020	3920	---	1080	805	3190	973	e169	e206	e240
31	3550	---	944	2830	---	1050	---	5470	---	e167	e215	---
TOTAL	58943	66070	22367	39868	61490	48420	29994	61455	67343	10901	6784	16643
MEAN	1901	2202	722	1286	2196	1562	1000	1982	2245	352	219	555
MAX	14800	4470	1050	3920	4550	2930	1480	5470	5550	754	632	1970
MIN	87	1050	540	715	1240	1050	788	737	725	160	86	196
AC-FT	116900	131000	44360	79080	122000	96040	59490	121900	133600	21620	13460	33010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

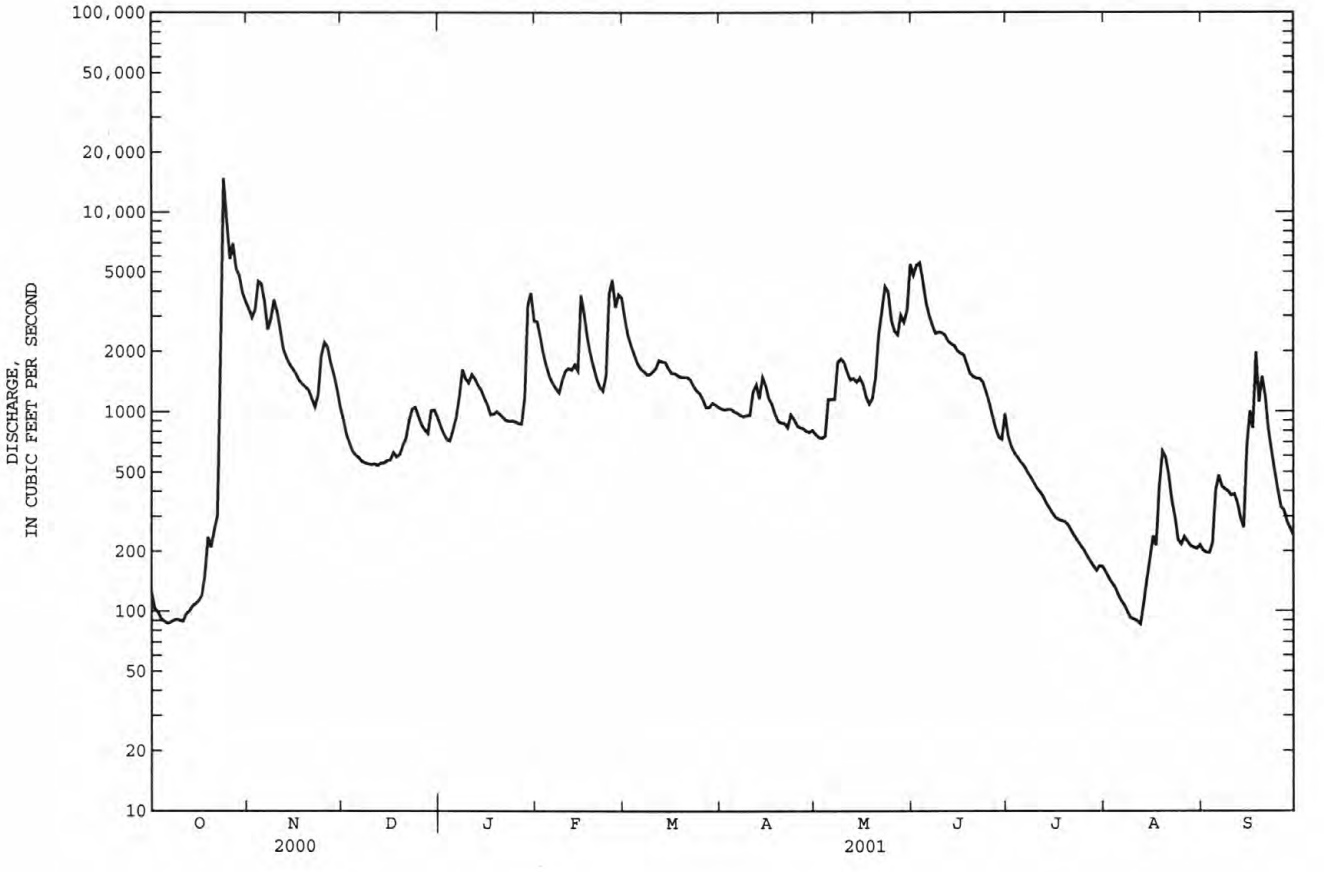
MEAN	913	780	650	630	755	1085	1085	1921	2010	691	467	644
MAX	7934	3608	3347	2868	3149	5573	4311	10690	9788	3174	2961	4086
(WY)	1987	1987	1992	1998	1987	1998	1997	1993	1995	1987	1995	1996
MIN	35.2	61.7	69.6	91.3	87.8	78.9	58.9	38.1	151	16.3	.28	23.6
(WY)	1964	1968	1968	1967	1967	1967	1982	1971	1966	1964	1972	1972

e Estimated

07328500 WASHITA RIVER NEAR PAULS VALLEY, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	414803		490278			
ANNUAL MEAN	1133		1343		[a]969	
HIGHEST ANNUAL MEAN					3661	1987
LOWEST ANNUAL MEAN					181	1967
HIGHEST DAILY MEAN	14800	Oct 24	14800	Oct 24	41700	May 29 1987
LOWEST DAILY MEAN	55	Sep 21	86	Aug 12	[b].00	Jul 21 1964
ANNUAL SEVEN-DAY MINIMUM	63	Sep 17	89	Oct 5	.00	Jul 21 1964
MAXIMUM PEAK FLOW			17300	Oct 24	43600	May 29 1987
MAXIMUM PEAK STAGE			14.96	Oct 24	[c]28.72	May 29 1987
ANNUAL RUNOFF (AC-FT)	822800		972500		702100	
10 PERCENT EXCEEDS	2920		2980		2200	
50 PERCENT EXCEEDS	588		1010		428	
90 PERCENT EXCEEDS	92		174		91	

[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.



07329700 WILDHORSE CREEK NEAR HOOVER, OK

LOCATION.--Lat 34°32'29", long 97°14'49", on west line of SW $^1/_4$ sec. 19, T.1 N., R.1 E., Garvin County, Hydrologic Unit 11130303, on downstream left bank at bridge on State Highway 19A, 1.0 mi north of Hoover, 1.8 mi downstream from Sandy Creek and at mile 7.9.

DRAINAGE AREA.--604 mi^2.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1951-69, October 1969 to September 1993, July 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 798.3 ft above sea level. Prior to July 1, 2000, datum 5.0 ft higher.

REMARKS.--Records fair. Flow regulated by Duncan, Clear Creek, Humphries, and Fuqua Lakes, combined surface-area, 3,340 acres, and capacity, 44.800 acre-ft, and numerous flood-retarding structures. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	380	219	353	707	915	150	77	e231	e50	4.7	e3.3
2	e1.7	385	195	300	525	798	144	73	e165	e36	e4.7	e3.7
3	e1.8	394	156	253	420	652	140	68	e132	e29	e4.6	e5.6
4	e2.0	989	125	273	353	541	139	67	130	e26	e4.4	e5.8
5	e1.9	531	110	333	314	464	138	295	109	e24	e4.3	e5.7
6	e3.0	1200	104	336	266	409	136	231	93	e21	e4.3	e4.2
7	e2.5	608	103	304	240	377	129	159	82	e19	e4.3	e4.7
8	e2.5	1200	90	270	222	362	118	136	74	e18	e4.0	e5.8
9	e2.4	1310	82	219	424	374	113	113	67	e16	e4.0	e6.7
10	e2.4	685	76	199	449	353	110	96	60	e14	e4.0	e5.4
11	e2.3	488	69	361	303	335	243	89	54	e14	e3.9	e5.0
12	e2.3	384	e68	356	261	362	310	81	48	e13	e3.9	e4.7
13	e2.4	305	e68	282	242	331	196	70	51	e13	e3.8	e4.6
14	e2.9	259	e68	247	245	289	1970	64	73	e14	e3.8	e4.5
15	e82	219	92	218	4400	268	1170	57	109	e13	e3.7	260
16	e33	182	111	189	5750	278	626	50	e56	e12	e3.7	788
17	e8.0	e122	135	190	2270	222	449	46	e54	e11	e3.7	165
18	e5.0	e93	96	205	1440	196	356	48	e48	e9.6	e3.6	248
19	e12	e76	91	186	1150	191	288	78	e44	e8.7	e3.6	165
20	e15	e66	80	178	935	189	239	2690	e40	e8.2	3.6	822
21	e20	66	68	149	765	180	205	1530	39	e7.2	e3.6	724
22	e31	57	70	134	645	175	180	827	e38	e6.3	e3.6	290
23	e54	63	58	129	615	170	163	588	e38	e5.9	e3.5	157
24	e102	2880	54	126	2000	179	159	449	e37	e5.6	e3.5	88
25	306	1750	56	122	1210	179	128	332	e37	e5.4	e3.5	63
26	1410	914	402	118	840	150	116	249	e36	e5.2	e3.5	50
27	3070	635	583	115	729	150	104	193	e35	e5.2	e3.5	e40
28	964	481	554	326	820	162	96	1200	e35	e5.0	e3.4	e32
29	1430	364	1030	3450	---	167	90	633	e35	e4.9	e3.4	e29
30	690	284	683	1470	---	163	82	472	85	e4.8	e3.4	e27
31	435	---	458	985	---	152	---	e320	---	e4.8	e3.3	---
TOTAL	8698.8	17370	6154	12376	28540	9733	8487	11381	2135	429.8	118.8	4017.7
MEAN	281	579	199	399	1019	314	283	367	71.2	13.9	3.83	134
MAX	3070	2880	1030	3450	5750	915	1970	2690	231	50	4.7	822
MIN	1.7	57	54	115	222	150	82	46	35	4.8	3.3	3.3
AC-FT	17250	34450	12210	24550	56610	19310	16830	22570	4230	853	236	7970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

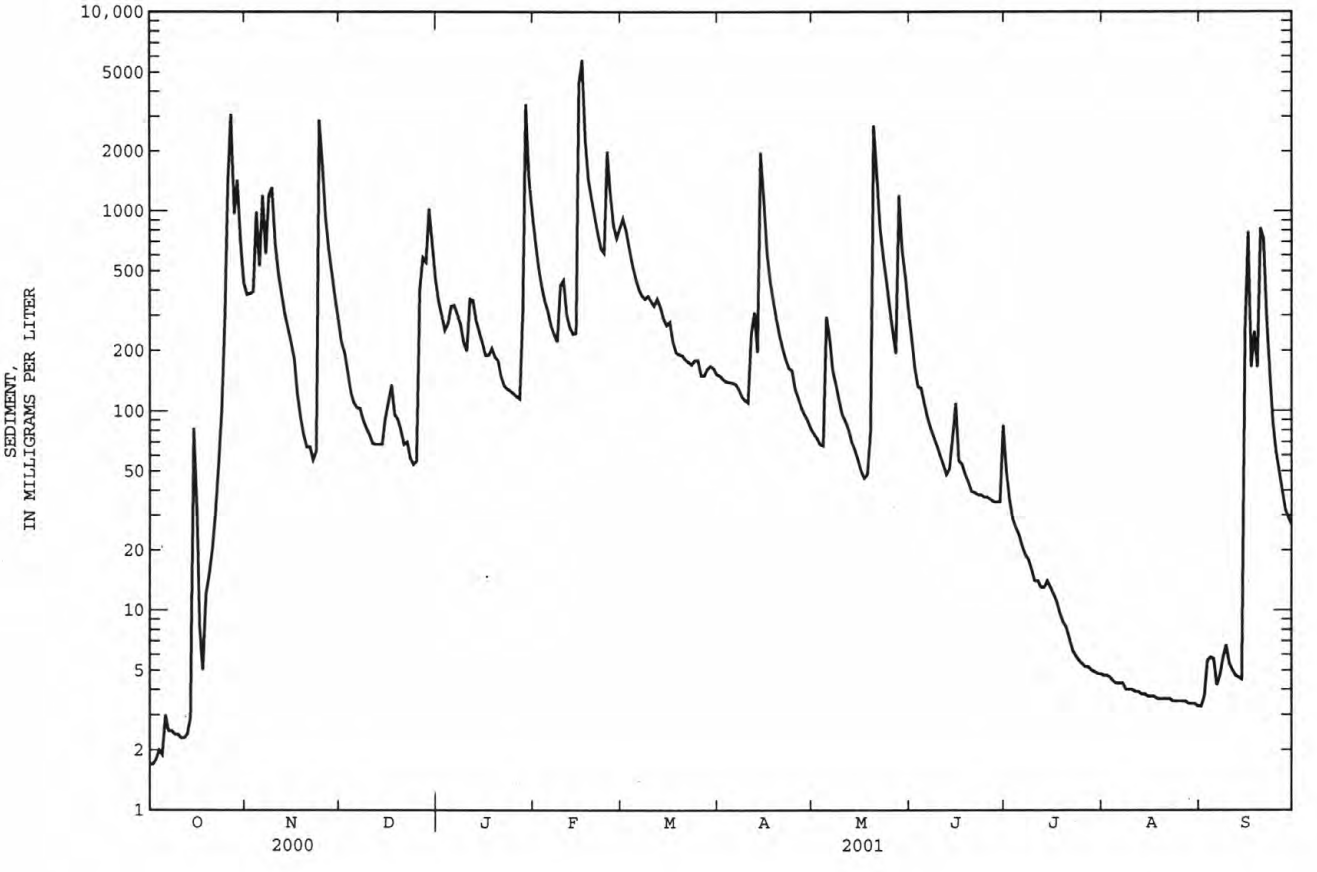
MEAN	182	193	243	190	243	387	371	719	465	104	33.2	126
MAX	647	920	1614	1371	1023	1283	2564	2937	1385	640	249	750
(WY)	1986	1974	1988	1988	1987	1990	1990	1982	1975	1975	1975	1991
MIN	1.14	3.33	2.00	4.88	8.76	8.48	6.73	35.8	16.5	.92	.16	.33
(WY)	1979	1978	1978	1978	1970	1972	1982	1984	1970	1980	1970	1971

e Estimated

07329700 WILDHORSE CREEK NEAR HOOVER, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL			109441.1			
ANNUAL MEAN			300		271	
HIGHEST ANNUAL MEAN					631	1987
LOWEST ANNUAL MEAN					35.3	1970
HIGHEST DAILY MEAN	3070	Oct 27	5750	Feb 16	27000	May 29 1987
LOWEST DAILY MEAN	1.4	Sep 22	1.7	Oct 1-2	.00	at times
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 16	2.1	Oct 1	.00	Sep 8 1980
MAXIMUM PEAK FLOW			7710	Feb 15	40600	May 3 1990
MAXIMUM PEAK STAGE			16.08	Feb 15	[a]31.13	May 3 1990
ANNUAL RUNOFF (AC-FT)			217100		196600	
10 PERCENT EXCEEDS	568		743		588	
50 PERCENT EXCEEDS	7.7		118		50	
90 PERCENT EXCEEDS	1.6		3.9		3.8	

[a]Present datum.



07329852 ROCK CREEK AT SULPHUR, OK

LOCATION.--Lat 34°29'43", long 96°59'18", in SE $^{1}/_{4}$ SE $^{1}/_{4}$ sec.4, T.1 S., R.3 E., Murray County, Hydrologic Unit 11130303, 80 ft west of campsite 69 in Rock Creek Campground, in the Chickasaw National Park at Sulphur, OK, and at mile 11.0.

DRAINAGE AREA.--44.1 mi^2.

PERIOD OF RECORD.--Oct. 1, 1989 to current year.

REVISED RECORDS.--WDR OK-94-2: 1993.

GAGE.--Water-stage recorder. Datum of gage is 896.97 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by numerous flood-retarding structures. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	17	22	129	177	235	46	20	30	11	7.0	5.6
2	2.3	14	21	112	103	210	46	19	22	9.8	6.8	5.7
3	2.4	13	20	104	78	173	46	18	18	9.3	6.8	7.3
4	2.6	14	20	113	65	141	45	59	15	8.8	7.0	8.4
5	2.3	108	20	124	54	113	42	282	14	8.6	6.6	7.7
6	4.0	136	20	116	49	100	41	90	13	8.4	6.5	6.3
7	2.6	44	20	101	45	89	38	49	13	8.1	6.7	7.1
8	2.6	211	19	84	46	87	35	33	12	7.9	6.6	10
9	2.7	116	18	76	94	94	34	26	12	7.8	6.5	7.6
10	2.8	60	18	77	67	85	33	21	11	8.0	7.3	5.9
11	2.8	40	19	144	51	82	93	21	11	7.9	6.9	5.6
12	2.5	34	18	126	45	85	65	27	10	7.8	6.7	5.5
13	2.6	27	21	107	44	75	46	22	12	8.2	6.3	5.5
14	2.9	22	22	94	48	72	412	19	11	8.7	6.3	5.3
15	77	20	25	79	726	68	283	16	10	7.7	6.6	620
16	9.0	18	33	75	1360	60	135	14	9.8	7.5	7.4	345
17	3.4	16	26	119	576	56	80	14	9.3	7.4	7.0	144
18	3.2	15	24	126	486	54	60	16	9.1	7.3	6.9	923
19	3.3	15	22	110	382	55	51	20	8.8	7.5	6.6	434
20	6.2	14	21	89	280	54	46	290	8.7	7.6	6.5	973
21	10	13	19	84	214	54	43	116	8.5	7.4	6.4	380
22	18	13	18	79	156	53	40	48	8.4	7.4	6.2	213
23	46	17	18	75	176	51	39	29	8.5	7.3	6.0	153
24	33	239	17	74	568	50	33	22	8.5	7.2	5.9	105
25	15	139	21	77	289	47	30	18	8.3	7.2	5.8	55
26	178	64	445	76	181	47	28	16	8.2	7.1	5.9	37
27	242	42	398	73	201	48	26	15	8.9	7.2	5.9	28
28	23	32	306	289	230	53	24	280	9.7	7.3	5.8	24
29	126	25	353	1210	---	56	23	46	9.4	7.3	5.9	18
30	29	23	214	486	---	53	21	36	20	7.2	6.1	17
31	17	---	159	281	---	49	---	51	---	7.0	6.0	---
TOTAL	876.5	1561	2397	4909	6791	2549	1984	1753	358.1	244.9	200.9	4562.5
MEAN	28.3	52.0	77.3	158	243	82.2	66.1	56.5	11.9	7.90	6.48	152
MAX	242	239	445	1210	1360	235	412	290	30	11	7.4	973
MIN	2.3	13	17	73	44	47	21	14	8.2	7.0	5.8	5.3
AC-FT	1740	3100	4750	9740	13470	5060	3940	3480	710	486	398	9050

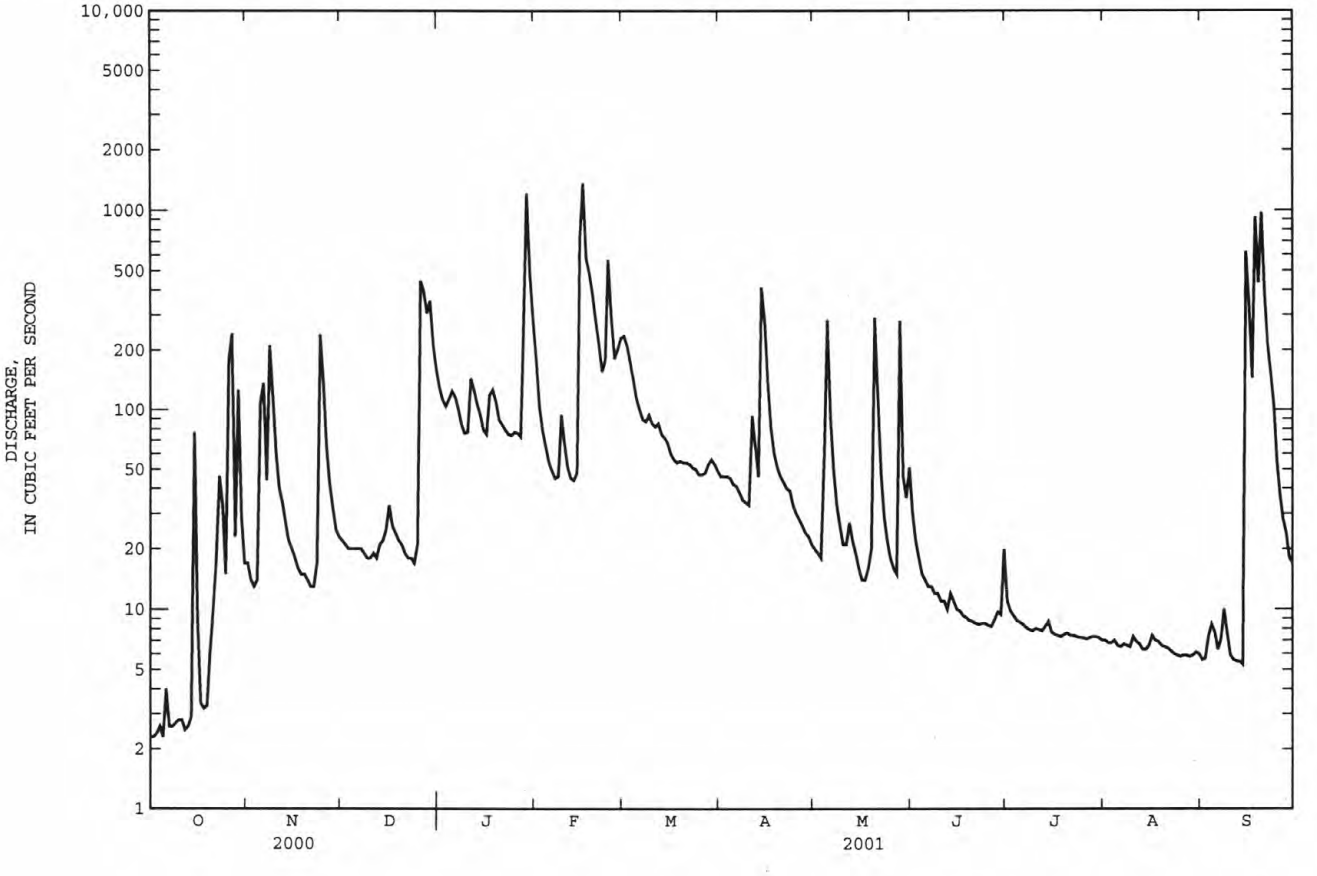
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

MEAN	27.0	46.3	59.4	68.8	66.1	108	97.9	102	66.6	24.8	18.3	59.5
MAX	77.3	170	210	281	243	261	390	406	211	121	53.1	213
(WY)	1997	1997	1992	1998	2001	1990	1990	1990	1991	1992	1996	1993
MIN	6.33	9.65	8.34	7.69	7.66	27.0	23.4	10.2	8.49	6.09	3.48	2.34
(WY)	1995	1998	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

07329852 ROCK CREEK AT SULPHUR, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1990 - 2001	
ANNUAL TOTAL	7770.3		28186.9			
ANNUAL MEAN	21.2		77.2		62.0	
HIGHEST ANNUAL MEAN					129	1990
LOWEST ANNUAL MEAN					10.4	2000
HIGHEST DAILY MEAN	445	Dec 26	1360	Feb 16	3450	May 2 1990
LOWEST DAILY MEAN	1.9	Sep 21	2.3	Oct 1,2,5	1.9	Sep 21 2000
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 16	2.6	Oct 1	2.0	Sep 16 2000
MAXIMUM PEAK FLOW			3880	Sep 18	[a]10400	Apr 26 1990
MAXIMUM PEAK STAGE			13.35	Sep 18	19.65	Apr 26 1990
ANNUAL RUNOFF (AC-FT)	15410		55910		44900	
10 PERCENT EXCEEDS	33		205		110	
50 PERCENT EXCEEDS	7.7		23		21	
90 PERCENT EXCEEDS	2.6		6.3		7.7	

[a]From indirect measurement.



07331000 WASHITA RIVER NEAR DICKSON, OK

LOCATION.--Lat 34°14'00", long 96°58'32", in SW $^1/_4$ SE $^1/_4$ sec.3, T.4 S., R.3 E., Carter County, Hydrologic Unit 11130303, on right bank on downstream side of bridge on U.S. Highway 177, 1.3 mi downstream from Caddo Creek, 3.2 mi north of Dickson, 12.0 mi northeast of Ardmore, and at mile 63.4.

DRAINAGE AREA.--7,202 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to current year. Monthly discharge only for some periods, published in WSP 1311. Prior to Oct. 1, 1979, published as Washita River near Durwood.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1281: 1935 (M).

GAGE.--Water-stage recorder. Datum of gage is 650.57 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 16, 1939, nonrecording gage, at same site and datum. Dec. 15, 1950, to Feb. 19, 1952, nonrecording gage, at site 500 ft upstream, at same datum. Apr. 24, 1975, to May 8, 1986, water-stage recorder, at site 500 ft upstream, at same datum.

REMARKS.--Records fair. Some diversions for irrigation upstream from station. Flow regulated by Fort Cobb Reservoir (station 07325900) since March 1959; by Foss Reservoir (station 07324300) since February 1961; and by numerous flood-retarding structures. U.S. Army Corps of Engineers satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

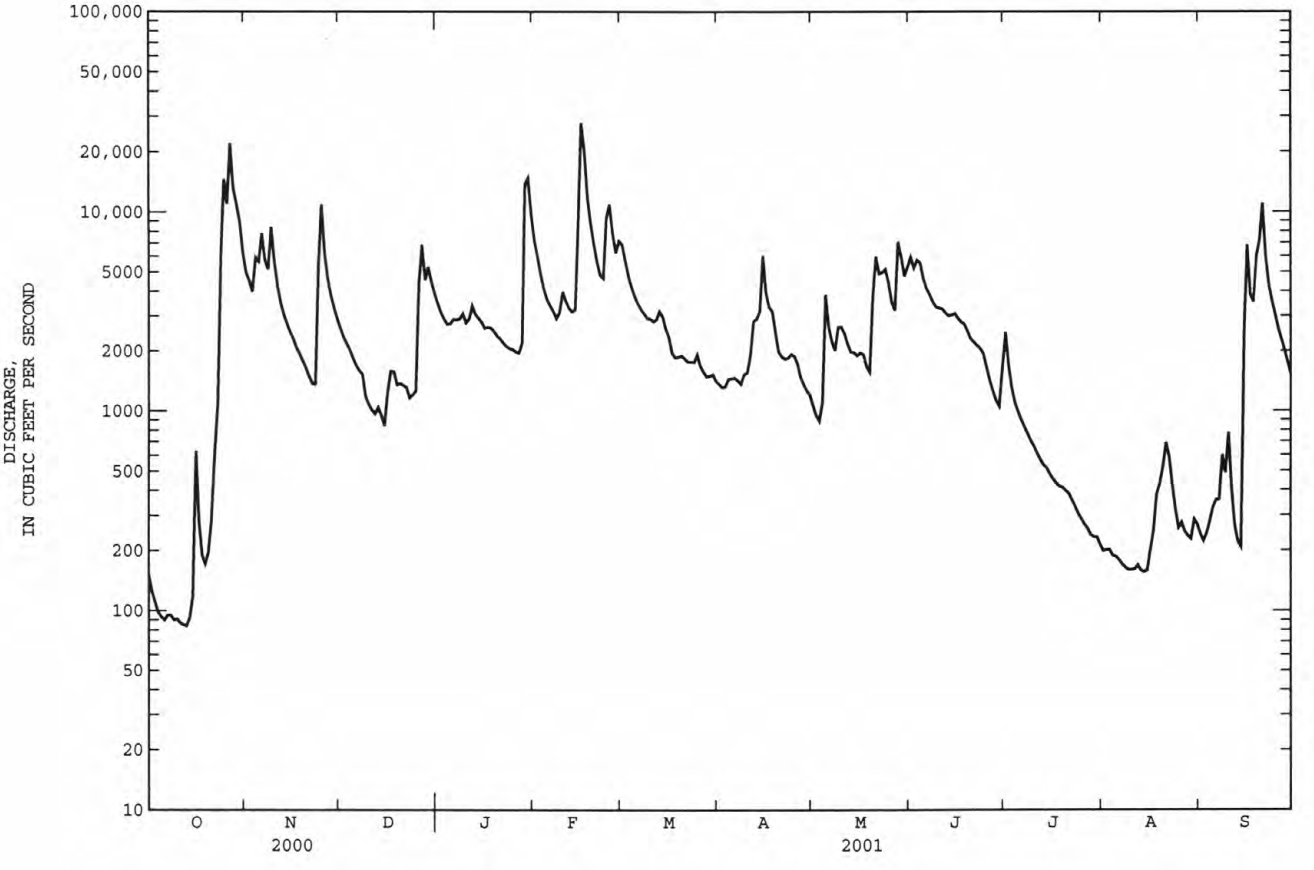
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	150	4970	2590	3460	7150	6880	1360	1060	5920	2480	199	241
2	125	4510	2330	3130	5910	5720	1310	945	5240	1670	202	223
3	110	3990	2170	2890	4820	4780	1320	889	5720	1290	202	243
4	98	5910	2010	2720	4090	4200	1440	1100	5540	1090	189	279
5	93	5640	1830	2740	3630	3770	1450	3830	4610	984	187	327
6	90	7820	1690	2880	3370	3470	1460	2640	4110	896	180	356
7	95	5690	1590	2860	3160	3240	1410	2220	3840	824	171	359
8	95	5170	1530	2900	2910	3080	1360	2010	3520	762	165	598
9	90	8420	1180	3070	3120	2930	e1520	2630	3330	704	160	486
10	91	5630	1080	2770	3970	2890	e1550	2640	3280	660	160	774
11	87	4260	1010	2890	3570	2810	e1900	2440	3250	609	161	408
12	85	3500	967	3370	3280	2870	2810	2160	3100	568	169	267
13	84	3050	1040	3060	3150	3160	e2900	1970	3000	534	159	221
14	92	2740	948	2920	3220	2980	e3150	1960	3030	516	156	208
15	118	2490	842	2790	8590	2580	e6020	1890	3080	480	159	2500
16	e630	2300	1240	2600	27800	2340	e3900	1950	2910	454	201	6790
17	e280	2080	1580	2630	20300	1950	e3320	1910	2790	434	249	3820
18	189	1930	1570	2610	11800	1850	e3160	1660	2720	417	379	3520
19	171	1780	1350	2500	8720	1860	e2470	1560	2510	413	429	5990
20	194	1640	1370	2370	6900	1890	1970	3780	2290	397	520	7170
21	282	1490	1340	2290	5610	1830	1870	5950	2210	385	689	e11000
22	611	1370	1310	2180	4800	1760	1820	4880	2120	357	586	5970
23	1090	1360	1160	2100	4640	1760	1840	4970	2050	332	427	4310
24	5940	5390	1200	2050	9300	1750	1920	5150	1930	305	322	3580
25	14600	10900	1250	2030	10900	1910	1880	4380	1650	287	259	3080
26	11000	6140	4360	1970	7780	1680	1720	3500	1420	269	275	2600
27	22000	4580	6850	1950	6240	1570	1470	3200	1250	257	248	2300
28	13100	3770	4560	2190	7160	1480	1350	7080	1120	239	236	2020
29	11000	3270	5300	13800	---	1490	1260	5930	1050	233	228	1760
30	8980	2880	4450	14800	---	1520	1200	4760	1640	233	285	1530
31	6260	---	3890	9690	---	1410	---	5290	---	213	270	---
TOTAL	97830	124670	65587	112210	195890	83410	62110	96334	90230	19292	8222	72930
MEAN	3156	4156	2116	3620	6996	2691	2070	3108	3008	622	265	2431
MAX	22000	10900	6850	14800	27800	6880	6020	7080	5920	2480	689	11000
MIN	84	1360	842	1950	2910	1410	1200	889	1050	213	156	208
AC-FT	194000	247300	130100	222600	388500	165400	123200	191100	179000	38270	16310	144700
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)												
MEAN	1528	1650	1414	1250	1592	2449	2451	4113	3550	1023	601	1162
MAX	8274	5879	9324	6061	6996	10890	15940	18720	14090	4042	3048	5236
(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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	659620		1028715			
ANNUAL MEAN	1802		2818		[a]1898	
HIGHEST ANNUAL MEAN					5644	1987
LOWEST ANNUAL MEAN					340	1964
HIGHEST DAILY MEAN	22000	Oct 27	27800	Feb 16	94400	May 3 1990
LOWEST DAILY MEAN	60	Sep 22	84	Oct 13	[b].10	Aug 11 1964
ANNUAL SEVEN-DAY MINIMUM	67	Sep 17	89	Oct 8	.30	Aug 8 1964
MAXIMUM PEAK FLOW			30700	Feb 16	[c]118000	May 3 1990
MAXIMUM PEAK STAGE			25.53	Feb 16	45.24	May 30 1987
ANNUAL RUNOFF (AC-FT)	1308000		2040000		1375000	
10 PERCENT EXCEEDS	4710		5940		4310	
50 PERCENT EXCEEDS	839		1970		730	
90 PERCENT EXCEEDS	93		218		142	

[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, 2,020 microsiements, Oct. 15; minimum, 138 microsiemens, Sept. 15.
WATER TEMPERATURE: Maximum, 36.0°C, July 25; minimum, 0.2°C, Dec. 13, 14.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT													
18...	1530	80020	1028	10.42	189	753	128	11.1	8.4	1550	27.8	21.6	590
NOV													
09...	1530	80020	1028	17.00	8520	743	102	11.4	8.1	530	10.3	9.3	180
DEC													
21...	1530	80020	1028	11.67	1340	754	104	13.3	8.1	1230	6.4	4.4	600
JAN													
30...	1300	80020	1028	19.50	13700	739	93	11.1	8.3	521	15.4	6.5	220
FEB													
26...	1240	80020	1028	16.54	7680	752	95	10.4	8.2	970	19.3	10.4	300
MAR													
22...	1500	80020	1028	12.50	1740	748	99	10.0	8.3	1300	23.7	13.7	610
APR													
12...	1730	80020	1028	13.19	3420	740	77	6.8	8.3	1370	21.8	19.8	620
MAY													
25...	0930	80020	1028	14.49	4520	747	87	7.6	8.0	932	19.5	21.1	400
JUN													
06...	1140	80020	1028	14.07	4110	747	100	7.8	8.2	802	32.3	26.5	360
JUL													
17...	1250	80020	1028	10.80	440	750	156	11.4	8.4	1560	35.0	30.4	650
AUG													
24...	1200	80020	1028	10.63	328	745	106	8.0	8.3	1140	35.6	28.7	410
SEP													
12...	1030	80020	1028	10.53	278	751	95	8.0	8.4	946	--	22.8	330

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT													
18...	450	135	62.1	4.38	2	101	27	147	179	.0	111	.5	4.5
NOV													
09...	66	50.8	13.1	3.31	.5	16.2	16	115	140	.0	17.5	.2	10.0
DEC													
21...	350	160	48.2	3.13	.9	51.7	16	250	305	.0	59.9	.4	11.4
JAN													
30...	92	58.9	17.6	3.01	.5	18.5	15	127	155	.0	18.1	.2	7.1
FEB													
26...	120	75.1	26.5	3.52	.7	27.3	16	172	210	.0	24.2	.3	7.8
MAR													
22...	370	151	56.3	3.60	.9	52.4	16	242	285	5	57.0	.4	9.0
APR													
12...	420	144	63.8	3.87	1	66.8	19	200	232	6	70.3	.4	6.9
MAY													
25...	270	102	36.5	5.73	.8	36.8	16	134	163	.0	32.4	.4	10.7
JUN													
06...	220	91.1	31.4	5.50	.6	27.9	14	136	166	.0	24.4	.3	11.0
JUL													
17...	560	128	79.1	4.65	2	89.0	23	89	92	8	88.3	.5	11.4
AUG													
24...	260	96.5	40.5	3.91	2	77.1	29	151	172	6	78.2	.5	12.6
SEP													
12...	200	70.9	36.3	4.00	1	56.6	27	125	143	5	72.8	.4	5.1

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT													
18...	521	1.00	<.041	--	--	--	--	<.047	--	<.006	--	--	<.060
NOV													
09...	68.5	1.8	E.021	.403	2.2	--	1.78	.412	.030	.009	--	.147	E.048
DEC													
21...	348	.69	.047	.710	1.4	.06	3.14	.723	.043	.013	.64	.120	E.050
JAN													
30...	97.6	2.4	.057	.483	2.8	.07	2.14	.492	.030	.009	2.3	.101	E.049
FEB													
26...	147	2.3	E.038	.479	2.8	--	2.12	.492	.043	.013	--	.120	E.051
MAR													
22...	397	.84	<.041	.782	1.6	--	3.46	.794	.038	.012	--	.126	<.060
APR													
12...	443	1.6	E.039	--	--	--	--	E.041	--	E.004	--	--	<.060
MAY													
25...	296	4.6	<.040	--	5.3	--	--	.706	--	E.005	--	.123	E.053
JUN													
06...	238	3.2	<.040	--	3.7	--	--	.484	--	E.003	--	.178	.079
JUL													
17...	610	2.5	<.040	--	--	--	--	<.050	--	<.006	--	--	<.060
AUG													
24...	312	1.0	<.040	--	--	--	--	E1.30	--	E.017	--	--	E.031
SEP													
12...	246	.98	<.040	--	--	--	--	<.050	--	E.003	--	--	<.060

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
18...	<.018	.175	65	1.40	524	1030	3.0	3	119	130	<8.00	<.11	E.7
NOV													
09...	.048	1.02	1180	.34	5760	251	E1.1	6	85.4	420	<8.00	E.11	<.8
DEC													
21...	.039	.154	88	1.14	3030	837	2.2	3	164	184	<8.00	.21	.9
JAN													
30...	.033	1.30	1600	.41	11100	300	E1.3	5	94.6	511	<8.00	.16	<.8
FEB													
26...	.039	1.04	1650	.57	8640	417	E1.9	6	127	456	<8.00	.12	<.8
MAR													
22...	.041	.299	286	1.19	4110	875	2.0	3	176	244	<8.00	<.11	<.8
APR													
12...	<.018	.480	540	1.25	8500	920	E1.9	5	173	311	<8.00	.14	E.5
MAY													
25...	.040	2.08	2410	.82	7370	604	E1.4	13	141	788	<8.00	.33	<.8
JUN													
06...	.058	1.40	1830	.70	5700	514	3.2	10	130	518	<8.00	.30	<.8
JUL													
17...	<.020	.145	46	1.45	1270	1060	3.5	4	160	162	<8.00	<.10	<.8
AUG													
24...	E.035	E.171	192	.97	630	712	5.4	12	104	163	<8.00	<.10	<.8
SEP													
12...	<.020	.191	44	.77	426	567	3.2	4	96.1	138	<8.00	<.10	<.8

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, DISSOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
OCT													
18...	<1	<4.7	2.0	<10	520	E.06	1	<3.2	76	<.23	<.14	<53.0	<66
NOV													
09...	14	<4.7	17.6	M	12100	<.08	22	<3.2	925	<.23	<.14	<53.0	<66
DEC													
21...	1	<4.7	5.8	<10	1220	E.07	3	10.2	74	<.23	<.14	<53.0	<66
JAN													
30...	18	<4.7	19.6	M	14500	E.06	21	9.1	1040	<.23	<.14	<53.0	E41
FEB													
26...	16	<4.7	17.1	<10	12900	E.07	20	E2.2	835	<.23	<.14	<53.0	<66
MAR													
22...	4	<4.7	5.6	<10	3360	.09	4	6.9	267	<.23	<.14	<53.0	<66
APR													
12...	5	<4.7	10.9	<10	4830	.31	7	6.7	470	<.01	<.01	<53.0	<66
MAY													
25...	30	<5.0	41.0	<10	23700	<.08	34	<3.0	2220	<.01	.05	<50.0	E34
JUN													
06...	6	<5.0	22.6	<10	7660	.68	20	<3.0	1340	<.01	.05	<50.0	<66
JUL													
17...	<1	<5.0	2.5	<10	300	E.06	1	5.1	74	<.01	<.01	<50.0	<66
AUG													
24...	2	<5.0	5.0	<10	2750	<.08	3	<3.0	240	<.01	<.01	<50.0	<66
SEP													
12...	2	<5.0	4.7	<10	1520	E.04	2	<3.0	149	<.01	<.01	<50.0	<66

DATE	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DISSOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	ALPHA-HCH-D6 SUR SCD 1608 WATER UNFLTRD PERCENT (99778)	AROCLOR 1016/ 1242 PCB WATER UNFLTRD (UG/L) (81648)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)
OCT													
18...	<2.4	<2.6	<.2	<.43	<20	<31	--	--	--	--	--	--	--
NOV													
09...	<2.4	<2.6	<.2	<.43	<20	46	--	--	--	--	--	--	--
DEC													
21...	E1.4	<2.6	<.2	<.43	<20	E19	--	--	--	--	--	--	--
JAN													
30...	<2.4	<2.6	<.2	<.43	<20	51	--	--	--	--	--	--	--
FEB													
26...	<2.4	<2.6	<.2	<.43	<20	46	--	--	--	--	--	--	--
MAR													
22...	<2.4	<2.6	<.2	<.43	<20	<31	--	--	--	--	--	--	--
APR													
12...	<2.4	E1.9	<.2	<.43	E12	38	<.040	<.03	77	<.10	<1	<.1	<.1
MAY													
25...	<2.0	<3.0	<.2	<.40	<20	106	--	--	--	--	--	--	--
JUN													
06...	<2.0	<3.0	<.2	<.40	<20	53	--	--	--	--	--	--	--
JUL													
17...	<2.0	<3.0	<.2	<.40	<20	<31	--	--	--	--	--	--	--
AUG													
24...	<2.0	E1.8	<.2	<.40	<20	E18	--	--	--	--	--	--	--
SEP													
12...	<2.0	<3.0	<.2	<.40	<20	<31	--	--	--	--	--	--	--

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN-I WATER WHOLE REC (UG/L) (34361)	ENDO-SULFAN II TOTAL (UG/L) (34356)	ENDO-SULFAN SULFATE TOTAL (UG/L) (34351)	ENDRIN ALDE-HYDE TOTAL (UG/L) (34366)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)
OCT 18...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV 09...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC 21...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN 30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR 22...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.1	<.1	<.03	<.1	<.1	<.1	<.09	<.020	<.1	<.04	<.6	<.2	<.060
MAY 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 17...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP 12...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	ISODRIN SUR SCD 1608 WTR, UNFLTRD PERCENT (90570)	LINDANE TOTAL (UG/L) (39340)	PCB 207 SUR SCD 1608 WATER UNFLTRD PERCENT (99781)	P,P' DDD, TOTAL (UG/L) (39310)	P,P' DDE, TOTAL (UG/L) (39320)	P,P' DDT, TOTAL (UG/L) (39300)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT 18...	--	--	--	--	--	--	--	--	--
NOV 09...	--	--	--	--	--	--	--	--	--
DEC 21...	--	--	--	--	--	--	--	--	--
JAN 30...	--	--	--	--	--	--	--	--	--
FEB 26...	--	--	--	--	--	--	--	--	--
MAR 22...	--	--	--	--	--	--	--	--	--
APR 12...	<.800	<.030	60	<.030	84	<.1	<.04	<.1	<2
MAY 25...	--	--	--	--	--	--	--	--	--
JUN 06...	--	--	--	--	--	--	--	--	--
JUL 17...	--	--	--	--	--	--	--	--	--
AUG 24...	--	--	--	--	--	--	--	--	--
SEP 12...	--	--	--	--	--	--	--	--	--

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1640	1170	1380	620	602	611	991	924	963	773	658	715
2	1340	1170	1270	632	607	618	1010	991	1000	887	773	835
3	1390	1260	1300	635	559	613	1080	1000	1040	907	866	889
4	1590	1390	1490	584	477	530	1110	1070	1090	958	898	924
5	1730	1590	1680	499	332	443	1100	1060	1080	975	946	959
6	1720	1660	1680	436	331	388	1120	1100	1110	977	964	969
7	1790	1670	1730	494	414	441	1160	1120	1140	974	961	967
8	1890	1780	1850	523	440	488	1190	1160	1170	1080	973	1010
9	1940	1860	1900	504	418	449	1330	1180	1260	1170	1080	1140
10	1950	1890	1930	538	443	467	1350	1330	1340	1120	962	1040
11	1920	1890	1900	672	538	632	1350	1340	1350	962	916	938
12	1930	1890	1910	690	665	679	1370	1350	1360	956	910	924
13	1970	1920	1950	728	667	694	1360	1350	1360	953	924	932
14	1990	1940	1980	776	728	748	1370	1340	1350	1020	953	1000
15	2020	1640	1930	848	776	814	1370	1310	1340	1020	999	1010
16	1730	702	1000	928	848	887	1330	1280	1300	1020	999	1010
17	1250	853	1010	1000	928	962	1340	1300	1320	1020	987	1010
18	1590	1250	1460	1070	1000	1040	1300	1270	1280	998	982	989
19	1680	1590	1640	1080	1070	1080	1350	1300	1330	1040	997	1020
20	1630	1480	1560	1080	1070	1080	1350	1270	1290	1070	1040	1050
21	1560	1450	1520	1100	1080	1080	1280	1270	1280	1180	1070	1130
22	1590	931	1320	1120	1100	1110	1310	1280	1300	1260	1180	1220
23	1030	835	940	1140	1100	1130	1400	1310	1370	1310	1260	1290
24	1200	435	794	1120	438	658	1450	1400	1430	1310	1300	1300
25	538	419	463	438	328	379	1470	1440	1460	1320	1300	1310
26	556	356	488	523	412	496	1440	420	831	1350	1320	1330
27	356	284	304	711	523	618	530	446	482	1350	1340	1350
28	403	346	371	792	711	747	595	503	546	1340	885	1280
29	471	379	434	840	792	814	663	466	576	885	406	579
30	500	450	490	924	840	876	552	466	505	563	410	492
31	608	499	550	---	---	---	658	552	608	662	563	632
MONTH	2020	284	1300	1140	328	719	1470	420	1120	1350	406	1010

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	664	584	613	946	731	837	1480	1470	1480	1500	1400	1450
2	895	664	784	731	690	704	1500	1470	1490	1520	1500	1520
3	1000	895	963	791	714	764	1480	1470	1480	1540	1500	1520
4	984	839	885	827	786	803	1480	1380	1420	1540	595	1480
5	868	832	844	881	825	853	1390	1360	1380	968	396	723
6	955	868	913	951	880	914	1360	1340	1350	1160	887	1070
7	1000	955	982	1020	951	987	1350	1330	1340	1080	893	1010
8	1040	982	1030	1060	1020	1040	1340	1320	1330	1160	1060	1080
9	1060	1020	1040	1090	1060	1080	1330	1310	1320	1440	1160	1310
10	1060	901	946	1110	1080	1090	1380	1320	1360	1500	1180	1400
11	990	909	944	1140	1110	1120	1380	996	1190	1180	1040	1090
12	1060	990	1040	1170	1140	1160	1400	1220	1310	1190	1120	1170
13	1090	1030	1050	1220	1080	1170	1400	1190	1340	1180	1050	1110
14	1140	996	1090	1150	1080	1100	1230	995	1160	1070	1030	1040
15	1150	377	878	1230	1150	1190	995	563	642	1120	1070	1100
16	377	282	302	1230	1200	1210	907	634	784	1180	1110	1150
17	445	288	369	1300	1230	1280	996	907	962	1290	1160	1210
18	526	445	486	1330	1300	1310	1120	979	1060	1320	1290	1300
19	600	526	564	1390	1330	1360	1150	1110	1130	---	---	1350
20	667	600	632	1390	1300	1350	1200	1150	1180	---	---	e1000
21	716	665	692	1320	1260	1290	1240	1200	1230	---	---	e1100
22	756	715	735	1300	1270	1290	1260	1240	1250	---	---	e1150
23	799	474	752	1310	1260	1300	1260	1230	1250	---	---	e1250
24	779	463	631	1310	1170	1290	1280	1230	1250	---	---	e1000
25	611	494	572	1260	1200	1230	1310	1270	1290	---	---	e926
26	685	575	630	1270	1240	1250	1310	1290	1300	908	848	869
27	712	681	697	1340	1270	1320	1370	1300	1350	919	848	880
28	914	712	853	1340	1330	1340	1390	1370	1380	926	398	653
29	---	---	---	1340	1330	1330	1400	1390	1390	808	509	638
30	---	---	---	1410	1330	1360	1420	1400	1410	985	808	926
31	---	---	---	1470	1410	1460	---	---	---	1190	962	1100
MONTH	1150	282	783	1470	690	1150	1500	563	1260	1540	396	1120

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1140	855	1010	1380	768	943	1620	1530	1570	1380	1320	1350
2	1130	856	1020	1000	825	913	1660	1620	1640	1360	1230	1290
3	1220	1060	1170	1310	1000	1180	1680	1590	1650	1460	1250	1390
4	1060	720	843	1460	1310	1400	1660	1610	1650	1360	1210	1290
5	772	719	743	1500	1460	1480	1670	1620	1640	1410	1290	1360
6	845	772	806	1550	1500	1520	1680	1650	1670	1290	1200	1240
7	892	845	874	1590	1550	1570	1730	1660	1690	1290	1190	1250
8	918	892	906	1650	1580	1630	1710	1670	1690	1360	1160	1270
9	1030	911	960	1690	1600	1660	1720	1680	1700	1200	791	919
10	1100	1030	1070	1690	1600	1680	1740	1700	1730	1170	804	975
11	1190	1100	1140	1690	1460	1660	1760	1720	1740	1110	935	989
12	1360	1190	1280	1690	1620	1660	1760	1620	1690	1150	929	988
13	1450	1360	1430	1660	1580	1620	1720	1680	1700	1400	1150	1310
14	1460	1430	1440	1650	1560	1610	1720	1710	1720	1510	1400	1460
15	1440	1400	1420	1570	1550	1560	1730	1680	1720	1550	138	1000
16	1470	1440	1460	1580	1560	1570	1730	1600	1640	672	273	325
17	1490	1460	1480	1580	1340	1540	1840	1730	1810	573	286	333
18	1590	1480	1550	1580	1520	1550	1950	1530	1840	590	267	374
19	1630	1590	1620	1560	1500	1540	1540	1210	1300	322	257	289
20	1610	1590	1600	1530	1460	1500	1700	1460	1650	344	194	267
21	1650	1590	1610	1540	1470	1500	1690	1500	1600	313	222	264
22	1770	1650	1730	1580	1530	1550	1700	1460	1610	456	313	366
23	1830	1770	1790	1620	1580	1600	1460	1160	1340	542	456	515
24	1830	1810	1820	1630	1550	1600	1160	1040	1100	514	468	483
25	1840	1800	1820	1600	1520	1560	1100	1040	1070	531	498	519
26	1810	1800	1800	1560	1470	1530	1120	1050	1090	499	488	493
27	1830	1790	1800	1530	1480	1510	1120	1070	1110	548	497	524
28	1810	1740	1780	1540	1500	1520	1150	1100	1120	590	547	569
29	1750	1700	1730	1570	1520	1560	1280	1150	1200	623	589	601
30	1700	1220	1470	1590	1560	1580	1350	1280	1330	664	623	641
31	---	---	---	1610	1550	1590	1400	1350	1380	---	---	---
MONTH	1840	719	1370	1690	768	1510	1950	1040	1530	1550	138	821
YEAR	2020	138	1150									

e Estimated

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	24.1	18.8	21.3	20.8	19.9	20.3	9.5	8.3	8.9	1.6	.4	1.0
2	25.4	18.9	21.9	19.9	18.0	18.8	8.3	6.7	7.5	2.3	.9	1.6
3	27.4	21.2	23.8	18.7	17.3	17.9	6.8	5.7	6.3	2.4	.6	1.6
4	28.5	22.7	25.1	17.3	16.3	16.8	6.5	5.1	5.9	3.9	1.7	2.7
5	28.0	22.9	25.1	16.4	16.1	16.3	7.2	5.6	6.5	5.2	3.1	4.1
6	22.9	16.9	19.7	16.4	15.6	16.2	7.9	6.8	7.5	6.0	4.0	5.0
7	16.9	12.6	14.2	15.6	13.0	14.1	7.4	5.4	6.6	6.9	5.4	6.1
8	15.9	10.8	12.8	13.0	10.0	11.3	8.6	6.8	7.6	6.5	4.9	5.8
9	16.9	9.7	12.8	10.0	8.8	9.2	8.0	7.2	7.5	6.0	4.5	5.4
10	14.9	10.9	12.7	9.8	8.3	9.1	9.6	7.2	8.4	5.6	4.8	5.1
11	17.7	12.5	14.7	9.5	8.9	9.0	9.5	4.7	7.7	5.1	4.4	4.8
12	21.0	15.3	17.6	9.1	8.5	8.9	4.7	.6	2.5	5.1	4.6	4.9
13	22.5	17.0	19.4	8.6	7.2	8.0	1.4	.2	.7	5.8	4.9	5.2
14	21.7	19.5	20.3	8.5	6.7	7.7	2.1	.2	1.1	7.0	5.3	6.1
15	24.0	19.5	21.1	8.4	7.4	8.0	3.0	1.6	2.2	6.7	5.1	6.0
16	24.0	20.2	21.8	10.0	8.4	9.1	4.6	3.0	3.5	6.4	5.6	6.0
17	23.2	19.7	21.5	9.1	7.4	8.2	3.2	1.7	2.4	5.6	4.2	4.8
18	22.6	18.9	20.7	8.5	7.5	7.9	3.6	1.6	2.5	4.5	3.7	4.1
19	22.5	17.4	19.8	9.1	6.9	8.0	3.5	1.8	2.6	4.8	3.4	4.0
20	20.4	17.6	18.4	8.9	7.5	8.2	4.5	1.9	3.1	3.5	2.0	2.9
21	17.9	16.9	17.5	8.6	6.6	7.7	4.4	2.9	3.5	4.8	2.8	3.6
22	19.3	17.3	18.1	9.3	7.8	8.4	3.6	2.0	2.8	5.4	3.1	4.2
23	20.5	19.1	19.6	10.4	9.3	10.0	2.9	2.2	2.6	6.2	4.8	5.4
24	20.2	18.8	19.6	10.9	10.4	10.6	3.1	1.3	2.2	7.0	6.1	6.5
25	18.8	18.1	18.4	10.7	10.1	10.4	2.9	2.6	2.8	7.0	5.1	6.2
26	18.5	18.1	18.2	10.2	9.2	9.8	2.6	1.9	2.2	8.9	6.6	7.6
27	18.9	17.9	18.3	9.9	8.8	9.4	1.9	1.4	1.5	8.2	5.9	6.7
28	19.6	18.9	19.2	10.2	8.6	9.5	2.8	1.5	2.1	6.7	5.9	6.2
29	19.9	19.2	19.5	10.4	9.0	9.8	3.2	2.4	2.7	6.7	6.1	6.4
30	20.4	19.6	20.0	9.6	8.2	8.9	2.6	1.6	2.2	7.0	6.1	6.5
31	20.8	19.8	20.2	---	---	---	2.3	.7	1.4	7.1	6.2	6.6
MONTH	28.5	9.7	19.1	20.8	6.6	10.9	9.6	.2	4.1	8.9	.4	4.9

07331000 WASHITA RIVER NEAR DICKSON, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.8	5.5	6.2	7.3	6.5	6.9	15.2	13.2	14.2	25.1	20.6	22.7
2	6.6	5.2	6.0	8.8	7.2	7.9	17.5	14.3	15.7	25.8	22.2	23.7
3	6.9	5.0	6.0	9.1	8.5	8.8	21.3	17.1	19.1	24.8	22.7	23.7
4	7.6	5.9	6.8	10.4	8.0	9.2	23.2	20.3	21.4	23.9	19.4	22.8
5	8.0	6.0	7.1	11.4	9.0	10.3	22.4	21.8	22.1	21.3	18.8	20.0
6	9.3	7.0	8.2	11.9	9.8	10.9	22.5	21.2	21.8	21.8	20.7	21.0
7	11.4	8.5	9.6	13.5	10.9	12.2	22.1	20.0	21.1	23.3	20.1	21.6
8	13.5	11.4	12.4	13.4	11.3	12.1	22.0	20.7	21.2	24.7	20.6	22.6
9	13.8	8.7	11.5	12.5	9.9	11.3	23.5	20.7	21.9	24.9	22.1	23.6
10	8.7	6.7	7.5	12.8	10.5	11.8	22.6	21.7	22.3	25.3	23.0	24.1
11	7.3	6.2	6.8	12.8	12.2	12.4	21.7	19.5	20.8	24.9	23.1	23.9
12	6.9	6.3	6.6	14.2	12.0	12.9	20.3	18.1	19.1	25.7	21.9	23.7
13	8.3	6.9	7.4	14.5	11.9	13.3	20.7	17.6	19.1	26.8	23.7	25.1
14	11.1	8.3	9.9	14.2	13.0	13.6	20.0	18.6	19.4	27.4	24.3	25.7
15	10.6	5.6	8.1	13.7	11.6	12.9	20.8	18.3	19.3	27.3	24.7	25.9
16	5.6	4.4	4.9	11.9	9.4	10.8	21.8	18.9	20.2	27.7	24.4	26.0
17	5.3	4.1	4.6	11.8	9.9	11.0	20.2	16.9	18.2	28.0	25.5	26.6
18	5.9	4.8	5.3	11.4	10.6	11.0	17.4	15.0	16.3	28.7	25.0	26.8
19	7.9	5.4	6.4	11.6	9.9	10.7	16.9	15.4	16.3	---	---	---
20	10.4	7.7	8.8	13.0	9.6	11.2	19.6	16.8	18.1	---	---	---
21	10.3	9.0	9.8	14.6	11.2	12.9	20.1	19.4	19.6	---	---	---
22	9.2	7.4	8.4	16.6	13.2	14.9	20.8	19.2	19.8	---	---	---
23	9.1	8.1	8.3	18.0	15.0	16.5	21.2	18.4	19.8	---	---	---
24	10.7	8.5	9.7	17.8	13.3	15.8	21.1	17.5	19.3	---	---	---
25	11.3	10.2	10.7	13.3	10.5	11.8	21.8	18.0	19.7	---	---	---
26	11.2	10.2	10.7	10.5	9.4	10.0	23.0	19.2	20.9	24.3	21.6	23.0
27	11.1	10.4	10.9	9.7	8.5	9.1	24.0	20.1	21.9	26.4	22.8	24.5
28	10.4	7.2	8.7	8.8	8.2	8.5	24.3	20.7	22.4	26.0	21.6	22.9
29	---	---	---	9.6	8.7	9.1	24.5	20.7	22.5	23.5	22.1	22.9
30	---	---	---	12.5	8.9	10.6	23.6	21.1	22.3	25.4	22.7	23.9
31	---	---	---	16.0	12.0	13.8	---	---	---	26.2	24.6	25.2
MONTH	13.8	4.1	8.1	18.0	6.5	11.4	24.5	13.2	19.9	28.7	18.8	23.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	25.4	23.4	24.5	29.3	26.0	27.6	35.1	28.5	31.6	31.6	25.8	28.0
2	27.3	24.0	25.5	31.2	27.1	28.9	34.7	29.4	31.9	31.3	25.4	28.3
3	28.3	26.3	27.2	32.0	27.9	29.8	34.7	28.1	31.3	30.9	26.7	28.1
4	28.2	26.2	27.2	33.3	28.2	30.5	35.0	28.1	31.5	27.1	24.7	25.6
5	28.0	26.3	27.2	34.1	28.9	31.4	35.7	28.8	32.1	27.2	24.1	25.4
6	28.2	25.9	27.1	34.4	29.3	31.8	34.2	28.8	31.6	29.0	24.3	26.3
7	29.2	26.9	28.0	34.0	29.5	31.8	33.9	28.1	30.8	29.6	24.9	27.1
8	29.7	27.3	28.5	34.0	29.2	31.5	34.4	28.6	31.3	28.1	25.1	26.4
9	29.7	27.7	28.8	34.9	29.1	31.8	34.8	28.5	31.4	26.7	23.1	24.9
10	30.6	27.9	29.2	35.0	29.5	32.2	34.5	28.6	31.4	26.8	21.6	24.2
11	30.8	28.1	29.5	34.9	29.7	32.3	33.3	28.4	30.6	27.7	21.6	24.5
12	30.8	28.4	29.6	35.1	29.5	32.2	34.6	28.4	31.1	29.0	22.6	25.6
13	30.3	28.1	29.2	33.5	29.2	31.2	32.8	29.3	31.1	29.9	23.2	26.4
14	29.4	27.0	28.2	31.2	28.0	29.5	33.4	27.3	30.2	28.7	23.8	26.4
15	29.5	25.7	27.4	32.6	26.7	29.3	32.8	26.9	29.8	27.4	20.4	23.6
16	30.2	26.7	28.4	33.5	28.0	30.6	33.3	27.4	30.0	23.3	21.4	22.2
17	30.2	27.3	28.8	34.0	28.5	31.0	30.7	27.8	29.1	25.2	23.3	24.1
18	29.9	27.0	28.5	34.8	28.8	31.6	31.6	25.6	28.2	24.6	23.1	24.0
19	30.0	26.9	28.4	34.8	29.5	32.0	32.9	26.4	29.5	24.2	22.0	23.0
20	31.1	27.3	29.1	35.0	29.2	31.9	32.6	27.6	30.1	23.9	20.8	22.1
21	31.2	28.3	29.6	35.5	29.5	32.3	31.9	27.6	29.7	23.0	21.0	21.8
22	30.7	27.1	28.9	35.3	29.6	32.4	31.6	27.6	29.4	24.4	22.6	23.4
23	30.2	26.8	28.4	35.0	29.2	32.1	32.1	27.2	29.4	25.3	22.9	24.0
24	30.0	26.7	28.3	35.9	29.8	32.7	32.2	27.2	29.4	24.0	20.8	22.0
25	30.0	26.1	28.0	36.0	30.2	32.9	33.0	26.4	29.4	21.2	18.8	20.1
26	30.3	26.5	28.3	34.9	30.0	32.5	30.7	27.1	28.6	21.3	18.9	20.1
27	28.9	26.5	27.5	35.6	29.5	32.3	30.5	26.2	28.0	21.6	19.0	20.2
28	27.3	24.9	26.1	35.7	29.8	32.4	30.8	26.2	28.6	22.1	19.4	20.7
29	26.8	23.7	24.9	34.3	29.9	32.0	30.0	26.2	28.1	22.3	19.4	20.8
30	29.0	24.1	26.3	35.1	29.4	32.1	28.2	25.9	26.9	22.4	19.1	20.7
31	---	---	---	34.3	29.1	31.7	29.9	24.9	26.9	---	---	---
MONTH	31.2	23.4	27.9	36.0	26.0	31.4	35.7	24.9	30.0	31.6	18.8	24.0
YEAR	36.0	.2	17.9									

07331600 Red River blw Denison Dam near Denison, Tx

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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	7040	17900	6300	5510	4830	11400	4240	11000	2730	3560	2550
2	2050	7020	17900	8280	3820	17300	11400	4240	6410	6970	2560	2670
3	1870	7040	17900	11100	11300	28500	11400	4230	6500	7320	2600	2680
4	1090	7020	14800	11100	11300	32700	11400	4260	8670	6080	316	562
5	1090	7070	11000	11200	11300	32600	11400	3340	11000	5960	133	255
6	199	7510	11000	11200	11300	32600	11500	3300	11000	6870	2500	526
7	42	13900	8270	11200	11400	32600	6730	4290	11000	6410	2860	617
8	43	17800	7770	11200	11400	32500	6230	4190	11000	6400	2370	238
9	919	17800	3290	11200	11400	32400	6210	4180	8610	6850	2710	254
10	1090	17900	3090	11300	11400	32500	6230	4150	8160	6590	2270	1180
11	1090	18000	6010	11300	11500	32800	6260	4170	9920	5880	267	1460
12	1080	17800	6260	11300	11500	29600	6180	4150	11000	5060	130	1440
13	1080	17800	7150	11300	11600	23900	6190	404	9520	4580	2130	1390
14	196	17900	6530	11300	8640	20600	6180	4720	7740	5810	2640	1420
15	43	17900	6360	11300	5230	24100	6160	5080	4350	5810	2690	424
16	1060	17900	7340	11400	6510	29900	6460	5080	165	5680	2710	181
17	991	14100	7390	11400	614	32300	2750	5080	46	5590	2700	928
18	1090	8250	7400	11400	264	32400	75	4820	4840	6930	2690	1130
19	1100	10800	7380	11400	10700	32400	64	408	5030	6930	2650	1140
20	2200	10800	7420	11400	11100	32400	6080	144	5410	6940	2690	1380
21	227	10800	7400	11400	13600	25200	6170	2250	6740	6950	2680	1250
22	53	8960	7450	11400	15300	14600	6230	3320	5920	6930	2710	397
23	1060	8630	7480	11500	15500	11300	6590	4100	7300	7000	2690	135
24	1100	8780	7470	11500	13800	11400	6390	2590	7310	6980	2690	903
25	1090	8580	7560	11500	13200	11300	6360	9220	6670	6990	2680	1050
26	1150	8490	8430	9550	15200	11300	6370	16500	7500	7040	2700	1010
27	1100	12200	7830	712	11900	11300	6390	16400	5630	7040	2690	999
28	44	17800	1830	107	1500	11400	4220	16500	4850	7090	2700	1010
29	71	17800	5980	5660	---	11400	4220	12900	3220	7090	2690	261
30	4940	17900	6320	5550	---	11400	6390	11000	2920	7120	332	49
31	7030	---	6240	5540	---	11300	---	11300	---	7090	150	---
TOTAL	36231	381290	256150	301999	277788	710830	199629	180556	209431	198710	67888	29489
MEAN	1169	12710	8263	9742	9921	22930	6654	5824	6981	6410	2190	983
MAX	7030	18000	17900	11500	15500	32800	11500	16500	11000	7320	3560	2680
MIN	42	7020	1830	107	264	4830	64	144	46	2730	130	49
AC-FT	71860	756300	508100	599000	551000	1410000	396000	358100	415400	394100	134700	58490

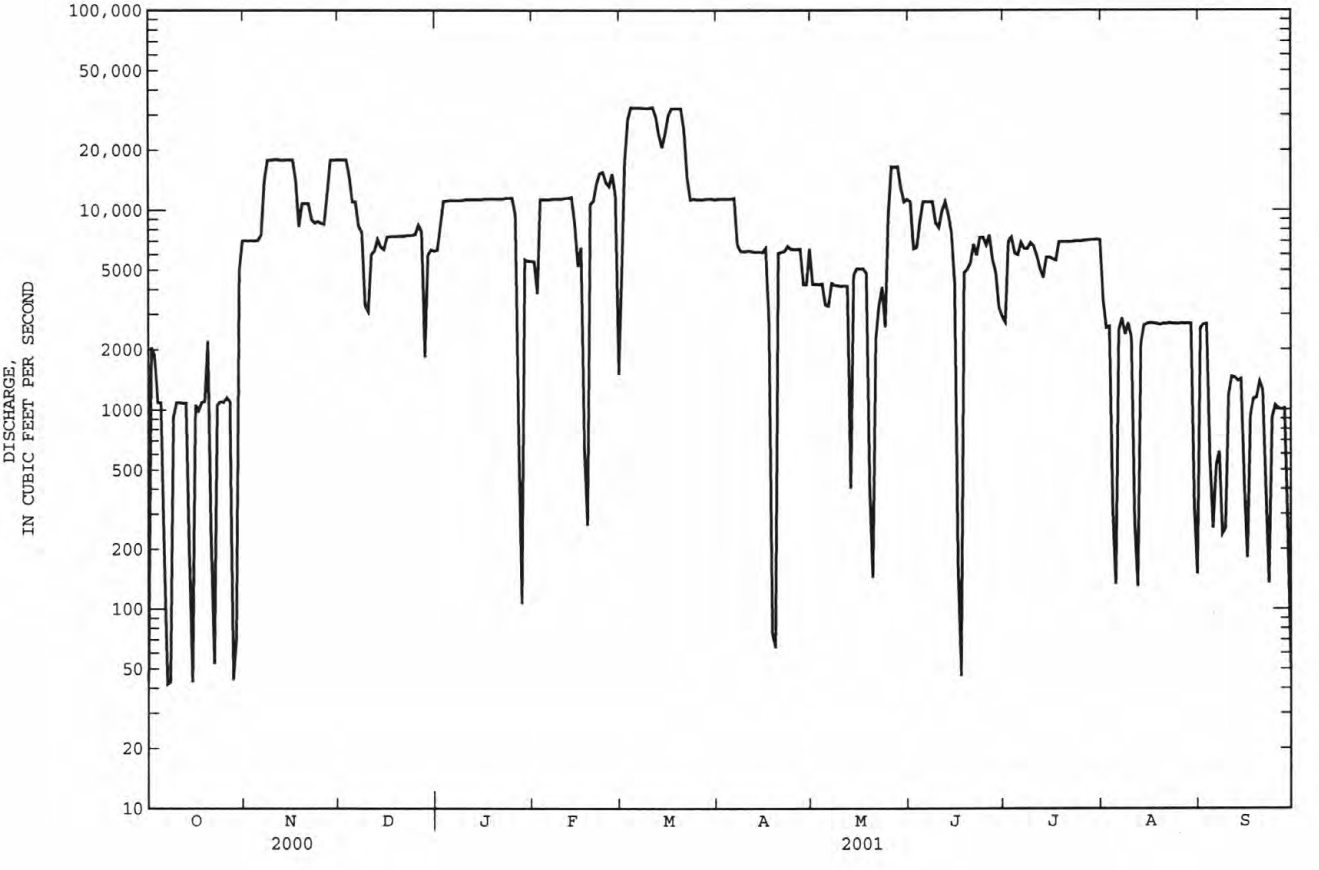
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

MEAN	4843	3748	3425	3667	3571	4767	4838	7555	11350	5470	3488	2613
MAX	27860	18880	13320	20630	13800	24760	20400	34710	66960	21820	25570	10330
(WY)	1987	1975	1997	1998	1987	1987	1945	1957	1957	1982	1950	1950
MIN	66.7	79.6	569	271	678	614	789	712	1449	1580	953	325
(WY)	1957	1957	1981	1945	1945	1976	1978	1959	1956	1956	1972	1984

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	1360927		2849991			
ANNUAL MEAN	3718		7808		[a]4891	
HIGHEST ANNUAL MEAN					16030	1987
LOWEST ANNUAL MEAN					1510	1964
HIGHEST DAILY MEAN	18000	Nov 11	32800	Mar 11	96200	Jun 5 1957
LOWEST DAILY MEAN	18	Feb 27	42	Oct 7	18	Feb 27 2000
ANNUAL SEVEN-DAY MINIMUM	25	Mar 8	519	Sep 4	25	Mar 8 2000
MAXIMUM PEAK FLOW			34100	Mar 11	[b]102000	Jun 5 1957
MAXIMUM PEAK STAGE			17.57	Mar 11	[c]26.26	Jun 5 1957
ANNUAL RUNOFF (AC-FT)	2699000		5653000		3543000	
10 PERCENT EXCEEDS	8450		16500		10700	
50 PERCENT EXCEEDS	2640		6460		2810	
90 PERCENT EXCEEDS	42		593		194	

[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 deter- mined 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, 2,430 microsiemens Oct. 30; minimum, 996 microsiemens May 19.
WATER TEMPERATURE: Maximum, 26.5°C Sept. 2,3; minimum, 4.8°C Jan. 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)
SEP										
26...	1253	1028	4.99	59	757	15.0	8.6	1500	26.1	40.0
26...	1256	1028	4.99	59	757	14.7	8.5	1500	26.1	60.0
26...	1259	1028	4.99	59	757	12.9	8.4	1510	25.7	80.0
26...	1302	1028	4.99	59	757	8.6	7.9	1510	24.8	100
26...	1305	1028	4.99	59	757	7.2	7.6	1520	24.4	120
26...	1308	1028	4.99	59	757	8.5	7.5	1520	24.2	140
26...	1311	1028	4.99	59	757	5.5	7.5	1530	24.1	160
26...	1314	1028	4.99	59	757	5.5	7.5	1520	24.0	180
26...	1317	1028	4.99	59	757	5.4	7.5	1520	24.2	200
26...	1320	1028	4.99	59	757	5.5	7.5	1520	24.2	220
26...	1323	1028	4.99	59	757	6.2	7.5	1520	24.1	240
26...	1326	1028	4.99	59	757	6.1	7.4	1520	24.2	260

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN, DISSOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT													
04...	1530	80020	1028	4.95	47	745	197	15.5	8.2	2210	34.0	25.9	490
NOV													
08...	1530	80020	1028	13.59	18000	744	77	7.0	8.1	2270	5.2	18.2	490
DEC													
22...	1000	80020	1028	10.32	10400	762	85	10.0	8.1	1780	-1.5	8.0	420
JAN													
30...	1815	80020	1028	10.15	10100	745	98	11.8	8.2	1520	13.3	6.1	360
FEB													
28...	1120	80020	1028	5.77	868	755	96	11.7	8.3	1110	1.8	6.3	320
MAR													
23...	1030	80020	1028	10.89	11000	750	91	10.1	8.2	1190	22.4	10.0	280
APR													
12...	1320	80020	1028	10.47	10600	749	91	9.5	8.1	1180	20.7	12.6	300
MAY													
24...	1450	80020	1028	5.06	63	749	152	13.5	8.6	1230	26.5	20.0	300
JUN													
06...	1730	80020	1028	10.74	10600	749	82	7.0	8.0	1340	34.6	22.2	330
JUL													
18...	1150	80020	1028	8.85	9670	750	55	4.5	7.7	1470	36.8	24.7	330
AUG													
22...	1130	80020	1028	5.27	200	750	38	3.2	7.9	1500	34.4	22.9	340
SEP													
12...	1500	80020	1028	5.23	197	750	83	6.7	8.0	1530	--	24.9	340
26...	1330	80020	1028	4.99	59	757	74	6.1	7.9	1520	23.7	24.2	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	SODIUM ADSORPTION RATIO (00931)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
OCT													
04...	390	119	45.8	6.11	5	275	55	94	115	.0	412	.3	5.5
NOV													
08...	390	120	45.1	6.36	5	274	55	91	111	.0	425	.3	.9
DEC													
22...	320	108	37.8	5.74	4	194	49	100	122	.0	319	.3	3.0
JAN													
30...	260	92.0	30.7	4.97	4	171	51	101	123	.0	246	.3	5.3
FEB													
28...	210	83.2	28.0	4.75	4	153	50	109	133	.0	247	.3	5.9
MAR													
23...	160	72.6	23.1	4.09	3	117	48	121	148	.0	198	.2	6.7
APR													
12...	180	77.9	25.1	4.23	3	127	48	118	144	.0	188	.2	7.0
MAY													
24...	180	78.1	25.9	4.22	3	126	47	117	134	4	190	.3	6.8
JUN													
06...	210	86.7	28.0	4.10	3	137	47	120	146	.0	218	.3	4.9
JUL													
18...	210	86.0	28.8	4.67	4	156	50	121	148	.0	243	.3	4.6
AUG													
22...	200	89.1	28.5	4.52	4	165	51	138	168	.0	255	.3	8.2
SEP													
12...	190	91.0	27.8	4.80	4	149	48	152	185	.0	255	.3	7.0
26...	--	--	--	--	--	--	--	128	156	.0	--	--	--

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, AMMONIA DISSOLVED (MG/L AS NH4) (71846)	NITROGEN, NITRATE DISSOLVED (MG/L AS NO3) (71851)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DISSOLVED (MG/L AS NO2) (71856)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)
OCT													
04...	401	.53	.136	.047	.59	.18	.208	.065	.059	.018	.39	.086	<.060
NOV													
08...	403	.48	E.034	.179	.67	--	.792	.191	.039	.012	--	--	<.060
DEC													
22...	304	.42	E.022	--	.82	--	--	.398	--	E.004	--	.080	<.060
JAN													
30...	240	.48	.053	.447	.94	.07	1.98	.453	.020	.006	.43	.117	E.046
FEB													
28...	227	.41	.054	.490	.91	.07	2.17	.499	.030	.009	.35	.123	.066
MAR													
23...	170	.45	.091	.524	.99	.12	2.32	.536	.039	.012	.36	.126	E.049
APR													
12...	174	.51	.042	.549	1.1	.05	2.43	.584	.115	.035	.47	.104	E.046
MAY													
24...	186	.48	<.040	--	.91	--	--	.429	--	E.004	--	.086	E.051
JUN													
06...	199	.41	<.040	.360	.79	--	1.59	.379	.062	.019	--	--	E.041
JUL													
18...	224	.44	.066	--	.59	.08	--	.156	--	<.006	.37	.071	<.060
AUG													
22...	207	1.0	E.552	--	--	--	--	E.053	--	E.019	--	--	.241
SEP													
12...	212	1.2	.740	.045	1.3	.95	.199	.070	.082	.025	.50	.693	.261
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
04...	.028	<.060	<10	1.80	168	1320	2.7	3	140	137	<8.00	<.11	<.8
NOV													
08...	E.017	E.039	<10	1.81	64600	1330	E1.7	E1	140	139	<8.00	<.11	<.8
DEC													
22...	.026	E.038	<10	1.41	29000	1030	E1.7	E1	136	128	<8.00	1.12	E.5
JAN													
30...	.038	E.057	<10	1.16	23300	853	E1.7	E1	124	117	<8.00	<.11	<.8
FEB													
28...	.040	.068	<10	1.11	1910	816	E1.7	E2	115	116	<8.00	<.11	<.8
MAR													
23...	.041	E.050	<10	.91	19800	668	E1.2	E1	105	103	<8.00	<.11	<.8
APR													
12...	.034	E.047	<10	.92	19400	678	E1.7	E2	111	108	<8.00	<.11	<.8
MAY													
24...	.028	.084	15	.94	117	690	2.3	E1	113	107	<8.00	<.10	<.8
JUN													
06...	<.020	E.045	<10	1.02	21500	752	E1.5	E2	118	112	<8.00	E.05	<.8
JUL													
18...	.023	<.060	<10	1.12	21500	822	2.8	3	129	119	<8.00	<.10	E.7
AUG													
22...	E.228	.285	<10	1.14	454	842	4.2	19	120	118	<8.00	<.10	<.8
SEP													
12...	.226	.275	<10	1.14	447	841	4.1	4	118	125	<8.00	<.10	<.8
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)
OCT													
04...	<1	<4.7	3.0	<10	30	<.08	M	12.2	50	<.23	<.14	<53.0	<39
NOV													
08...	1	<4.7	<1.8	<10	90	E.07	<1	<3.2	31	.55	<.14	<53.0	<66
DEC													
22...	<1	<4.7	6.5	<10	20	.16	2	E1.8	11	<.23	<.14	<53.0	<66
JAN													
30...	<1	<4.7	E1.0	<10	40	.09	<1	E2.1	8	<.23	<.14	<53.0	<66
FEB													
28...	<1	<4.7	3.2	<10	100	.17	M	9.5	16	<.23	<.14	<53.0	<66
MAR													
23...	<1	<4.7	E1.5	<10	120	.09	<1	E1.7	8	<.23	<.14	<53.0	<66
APR													
12...	<1	<4.7	E1.8	<10	100	.11	<1	<3.2	7	<.01	<.01	<53.0	<66
MAY													
24...	<1	<5.0	2.2	<10	160	<.08	M	9.8	45	<.01	.02	<50.0	<66
JUN													
06...	<1	<5.0	2.3	<10	90	E.08	<1	7.8	33	<.01	<.01	<50.0	<66
JUL													
18...	<1	<5.0	E1.0	<10	30	<.08	<1	124	120	<.01	<.01	<50.0	<66
AUG													
22...	<1	<5.0	1.8	20	70	.67	M	417	400	<.01	<.01	<50.0	<66
SEP													
12...	<1	<5.0	<1.0	10	80	E.06	<1	393	402	<.01	<.01	<50.0	<66
26...	--	--	--	--	--	--	--	--	--	--	--	--	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	ALPHA-HCH-D6 SUR SCD 1608 WATER UNFLTRD PERCENT (99778)	AROCLOR 1016/ 1242 PCB WATER UNFLTRD (UG/L) (81648)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)
OCT													
04...	<2.4	<2.6	<.2	<.43	<20	<31	--	--	--	--	--	--	--
NOV													
08...	<2.4	<2.6	<.2	<.43	<20	<31	--	--	--	--	--	--	--
DEC													
22...	<2.4	<2.6	<.2	<.43	E11	<31	--	--	--	--	--	--	--
JAN													
30...	<2.4	<2.6	<.2	<.86	<20	<31	--	--	--	--	--	--	--
FEB													
28...	<2.4	<2.6	<.2	<.43	E14	<31	--	--	--	--	--	--	--
MAR													
23...	<2.4	<2.6	<.2	<.43	<20	<31	--	--	--	--	--	--	--
APR													
12...	<2.4	<2.6	<.2	<.43	<20	<31	<.040	<.03	76	<.10	<1	<.1	<.1
MAY													
24...	<2.0	<3.0	<.2	<.40	<20	<31	--	--	--	--	--	--	--
JUN													
06...	<2.0	<3.0	<.2	<.40	<20	E17	--	--	--	--	--	--	--
JUL													
18...	<2.0	<3.0	<.2	<.40	<20	<31	--	--	--	--	--	--	--
AUG													
22...	<2.0	<3.0	<.2	<.40	E11	<31	--	--	--	--	--	--	--
SEP													
12...	<2.0	<3.0	<.2	<.40	<20	<31	--	--	--	--	--	--	--
26...	--	--	--	--	--	--	<.040	<.03	106	<.10	<1	<.1	<.1

DATE	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	CHLOR-DANE CIS WATER WHOLE TOTAL (UG/L) (39062)	CHLOR-DANE, TECH-NICAL TOTAL (UG/L) (39350)	CHLOR-DANE TRANS WATER WHOLE TOTAL (UG/L) (39065)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN-I WATER WHOLE REC (UG/L) (34361)	ENDO-SULFAN II TOTAL (UG/L) (34356)	ENDO-SULFAN SULFATE TOTAL (UG/L) (34351)	ENDRIN ALDE-HYDE TOTAL (UG/L) (34366)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)
OCT													
04...	--	--	--	--	--	--	--	--	--	--	--	--	--
NOV													
08...	--	--	--	--	--	--	--	--	--	--	--	--	--
DEC													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
JAN													
30...	--	--	--	--	--	--	--	--	--	--	--	--	--
FEB													
28...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAR													
23...	--	--	--	--	--	--	--	--	--	--	--	--	--
APR													
12...	<.1	<.1	<.03	<.1	<.1	<.1	<.09	<.020	<.1	<.04	<.6	<.2	<.060
MAY													
24...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
06...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
22...	--	--	--	--	--	--	--	--	--	--	--	--	--
SEP													
12...	--	--	--	--	--	--	--	--	--	--	--	--	--
26...	<.1	<.1	<.03	<.1	<.1	<.1	<.09	<.020	<.1	<.04	<.6	<.2	<.060

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	ISODRIN SUR SCD 1608 WTR, UNFLTRD PERCENT (90570)	LINDANE TOTAL (UG/L) (39340)	PCB 207 SUR SCD 1608 WATER UNFLTRD PERCENT (99781)	P,P' DDD, TOTAL (UG/L) (39310)	P,P' DDE, TOTAL (UG/L) (39320)	P,P' DDT, TOTAL (UG/L) (39300)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT									
04...	--	--	--	--	--	--	--	--	--
NOV									
08...	--	--	--	--	--	--	--	--	--
DEC									
22...	--	--	--	--	--	--	--	--	--
JAN									
30...	--	--	--	--	--	--	--	--	--
FEB									
28...	--	--	--	--	--	--	--	--	--
MAR									
23...	--	--	--	--	--	--	--	--	--
APR									
12...	<.800	<.030	48	<.030	77	<.1	<.04	<.1	<2
MAY									
24...	--	--	--	--	--	--	--	--	--
JUN									
06...	--	--	--	--	--	--	--	--	--
JUL									
18...	--	--	--	--	--	--	--	--	--
AUG									
22...	--	--	--	--	--	--	--	--	--
SEP									
12...	--	--	--	--	--	--	--	--	--
26...	<.800	<.030	57	<.030	81	<.1	<.04	<.1	<2

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	2260	2160	2210	2390	2350	2370	2040	1980	2000	1740	1730	1740
2	2240	2170	2210	2380	2300	2330	2000	1980	2000	1740	1720	1730
3	2310	2210	2240	2350	2280	2300	1990	1980	1980	1730	1680	1720
4	2310	2210	2250	2330	2270	2290	1980	1950	1970	1680	1660	1670
5	2260	2240	2240	2280	2210	2260	1960	1940	1960	1660	1640	1650
6	2250	1980	2210	2280	2180	2250	1950	1930	1950	1660	1640	1650
7	2260	2240	2250	2280	2260	2270	1950	1940	1940	1670	1650	1650
8	2260	2250	2260	2280	2250	2270	1950	1930	1940	1670	1650	1650
9	2270	2240	2260	2250	2220	2240	1940	1930	1940	1660	1630	1650
10	2260	2240	2250	2220	2200	2220	1960	1920	1940	1650	1630	1650
11	2250	2230	2240	2220	2220	2220	1950	1930	1940	1650	1610	1630
12	2250	2240	2240	2220	2200	2210	1950	1930	1940	1630	1600	1610
13	2250	2240	2250	2210	2200	2210	1940	1920	1930	1640	1620	1630
14	2260	2240	2250	2210	2200	2200	1930	1920	1920	1630	1590	1600
15	2260	2160	2240	2210	2200	2210	1930	1890	1920	1590	1580	1580
16	2260	2160	2230	2210	2200	2200	1930	1860	1910	1580	1560	1570
17	2260	2240	2250	2200	2170	2190	1900	1850	1880	1580	1550	1560
18	2270	2250	2260	2180	2140	2160	1900	1870	1890	1560	1530	1550
19	---	---	e2270	2140	2140	2140	1890	1870	1880	1540	1530	1540
20	---	---	e2290	2140	2140	2140	1880	1840	1870	1540	1520	1520
21	---	---	e2300	2140	2140	2140	1870	1860	1860	1530	1520	1530
22	---	---	e2320	2150	2130	2140	1860	1820	1840	1530	1530	1530
23	---	---	e2330	2150	2090	2130	1840	1780	1800	1540	1530	1530
24	---	---	e2340	2130	2050	2100	1800	1770	1780	1530	1530	1530
25	---	---	e2330	2100	2090	2100	1780	1750	1770	1530	1530	1530
26	---	---	e2370	2110	2090	2100	1770	1620	1750	1540	1530	1530
27	---	---	e2350	2120	2100	2100	1780	1740	1770	1530	1460	1500
28	2420	2370	2400	2120	2090	2100	1780	1750	1760	1520	1410	1500
29	2420	2220	2320	2090	1920	2030	1760	1730	1750	1520	1280	1480
30	2430	2340	2380	2030	1920	1970	1750	1740	1750	1520	1510	1520
31	2380	2350	2370	---	---	---	1750	1720	1740	1520	1500	1520
MONTH	2430	1980	2280	2390	1920	2190	2040	1620	1880	1740	1280	1590

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

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1520	1510	1510	1460	1350	1430	1240	1230	1240	1200	1170	1180
2	1520	1490	1510	1470	1440	1460	1260	1240	1250	1200	1170	1180
3	1510	1500	1500	1440	1380	1410	1300	1260	1280	1190	1160	1180
4	1500	1500	1500	1380	1310	1340	1300	1290	1300	1190	1160	1180
5	1500	1490	1490	1320	1280	1300	1300	1290	1300	1190	1160	1170
6	1490	1480	1490	1350	1280	1310	1330	1300	1310	1190	1160	1180
7	1480	1480	1480	1310	1260	1280	1330	1270	1300	1180	1150	1170
8	1480	1470	1480	1290	1220	1270	1300	1260	1270	1180	1170	1170
9	1470	1460	1470	1220	1140	1180	1290	1250	1260	1180	1170	1170
10	1460	1460	1460	1350	1200	1290	1280	1240	1250	1180	1170	1180
11	1460	1450	1450	1360	1320	1340	1260	1200	1220	1190	1160	1180
12	1450	1450	1450	1350	1240	1310	1250	1160	1200	1180	1170	1180
13	1450	1420	1440	1280	1260	1270	1200	1160	1170	1190	1180	1180
14	1440	1430	1440	1340	1220	1290	1200	1160	1170	1190	1170	1180
15	1480	1410	1450	1350	1190	1260	1210	1160	1180	1210	1180	1190
16	1470	1400	1440	1220	1210	1220	1200	1170	1180	1200	1190	1200
17	1460	1450	1450	1230	1220	1220	1230	1160	1180	1210	1200	1200
18	1460	1440	1450	1220	1210	1220	1230	1210	1220	1210	1190	1200
19	1460	1460	1460	1210	1200	1200	1220	1220	1220	1210	996	1180
20	1460	1450	1450	1200	1190	1200	1220	1210	1210	1190	1060	1160
21	1450	1450	1450	1200	1190	1200	1220	1200	1210	1200	1180	1190
22	1450	1440	1440	1190	1190	1190	1220	1200	1210	1250	1190	1220
23	1450	1420	1440	1200	1190	1190	1200	1160	1180	1260	1240	1250
24	1450	1430	1440	1200	1190	1190	1200	1180	1190	1260	1210	1240
25	1440	1430	1430	1200	1190	1190	1210	1180	1190	1260	1240	1250
26	1430	1420	1430	1200	1190	1190	1200	1180	1180	1280	1250	1260
27	1420	1410	1420	1200	1180	1190	1200	1180	1180	1320	1280	1300
28	1420	1340	1400	1210	1200	1200	1210	1180	1190	1320	1280	1300
29	---	---	---	1210	1200	1210	1200	1180	1190	1320	1300	1310
30	---	---	---	1220	1210	1220	1190	1180	1180	1400	1320	1370
31	---	---	---	1230	1220	1230	---	---	---	1430	1320	1370
MONTH	1520	1340	1460	1470	1140	1260	1330	1160	1220	1430	996	1220

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1360	1330	1340	1420	1370	1410	1490	1450	1470	1530	1470	1500
2	1390	1310	1360	1420	1410	1420	1500	1460	1480	1530	1470	1500
3	1380	1320	1360	1430	1410	1420	1500	1450	1480	1530	1470	1500
4	1370	1320	1350	1420	1410	1420	1510	1460	1490	1530	1260	1480
5	1350	1330	1340	1430	1420	1420	1520	1470	1500	1540	1510	1530
6	1350	1330	1340	1440	1420	1430	1520	1480	1510	1540	1510	1530
7	1340	1340	1340	1440	1430	1440	1540	1470	1510	1540	1510	1530
8	1340	1340	1340	1450	1430	1440	1520	1470	1500	1540	1520	1530
9	1340	1340	1340	1460	1430	1440	1520	1480	1500	1550	1500	1530
10	1350	1340	1340	1460	1440	1440	1520	1470	1500	1560	1520	1540
11	1350	1340	1340	1460	1440	1450	1520	1490	1510	1560	1520	1540
12	1370	1340	1350	1460	1440	1450	1520	1480	1510	1560	1510	1530
13	1390	1360	1380	1470	1440	1450	1520	1490	1510	1540	1500	1530
14	1390	1370	1380	1470	1450	1460	1530	1470	1500	1680	1510	1570
15	1380	1360	1370	1480	1450	1460	1520	1470	1500	1670	1510	1580
16	1380	1320	1350	1480	1460	1470	1510	1460	1490	1510	1470	1500
17	1340	1330	1340	1490	1470	1480	1510	1420	1470	1720	1460	1520
18	1380	1340	1360	1490	1450	1470	1510	1460	1480	1690	1460	1560
19	1390	1360	1380	1480	1450	1460	1510	1460	1490	1470	1440	1460
20	1390	1360	1380	1480	1460	1470	1520	1460	1490	1610	1320	1470
21	1390	1360	1380	1480	1450	1470	1520	1470	1500	1620	1410	1440
22	1390	1360	1380	1480	1450	1460	1520	1480	1500	1590	1410	1490
23	1400	1380	1390	1480	1450	1460	1520	1480	1500	1430	1390	1420
24	1410	1380	1400	1490	1460	1460	1520	1480	1500	1520	1380	1410
25	1420	1390	1410	1490	1450	1470	1520	1470	1500	1410	1360	1390
26	1420	1410	1420	1490	1460	1470	1520	1460	1500	1530	1390	1510
27	1420	1390	1410	1500	1460	1470	1520	1460	1490	1660	1500	1540
28	1420	1390	1420	1500	1460	1480	1520	1460	1490	1550	1500	1530
29	1430	1370	1410	1500	1460	1480	1520	1460	1500	1550	1500	1530
30	1430	1340	1400	1500	1470	1480	1520	1490	1510	1670	1500	1560
31	---	---	---	1500	1460	1470	1520	1490	1510	---	---	---
MONTH	1430	1310	1370	1500	1370	1450	1540	1420	1500	1720	1260	1510
YEAR	2430	996	1580									

e Estimated

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	25.9	21.8	23.5	19.6	19.3	19.5	12.7	12.4	12.6	6.6	5.8	6.2
2	25.7	22.0	23.4	19.9	18.7	19.6	12.4	12.1	12.2	6.2	5.7	6.1
3	26.4	22.8	23.8	19.8	19.2	19.6	12.1	11.8	12.0	6.1	5.6	5.9
4	26.5	23.0	24.0	19.7	19.3	19.6	11.8	11.6	11.7	5.7	5.5	5.6
5	25.8	22.3	23.6	19.7	19.2	19.6	11.7	11.5	11.6	5.7	5.5	5.6
6	23.0	20.9	21.8	19.7	19.0	19.4	11.6	11.3	11.5	5.8	5.5	5.6
7	21.0	19.5	20.2	19.3	19.0	19.2	11.4	10.8	11.2	6.0	5.8	5.9
8	21.4	18.8	19.8	19.0	18.1	18.6	11.4	10.8	11.2	6.1	5.7	5.9
9	21.7	17.9	19.6	18.1	17.7	17.9	11.7	10.5	11.1	6.0	5.7	5.8
10	21.7	17.7	19.6	17.7	17.4	17.6	11.9	10.9	11.3	5.9	5.7	5.8
11	21.4	18.7	19.8	17.4	17.1	17.2	11.3	10.3	10.9	5.9	5.7	5.8
12	21.5	18.7	19.8	17.1	16.6	16.9	10.3	9.0	10.0	5.8	5.7	5.7
13	22.2	18.5	19.9	16.6	16.3	16.5	10.1	9.1	9.8	5.9	5.8	5.9
14	21.9	19.3	20.4	16.3	15.9	16.0	10.1	9.0	9.7	6.0	5.7	5.9
15	22.2	19.2	20.4	15.9	15.5	15.7	9.7	9.1	9.6	6.0	5.8	5.8
16	21.9	19.4	20.0	15.6	15.3	15.5	9.7	9.0	9.4	5.8	5.7	5.8
17	21.9	18.3	19.8	15.3	14.8	15.1	9.3	7.9	8.9	5.7	5.7	5.7
18	22.7	18.7	19.9	14.8	14.1	14.6	9.1	8.2	8.9	5.7	5.5	5.6
19	---	---	---	14.4	14.2	14.3	8.8	7.3	8.5	5.5	5.3	5.4
20	---	---	---	14.2	13.9	14.1	8.6	7.7	8.4	5.4	5.1	5.2
21	---	---	---	14.0	13.8	13.9	8.3	7.6	8.1	5.4	5.2	5.3
22	---	---	---	13.9	13.5	13.8	8.3	7.1	8.0	5.5	5.2	5.3
23	---	---	---	13.7	13.6	13.7	8.0	7.7	7.8	5.4	5.3	5.4
24	---	---	---	13.6	13.4	13.5	7.7	7.0	7.5	5.5	5.3	5.4
25	---	---	---	13.4	12.8	13.2	7.6	6.9	7.4	5.5	5.3	5.4
26	---	---	---	13.3	12.6	13.1	7.3	6.6	7.2	5.7	5.3	5.5
27	---	---	---	13.2	12.7	13.1	7.2	6.9	7.1	5.6	4.8	5.3
28	21.4	18.8	20.0	13.3	13.0	13.1	7.8	6.8	7.1	6.9	5.5	6.1
29	20.2	19.0	19.6	13.2	12.6	13.0	7.2	6.1	6.7	7.2	5.7	6.0
30	20.3	19.3	19.6	12.9	12.6	12.7	7.0	6.0	6.6	6.9	5.4	5.9
31	19.6	19.4	19.5	---	---	---	6.5	6.0	6.3	6.8	5.5	5.9
MONTH	26.5	17.7	20.8	19.9	12.6	16.0	12.7	6.0	9.4	7.2	4.8	5.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.5	5.3	5.9	8.0	6.5	7.2	10.9	10.1	10.5	17.2	14.4	15.5
2	8.3	5.4	6.2	7.5	7.4	7.4	10.3	10.0	10.1	16.7	14.8	15.5
3	6.3	6.0	6.1	7.6	7.4	7.5	10.7	10.1	10.3	17.1	15.1	15.8
4	6.4	6.0	6.2	7.9	7.5	7.7	10.8	10.5	10.6	16.5	15.2	15.9
5	6.3	6.1	6.2	8.1	7.8	7.9	11.0	10.7	10.8	16.5	15.1	15.8
6	6.5	6.1	6.3	7.9	7.7	7.8	10.8	10.3	10.6	16.4	15.2	15.9
7	6.4	6.1	6.2	8.2	7.9	8.0	11.4	10.3	11.0	18.3	15.1	16.4
8	6.6	6.3	6.5	8.3	7.9	8.1	11.5	11.2	11.4	18.4	15.4	17.0
9	7.3	6.5	6.9	8.9	8.3	8.7	12.0	11.1	11.5	18.1	15.6	17.1
10	6.8	6.5	6.6	8.4	7.9	8.1	11.8	11.3	11.5	17.9	16.0	16.9
11	6.6	6.5	6.6	8.3	7.9	8.0	12.7	11.5	12.2	18.2	15.9	16.9
12	6.7	6.6	6.7	9.3	8.1	8.6	13.7	10.9	12.4	19.5	15.8	17.7
13	6.8	6.7	6.7	9.1	8.8	8.9	13.8	11.5	13.1	19.5	16.3	17.9
14	7.3	6.7	7.0	9.2	8.3	8.7	13.4	12.3	13.0	18.2	15.6	17.0
15	7.3	6.8	7.0	9.7	8.1	9.0	14.3	12.1	13.4	18.1	16.0	17.1
16	7.1	6.2	6.7	9.5	9.1	9.3	14.9	12.4	13.9	18.5	16.3	17.2
17	8.9	5.7	6.8	9.3	9.1	9.2	16.7	11.7	14.6	18.4	16.7	17.6
18	8.5	5.5	6.8	9.3	9.1	9.2	14.3	10.3	12.2	18.9	16.5	17.9
19	6.7	6.3	6.5	9.9	9.3	9.6	13.2	11.2	12.2	19.6	16.8	18.1
20	7.2	6.7	6.8	10.3	9.8	10.0	14.5	12.3	13.7	19.0	16.1	17.3
21	7.0	6.7	6.9	10.1	9.7	9.9	14.4	13.2	14.1	21.7	15.9	18.1
22	7.3	6.8	7.1	10.2	9.7	9.9	14.3	13.5	13.9	20.9	16.5	19.0
23	7.1	6.5	6.7	10.2	9.7	9.9	17.3	14.2	15.3	21.3	16.6	19.3
24	6.9	6.4	6.7	10.6	9.8	10.0	17.5	13.7	15.8	20.5	17.2	19.0
25	7.1	6.9	7.0	10.7	10.3	10.5	17.7	13.6	15.9	20.5	16.8	19.2
26	6.9	6.7	6.8	10.5	10.3	10.4	17.5	14.1	15.9	20.0	19.6	19.8
27	6.8	6.7	6.8	10.5	10.0	10.2	17.7	14.3	15.9	20.0	19.6	19.8
28	6.7	6.3	6.5	10.1	10.0	10.0	17.4	13.8	15.5	21.2	19.7	20.9
29	---	---	---	10.0	10.0	10.0	16.8	14.1	15.5	20.7	19.7	20.2
30	---	---	---	10.4	9 9	10.1	17.2	14.9	15.8	20.6	19.8	20.3
31	---	---	---	10.7	10.0	10.3	---	---	---	21.8	20.3	21.2
MONTH	8.9	5.3	6.6	10.7	6.5	9.0	17.7	10.0	13.1	21.8	14.4	17.8

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.7	20.9	21.3	24.2	20.4	22.2	25.8	22.9	24.6	26.1	21.8	23.5
2	21.5	18.9	20.5	24.1	20.5	23.1	25.4	22.1	23.9	26.5	21.9	23.8
3	21.3	19.4	20.2	24.3	21.1	23.5	25.7	21.8	23.7	26.5	22.0	23.9
4	21.2	19.9	20.4	24.5	21.0	23.3	24.9	21.0	22.7	23.9	22.1	22.5
5	21.4	20.7	21.0	24.4	20.9	23.2	24.8	20.9	22.3	23.7	22.1	22.6
6	22.3	21.2	22.0	24.4	21.3	23.5	25.8	21.0	23.0	24.8	22.0	23.2
7	22.6	21.6	22.2	24.3	21.1	23.4	26.1	21.2	23.5	25.2	22.3	23.5
8	22.9	22.2	22.5	24.5	21.2	23.5	26.0	21.4	23.5	24.2	22.3	23.2
9	22.5	21.2	22.1	25.0	21.4	23.8	25.5	21.6	23.4	24.6	22.1	22.9
10	22.4	20.3	22.0	24.7	21.4	23.9	26.1	21.4	23.4	25.5	21.2	23.4
11	22.5	21.5	22.2	25.1	21.4	23.8	24.7	21.8	23.0	25.3	22.0	24.0
12	22.3	21.9	22.1	25.0	21.5	23.6	25.2	21.7	22.9	25.1	22.0	23.8
13	22.4	21.7	22.0	25.3	21.5	23.6	26.4	21.9	23.7	25.0	21.3	23.3
14	22.9	20.4	21.9	24.9	21.7	23.9	26.3	21.8	23.9	25.0	21.6	23.4
15	23.4	20.0	21.9	24.9	21.9	23.8	26.1	21.8	23.8	24.7	21.9	22.4
16	23.3	18.8	20.9	24.8	21.9	23.8	25.9	22.3	23.8	24.5	21.9	22.8
17	22.9	18.4	20.3	25.4	22.1	23.9	25.8	21.7	23.3	24.7	21.9	23.4
18	22.9	18.3	21.0	25.4	22.6	24.3	26.2	21.6	23.7	24.9	22.4	23.4
19	23.3	19.4	21.8	25.0	22.1	24.2	26.4	21.6	23.8	25.5	22.5	24.1
20	23.6	19.6	22.2	24.8	22.0	24.1	26.2	21.7	23.7	24.9	22.0	23.4
21	24.0	19.9	22.7	25.1	22.1	24.2	25.7	21.7	23.7	25.0	22.5	23.6
22	24.1	20.0	22.7	25.2	22.0	24.4	24.9	22.1	23.5	25.7	22.4	23.7
23	23.8	20.1	22.9	25.3	22.2	24.4	25.8	21.5	23.3	25.9	22.3	23.6
24	23.7	20.2	22.9	25.1	22.3	24.4	25.5	21.7	23.4	25.3	21.5	23.6
25	23.8	20.1	22.7	25.5	22.2	24.5	25.7	21.5	23.5	26.4	22.8	24.5
26	23.7	20.6	23.1	25.5	22.5	24.6	26.4	21.8	23.8	25.5	22.1	23.8
27	23.9	20.4	22.9	25.2	22.5	24.5	26.2	21.9	23.6	25.7	21.3	23.3
28	23.5	20.4	22.7	25.5	22.5	24.6	26.0	21.7	23.7	25.9	21.6	23.5
29	23.5	20.1	21.9	25.4	22.2	24.5	26.1	21.9	23.5	26.0	21.6	23.5
30	24.1	20.0	21.9	25.5	22.6	24.6	23.9	21.9	22.7	25.7	20.8	23.0
31	---	---	---	25.6	22.7	24.7	23.8	21.9	22.6	---	---	---
MONTH	24.1	18.3	21.9	25.6	20.4	23.9	26.4	20.9	23.4	26.5	20.8	23.4
YEAR	26.5	4.8	15.9									

07332500 BLUE RIVER NEAR BLUE, OK

LOCATION.--Lat 33°59'49", long 96°14'27", on line between sec.27 and 34, T.6 S., R.10 E., Bryan County, Hydrologic Unit 11140102, on left bank on downstream side near end of bridge on U.S. Highway 70, 1.0 mi west of Blue, 7.0 mi east of Durant, 7.7 mi upstream from Caddo Creek, and at mile 38.8.

DRAINAGE AREA.--476 mi^2.

PERIOD OF RECORD.--June 1936 to current year. Monthly discharge only for some periods, published in WSP 1311, 1731.

REVISED RECORDS.--WSP 957: 1938. WSP 1241: 1936, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 500.60 ft above sea level. Prior to Oct. 1, 1988, at datum 3.00 ft higher. Prior to Mar. 13, 1945, nonrecording gage and Mar. 13, 1945, to Feb. 2, 1960, water-stage recorder at site 1.2 mi downstream at datum 5.00 ft lower.

REMARKS.--No estimated daily discharge. Records good. Some regulation at low flow by a State fish hatchery, 16.0 mi upstream from station. Small diversion for municipal water supply for city of Durant upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station. No flow also occurred Aug. 4, 1936, result of regulation at fish hatchery, and no flow Sept. 19 to Oct. 16, 1956.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 25	0030	5,290	18.89	Feb 25	1400	7,730	22.04
Dec 26	2400	9,740	24.16	Mar 1	0500	5,940	19.85
Jan 29	1900	5,310	18.92	Apr 15	2100	4,560	17.73
Feb 16	2130	11,200	25.53	Sep 20	2200	5,690	19.48

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	127	131	351	522	4590	255	169	204	163	48	30
2	4.2	111	119	309	397	1500	241	164	162	194	35	30
3	4.0	85	113	280	340	878	236	157	152	127	27	29
4	3.6	127	106	282	309	680	228	154	140	106	26	34
5	2.7	95	103	314	286	562	221	216	133	96	26	100
6	2.3	2020	102	303	267	492	214	1800	129	90	27	63
7	2.1	1060	101	278	256	457	210	552	124	83	25	45
8	2.1	721	98	247	248	431	205	313	122	80	25	44
9	2.1	1420	95	220	285	431	198	245	119	78	27	102
10	2.3	709	94	203	351	427	193	214	117	76	28	185
11	3.7	314	92	221	301	459	412	235	111	63	28	69
12	6.2	199	90	333	259	1970	790	408	106	58	28	44
13	7.1	206	97	291	396	880	439	267	102	55	32	37
14	8.3	182	158	277	497	506	368	194	101	54	29	36
15	8.0	135	338	253	1310	439	3290	171	111	54	26	38
16	9.5	114	716	221	9840	390	1810	158	123	53	30	514
17	16	102	394	858	10100	343	470	152	101	52	40	1390
18	20	93	226	869	4230	320	338	147	91	55	88	312
19	20	86	160	614	861	308	296	151	85	54	45	1180
20	14	81	137	378	663	299	278	189	83	54	34	3200
21	32	78	122	280	560	291	267	306	80	52	30	4820
22	35	75	113	249	485	282	258	345	78	49	28	750
23	52	140	106	224	442	274	250	204	76	46	27	311
24	32	2250	101	211	5960	291	243	168	73	45	25	206
25	27	3480	157	201	7400	286	217	152	70	45	24	157
26	32	706	6490	190	2590	260	201	144	69	43	27	130
27	300	319	8460	182	1600	251	194	138	71	42	32	113
28	579	217	2420	183	3630	266	188	282	80	42	29	102
29	948	173	712	3070	---	315	180	257	147	43	28	95
30	942	148	576	4590	---	304	175	229	110	56	28	88
31	214	---	453	1310	---	277	---	707	---	52	28	---
TOTAL	3335.5	15573	23180	17792	54385	19459	12865	8988	3270	2160	980	14254
MEAN	108	519	748	574	1942	628	429	290	109	69.7	31.6	475
MAX	948	3480	8460	4590	10100	4590	3290	1800	204	194	88	4820
MIN	2.1	75	90	182	248	251	175	138	69	42	24	29
AC-FT	6620	30890	45980	35290	107900	38600	25520	17830	6490	4280	1940	28270

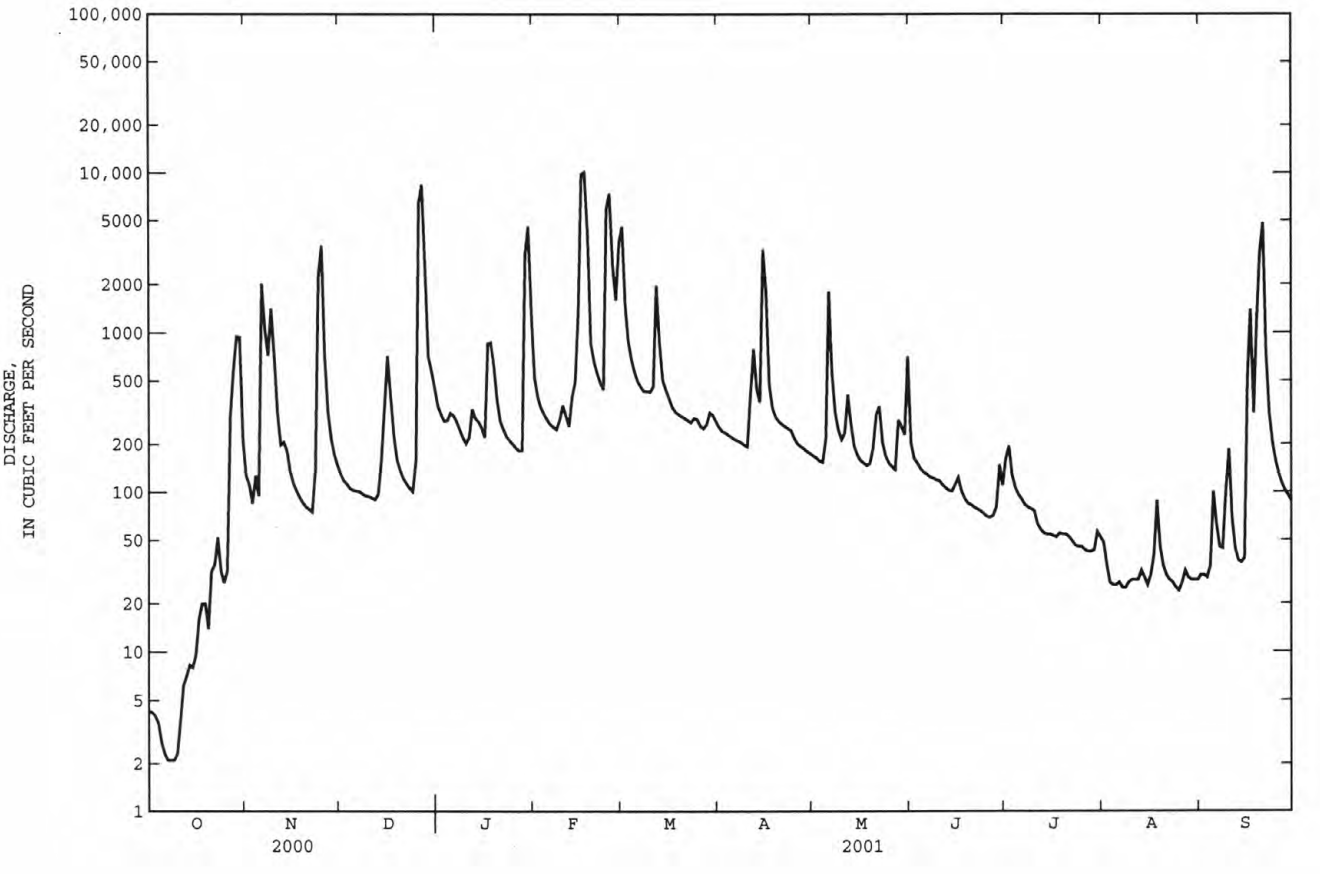
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2001, BY WATER YEAR (WY)

MEAN	241	274	266	238	395	462	571	630	424	146	76.7	163
MAX	3613	1813	1384	1291	2156	3089	3846	2953	2510	780	755	1501
(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	.94	.42
(WY)	1940	1940	1940	1940	1967	1940	1956	1939	1939	1956	1956	1956

07332500 BLUE RIVER NEAR BLUE, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1936 - 2001	
ANNUAL TOTAL	58776.9		176241.5			
ANNUAL MEAN	161		483		324	
HIGHEST ANNUAL MEAN					972	1945
LOWEST ANNUAL MEAN					30.8	1956
HIGHEST DAILY MEAN	8460	Dec 27	10100	Feb 17	45500	Oct 14 1981
LOWEST DAILY MEAN	1.9	Sep 8	2.1	Oct 7-9	[a].00	Aug 3 1936
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 15	2.5	Oct 4	.00	Sep 19 1956
MAXIMUM PEAK FLOW			11200	Feb 16	65200	Oct 14 1981
MAXIMUM PEAK STAGE			25.53	Feb 16	[b]44.20	Oct 14 1981
ANNUAL RUNOFF (AC-FT)	116600		349600		234400	
10 PERCENT EXCEEDS	203		859		542	
50 PERCENT EXCEEDS	56		168		88	
90 PERCENT EXCEEDS	3.7		28		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 $^1/_4$ NE $^1/_4$ sec.30, T.1 S., R.12 E., Atoka County, Hydrologic Unit 11140103, in intake tower on north side of dam on North Boggy Creek, 2.2 mi southwest of Stringtown and at mile 7.4.

DRAINAGE AREA.--172 mi^2 (City of Oklahoma City).

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

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

REMARKS.--Reservoir is formed by earthen dam, construction completed 1960. Top of dam 602.5 ft, contents 225,000 acre-ft, emergency spillway elevation is 590.00 ft, contents 123,500 acre-ft, normal pool. Figures herein represent total contents. Reservoir is used for water supply. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 141,000 acre-ft, Feb. 16, 2001, elevation 592.82 ft; minimum, 81,600 acre-ft, Oct. 20, 25, 26, 2000, elevation 581.98 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 141,000 acre-ft, Feb. 16, elevation 592.82 ft; minimum, 81,600 acre-ft, Oct. 20, 25, 26, elevation 581.98 ft.

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

580	72,780	586	101,300
582	81,670	588	112,000
584	91,160	590	123,500

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY OBSERVATION AT 0800 HOURS

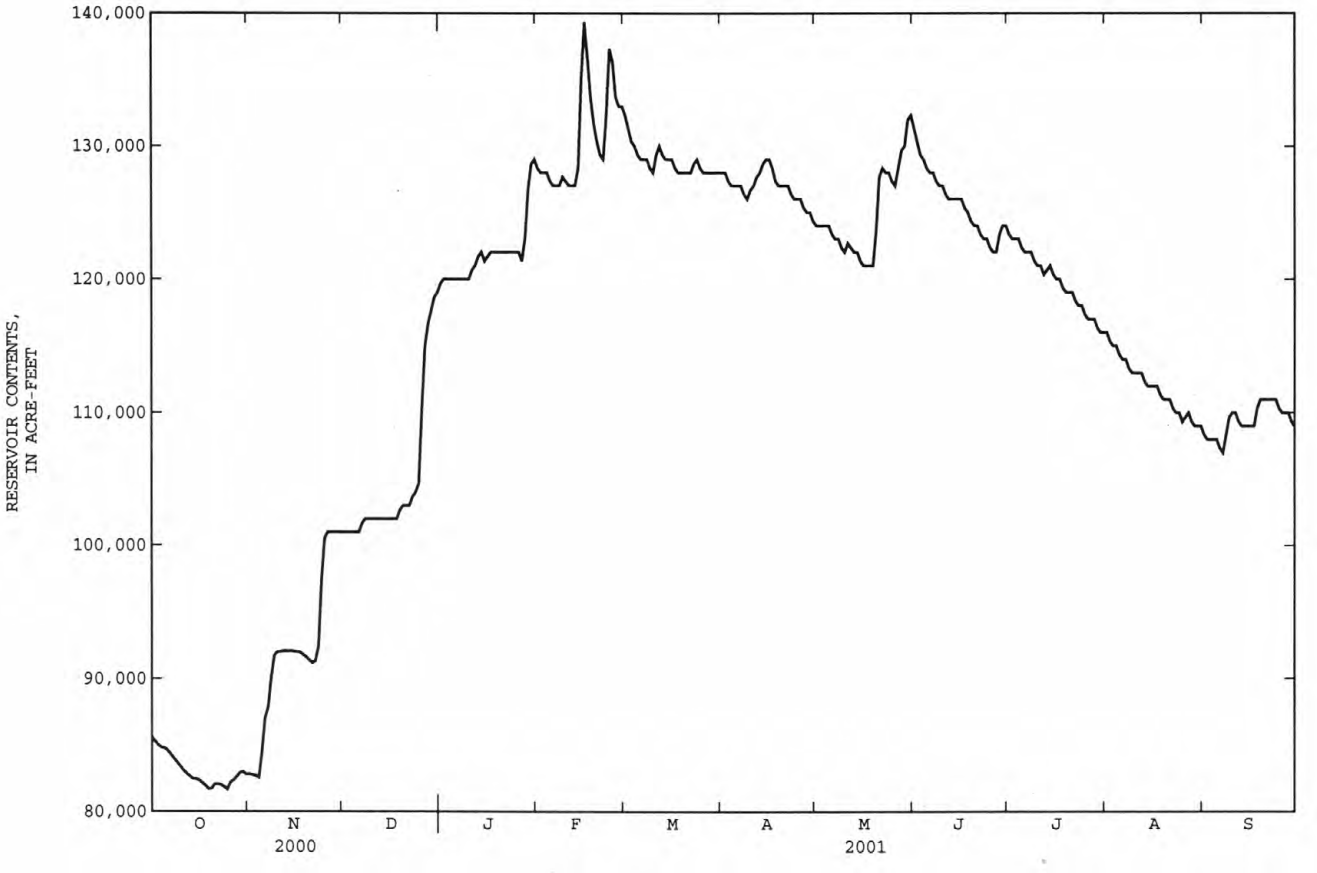
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85700	82700	101000	119000	129000	133000	128000	124000	132000	124000	116000	109000
2	85500	82900	101000	120000	128000	132000	128000	124000	131000	123000	116000	108000
3	85200	82700	101000	120000	128000	131000	128000	124000	130000	123000	115000	108000
4	84900	82700	101000	120000	128000	130000	127000	124000	129000	123000	115000	108000
5	84800	82500	101000	120000	128000	130000	127000	124000	129000	123000	115000	108000
6	84800	85500	101000	120000	127000	129000	127000	124000	128000	122000	114000	108000
7	84500	87800	101000	120000	127000	129000	127000	123000	128000	122000	114000	107000
8	84200	87900	102000	120000	127000	129000	127000	123000	128000	122000	114000	107000
9	83900	91200	102000	120000	127000	129000	126000	123000	127000	122000	113000	109000
10	83600	92000	102000	120000	128000	128000	126000	122000	127000	121000	113000	110000
11	83300	92000	102000	120000	127000	128000	127000	122000	127000	121000	113000	110000
12	83000	92000	102000	121000	127000	130000	127000	123000	126000	121000	113000	110000
13	82800	92100	102000	121000	127000	130000	128000	122000	126000	120000	113000	109000
14	82600	92000	102000	122000	127000	129000	128000	122000	126000	121000	112000	109000
15	82400	92100	102000	122000	129000	129000	129000	122000	126000	121000	112000	109000
16	82500	92000	102000	121000	138000	129000	129000	121000	126000	120000	112000	109000
17	82300	92000	102000	122000	140000	129000	129000	121000	126000	120000	112000	109000
18	82100	92000	e102000	122000	135000	128000	128000	121000	125000	120000	112000	109000
19	81900	91700	e102000	122000	133000	128000	127000	121000	125000	119000	111000	111000
20	81600	91600	e103000	122000	131000	128000	127000	121000	124000	119000	111000	111000
21	81800	91300	103000	122000	130000	128000	127000	125000	124000	119000	111000	111000
22	82200	91100	103000	122000	129000	128000	127000	129000	124000	119000	111000	111000
23	82000	91400	103000	122000	129000	128000	127000	128000	123000	118000	110000	111000
24	82000	92900	104000	122000	134000	129000	126000	128000	123000	118000	110000	111000
25	81800	99600	104000	122000	139000	129000	126000	128000	123000	118000	110000	111000
26	81600	101000	105000	122000	135000	128000	126000	127000	122000	117000	109000	110000
27	82500	101000	113000	122000	133000	128000	126000	127000	122000	117000	110000	110000
28	82300	101000	116000	121000	133000	128000	125000	129000	122000	117000	110000	110000
29	82800	101000	117000	124000	---	128000	125000	130000	124000	117000	109000	110000
30	83000	101000	118000	128000	---	128000	125000	130000	124000	116000	109000	109000
31	83000	---	119000	129000	---	128000	---	133000	---	116000	109000	---
MAX	85700	101000	119000	129000	140000	133000	129000	133000	132000	124000	116000	111000
MIN	81600	82500	101000	119000	127000	128000	125000	121000	122000	116000	109000	107000
(‡)	582.29	585.88	589.22	590.89	591.65	590.77	590.22	591.52	590.06	588.72	587.39	587.53
(‡‡)	-3100	+18000	+18000	+10000	+4000	-5000	-3000	+8000	-9000	-8000	-7000	0

CAL YR 2000 MAX 119000 MIN 81600 (‡‡) +25400
WTR YR 2001 MAX 140000 MIN 81600 (‡‡) +22900

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

e Estimated

07333010 ATOKA RESERVOIR NEAR STRINGTOWN, OK.--Continued



07334000 MUDDY BOGGY CREEK NEAR FARRIS, OK

LOCATION.--Lat 34°16'17", long 95°54'43", in NE $^1/_4$ NW $^1/_4$ sec.26, T.3 S., R.13 E., Atoka County, Hydrologic Unit 11140103, on downstream left bank of bridge on State Highway 3, 1.3 mi downstream from McGee Creek, 2.8 mi northwest of Farris, and at mile 57.7.

DRAINAGE AREA.--1,087 mi^2.

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

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 439.58 ft above sea level. Prior to Mar. 13, 1945, nonrecording gage, and Mar. 13, 1945, to Sept. 30, 1961, water-stage recorder at same site at datum 7 ft higher. Prior to Oct. 1, 1989, water-stage recorder at same site and datum 5 ft higher.

REMARKS.--Records good. Some regulation since June 1959 by Atoka Reservoir, drainage area, 176 mi^2; pipeline diversions to Oklahoma City since November 1963, and since April 1987 by McGee Creek Lake, drainage area 178 mi^2. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	510	1650	697	4830	5370	404	83	3520	198	17	24
2	16	598	1050	625	1880	4540	313	79	2850	313	7.9	23
3	16	243	1020	1220	1160	3910	260	75	2170	536	16	23
4	16	197	628	1600	1010	3250	420	71	1840	346	18	24
5	16	280	120	1820	1040	2820	718	77	1770	309	18	22
6	e16	3780	107	2210	1010	2750	493	194	1890	287	18	22
7	e16	4650	96	2310	578	2930	171	1410	1620	276	18	20
8	e15	3520	93	2000	231	2830	150	757	706	267	18	21
9	e14	3770	88	1270	259	2770	138	578	143	59	18	34
10	e15	3230	84	775	817	2700	126	275	108	30	18	102
11	e16	1360	80	770	1050	2640	376	168	90	28	18	114
12	e16	573	e75	1280	632	3930	1820	204	75	26	18	65
13	e16	728	e100	1110	733	3670	2180	1100	65	25	18	43
14	e16	1370	206	718	960	2740	1960	517	75	27	18	38
15	e16	1440	430	500	3070	1670	3560	224	94	25	18	35
16	e18	1110	957	386	13400	604	3650	150	91	43	21	35
17	e20	495	1170	1260	15100	456	2560	116	69	66	19	84
18	e18	138	936	1990	11200	374	1210	116	57	42	19	89
19	e16	117	1030	1580	7510	314	559	109	53	33	24	416
20	e19	104	647	1280	2720	276	276	123	53	29	26	738
21	e30	93	238	1060	1380	246	226	900	52	26	23	497
22	46	86	187	940	990	222	196	3940	49	24	21	203
23	44	435	162	657	761	208	177	4700	47	23	20	115
24	40	3490	139	264	6940	427	169	2420	44	22	20	81
25	699	5760	172	227	10500	1820	147	389	43	21	19	58
26	419	4130	4180	206	10200	1080	140	235	42	21	212	48
27	290	1850	8300	186	9570	498	119	169	41	20	313	36
28	293	1790	5920	173	7080	378	105	692	140	20	45	33
29	539	2170	3640	3120	---	467	96	2060	155	20	30	30
30	1450	2060	1930	5510	---	625	89	1800	133	20	26	28
31	874	---	1180	5620	---	525	---	4230	---	19	24	---
TOTAL	5051	50077	36615	43364	116611	57040	22808	27961	18085	3201	1118.9	3101
MEAN	163	1669	1181	1399	4165	1840	760	902	603	103	36.1	103
MAX	1450	5760	8300	5620	15100	5370	3650	4700	3520	536	313	738
MIN	14	86	75	173	231	208	89	71	41	19	7.9	20
AC-FT	10020	99330	72630	86010	231300	113100	45240	55460	35870	6350	2220	6150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2001, BY WATER YEAR (WY)

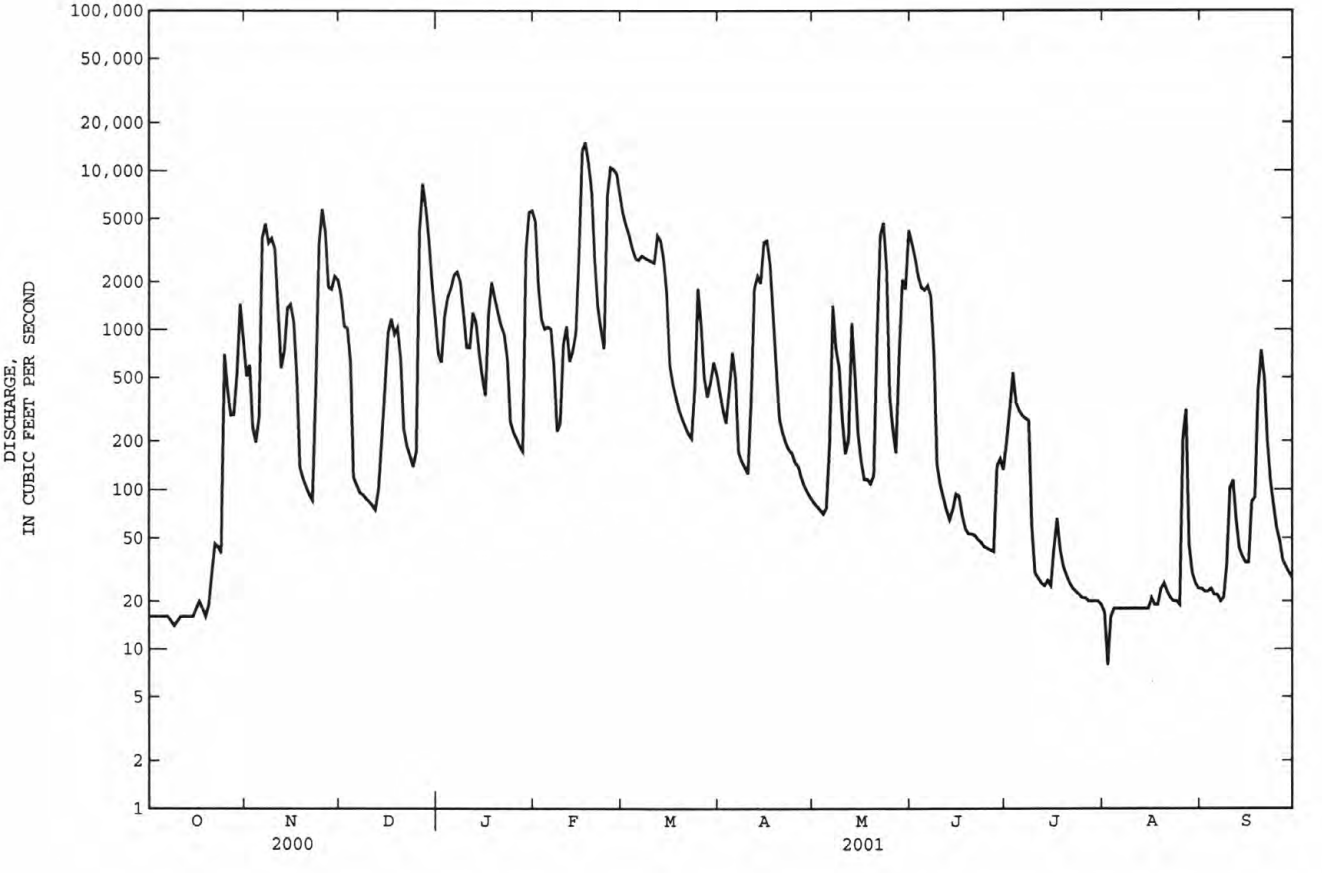
MEAN	258	1008	1474	1136	1289	1944	1690	2101	1071	324	222	386
MAX	1489	4184	4223	5313	4165	4541	6622	8384	2764	1854	1525	1026
(WY)	1992	1997	1992	1998	2001	1990	1990	1990	1991	1992	1992	1992
MIN	13.5	26.6	25.5	81.6	41.5	265	267	34.7	25.0	15.5	13.7	13.8
(WY)	2000	2000	1990	2000	1996	2000	2000	1988	1988	1998	1998	1988

e Estimated

07334000 MUDDY BOGGY CREEK NEAR FARRIS, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1988 - 2001	
ANNUAL TOTAL	157213.5		385032.9			
ANNUAL MEAN	430		1055		[a]1074	
HIGHEST ANNUAL MEAN					2145	1990
LOWEST ANNUAL MEAN					208	2000
HIGHEST DAILY MEAN	8300	Dec 27	15100	Feb 17	45700	May 5 1990
LOWEST DAILY MEAN	7.5	Sep 26	7.9	Aug 2	[b]7.5	Sep 26 2000
ANNUAL SEVEN-DAY MINIMUM	14	Aug 31	15	Oct 4	11	Oct 18 1991
MAXIMUM PEAK FLOW			16000	Feb 17	[c]49800	May 5 1990
MAXIMUM PEAK STAGE			38.36	Feb 17	[d]48.73	May 5 1990
ANNUAL RUNOFF (AC-FT)	311800		763700		778000	
10 PERCENT EXCEEDS	1120		3160		2660	
50 PERCENT EXCEEDS	72		231		160	
90 PERCENT EXCEEDS	15		19		19	

[a]Prior to regulation, water years 1938-86, 880 ft^3/s.
[b]No flow at times in many years prior to regulation.
[c]Maximum discharge for period of record 61,900 ft^3/s, June 17, 1945, from rating curve above 37,000 ft^3/s.
[d]Maximum gage height for period of record 51.94 ft, June 17, 1945, present datum.



07334200 BYRDS MILL SPRING NEAR FITTSTOWN, OK

LOCATION.--Lat 34°35'40", long 96°39'55", in SW $^1/_4$ SW $^1/_4$ sec.34, T.2 N., R.6 E., Pontotoc County, Hydrologic Unit 11140104, upstream from weir outlet of spring, 0.5 mi upstream from Big Spring Creek, 2.0 mi west of Fittstown, and 12.0 mi south of Ada.

PERIOD OF RECORD.--Creek only, April 1959 to current year. Combined flow from December 1989 to current year.

GAGE.--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 1,021.17 ft above sea level. Flow meters on diversion pipe and wells, to City of Ada.

REMARKS.--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: 42 years, 9.10 ft^3/s. Combined spring flow: 11 years, 19.9 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Combined flow: maximum daily discharge, 43 ft^3/s, May 4, 5, 1990; minimum daily discharge, 7.0 ft^3/s, Sept. 15, 2000.

EXTREMES FOR CURRENT YEAR.--Combined flow: maximum daily discharge, 28.0 ft^3/s, at times; minimum daily discharge, 9.3 ft^3/s, Oct. 5, 21, 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	4.1	e7.1	9.4	12	19	17	16	13	11	8.2	10
2	2.5	3.0	e7.1	9.4	12	19	17	16	13	10	8.9	10
3	2.5	4.1	e8.7	9.8	12	19	17	16	13	10	9.9	9.9
4	4.6	4.1	e8.7	9.8	12	19	17	16	13	10	9.7	9.8
5	5.2	4.1	8.6	9.8	13	19	17	17	13	10	9.5	9.8
6	3.8	4.9	8.6	10	14	19	17	17	14	10	7.9	9.8
7	3.8	5.4	8.7	10	13	19	16	17	13	9.9	6.2	9.7
8	3.9	4.9	8.7	10	13	19	16	16	13	9.8	6.2	9.4
9	3.9	4.9	8.7	10	e13	19	16	16	13	9.7	6.1	9.4
10	4.0	5.1	8.7	10	e13	19	16	15	12	9.0	6.1	7.6
11	3.9	5.3	8.7	10	e13	19	16	15	12	8.5	6.1	6.9
12	3.9	5.4	8.6	10	e14	19	16	15	12	8.5	6.1	4.0
13	3.9	5.4	8.6	11	e14	19	16	15	12	8.4	4.7	5.7
14	3.9	5.4	8.6	11	14	20	16	15	12	8.3	6.1	9.4
15	3.9	5.4	8.6	11	14	19	17	15	12	8.2	7.8	9.5
16	3.5	5.4	8.6	11	15	19	17	15	12	8.1	8.3	9.6
17	3.4	5.4	8.6	11	16	19	17	17	12	8.6	8.6	9.5
18	3.3	5.4	8.6	11	16	19	17	16	12	8.0	8.5	6.9
19	3.1	5.4	8.6	11	16	19	17	15	12	7.7	8.4	5.9
20	3.2	e5.6	8.6	11	16	19	17	15	12	7.4	8.3	7.7
21	3.1	e5.6	8.6	11	16	19	16	15	12	7.1	8.3	7.9
22	3.1	e6.0	8.6	11	16	18	16	15	11	6.9	8.2	8.2
23	3.3	e6.0	8.6	11	17	18	16	15	11	7.4	8.2	8.4
24	3.4	e7.3	8.6	11	17	18	16	15	11	7.8	8.1	8.6
25	3.5	e6.5	8.6	11	18	18	16	15	11	7.6	7.9	8.6
26	3.6	e6.5	8.6	11	18	18	17	15	9.3	6.9	7.8	8.6
27	4.0	e7.0	8.9	11	18	18	16	15	9.1	8.9	7.8	8.6
28	4.1	e7.0	8.9	11	18	18	16	15	9.3	11	8.7	8.7
29	4.3	e7.0	9.1	11	---	18	16	15	10	11	11	8.7
30	4.4	e7.8	9.4	12	---	18	16	15	11	10	11	8.7
31	4.6	---	9.4	12	---	18	---	14	---	8.4	10	---
TOTAL	113.9	165.4	267.0	329.2	413	580	493	479	354.7	274.1	248.6	255.5
MEAN	3.67	5.51	8.61	10.6	14.8	18.7	16.4	15.5	11.8	8.84	8.02	8.52
MAX	5.2	7.8	9.4	12	18	20	17	17	14	11	11	10
MIN	2.3	3.0	7.1	9.4	12	18	16	14	9.1	6.9	4.7	4.0
AC-FT	226	328	530	653	819	1150	978	950	704	544	493	507

CAL YR 2000 TOTAL 2123.7 MEAN 5.80 MAX 9.4 MIN 1.8 AC-FT 4210
WTR YR 2001 TOTAL 3973.4 MEAN 10.9 MAX 20 MIN 2.3 AC-FT 7880

e Estimated

07334200 BYRDS MILL SPRING NEAR FITTSTOWN, OK--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	10	15	18	20	28	25	25	23	21	18	16
2	10	11	15	18	20	28	25	25	23	20	18	16
3	10	11	17	18	20	28	26	25	23	20	18	15
4	9.8	11	17	18	20	28	25	25	23	20	18	15
5	9.3	11	17	18	21	28	25	26	23	20	18	15
6	9.8	11	17	18	21	28	25	26	23	20	17	15
7	9.8	10	17	18	21	28	24	26	23	20	17	15
8	9.9	12	17	18	21	27	24	26	23	20	17	15
9	9.9	13	17	18	21	28	24	26	23	20	17	15
10	10	13	17	18	21	27	24	25	22	20	17	15
11	9.9	14	17	18	22	27	24	25	22	20	17	15
12	9.9	14	17	18	22	27	24	25	22	20	16	14
13	9.9	14	17	19	22	27	24	25	22	19	16	15
14	9.8	14	17	19	22	28	24	25	22	19	16	15
15	9.9	14	17	19	22	27	26	25	22	19	17	15
16	9.7	14	17	19	23	27	26	25	22	19	17	15
17	9.5	14	17	20	24	27	26	26	22	20	17	15
18	9.5	14	17	19	24	27	26	25	22	19	17	15
19	9.4	14	17	19	24	27	26	25	22	19	17	16
20	9.5	14	17	20	24	27	26	25	22	18	17	16
21	9.3	14	17	20	25	27	25	25	22	18	17	16
22	9.3	14	17	20	24	26	25	25	21	18	17	16
23	9.5	14	17	20	26	26	25	25	21	18	17	17
24	9.6	16	17	20	26	26	25	25	21	19	17	17
25	9.7	15	17	20	26	26	25	25	21	19	16	17
26	9.6	15	17	20	26	26	25	25	20	18	16	17
27	10	15	17	20	26	26	25	25	20	18	16	17
28	10	15	17	20	27	26	25	25	20	19	16	17
29	11	15	18	19	---	26	25	25	20	19	16	17
30	11	16	18	20	---	26	25	25	21	18	16	17
31	11	---	18	20	---	26	---	24	---	18	16	---
TOTAL	305.4	402	526	589	641	836	749	780	656	595	522	471
MEAN	9.85	13.4	17.0	19.0	22.9	27.0	25.0	25.2	21.9	19.2	16.8	15.7
MAX	11	16	18	20	27	28	26	26	23	21	18	17
MIN	9.3	10	15	18	20	26	24	24	20	18	16	14
AC-FT	606	797	1040	1170	1270	1660	1490	1550	1300	1180	1040	934

CAL YR 2000 TOTAL 4948.9 MEAN 13.5 MAX 18 MIN 7.0 AC-FT 9820
WTR YR 2001 TOTAL 7072.4 MEAN 19.4 MAX 28 MIN 9.3 AC-FT 14030

07335300 MUDDY BOGGY CREEK NEAR UNGER, OK

LOCATION.--Lat 34°01'36", long 95°45'00", in SE $^1/_4$ SE $^1/_4$ sec.17, T.6 S., R.15 E., Choctaw County, Hydrologic Unit 11140103, at bridge on U.S. Highway 70, 3.5 mi west of Soper, 1.8 mi east of Unger and at mile 18.6.

DRAINAGE AREA.--2,273 mi^2.

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 392.72 ft above sea level. Prior to Sept. 19, 1985, gage 500 ft downstream at same datum.

REMARKS.--Records good. Some regulation by Atoka and McGee Creek Reservoirs. U.S. Army Corp of Engineers' telemeter at site.

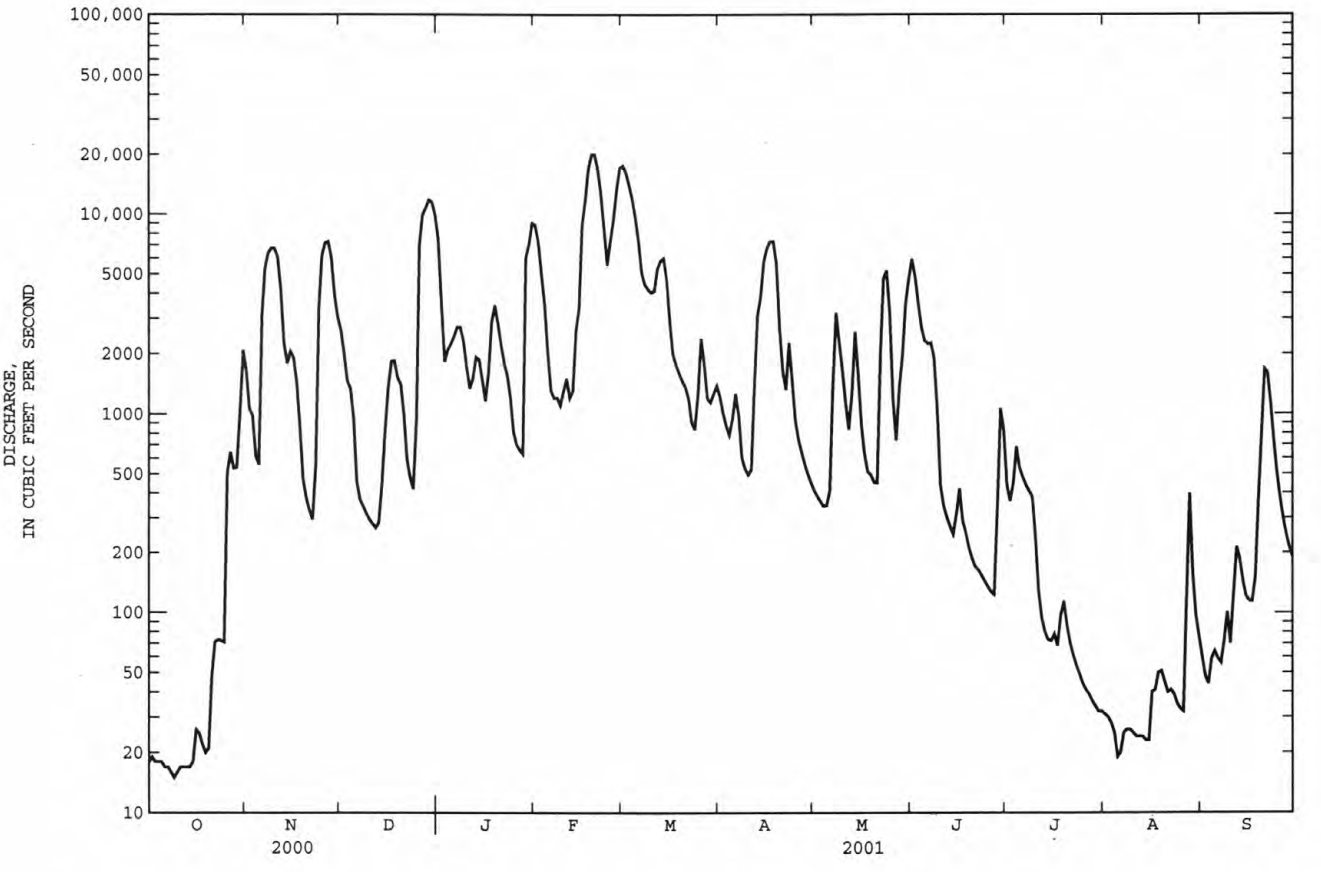
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	1650	2610	7440	e8800	17500	1220	411	5930	438	31	60
2	19	1060	1990	3540	e7200	16200	1010	385	4880	364	30	48
3	18	982	1460	1820	e5000	14000	871	363	3560	445	28	44
4	18	613	1340	2090	e3500	11900	783	343	2720	681	25	59
5	18	557	950	2240	e2000	9610	940	346	2320	535	19	64
6	17	3080	455	2440	e1300	7290	1260	409	2240	481	20	59
7	17	5360	371	2710	e1200	5060	983	1420	2260	438	25	56
8	16	6360	343	2710	e1200	4420	602	3190	1890	409	26	72
9	15	6730	316	2310	e1100	4190	530	2270	1030	383	26	101
10	16	6720	295	1710	e1300	4040	494	1640	435	240	25	70
11	17	6100	280	1340	e1500	4100	523	1130	344	128	24	124
12	17	4150	267	1500	e1200	5280	1370	836	302	94	24	214
13	17	2230	282	1920	e1300	5830	3090	1260	271	80	24	186
14	17	1790	440	1860	2590	5990	3830	2560	248	73	23	145
15	18	2050	809	1480	3350	4690	5750	1560	312	72	23	121
16	26	1910	1330	1160	8720	2950	6720	876	420	78	40	115
17	25	1440	1830	1610	11700	1980	7270	626	289	68	41	114
18	22	873	1840	2860	16800	1760	7310	511	252	97	50	151
19	20	470	1510	3480	19900	1590	5660	494	213	114	51	367
20	21	378	1410	2820	19900	1460	2700	453	188	86	45	788
21	48	326	996	2210	16800	1360	1630	449	170	70	40	1670
22	71	294	585	1790	12600	1190	1320	1920	164	61	41	1600
23	73	547	476	1550	8460	905	2260	4730	154	54	39	1130
24	72	3310	419	1200	5550	835	1470	5200	144	49	35	729
25	71	6160	938	805	7280	1240	925	3160	135	44	33	506
26	509	7150	6930	698	e9360	2370	743	1170	127	41	32	378
27	642	7270	9890	e658	e13200	1780	643	735	123	39	119	298
28	532	6030	10700	e629	e17100	1190	558	1350	340	36	397	247
29	539	3890	11800	e6000	---	1140	497	1950	1060	34	157	212
30	1010	3020	11500	e7000	---	1260	451	3510	829	32	97	189
31	2080	---	9880	e9000	---	1380	---	4720	---	32	76	---
TOTAL	6019	92500	84242	80580	209910	144490	63413	49977	33350	5796	1666	9917
MEAN	194	3083	2717	2599	7497	4661	2114	1612	1112	187	53.7	331
MAX	2080	7270	11800	9000	19900	17500	7310	5200	5930	681	397	1670
MIN	15	294	267	629	1100	835	451	343	123	32	19	44
AC-FT	11940	183500	167100	159800	416400	286600	125800	99130	66150	11500	3300	19670
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)												
MEAN	735	2080	2796	2100	2730	3843	3445	4552	2331	624	351	677
MAX	3713	9607	9832	9591	7497	10970	14270	21720	7293	4536	2517	2218
(WY)	1985	1997	1992	1998	2001	1990	1990	1990	1991	1992	1992	1996
MIN	34.0	84.0	76.3	177	195	677	480	92.3	49.8	57.8	28.7	16.7
(WY)	1989	1989	1990	1984	1996	1986	1987	1988	1988	1998	1988	2000

e Estimated

07335300 MUDDY BOGGY CREEK NEAR UNGER, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1983 - 2001	
ANNUAL TOTAL	323028		781860			
ANNUAL MEAN	883		2142		2185	
HIGHEST ANNUAL MEAN					4951	1990
LOWEST ANNUAL MEAN					450	2000
HIGHEST DAILY MEAN	11800	Dec 29	19900	Feb 19	76000	May 6 1990
LOWEST DAILY MEAN	12	Sep 21	15	Oct 9	1.8	Sep 8 1984
ANNUAL SEVEN-DAY MINIMUM	13	Sep 18	16	Oct 6	2.6	Sep 3 1984
MAXIMUM PEAK FLOW			20500	Feb 19	76700	May 6 1990
MAXIMUM PEAK STAGE			41.60	Feb 19	55.27	May 6 1990
ANNUAL RUNOFF (AC-FT)	640700		1551000		1583000	
10 PERCENT EXCEEDS	1930		6500		6740	
50 PERCENT EXCEEDS	297		809		512	
90 PERCENT EXCEEDS	17		32		51	



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 sea level. From 1905-11 nonrecording gage at St. Louis-San Francisco Railway Co. bridge 200 ft upstream at same datum. July 1, 1936, to Mar. 24, 1940, nonrecording gage at present site and datum.

REMARKS.--Records fair. 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 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2440	4760	22600	18700	18300	51500	17300	e7000	31100	6030	6830	2290
2	2250	8130	21900	15100	16300	50500	16800	7050	23000	4960	6770	1350
3	e1000	7880	21100	11500	15800	44700	16400	5240	14500	4320	4280	1510
4	638	8170	21000	14400	14500	51600	16200	5080	10500	7120	3100	2540
5	e1200	8070	20100	15900	15200	54800	16100	5040	9940	7770	2890	2770
6	e1100	14200	14600	16200	14100	51600	16300	5300	11900	6720	2220	2380
7	e800	20800	12600	16400	13800	48200	16200	6270	13100	6480	1490	1790
8	e800	19700	10700	16300	13400	47000	14100	8690	12800	7070	1670	1340
9	e750	26900	9240	16100	13100	47000	e12000	8540	12100	6730	2650	1440
10	e700	28200	8510	15400	13200	47700	e11000	6730	10100	6660	2540	1390
11	e650	25900	5170	14900	13400	47700	10100	5870	8370	6840	2590	1500
12	e800	24100	4550	14900	13800	59100	e9000	5360	8790	6530	2470	1400
13	e810	22400	6670	15200	15600	59100	e8000	5930	9990	5910	1970	1570
14	e820	21600	7310	15300	28100	49300	14200	6870	9830	5300	1270	1590
15	e810	21600	8010	14800	31700	39800	18200	4650	8530	4820	1290	1520
16	e2800	21400	9540	14400	48000	37400	21500	4630	7450	5570	2360	1520
17	e940	21100	10300	15100	74100	41600	21000	5510	5170	5650	2890	1550
18	e800	19700	11000	19200	e60000	44400	18300	5460	2870	5560	2820	1460
19	e770	12200	10000	22000	e49000	43400	14200	5330	2020	5600	2770	2260
20	e780	11000	9580	19500	e45000	42700	e12000	5150	3650	6590	2710	2620
21	e800	11600	9050	16900	e48000	42300	e10000	4250	4800	6670	2630	6780
22	1400	11400	8400	15400	e44000	38200	e8000	3320	5120	6700	2590	9780
23	1580	11000	8130	14800	e42700	26900	13900	5880	5910	6690	2570	7220
24	999	17700	7990	14300	e39200	19700	21100	8820	5540	6680	2550	3880
25	746	26300	8200	13800	e51800	20500	15300	8080	6400	6710	2540	2400
26	1010	25900	25600	13500	e48700	23000	e11000	4370	6330	6690	2520	1860
27	1630	19800	51300	12600	e48600	20000	e9000	13500	6060	6720	2570	1900
28	1650	17400	40600	9640	50300	17800	e7000	20900	7480	6750	3040	1830
29	1810	21900	27200	7130	---	18000	e9000	21800	8100	6770	3050	1730
30	2070	23100	20900	14600	---	18900	e8000	21100	9100	6850	2790	1660
31	3020	---	20800	21400	---	18000	---	20200	---	6860	2770	---
TOTAL	38373	533910	472650	475370	899700	1222400	411200	251920	280550	196320	87200	74830
MEAN	1238	17800	15250	15330	32130	39430	13710	8126	9352	6333	2813	2494
MAX	3020	28200	51300	22000	74100	59100	21500	21800	31100	7770	6830	9780
MIN	638	4760	4550	7130	13100	17800	7000	3320	2020	4320	1270	1340
AC-FT	76110	1059000	937500	942900	1785000	2425000	815600	499700	556500	389400	173000	148400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2001, BY WATER YEAR (WY)

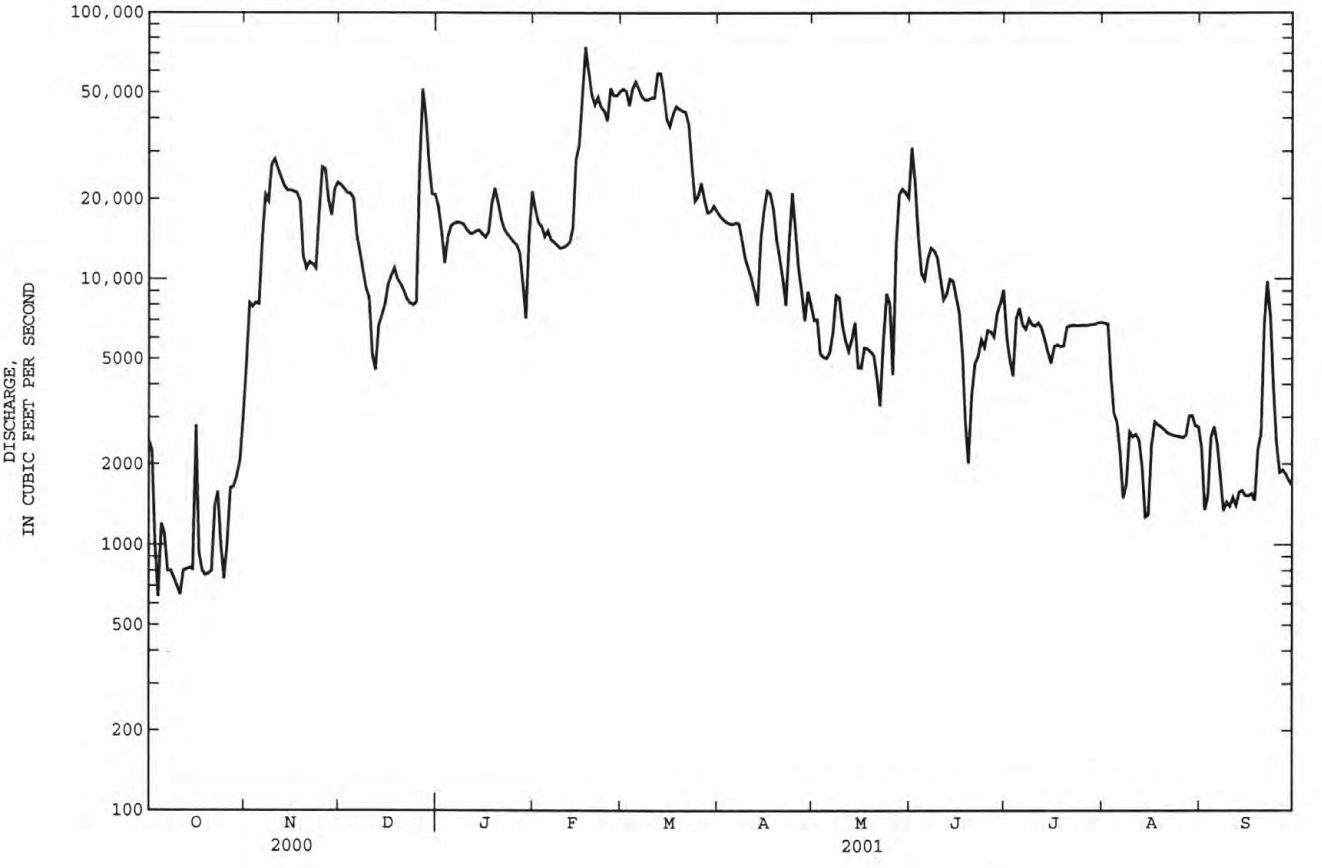
MEAN	6782	7522	7471	7072	8757	11190	11680	16860	17880	7784	4874	4767
MAX	40240	37170	32340	39930	32130	39430	55500	103900	83820	27700	34840	19010
(WY)	1982	1975	1992	1992	2001	2001	1990	1990	1957	1989	1950	1950
MIN	263	242	894	1126	1138	1118	1344	2837	2074	1586	1108	859
(WY)	1957	1957	1957	1964	1959	1967	1956	1980	1956	1956	1972	1988

e Estimated

07335500 RED RIVER AT ARTHUR CITY, TX--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1945 - 2001	
ANNUAL TOTAL	2022015		4944423			
ANNUAL MEAN	5525		13550		[a]9379	
HIGHEST ANNUAL MEAN					23290	1990
LOWEST ANNUAL MEAN					2754	1964
HIGHEST DAILY MEAN	51300	Dec 27	74100	Feb 17	269000	May 4 1990
LOWEST DAILY MEAN	638	Oct 4	638	Oct 4	134	[b]Dec 11 1956
ANNUAL SEVEN-DAY MINIMUM	759	Oct 7	759	Oct 7	134	Dec 11 1956
MAXIMUM PEAK FLOW			80400	Feb 17	[c]275000	May 4 1990
MAXIMUM PEAK STAGE			18.35	Feb 17	[d]34.21	May 4 1990
ANNUAL RUNOFF (AC-FT)	4011000		9807000		6795000	
10 PERCENT EXCEEDS	12200		37700		24200	
50 PERCENT EXCEEDS	3260		8690		4320	
90 PERCENT EXCEEDS	1200		1560		1370	

[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 $^1/_4$ SE $^1/_4$ sec.18, T.2 N., R.26 E., Le Flore County, Hydrologic Unit 11140105, in Ouachita National Forest, on downstream side of right bank pier of bridge on State Highway 63, 0.2 mi upstream from Rattlesnake Creek, 1.1 mi upstream from Big Branch, 2.1 mi east of Big Cedar, and at mile 157.6.

DRAINAGE AREA.--40.1 mi^2.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 886.97 ft above sea level.

REMARKS.--No estimated daily discharge. Records fair. 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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 6	0100	3,250	10.34	Feb 16	0830	7,760	13.40

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	14	66	117	141	187	74	22	63	9.2	.00	.06
2	.00	98	54	97	115	168	69	19	50	6.4	.00	.03
3	.00	72	46	86	99	180	64	17	40	4.9	.00	.03
4	.00	68	40	78	86	290	58	15	32	4.1	.00	.01
5	.00	176	35	78	74	205	53	14	25	3.6	.00	2.3
6	.00	1290	31	79	66	165	50	19	20	3.3	.00	2.4
7	.00	282	28	80	60	135	47	17	18	2.8	.00	.92
8	.00	289	25	82	58	116	45	13	14	2.3	.00	5.1
9	.00	302	23	80	222	102	41	11	10	1.8	.00	229
10	.00	205	22	75	189	85	39	9.1	7.6	1.4	.00	58
11	.00	158	21	101	156	121	89	7.9	5.5	1.2	.10	31
12	.00	158	19	92	132	292	95	8.1	4.1	1.1	.10	18
13	.00	170	31	90	192	200	82	6.4	3.3	.87	.05	10
14	.00	149	35	91	666	172	95	5.2	5.7	.98	.01	5.4
15	.00	132	40	83	1420	172	193	4.4	21	1.4	.00	3.5
16	.00	117	84	77	3200	141	178	3.8	8.9	1.2	.06	15
17	.00	101	102	138	590	121	130	3.4	5.6	.98	.04	14
18	.00	89	100	148	337	105	104	3.5	4.1	.78	.02	9.4
19	.00	81	91	138	236	91	86	4.3	3.1	.53	.00	74
20	.00	73	84	120	181	80	74	5.1	2.6	.35	.00	40
21	.00	67	76	106	148	69	63	133	2.5	.24	.00	32
22	.00	63	64	93	126	61	54	73	2.6	.17	.00	24
23	.00	265	58	82	113	61	68	54	2.5	.11	.00	18
24	.00	1370	52	73	315	106	55	49	2.6	.06	.00	14
25	.00	745	51	63	374	82	46	37	2.6	.03	.00	8.8
26	.00	301	311	59	233	74	41	28	2.6	.02	.19	6.2
27	.00	183	436	54	198	68	37	22	2.6	.04	.82	4.6
28	.00	133	288	50	192	73	33	197	3.5	.13	.46	3.6
29	.00	102	239	419	---	89	28	109	4.7	.10	.25	3.0
30	.35	81	177	282	---	84	25	93	5.2	.07	.16	2.4
31	.74	---	142	183	---	80	---	79	---	.02	.12	---
TOTAL	1.09	7334	2871	3394	9919	3975	2116	1082.2	374.9	50.18	2.38	634.75
MEAN	.035	244	92.6	109	354	128	70.5	34.9	12.5	1.62	.077	21.2
MAX	.74	1370	436	419	3200	292	193	197	63	9.2	.82	229
MIN	.00	14	19	50	58	61	25	3.4	2.5	.02	.00	.01
AC-FT	2.2	14550	5690	6730	19670	7880	4200	2150	744	100	4.7	1260
CFSM	.00	6.10	2.31	2.73	8.83	3.20	1.76	.87	.31	.04	.00	.53
IN.	.00	6.80	2.66	3.15	9.20	3.69	1.96	1.00	.35	.05	.00	.59

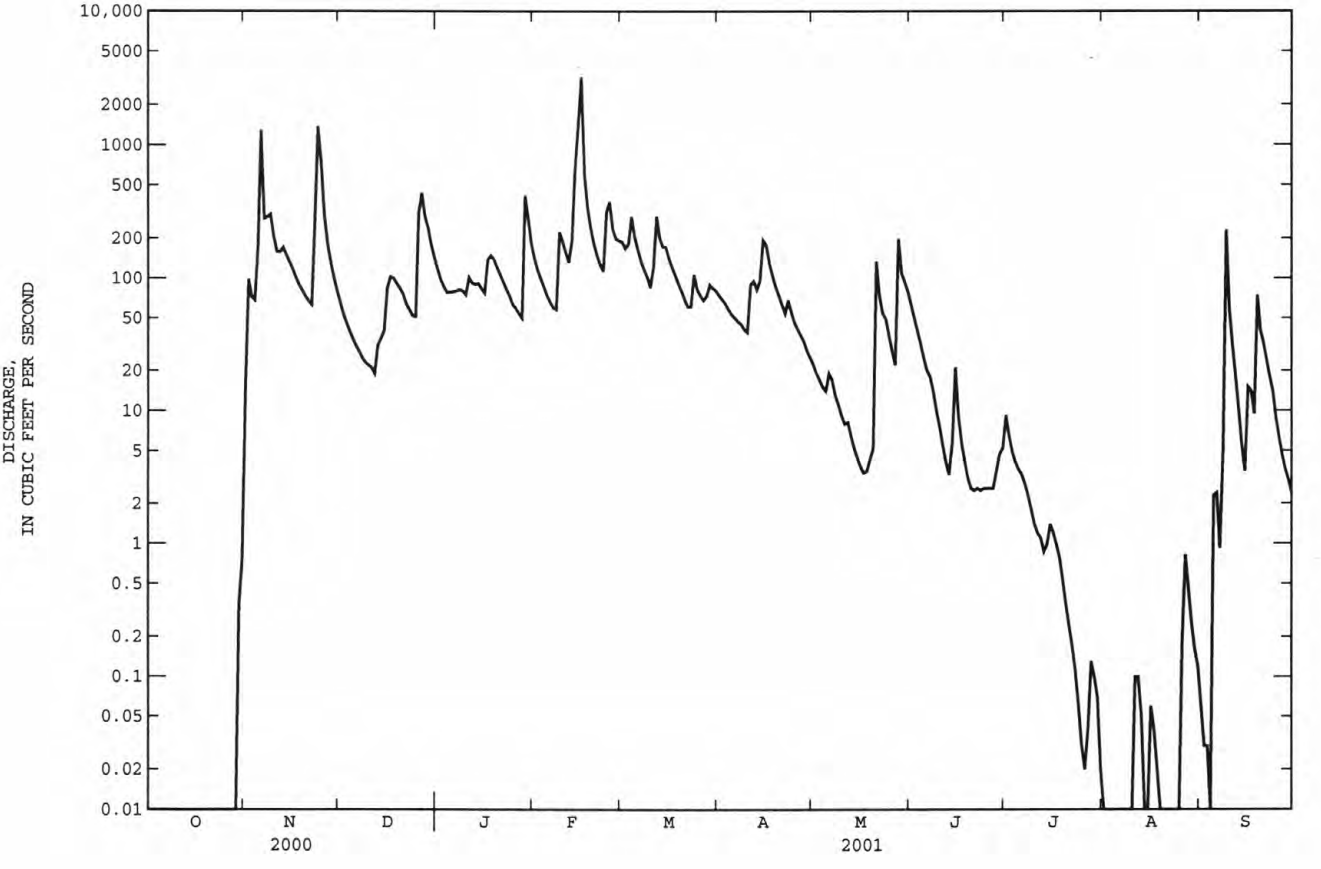
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2001, BY WATER YEAR (WY)

MEAN	64.8	103	128	99.2	122	146	127	133	62.0	21.8	6.89	20.1
MAX	514	533	445	253	354	362	362	614	263	128	51.0	283
(WY)	1985	1997	1972	1998	2001	1973	1991	1990	2000	1991	1988	1992
MIN	.000	.000	.92	2.50	6.12	28.8	34.5	6.97	.078	.000	.000	.000
(WY)	1984	1967	1967	1967	1967	1967	1972	1977	1988	1988	1972	1983

07335700 KIAMICHI RIVER NEAR BIG CEDAR, OK--Continued
(Hydrologic benchmark station)

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1966 - 2001	
ANNUAL TOTAL	27687.67		31754.50			
ANNUAL MEAN	75.6		87.0		85.9	
HIGHEST ANNUAL MEAN					152	1985
LOWEST ANNUAL MEAN					33.9	1978
HIGHEST DAILY MEAN	1370	Nov 24	3200	Feb 16	5960	May 13 1982
LOWEST DAILY MEAN	.00	Aug 15	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 15	.00	Oct 1	.00	Oct 16 1966
MAXIMUM PEAK FLOW			7760	Feb 16	[a]27400	May 19 1990
MAXIMUM PEAK STAGE			13.40	Feb 16	19.60	May 19 1990
ANNUAL RUNOFF (AC-FT)	54920		62990		62230	
ANNUAL RUNOFF (CFSM)	1.89		2.17		2.14	
ANNUAL RUNOFF (INCHES)	25.69		29.46		29.10	
10 PERCENT EXCEEDS	178		188		177	
50 PERCENT EXCEEDS	34		37		27	
90 PERCENT EXCEEDS	.00		.00		.09	

[a]From rating curve extended above 9,000 ft^3/s.



07335790 KIAMICHI RIVER NEAR CLAYTON, OK

LOCATION.--Lat 34°34'29", long 95°20'26", in NE $^1/_4$ SE $^1/_4$ sec.7, T.1 N., R.19 E., Pushmataha County, Hydrologic Unit 11140105, on left bank near downstream bridge abutment on U.S. Highway 271, approximately 1 mi southeast of Clayton, and at mile 101.6.

DRAINAGE AREA.--708 mi^2.

PERIOD OF RECORD.--November 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage is 520.00 ft above sea level.

REMARKS.--Records fair. Some regulation since December 1982 by Sardis Lake (station 07335775), on Jackfork Creek 4.5 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	2.1	1850	2110	2810	2400	1790	89	2330	184	1.5	3.5
2	.05	4.8	1500	1960	2050	e3190	1730	78	3100	88	1.2	2.9
3	.03	12	1440	1850	1070	e4130	1140	69	3060	58	1.0	2.3
4	.01	32	1140	1830	973	e4190	386	62	2300	40	.88	1.8
5	.00	53	674	2140	881	e4180	338	57	1160	30	.73	1.6
6	.00	3430	169	2570	628	e4210	298	54	1860	25	.57	1.5
7	.00	3010	145	2580	409	3360	269	50	2770	20	.54	1.2
8	.00	1310	129	2510	373	2500	240	49	2290	16	.60	2.3
9	.00	2060	110	2420	1250	2420	215	46	1650	14	5.7	2900
10	.00	1260	101	1740	1990	2350	194	43	1630	12	11	2080
11	.00	737	91	1470	1520	2300	237	40	929	10	4.3	576
12	.00	534	81	1540	1400	2420	866	46	80	8.8	2.3	267
13	.00	943	108	1070	1500	1800	644	126	64	8.6	1.8	157
14	.00	1340	557	978	2490	1450	686	92	56	7.2	1.3	102
15	.00	1430	652	881	6690	1190	1350	60	58	6.2	2.8	74
16	.00	880	1020	790	16600	1140	1520	44	55	5.5	27	71
17	.00	507	927	1380	e16300	1010	1590	35	61	5.1	25	125
18	.00	227	1140	2440	7030	938	1410	32	48	4.6	19	104
19	.00	185	1690	1990	3840	879	925	30	44	4.2	16	1250
20	.00	153	1590	1540	4270	836	368	33	42	3.7	12	719
21	.00	125	1140	1390	3980	798	318	3110	35	3.3	9.0	375
22	.00	106	306	1300	3360	773	268	3010	29	2.9	6.7	236
23	.00	455	257	914	2220	741	245	3110	25	5.7	5.2	171
24	.00	4990	230	497	1950	1570	405	3520	22	10	4.2	e200
25	.00	6870	225	438	2900	1390	309	3390	19	7.1	3.6	556
26	.02	2950	4860	391	1690	1060	220	3180	16	6.0	3.2	526
27	.16	1850	5970	343	2170	939	178	3090	15	4.6	7.6	400
28	.23	2300	2680	315	3170	1020	147	3670	16	3.4	9.7	371
29	.52	2290	2450	3080	---	1630	120	3080	48	2.7	5.9	352
30	2.1	2130	2620	5310	---	1800	103	1640	469	2.3	4.7	338
31	2.8	---	2310	3330	---	1880	---	3510	---	1.8	4.1	---
TOTAL	6.00	42175.9	38162	53097	95514	60494	18509	35445	24281	600.7	199.12	11967.1
MEAN	.19	1406	1231	1713	3411	1951	617	1143	809	19.4	6.42	399
MAX	2.8	6870	5970	5310	16600	4210	1790	3670	3100	184	27	2900
MIN	.00	2.1	81	315	373	741	103	30	15	1.8	.54	1.2
AC-FT	12	83660	75690	105300	189500	120000	36710	70310	48160	1190	395	23740

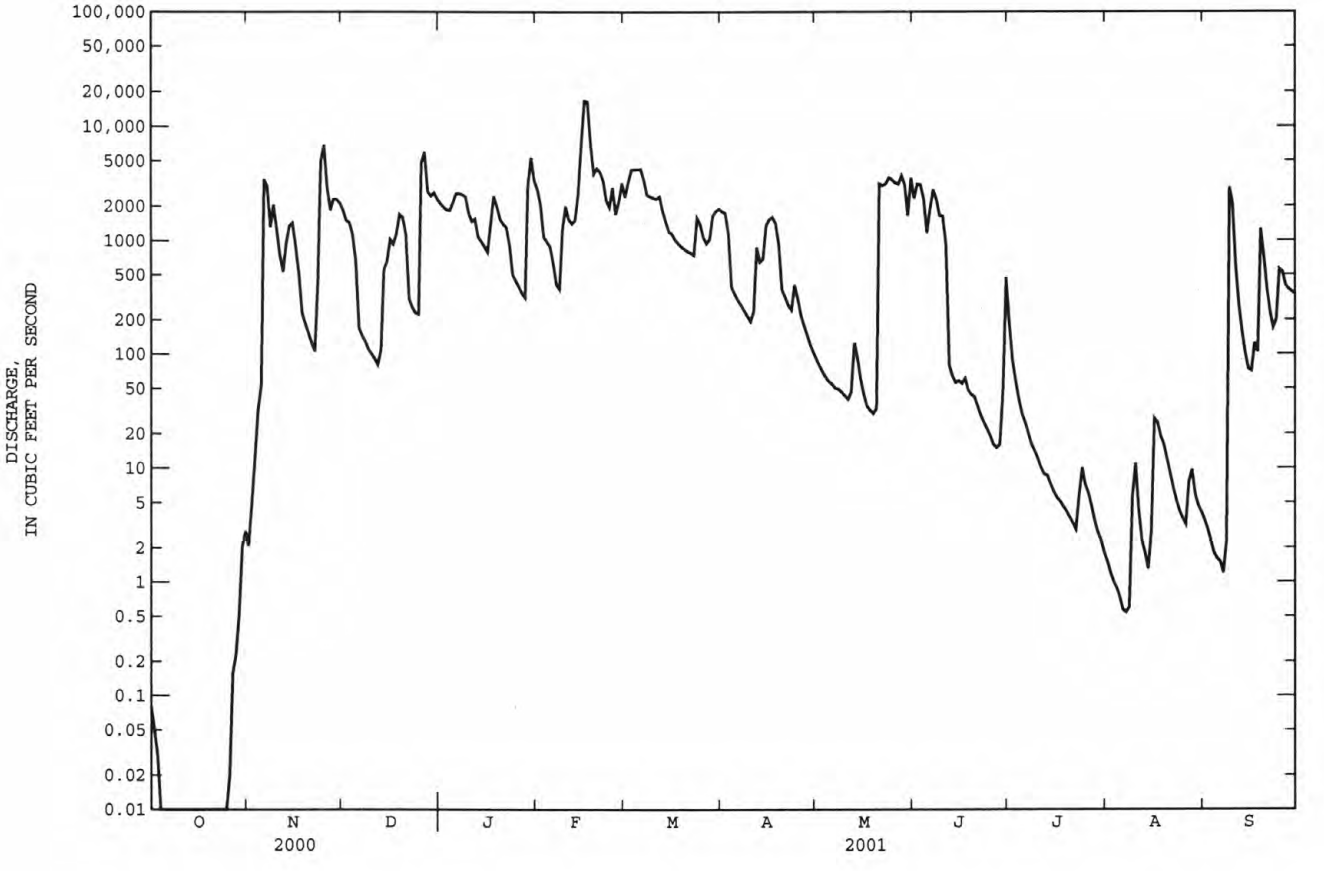
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

MEAN	707	1379	1537	1277	1558	1524	1496	1935	971	236	179	295
MAX	4628	4837	3376	4569	4196	3184	2935	7658	2288	984	1268	2735
(WY)	1985	1985	1988	1998	1990	1990	1991	1990	1986	1992	1992	1992
MIN	.13	2.89	24.5	88.3	116	517	226	53.7	7.33	3.52	.29	.36
(WY)	2000	2000	1990	1986	1996	2000	1982	1988	1988	1998	1998	2000

e Estimated

07335790 KIAMICHI RIVER NEAR CLAYTON, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1982 - 2001	
ANNUAL TOTAL	224259.00		380450.82			
ANNUAL MEAN	613		1042		1088	
HIGHEST ANNUAL MEAN					1967	1990
LOWEST ANNUAL MEAN					429	2000
HIGHEST DAILY MEAN	10900	Jun 22	16600	Feb 16	36800	May 4 1990
LOWEST DAILY MEAN	.00	Aug 28	.00	at times	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 28	.00	Oct 5	.00	Oct 3 1983
MAXIMUM PEAK FLOW			18000	Feb 16	40200	May 4 1990
MAXIMUM PEAK STAGE			16.33	Feb 16	22.23	May 4 1990
ANNUAL RUNOFF (AC-FT)	444800		754600		788500	
10 PERCENT EXCEEDS	1950		2970		3120	
50 PERCENT EXCEEDS	168		298		265	
90 PERCENT EXCEEDS	.00		1.2		4.2	



07336200 KIAMICHI RIVER NEAR ANTLERS, OK

LOCATION.--Lat 34°14'55", long 95°36'18", in SW $^{1}/_{4}$ sec.35, T.3 S., R.16 E., Pushmataha County, Hydrologic Unit 11140105, on right bank, 50 ft downstream from bridge on U.S. Highway 271 and State Highway 2, 2.0 mi northeast of Antlers, 7.7 mi downstream from Tenmile Creek, 5.4 mi upstream from Cedar Creek and at mile 59.6.

DRAINAGE AREA.--1,138 mi^2.

PERIOD OF RECORD.--October 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 419.82 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Some regulation since December 1982 by Sardis Lake (station 07335775), located on Jackfork Creek, 42.0 miles upstream from station. Small diversion for municipal water supply for city of Antlers upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	118	2450	2730	3870	5780	2050	166	8090	1090	7.0	21
2	.99	196	1900	2410	3220	4400	1930	146	3860	538	7.2	15
3	.89	439	1680	2170	1780	5370	1850	130	3730	316	6.2	12
4	.83	327	1600	2090	1250	5340	981	117	3270	212	5.3	11
5	.73	519	1130	2180	1100	5360	521	113	1750	149	4.6	11
6	.99	7900	761	2950	987	4860	466	115	1120	107	4.3	16
7	.85	8240	313	3110	714	4530	417	110	2450	80	3.9	22
8	.75	4540	252	2950	545	3400	375	115	2770	63	3.1	21
9	.60	6360	225	2760	743	2920	336	99	1820	50	2.5	86
10	.46	3680	203	2560	2510	2800	306	85	1520	41	2.1	3930
11	.40	1980	185	1660	2160	2800	388	79	1480	34	2.7	1360
12	.32	1340	166	2150	1730	3150	1210	80	778	28	2.6	649
13	.27	1280	202	1700	2060	2720	1250	98	231	24	2.4	394
14	.24	1710	481	1350	4290	2000	1440	122	139	25	2.1	269
15	.31	1950	1210	1190	8320	1630	2380	167	151	23	1.7	201
16	.86	1610	1870	1050	27000	1430	2160	143	146	30	6.6	166
17	.83	1080	2440	1440	28000	1300	2000	107	111	42	6.6	131
18	.82	698	1680	3820	18300	1160	1760	157	92	38	6.8	123
19	.84	400	2070	3390	5940	1070	1550	221	83	28	5.0	217
20	1.0	325	2150	2350	5640	1010	912	122	78	21	4.3	1450
21	1.5	271	1980	1840	5250	956	536	4100	68	16	3.4	874
22	2.2	232	1190	1640	4900	910	467	7360	59	13	3.9	562
23	2.7	939	593	1500	3640	869	443	3790	53	11	9.7	393
24	2.5	7260	505	973	6160	952	371	4000	46	9.3	13	292
25	2.1	12200	586	691	8910	1940	468	4010	41	7.9	11	225
26	2.0	7870	10900	602	4550	1350	405	3710	36	7.1	19	438
27	4.2	3120	18300	531	3210	1100	307	3490	31	6.3	80	489
28	4.6	2800	7460	478	6450	1040	254	6020	36	5.4	134	438
29	11	3000	3880	2960	---	1510	219	5910	782	4.8	76	406
30	70	2690	3910	8520	---	1930	191	4640	853	4.7	45	382
31	150	---	3200	5470	---	2180	---	14900	---	5.9	31	---
TOTAL	266.88	85074	75472	71215	163229	77767	27943	64422	35674	3030.4	513.0	13604
MEAN	8.61	2836	2435	2297	5830	2509	931	2078	1189	97.8	16.5	453
MAX	150	12200	18300	8520	28000	5780	2380	14900	8090	1090	134	3930
MIN	.24	118	166	478	545	869	191	79	31	4.7	1.7	11
AC-FT	529	168700	149700	141300	323800	154300	55420	127800	70760	6010	1020	26980

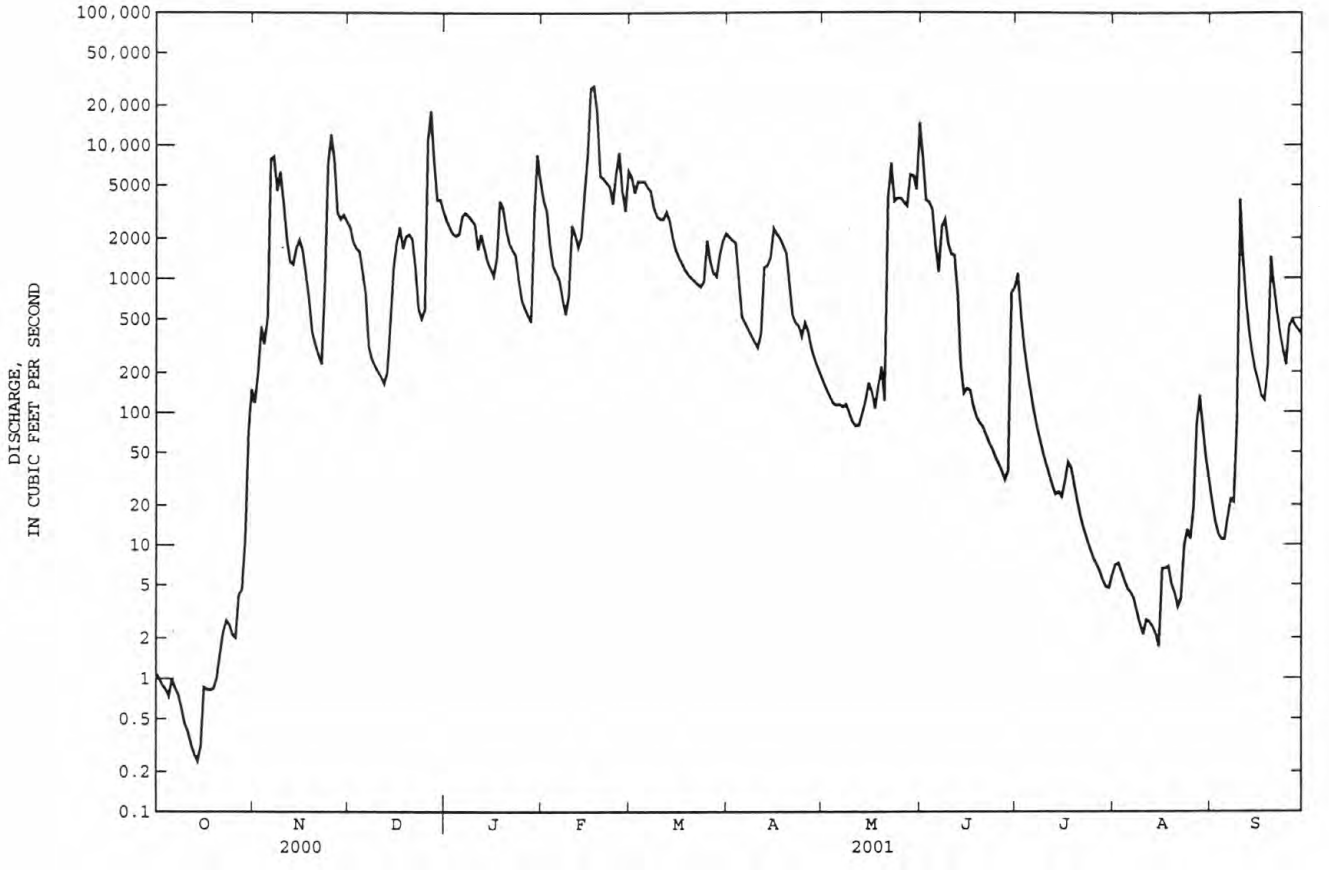
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

MEAN	1021	2331	2424	1951	2427	2639	2594	3009	1465	401	257	424
MAX	7763	8614	5288	7159	6316	5601	6400	12700	3784	1704	2017	2960
(WY)	1985	1997	1993	1998	1990	1990	1990	1990	1992	1992	1992	1992
MIN	2.37	5.19	7.84	154	154	853	456	77.9	21.5	10.1	.000	.16
(WY)	2000	1990	1990	1986	1996	2000	1987	1988	1988	1998	1998	2000

07336200 KIAMICHI RIVER NEAR ANTLERS, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1984 - 2001	
ANNUAL TOTAL	369149.96		618210.28			
ANNUAL MEAN	1009		1694		[a]1741	
HIGHEST ANNUAL MEAN					3184	1990
LOWEST ANNUAL MEAN					646	2000
HIGHEST DAILY MEAN	18300	Dec 27	28000	Feb 17	57000	May 4 1990
LOWEST DAILY MEAN	.00	Aug 29	.24	Oct 14	[b].00	at times
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 29	.37	Oct 9	.00	Jul 31 1998
MAXIMUM PEAK FLOW			32100	Feb 16	62300	May 3 1990
MAXIMUM PEAK STAGE			28.81	Feb 16	42.65	May 3 1990
ANNUAL RUNOFF (AC-FT)	732200		1226000		1261000	
10 PERCENT EXCEEDS	2860		4450		4780	
50 PERCENT EXCEEDS	330		489		425	
90 PERCENT EXCEEDS	.49		3.9		9.1	

[a]Prior to regulation by Sardis Lake, 1973-82, 1,484 ft^3/s.
[b]Prior to regulation by Sardis Lake, no flow many years.



07337900 GLOVER RIVER NEAR GLOVER, OK

LOCATION.--Lat 34°05'51", long 94°54'07", in NW $^1/_4$ NE $^1/_4$ sec.28, T.5 S., R.23 E., McCurtain County, Hydrologic Unit 11140107, on right downstream end of bridge on State Highways 3 and 7, 2.0 mi north of Glover, 11.0 mi northwest of Broken Bow, and at mile 9.2.

DRAINAGE AREA.--315 mi^2.

PERIOD OF RECORD.--October 1961 to current year. Prior to October 1990, published as Glover Creek near Glover.

GAGE.--Water-stage recorder. Datum of gage is 378.70 ft above sea level.

REMARKS.--Records good. 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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 6	0730	21,800	15.00	Feb 16	1330	35,100	19.31
Nov 24	0630	19,300	14.10	May 21	1330	10,500	10.38
Dec 26	2230	16,400	12.97				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	270	350	639	758	1190	256	96	1460	75	19	9.3
2	1.8	1680	289	506	576	1140	231	83	780	51	14	8.5
3	1.7	575	234	415	454	924	209	75	510	41	11	7.5
4	1.6	762	200	379	385	2000	192	66	359	32	9.1	6.8
5	1.5	808	177	386	329	1310	177	62	263	26	8.3	6.5
6	2.4	13600	162	424	279	884	161	67	203	21	7.5	7.5
7	2.1	2650	147	410	247	681	148	115	166	18	7.4	6.6
8	2.2	2080	131	368	225	533	139	426	140	15	6.2	11
9	2.3	2630	120	323	345	437	129	229	119	12	5.4	463
10	2.3	1120	110	288	629	363	118	155	102	11	5.3	608
11	2.3	657	103	396	502	348	136	122	88	9.7	7.7	259
12	2.4	557	93	644	444	3930	448	834	76	8.6	7.8	148
13	2.3	1020	115	562	1480	1720	414	650	68	7.8	7.5	97
14	2.2	648	188	546	3470	1040	389	382	61	7.1	6.5	67
15	2.2	450	359	499	5360	1340	2440	257	e57	6.7	5.8	50
16	3.1	348	878	438	22700	946	1320	185	e54	6.3	12	44
17	3.5	264	1320	746	4970	696	751	141	e51	6.0	12	35
18	4.3	199	907	1530	2120	546	514	122	e48	5.8	9.9	34
19	4.6	160	680	1200	1240	447	399	126	45	5.6	8.5	39
20	4.6	134	537	854	899	375	328	120	41	5.2	7.6	44
21	5.0	114	459	673	711	321	278	4170	34	5.0	6.8	44
22	5.4	98	372	542	588	276	234	2100	32	4.8	6.1	61
23	5.8	1520	327	448	485	242	245	879	30	4.5	5.6	54
24	6.3	11700	292	386	480	220	385	549	30	4.2	5.3	42
25	6.9	4810	312	335	1110	222	303	384	30	4.2	5.0	51
26	7.5	1990	9590	290	848	205	225	277	27	4.4	5.9	90
27	13	1090	7910	254	711	181	182	207	23	4.9	9.0	72
28	15	748	2800	225	877	175	151	1040	30	5.6	8.1	50
29	16	555	1580	1740	---	210	129	625	243	5.3	7.5	38
30	218	422	1030	2190	---	312	109	386	143	19	6.8	30
31	139	---	773	1120	---	289	---	2420	---	28	7.9	---
TOTAL	489.2	53659	32545	19756	53222	23503	11140	17350	5313	460.7	252.5	2483.7
MEAN	15.8	1789	1050	637	1901	758	371	560	177	14.9	8.15	82.8
MAX	218	13600	9590	2190	22700	3930	2440	4170	1460	75	19	608
MIN	1.5	98	93	225	225	175	109	62	23	4.2	5.0	6.5
AC-FT	970	106400	64550	39190	105600	46620	22100	34410	10540	914	501	4930
CFSM	.05	5.68	3.33	2.02	6.03	2.41	1.18	1.78	.56	.05	.03	.26
IN.	.06	6.34	3.84	2.33	6.29	2.78	1.32	2.05	.63	.05	.03	.29

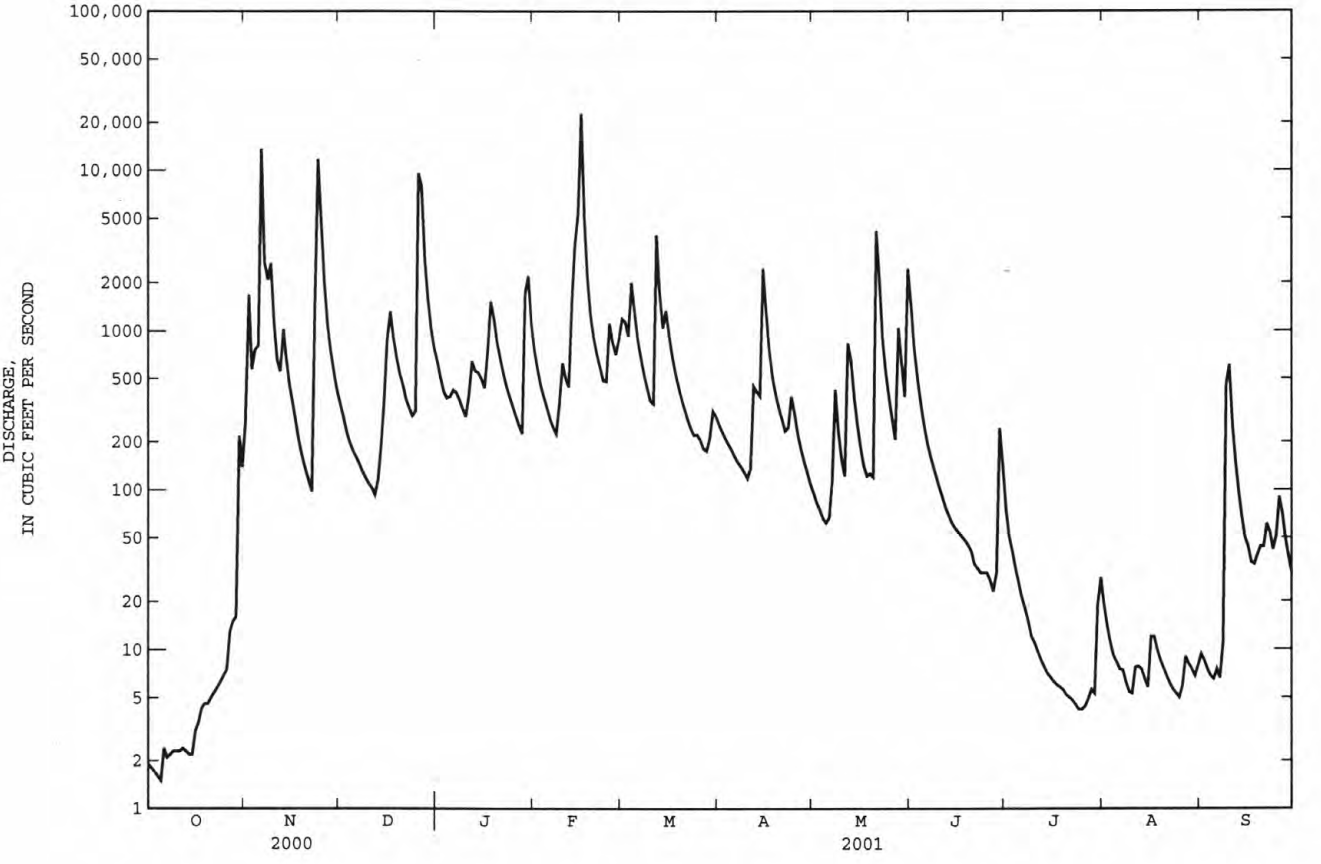
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2001, BY WATER YEAR (WY)

MEAN	387	601	738	507	699	824	696	844	358	90.5	68.4	212
MAX	2427	2615	3376	1556	1943	2506	2753	3503	1514	534	461	2690
(WY)	1985	1997	1972	1998	1997	1973	1991	1990	1973	1994	1992	1974
MIN	.000	.33	2.80	1.96	48.7	96.9	125	40.4	4.59	1.06	.000	.000
(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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1962 - 2001	
ANNUAL TOTAL	177134.76		220174.1			
ANNUAL MEAN	484		603		501	
HIGHEST ANNUAL MEAN					979	1973
LOWEST ANNUAL MEAN					169	1976
HIGHEST DAILY MEAN	13600	Nov 6	22700	Feb 16	53100	Dec 10 1971
LOWEST DAILY MEAN	.06	Sep 23	1.5	Oct 5	.00	at times
ANNUAL SEVEN-DAY MINIMUM	.08	Sep 17	1.9	Oct 1	.00	Aug 4 1970
MAXIMUM PEAK FLOW			35100	Feb 16	98600	Dec 10 1971
MAXIMUM PEAK STAGE			19.31	Feb 16	29.72	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	351300		436700		362900	
ANNUAL RUNOFF (CFSM)	1.54		1.91		1.59	
ANNUAL RUNOFF (INCHES)	20.92		26.00		21.61	
10 PERCENT EXCEEDS	1100		1190		1070	
50 PERCENT EXCEEDS	132		188		126	
90 PERCENT EXCEEDS	1.6		5.6		3.6	



07338500 LITTLE RIVER BELOW LUKFATA CREEK NEAR IDABEL, OK

LOCATION.--Lat 33°56'28", long 94°45'30", in SE $^1/_4$ SE $^1/_4$ sec.14, T.7 S., R.24 E., McCurtain County, Hydrologic Unit 11140107, on left bank at downstream side of bridge on U.S. Highway 70 just downstream from Lukfata Creek, 5.0 mi northeast of Idabel, and at mile 103.4.

DRAINAGE AREA.--1,226 mi^2.

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1211: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 312.08 ft above sea level. Oct. 1, 1946, to Oct. 26, 1950, and for stages below 9.0 ft Oct. 26, 1950, to Oct. 10, 1951, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records good. Flow regulated since June 1969 by Pine Creek Lake (station 07337300), 41.9 mi upstream. Small diversions for municipal use by City of Idabel at station and by Weyerhaeuser 41 miles above station. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in February 1938 reached a stage of 39.7 ft, from information provided by local resident, discharge, 86,000 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	340	4710	6550	5400	6370	684	248	5660	946	163	50
2	44	1510	4650	6470	5090	6110	607	222	5900	463	176	48
3	44	1650	4530	4460	3590	6130	550	205	6300	260	171	45
4	44	1090	4420	4030	1630	7180	511	192	6250	179	167	43
5	46	1320	4320	4830	1370	7810	472	185	4070	137	163	41
6	48	8020	4220	5420	1570	7590	437	195	695	114	161	40
7	52	10800	4140	5990	1690	6890	407	268	380	98	157	40
8	53	9730	4070	6100	1110	6530	386	659	341	86	156	42
9	48	7150	2730	6060	814	6650	366	1050	278	76	155	104
10	46	5400	1550	5560	1370	6840	339	872	226	71	141	566
11	46	4550	1470	4920	1510	7170	324	609	190	121	85	613
12	47	5300	987	4140	1340	8850	620	461	164	173	59	337
13	48	7100	708	2300	2970	10200	923	1200	144	171	55	212
14	49	7270	891	1680	8600	9840	1070	809	130	173	45	148
15	49	6820	1110	1530	8440	9080	3050	575	135	229	39	113
16	54	6350	1470	1350	12500	8060	4060	607	134	239	45	94
17	60	5150	2200	1630	18300	7060	3610	671	125	183	68	84
18	61	2960	2100	3590	19100	6290	3960	551	110	187	129	268
19	55	2270	2970	4590	13700	5810	3680	278	107	189	75	1030
20	52	2150	3800	4350	8340	5530	2900	238	100	187	57	1060
21	56	2070	2940	4100	3240	5970	1580	501	90	182	46	1080
22	60	2020	1450	3810	2430	6580	1020	4680	81	179	40	1080
23	63	2060	968	3560	2940	6730	988	3930	75	179	36	1080
24	62	10300	898	2690	1900	6760	1520	4310	71	190	35	1060
25	58	13300	867	1980	1980	6740	1900	3190	73	258	33	1040
26	57	11700	9310	1380	3240	6600	1780	836	73	274	41	1040
27	63	7010	15100	939	3630	5750	1050	534	68	266	72	1060
28	102	3610	15800	772	5590	3960	523	1020	82	189	98	607
29	101	3830	13100	1330	---	2880	339	2570	1160	156	67	171
30	102	4330	9010	4510	---	1480	283	1930	2050	153	50	90
31	437	---	6650	5300	---	798	---	3430	---	153	50	---
TOTAL	2152	157160	133139	115921	143384	200238	39939	37026	35262	6461	2835	13286
MEAN	69.4	5239	4295	3739	5121	6459	1331	1194	1175	208	91.5	443
MAX	437	13300	15800	6550	19100	10200	4060	4680	6300	946	176	1080
MIN	44	340	708	772	814	798	283	185	68	71	33	40
AC-FT	4270	311700	264100	229900	284400	397200	79220	73440	69940	12820	5620	26350

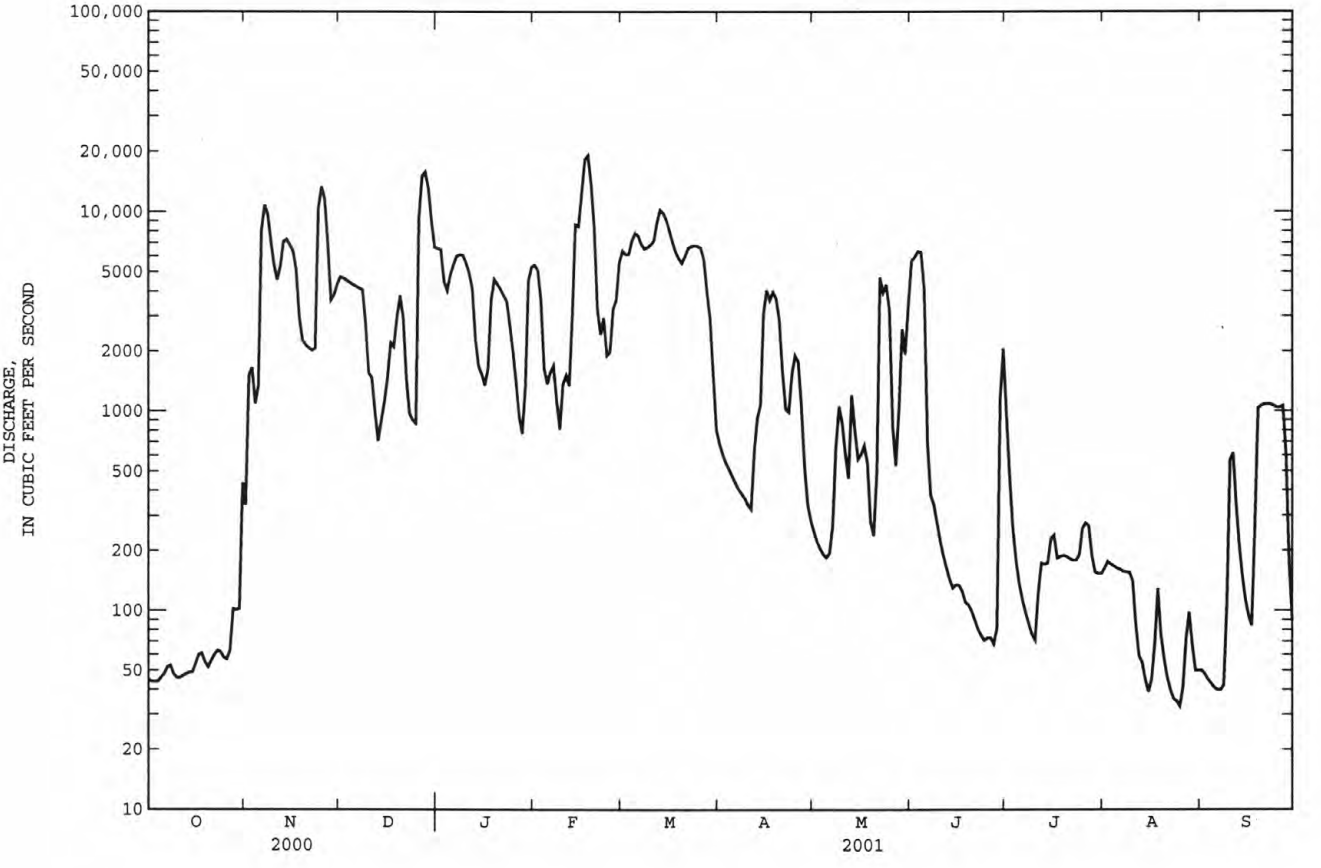
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2001, BY WATER YEAR (WY)

MEAN	1137	2394	2922	2142	2564	3062	2310	3031	1909	435	297	692
MAX	4453	8381	10320	7746	5513	7730	6187	8976	6044	2058	2299	6992
(WY)	1985	1997	1972	1998	1997	1973	1973	1990	1973	1992	1992	1974
MIN	26.4	38.2	37.3	157	176	209	380	143	46.9	31.0	18.5	25.0
(WY)	1979	1990	1990	1981	1976	1996	1987	1988	1972	1977	1972	1972

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

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1971 - 2001	
ANNUAL TOTAL	598832		886803			
ANNUAL MEAN	1636		2430		[a]1904	
HIGHEST ANNUAL MEAN					3424	1973
LOWEST ANNUAL MEAN					676	1976
HIGHEST DAILY MEAN	15800	Dec 28	19100	Feb 18	66800	Dec 11 1971
LOWEST DAILY MEAN	44	Aug 28	33	Aug 25	[b]7.8	Aug 14 1976
ANNUAL SEVEN-DAY MINIMUM	45	Aug 27	41	Aug 20	11	Oct 15 1972
MAXIMUM PEAK FLOW			20800	Feb 17	103000	Dec 10 1971
MAXIMUM PEAK STAGE			31.87	Feb 17	39.39	Dec 10 1971
ANNUAL RUNOFF (AC-FT)	1188000		1759000		1379000	
10 PERCENT EXCEEDS	4660		6750		6000	
50 PERCENT EXCEEDS	528		946		600	
90 PERCENT EXCEEDS	48		55		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 $^1/_4$ SW $^1/_4$ sec.13, T.1 S., R.25 E., McCurtain County, Hydrologic Unit 11140108, on right downstream abutment of bridge on Highway 4, .5 mi east of Smithville, 0.6 mi downstream from Rock Creek, 3.5 mi upstream from Big Eagle Creek, and at mi 55.6.

DRAINAGE AREA.--320 mi^2.

PERIOD OF RECORD.--October 1991 to current year.

REVISED RECORDS.--WDR OK-99-2: 1994(M); 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 664.70 ft above sea level.

REMARKS.--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:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov 6	0830	21,400	18.09	Feb 16	1200	31,000	22.62
Nov 24	0430	18,700	16.83	Sep 9	1000	13,700	14.66

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	91	397	731	857	1280	612	135	384	16	16	8.0
2	6.7	571	325	576	657	1180	518	124	254	18	18	7.5
3	5.8	399	274	480	537	1070	454	117	203	15	12	7.5
4	5.5	289	240	434	462	1860	397	109	166	13	9.0	7.3
5	5.4	696	216	440	398	1460	345	104	142	12	7.8	7.0
6	6.2	12400	198	431	352	1070	311	119	119	9.8	6.0	7.1
7	5.8	2540	184	405	321	821	281	144	106	8.2	5.4	8.0
8	5.3	1680	172	388	300	660	262	134	97	7.3	4.6	15
9	5.0	1760	161	371	559	574	239	113	85	6.6	3.8	4500
10	4.9	1040	152	344	808	477	219	101	74	6.0	8.6	822
11	4.5	693	144	447	638	515	359	143	61	5.5	256	400
12	4.2	603	137	539	572	2080	e511	193	49	5.0	254	261
13	4.0	1240	190	504	969	1530	e370	117	40	4.5	159	195
14	3.8	869	433	597	3990	1250	e2800	93	38	5.0	75	151
15	3.8	617	452	555	6580	2000	e2200	77	103	9.5	50	121
16	5.5	476	960	505	23100	1440	e1300	65	89	11	58	126
17	5.5	370	1230	902	5850	1030	1060	54	78	8.7	43	122
18	5.5	294	927	1350	2580	782	676	48	53	7.3	34	102
19	5.6	248	702	1170	1650	630	525	45	36	6.3	28	211
20	5.4	214	550	887	1210	522	432	50	28	5.5	23	201
21	5.7	189	472	722	945	441	372	197	23	4.8	19	153
22	6.4	172	386	597	758	381	313	346	19	4.3	17	119
23	9.5	1670	328	505	628	345	296	223	17	3.6	15	101
24	11	12300	295	440	910	806	294	206	15	3.0	13	91
25	11	5440	269	386	2360	706	239	181	14	2.8	12	75
26	11	2200	2080	343	1450	552	207	148	12	3.5	12	60
27	14	1290	4670	311	1160	468	188	121	11	8.2	13	49
28	13	891	2700	284	1220	484	170	686	11	20	11	42
29	44	651	1840	2060	---	846	157	633	11	12	9.9	37
30	60	489	1260	2120	---	864	145	530	13	7.2	8.9	32
31	70	---	920	1250	---	740	---	514	---	7.4	8.4	---
TOTAL	362.4	52382	23264	21074	61821	28864	16252	5870	2351	257.0	1210.4	8038.4
MEAN	11.7	1746	750	680	2208	931	542	189	78.4	8.29	39.0	268
MAX	70	12400	4670	2120	23100	2080	2800	686	384	20	256	4500
MIN	3.8	91	137	284	300	345	145	45	11	2.8	3.8	7.0
AC-FT	719	103900	46140	41800	122600	57250	32240	11640	4660	510	2400	15940

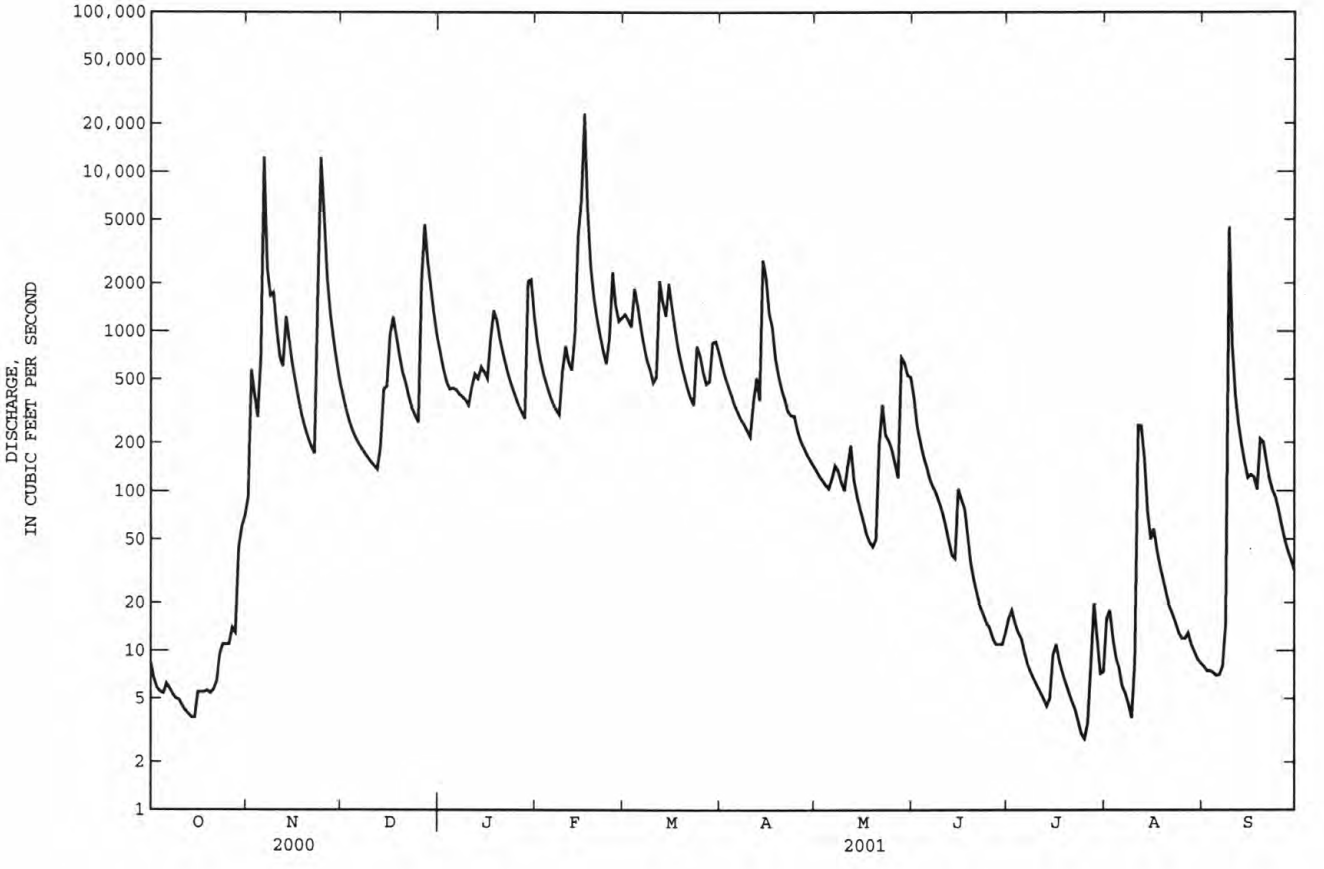
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	570	955	1092	811	841	798	619	669	497	169	47.8	229
MAX	1936	1814	1866	1417	2208	1268	1128	1397	1825	549	158	1525
(WY)	1999	1997	1992	1998	2001	1998	1999	1993	2000	1994	1996	1992
MIN	7.69	8.97	115	190	129	271	235	97.1	78.4	8.01	5.90	5.40
(WY)	2000	1996	1996	2000	1996	1996	1992	1997	2001	1998	2000	2000

e Estimated

07338750 MOUNTAIN FORK AT SMITHVILLE, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	222713.3		221746.2			
ANNUAL MEAN	609		608		607	
HIGHEST ANNUAL MEAN					821	1999
LOWEST ANNUAL MEAN					214	1996
HIGHEST DAILY MEAN	12400	Nov 6	23100	Feb 16	33700	Oct 6 1998
LOWEST DAILY MEAN	2.2	Aug 31	2.8	Jul 25	.12	Aug 31 1995
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 29	3.9	Jul 20	.70	Aug 29 1995
MAXIMUM PEAK FLOW			31000	Feb 16	46500	Oct 6 1998
MAXIMUM PEAK STAGE			22.62	Feb 16	30.40	Oct 6 1998
ANNUAL RUNOFF (AC-FT)	441800		439800		439500	
10 PERCENT EXCEEDS	1510		1250		1270	
50 PERCENT EXCEEDS	214		203		221	
90 PERCENT EXCEEDS	3.3		6.4		9.5	



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

LOCATION.--Lat 34°08'15", long 94°41'16", in SE $^1/_4$ NE $^1/_4$ sec.9, T.5 S., R.25 E., McCurtain County, Hydrologic Unit 11140108, on right upstream abutment of bridge on State Highway 259A, 1.0 mi below Broken Bow Dam, 8.0 mi northeast of Broken Bow, and at mile 17.5.

PERIOD OF RECORD.--June 1996 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1996 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 25.5°C Sept. 14, 1997; minimum, 0.3°C Jan. 27, 2000.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 24.9°C Oct. 5; minimum, 1.1°C Jan. 2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	23.5	21.1	22.2	21.9	21.0	21.5	11.7	9.0	10.3	3.2	1.4	2.1
2	23.9	21.2	22.4	21.1	20.2	20.7	9.1	7.6	8.6	3.4	1.1	2.1
3	24.1	22.3	23.0	20.7	19.9	20.4	8.6	6.5	7.4	3.5	1.6	2.3
4	24.5	22.3	23.3	20.0	18.8	19.3	8.0	5.5	6.5	4.6	1.6	2.7
5	24.9	22.8	23.7	18.8	17.6	18.4	8.9	5.5	6.9	5.6	2.5	3.7
6	23.6	21.4	22.6	18.5	17.3	17.9	9.0	7.5	8.0	7.5	3.4	5.0
7	21.4	19.0	20.2	17.3	15.8	16.6	9.5	6.2	7.7	7.9	5.7	6.5
8	19.0	17.5	18.3	15.8	14.3	15.4	9.8	6.8	8.1	7.7	4.6	5.9
9	18.8	16.6	17.6	14.3	12.2	12.9	8.6	7.1	7.9	7.3	4.5	5.6
10	18.9	16.6	17.8	13.0	11.5	12.2	10.5	8.1	9.3	5.8	4.2	5.0
11	18.7	17.1	17.9	12.2	11.6	11.9	11.5	6.4	9.7	5.6	4.6	5.1
12	19.7	17.3	18.4	11.8	11.3	11.5	6.8	5.1	5.8	6.3	5.1	5.6
13	19.7	18.7	19.1	12.0	10.5	11.2	5.2	2.0	3.8	5.9	5.6	5.7
14	20.6	19.1	19.8	11.4	9.8	10.6	4.8	3.4	4.1	8.7	5.8	6.7
15	20.1	19.7	19.9	10.9	9.8	10.4	4.9	4.1	4.5	8.6	5.2	6.7
16	22.0	20.0	21.0	11.3	10.4	10.8	5.8	3.0	4.8	7.1	6.3	6.8
17	21.6	20.2	20.9	10.9	9.4	10.0	4.8	2.0	3.1	6.5	5.9	6.2
18	21.9	20.0	20.8	9.6	8.7	9.2	5.6	3.0	3.9	6.6	5.7	6.0
19	22.1	19.7	20.8	10.2	8.1	9.2	4.2	1.8	2.7	6.5	3.3	5.2
20	21.3	19.6	20.1	9.4	8.4	8.9	5.0	1.7	3.3	5.8	2.2	3.7
21	20.0	19.4	19.8	9.5	7.2	8.3	4.7	2.4	3.3	5.0	3.0	3.9
22	20.3	19.3	19.7	10.1	7.0	8.6	4.4	2.0	2.9	6.9	3.2	4.8
23	20.8	19.7	20.1	12.3	9.4	10.3	3.4	2.3	3.0	7.2	4.4	5.5
24	21.4	20.3	20.8	12.9	12.2	12.5	5.5	2.4	3.6	8.9	5.5	6.8
25	21.9	20.6	21.1	12.9	11.1	11.9	4.0	2.7	3.4	9.2	5.5	6.9
26	21.5	20.6	21.1	12.1	9.9	10.8	7.1	3.2	5.9	10.6	6.9	8.1
27	22.5	20.8	21.5	12.0	8.9	10.4	7.1	6.4	6.8	8.4	6.6	7.4
28	22.4	21.1	21.7	12.2	9.2	10.6	7.8	5.7	6.7	8.4	6.8	7.4
29	21.9	21.2	21.4	11.8	9.6	10.5	5.9	3.8	4.8	10.2	8.2	9.0
30	22.1	21.1	21.5	11.0	8.7	9.7	4.7	2.5	3.2	10.7	7.3	8.7
31	22.4	21.6	21.9	---	---	---	2.8	1.6	2.2	10.0	6.9	8.0
MONTH	24.9	16.6	20.7	21.9	7.0	12.8	11.7	1.6	5.6	10.7	1.1	5.6

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9.4	5.6	7.2	9.9	9.3	9.5	13.8	11.7	12.7	23.0	20.9	22.0
2	8.6	4.7	6.4	11.7	9.1	10.2	14.3	13.7	14.0	22.7	21.2	21.9
3	8.9	4.4	6.4	11.3	10.3	10.7	16.3	14.3	14.9	23.0	21.3	22.1
4	8.6	5.2	6.6	12.7	9.1	10.6	17.3	15.9	16.3	22.9	21.9	22.4
5	9.7	5.2	7.2	13.5	8.5	10.8	17.6	17.2	17.4	22.6	21.4	22.0
6	10.7	6.2	8.0	15.7	9.7	12.0	18.6	17.2	17.8	22.5	21.0	21.7
7	11.0	8.7	9.7	16.6	10.3	13.2	18.8	18.2	18.4	23.3	19.8	20.9
8	11.8	10.4	11.0	14.7	12.7	13.2	19.4	17.9	18.5	19.8	18.2	18.8
9	12.7	8.1	10.7	13.7	11.7	12.7	20.5	18.6	19.4	20.6	19.1	19.9
10	10.2	6.1	8.0	13.6	11.4	12.5	19.9	19.1	19.5	22.0	20.3	21.0
11	7.7	5.9	6.7	12.8	12.1	12.4	19.9	18.9	19.5	23.4	20.8	21.9
12	6.6	5.8	6.0	14.1	11.5	12.6	19.0	17.5	18.1	22.8	21.3	22.1
13	9.3	6.2	7.5	15.2	11.9	13.3	19.1	17.4	18.2	23.4	21.7	22.4
14	11.4	9.3	10.3	14.2	12.6	13.2	19.1	17.2	18.3	23.4	21.7	22.8
15	11.6	11.0	11.3	13.4	11.8	12.6	18.7	16.7	17.5	22.9	20.3	21.4
16	11.4	8.5	10.3	13.0	10.6	11.8	19.0	16.6	17.9	20.6	18.3	19.4
17	9.8	6.9	8.1	13.1	10.8	11.9	18.9	16.6	17.7	19.7	18.6	19.1
18	10.0	5.7	7.5	12.4	11.5	11.9	18.1	15.4	16.9	19.3	17.1	18.1
19	11.2	5.9	8.3	12.5	11.0	11.7	17.8	16.8	17.2	17.9	15.9	16.9
20	11.8	8.9	10.2	13.4	10.7	12.1	17.3	16.8	17.1	18.9	17.2	17.9
21	11.9	10.2	11.0	13.7	11.1	12.4	18.9	16.8	17.6	17.8	15.6	16.5
22	11.5	9.0	9.9	15.3	12.4	13.7	19.1	17.7	18.5	18.4	15.4	16.6
23	9.8	8.9	9.3	16.5	14.7	15.5	20.1	18.7	19.1	19.2	15.8	17.3
24	12.3	8.9	10.2	16.6	14.8	15.9	20.0	17.4	18.6	19.6	17.0	18.0
25	13.1	9.2	10.9	15.2	13.3	14.2	20.5	17.4	18.9	19.7	16.8	18.0
26	13.4	10.5	11.8	14.0	12.2	13.1	21.3	18.2	19.8	19.7	16.7	17.9
27	11.9	10.7	11.4	12.2	11.5	11.9	21.3	19.1	20.1	19.7	17.1	18.3
28	10.7	9.7	10.3	11.5	10.6	11.0	21.7	19.6	20.7	19.4	17.8	18.6
29	---	---	---	10.8	10.4	10.5	22.5	20.2	21.3	19.7	17.6	19.1
30	---	---	---	11.4	10.3	10.7	22.6	20.4	21.6	17.6	16.5	17.0
31	---	---	---	13.4	10.4	11.8	---	---	---	17.2	16.0	16.5
MONTH	13.4	4.4	9.0	16.6	8.5	12.2	22.6	11.7	18.1	23.4	15.4	19.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.5	15.9	17.0	18.8	17.3	17.9	20.1	19.2	19.5	19.6	18.1	18.6
2	20.6	17.8	19.0	19.5	17.8	18.6	20.4	19.3	19.8	19.9	18.7	19.2
3	20.9	18.6	19.4	20.4	18.1	18.9	20.5	19.6	20.0	21.0	19.0	19.9
4	20.8	18.7	19.5	20.8	18.6	19.3	20.5	19.5	20.0	20.8	19.2	20.1
5	20.5	18.9	19.5	19.5	18.3	18.9	20.7	19.5	20.0	20.3	19.2	19.6
6	19.4	17.5	18.4	19.9	17.7	18.7	20.2	18.4	19.5	21.0	19.6	20.0
7	17.5	16.4	17.0	20.1	18.5	19.2	19.7	18.3	18.9	21.1	19.8	20.4
8	18.8	16.7	17.7	20.3	18.6	19.4	20.7	19.5	20.0	20.5	19.3	20.0
9	19.9	18.3	19.0	19.9	18.7	19.3	21.4	19.7	20.4	20.6	19.2	19.7
10	20.6	18.9	19.6	19.9	18.5	19.1	21.5	20.1	20.6	20.9	19.3	19.9
11	20.5	18.9	19.7	20.4	18.7	19.4	21.6	19.9	20.8	21.0	19.1	19.8
12	19.6	18.6	19.1	20.8	18.9	19.6	21.3	19.2	20.4	20.2	18.7	19.3
13	19.1	18.2	18.6	19.6	18.2	19.1	20.6	19.0	19.6	20.1	18.9	19.5
14	19.0	17.9	18.3	18.3	16.7	17.8	21.0	19.9	20.4	20.4	19.2	19.8
15	19.2	17.6	18.3	18.2	16.1	17.0	21.0	19.6	20.1	19.7	18.7	19.2
16	19.5	17.8	18.6	19.1	17.6	18.3	20.3	19.1	19.6	19.4	18.7	18.9
17	19.6	17.9	18.6	20.3	18.3	19.1	19.3	17.7	18.8	20.3	18.5	19.3
18	19.8	18.3	18.9	19.9	18.8	19.3	19.6	17.5	18.3	19.8	18.7	19.5
19	19.8	18.4	19.0	20.1	18.6	19.1	21.0	18.8	19.6	20.9	18.6	19.6
20	19.2	17.9	18.5	19.7	18.4	19.0	21.1	20.0	20.4	20.4	18.4	19.8
21	18.9	16.6	18.0	20.1	18.9	19.5	21.5	20.1	20.6	18.8	17.9	18.3
22	18.5	16.3	17.2	20.5	19.1	19.8	21.5	20.1	20.6	20.7	18.5	19.5
23	19.5	17.6	18.4	20.3	19.6	20.0	21.5	20.2	20.6	21.1	19.9	20.4
24	19.4	17.9	18.5	20.2	18.6	19.5	21.3	20.1	20.5	21.0	19.6	20.1
25	19.4	17.9	18.5	20.3	18.3	19.0	21.6	20.1	20.6	22.3	20.0	21.0
26	19.4	18.0	18.5	19.9	18.5	19.1	21.3	19.3	20.3	20.8	18.8	19.6
27	19.0	17.5	18.1	19.7	18.5	19.1	19.5	18.2	19.1	19.9	18.0	18.9
28	18.2	16.0	17.5	20.0	18.3	19.3	20.3	18.0	18.9	20.1	18.5	19.3
29	16.6	15.4	15.9	20.8	18.1	19.2	20.3	19.1	19.7	20.7	18.9	19.6
30	18.3	15.9	16.9	20.4	19.3	19.8	19.3	18.4	19.0	20.9	18.7	19.6
31	---	---	---	20.5	18.9	19.6	18.9	18.3	18.4	---	---	---
MONTH	20.9	15.4	18.4	20.8	16.1	19.1	21.6	17.5	19.8	22.3	17.9	19.6
YEAR	24.9	1.1	15.1									

07338960 MOUNTAIN FORK AT PRESBYTERIAN FALLS NEAR EAGLETOWN, OK

LOCATION.--Lat 34°04'21", long 94°37'42", in NE $^{1}/_{4}$ NW $^{1}/_{4}$ sec.31, T.5 S., R.26 E., McCurtain County, Hydrologic Unit 11140108, on right downstream bank, 4.0 mi northwest of Eagletown, 9.7 mi downstream from Broken Bow Dam, and at mile 11.3.

PERIOD OF RECORD.--July 1996 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1996 to current year.

EXTREMES FOR PERIOD OF RECORD.--
WATER TEMPERATURE: Maximum 27.0°C July 25, 26, 27, 1998; minimum 2.9°C Jan. 1, 2001.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 24.1°C Aug. 24; minimum 2.9°C Jan. 1.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.9	18.6	19.3	18.9	17.7	18.1	11.3	10.8	11.1	5.0	2.9	4.1
2	20.8	18.6	19.3	18.7	16.8	17.8	11.2	10.7	10.9	5.4	2.9	4.3
3	20.7	18.8	19.4	17.3	16.6	17.0	10.7	10.4	10.5	6.2	4.6	5.6
4	21.5	18.8	19.8	17.2	16.3	16.6	10.6	9.7	10.3	6.4	5.3	5.8
5	21.2	18.9	19.9	16.3	15.5	16.0	10.6	9.9	10.2	6.4	5.7	6.0
6	20.2	18.4	19.5	16.5	15.5	15.8	10.4	9.9	10.2	6.7	5.8	6.1
7	18.4	17.5	17.9	15.5	14.2	14.9	10.5	9.7	9.9	7.3	5.9	6.5
8	18.1	16.5	17.2	14.3	13.3	13.9	10.2	9.7	9.9	6.6	5.3	6.0
9	17.4	15.7	16.4	13.9	12.6	13.2	10.2	9.5	9.8	6.3	5.8	6.0
10	17.5	14.9	15.8	13.5	11.6	12.5	10.4	9.3	9.8	6.0	5.7	5.8
11	16.1	14.6	15.2	11.7	10.5	11.1	11.9	8.9	9.7	5.9	5.7	5.8
12	17.4	14.6	15.5	10.7	10.3	10.5	9.1	8.5	8.8	5.9	5.7	5.8
13	17.5	15.0	16.0	11.9	9.4	10.4	9.0	8.3	8.5	6.0	5.5	5.7
14	18.5	16.1	17.1	11.4	9.6	10.5	8.3	7.6	7.9	6.2	5.6	5.8
15	18.4	14.6	17.0	10.8	9.6	10.2	7.9	7.4	7.7	6.3	5.7	6.0
16	18.3	16.4	17.3	13.0	10.0	11.7	7.7	6.4	7.3	6.4	6.0	6.1
17	20.1	16.6	17.9	12.5	11.6	12.0	7.0	5.5	6.2	6.1	5.8	5.9
18	19.5	16.3	17.7	11.8	10.4	11.3	6.6	5.3	5.8	5.9	5.5	5.8
19	19.7	16.6	18.1	11.5	9.7	10.6	7.6	5.6	7.2	6.0	5.4	5.7
20	18.4	16.0	17.3	10.9	9.5	10.2	7.7	6.9	7.3	5.6	4.9	5.3
21	17.7	17.1	17.4	10.6	9.3	10.0	7.6	6.7	7.2	5.5	5.0	5.3
22	18.1	16.7	17.3	11.0	9.8	10.5	7.3	6.4	6.8	5.7	5.2	5.4
23	19.2	16.9	17.8	11.1	10.6	10.8	6.7	6.4	6.5	5.7	5.2	5.4
24	19.5	16.8	18.0	11.2	10.7	10.8	7.1	6.0	6.5	6.0	5.1	5.7
25	19.2	16.8	18.0	11.6	9.8	10.8	6.4	4.6	5.2	6.0	5.6	5.8
26	19.0	17.1	18.1	11.9	10.4	10.9	5.5	4.7	5.2	6.4	5.6	5.9
27	19.9	17.7	18.6	11.9	10.0	10.6	6.1	4.5	5.6	6.2	5.4	5.8
28	20.3	17.4	18.6	11.5	11.0	11.3	7.4	4.6	6.2	6.4	5.8	6.0
29	18.9	17.5	18.1	11.7	10.9	11.4	6.3	5.1	5.9	7.4	6.3	6.9
30	19.4	17.8	18.5	11.4	9.8	11.2	5.5	4.3	4.9	8.2	5.7	6.7
31	18.9	17.7	18.4	---	---	---	5.0	3.6	4.1	6.5	5.3	5.7
MONTH	21.5	14.6	17.8	18.9	9.3	12.4	11.9	3.6	7.8	8.2	2.9	5.8

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.3	5.2	5.9	8.2	7.6	7.9	12.6	9.5	10.9	16.1	13.8	14.8
2	6.3	5.2	6.0	8.3	7.4	7.9	11.7	10.1	10.7	17.4	13.5	14.8
3	7.3	5.2	6.2	8.0	7.6	7.8	10.4	9.6	10.0	17.4	13.4	15.8
4	7.3	5.1	6.0	8.8	7.8	8.2	10.9	9.6	10.2	17.1	14.1	16.0
5	6.6	5.2	5.9	10.5	7.9	9.0	10.9	10.1	10.6	16.4	14.3	15.2
6	7.3	6.0	6.4	9.7	8.5	9.0	11.1	10.1	10.4	16.5	14.0	15.1
7	6.8	6.1	6.5	9.4	8.5	8.8	11.3	10.1	10.9	18.2	14.0	15.7
8	7.0	6.6	6.8	8.8	7.8	8.4	13.5	10.0	11.4	19.6	17.2	18.3
9	7.0	6.3	6.7	9.4	8.4	8.9	14.6	10.2	12.1	20.4	17.0	18.6
10	6.4	5.3	5.9	9.0	8.2	8.5	15.1	11.3	13.8	20.7	15.8	17.5
11	6.2	5.6	5.9	8.2	7.4	7.9	14.0	10.3	11.7	19.4	16.3	17.7
12	6.0	5.7	5.8	9.7	7.8	8.7	12.9	10.9	11.5	19.9	15.4	17.3
13	6.5	5.8	6.0	12.3	8.8	10.3	14.2	11.5	12.4	19.8	14.8	17.3
14	7.9	6.2	6.9	10.8	8.5	8.9	13.0	11.7	12.7	20.3	15.3	17.5
15	8.5	6.5	7.3	10.2	8.6	9.3	16.7	12.1	14.0	23.3	19.4	20.9
16	9.9	7.1	9.0	9.5	8.4	9.0	17.4	12.6	14.4	20.2	15.9	18.4
17	10.4	8.7	9.3	9.6	9.0	9.2	15.2	12.8	13.8	18.2	15.5	17.1
18	10.1	8.1	8.9	9.1	8.7	8.8	14.9	13.8	14.5	18.2	15.5	17.0
19	10.1	7.3	8.6	9.4	8.6	9.0	13.8	12.6	12.9	18.1	16.0	16.9
20	9.8	8.1	8.9	10.0	9.0	9.5	12.7	11.7	12.0	19.4	16.2	17.6
21	9.5	8.5	8.9	10.3	9.3	9.7	14.2	11.7	12.7	17.9	15.7	16.4
22	9.5	6.9	8.1	10.9	9.1	9.7	16.0	12.1	13.7	21.2	15.9	18.1
23	7.0	6.7	6.8	10.2	9.0	9.5	16.2	13.5	14.7	21.3	16.4	18.6
24	7.1	6.5	6.7	11.0	9.1	9.8	16.0	13.5	14.6	21.2	16.8	18.8
25	8.0	6.2	7.2	11.0	10.4	10.7	17.7	13.8	15.4	22.5	19.1	20.6
26	8.0	7.5	7.8	10.7	10.1	10.5	16.8	14.4	15.5	22.4	17.9	19.9
27	7.7	7.2	7.3	10.1	9.4	9.7	16.6	14.2	15.1	23.2	18.1	20.3
28	7.8	7.4	7.7	9.6	8.9	9.1	15.5	13.5	14.7	23.7	19.0	21.2
29	---	---	---	9.4	8.9	9.1	18.1	13.1	15.2	24.0	19.8	21.8
30	---	---	---	9.9	9.1	9.5	18.5	12.9	15.5	19.8	17.7	19.1
31	---	---	---	11.4	9.5	10.3	---	---	---	20.1	16.7	18.9
MONTH	10.4	5.1	7.1	12.3	7.4	9.1	18.5	9.5	12.9	24.0	13.4	17.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.2	15.9	17.0	---	---	---	---	---	---	21.1	18.5	19.9
2	18.6	15.8	16.9	---	---	---	---	---	---	21.6	18.5	20.1
3	19.9	16.0	17.5	---	---	---	---	---	---	22.6	19.2	20.6
4	19.7	15.3	17.1	---	---	---	---	---	---	22.3	19.7	20.8
5	20.6	17.4	18.6	---	---	---	---	---	---	22.8	19.9	21.2
6	18.4	16.9	17.4	---	---	---	---	---	---	22.7	19.5	20.8
7	19.9	17.4	18.5	---	---	---	---	---	---	22.1	19.6	20.9
8	23.1	19.0	20.6	---	---	---	---	---	---	21.2	19.9	20.4
9	23.2	20.1	21.2	---	---	---	---	---	---	21.7	20.3	21.0
10	23.1	19.7	21.4	---	---	---	---	---	---	22.8	19.7	20.8
11	22.7	17.1	19.5	---	---	---	---	---	---	22.6	19.6	20.8
12	---	---	---	---	---	---	---	---	---	22.9	19.7	20.8
13	---	---	---	---	---	---	---	---	---	22.9	20.7	21.6
14	---	---	---	---	---	---	---	---	---	23.2	21.6	22.1
15	---	---	---	---	---	---	---	---	---	22.2	21.1	21.5
16	---	---	---	---	---	---	---	---	---	22.1	20.9	21.5
17	---	---	---	---	---	---	---	---	---	22.5	20.2	21.1
18	---	---	---	---	---	---	21.4	19.4	20.1	21.4	20.4	20.9
19	---	---	---	---	---	---	21.8	18.5	19.6	22.2	19.7	21.0
20	---	---	---	---	---	---	23.1	19.7	21.1	21.1	20.5	20.8
21	---	---	---	---	---	---	23.4	19.7	21.3	21.2	20.3	20.6
22	---	---	---	---	---	---	23.7	19.9	21.4	22.5	20.6	21.3
23	---	---	---	---	---	---	23.9	20.3	21.8	23.4	21.1	22.0
24	---	---	---	---	---	---	24.1	20.6	22.1	22.6	20.9	21.6
25	---	---	---	---	---	---	24.0	20.3	22.1	22.3	19.8	20.9
26	---	---	---	---	---	---	23.9	20.3	21.9	21.7	18.7	20.0
27	---	---	---	---	---	---	22.4	21.2	21.8	21.7	18.8	20.1
28	---	---	---	---	---	---	22.4	19.9	20.9	21.0	17.2	18.8
29	---	---	---	---	---	---	21.8	19.3	20.5	20.9	18.6	19.5
30	---	---	---	---	---	---	21.2	19.3	20.4	20.9	18.2	19.4
31	---	---	---	---	---	---	20.0	18.5	19.4	---	---	---
MONTH	23.2	15.3	18.7	---	---	---	24.1	18.5	21.0	23.4	17.2	20.8
YEAR	24.1	2.9	13.1									

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK

LOCATION.--Lat 34°02'30", long 94°37'11", in SE $^1/_4$ SE $^1/_4$ sec.7, T.6 S., R.26 E., McCurtain County, Hydrologic Unit 11140108, on right downstream bank on U.S. Highway 70, 2.0 mi west of Eagletown, 10.7 mi downstream from Broken Bow Dam, and at mile 8.9.

DRAINAGE AREA.--787 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1924 to December 1925, October 1929 to current year. Published as Mountain Fork River near Broken Bow 1924-25 and as Mountain Fork River near Eagletown 1929-60. Monthly discharge only for some periods, pub- lished in WSP 1311.

REVISED RECORDS.--WSP 1211: Drainage area. WSP 1241: 1924-26, 1930 (M), 1936-37 (M), 1938, 1939 (M) 1942 (M).

GAGE.--Water-stage recorder. Datum of gage is 333.87 ft above sea level. See WSP 1920 for history of changes prior to July 23, 1950.

REMARKS.--No estimated daily discharge. Records good. Flow completely regulated except for 33 mi^2 intervening area, since October 1968 by Broken Bow Lake (station 07338900). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 18-19, 1915, reached a stage of 26.4 ft, from information provided by local resident, discharge, 92,500 ft^3/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	607	123	5730	509	3100	1320	225	1080	2030	308	1670	375
2	897	154	5710	1100	3120	6750	1210	325	1220	288	1060	274
3	757	213	5620	5500	1230	7270	2960	711	213	321	588	288
4	633	281	5780	5140	188	4980	4030	847	245	312	361	287
5	794	214	3600	5430	953	532	3650	725	217	531	308	384
6	653	2580	3450	1710	1300	858	2640	174	148	1010	1130	357
7	330	379	3580	223	1430	3280	1410	190	144	1170	1620	931
8	297	429	4400	2970	1790	7090	213	542	143	1030	1870	1110
9	334	336	2240	5140	1320	7120	184	438	193	992	2030	590
10	305	205	411	5240	1660	7150	777	366	230	1580	1490	360
11	303	243	934	5460	1080	7250	1560	568	205	2030	863	313
12	303	227	3570	5690	1830	2170	1070	212	483	1180	298	1120
13	301	425	1720	3010	3220	691	648	191	709	454	284	2330
14	274	567	1120	1920	2760	2310	502	160	583	355	318	1740
15	143	286	886	2540	940	1580	382	497	447	275	319	711
16	140	1520	651	3260	4180	3110	1920	1030	368	456	354	288
17	178	813	349	3140	903	5360	3200	919	603	1430	331	738
18	139	449	556	2630	334	7200	3430	756	821	2180	530	1490
19	189	146	4220	2930	205	7190	3020	634	889	2810	604	1080
20	152	159	3230	2060	157	7220	2310	176	993	2600	358	1530
21	286	677	2370	1710	241	7250	834	171	633	2010	349	1650
22	142	827	1490	2550	3920	7300	188	184	740	2200	309	1010
23	137	1740	1440	3410	7050	7310	1050	142	787	2800	317	313
24	138	2980	226	2280	4820	7350	1040	144	383	1730	305	317
25	134	999	128	3280	2520	7360	360	184	607	396	305	300
26	138	612	3130	2280	7180	7390	1010	136	847	320	265	258
27	132	859	2280	593	7400	7270	1160	145	918	407	380	385
28	133	4330	1750	561	4760	4730	872	517	368	303	773	227
29	132	3870	415	420	---	5220	188	540	359	268	518	391
30	125	4150	202	2290	---	2600	494	587	416	280	459	311
31	126	---	146	3680	---	1480	---	1110	---	706	301	---
TOTAL	9352	30793	71334	88656	69591	155691	42537	14401	16942	32732	20667	21458
MEAN	302	1026	2301	2860	2485	5022	1418	465	565	1056	667	715
MAX	897	4330	5780	5690	7400	7390	4030	1110	2030	2810	2030	2330
MIN	125	123	128	223	157	532	184	136	143	268	265	227
AC-FT	18550	61080	141500	175800	138000	308800	84370	28560	33600	64920	40990	42560

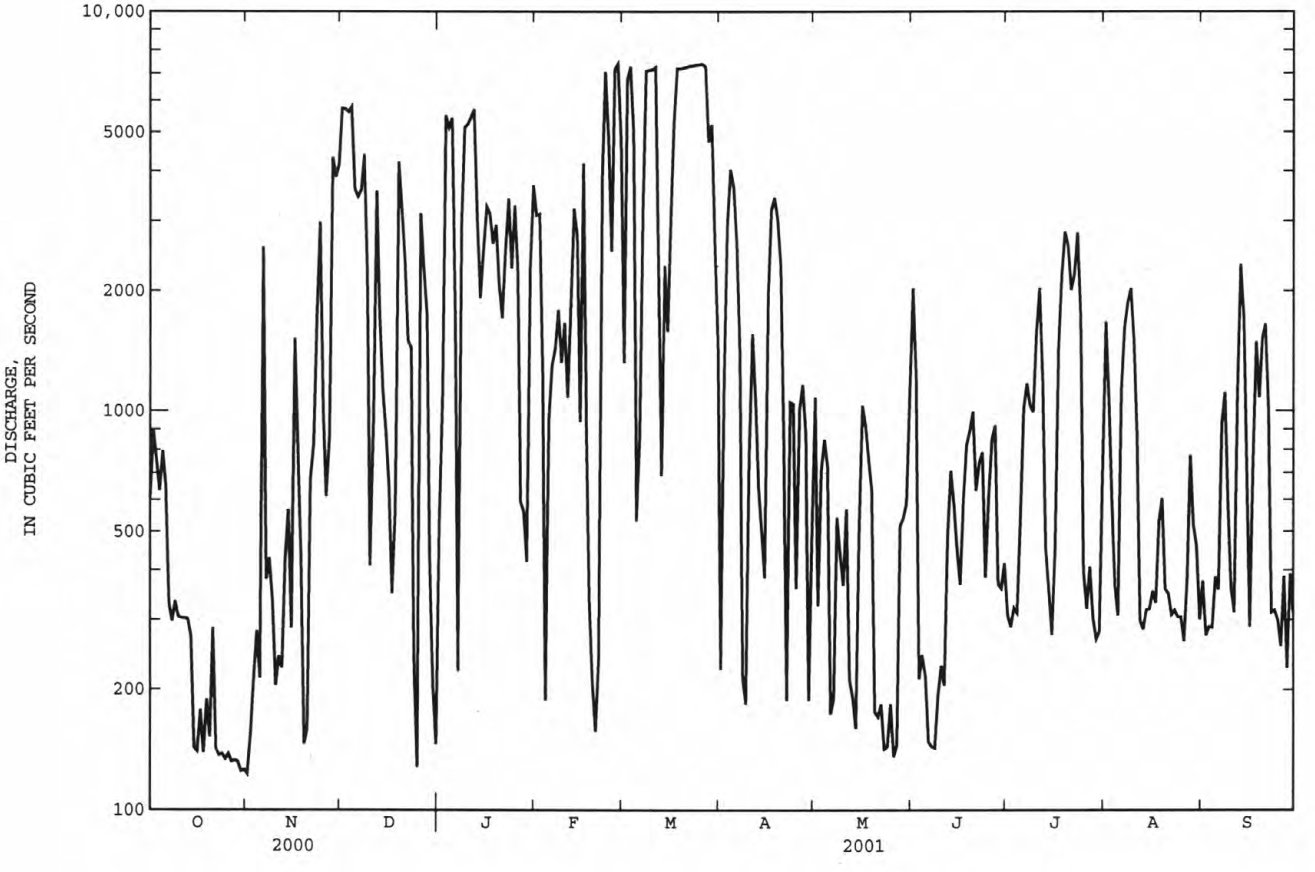
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

MEAN	677	1260	2057	1778	1824	2243	2027	2054	1596	986	767	629
MAX	2638	6897	5286	5121	4159	5623	4976	7264	6061	3371	1515	2300
(WY)	1994	1985	1997	1988	1989	1997	1979	1991	1990	1999	1983	1992
MIN	136	110	154	166	292	348	306	357	219	155	238	155
(WY)	1989	1996	1990	2000	1981	1996	1980	1988	1988	1988	1985	1989

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1970 - 2001	
ANNUAL TOTAL	414047		574154			
ANNUAL MEAN	1131		1573		[a]1490	
HIGHEST ANNUAL MEAN					2468	1973
LOWEST ANNUAL MEAN					450	1996
HIGHEST DAILY MEAN	7680	Jun 28	7400	Feb 27	11500	May 19 1991
LOWEST DAILY MEAN	94	May 1	123	Nov 1	[b]16	Dec 12 1971
ANNUAL SEVEN-DAY MINIMUM	129	Jan 25	130	Oct 26	68	Jan 12 1996
MAXIMUM PEAK FLOW			8250	Feb 27	[c]18200	Jun 2 1990
MAXIMUM PEAK STAGE			7.68	Feb 27	[d]11.58	Jun 2 1990
ANNUAL RUNOFF (AC-FT)	821300		1139000		1080000	
10 PERCENT EXCEEDS	3250		4530		4080	
50 PERCENT EXCEEDS	611		740		692	
90 PERCENT EXCEEDS	135		186		157	

[a]Prior to regulation by Broken Bow Lake, 1925, 1930-68, 1,291 ft^3/s.
[b]No flow in several years prior to regulation by Broken Bow Lake.
[c]Maximum discharge for period of record, 101,000 ft^3/s May 20, 1960, from rating curve extended above 65,000 ft^3/s.
[d]Maximum gage-height for period of record, 26.73 ft May 20, 1960.



07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948, 1955, 1961-1963, October 1992 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1947 to September 1948, November 1960 to September 1963.
WATER TEMPERATURE: October 1947 to September 1948, March to September 1955, November 1960 to September 1963, October 1992 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 128 microsiemens Nov. 19, 1947; minimum daily, 21 microsiemens Jan. 1, 1948.
WATER TEMPERATURE: Maximum daily, 34.5°C July 29, 1955; minimum daily, 0.0°C several days in winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 26.2°C June 11; minimum 3.4°C Jan. 1,2.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	21.8	18.6	20.1	20.9	19.3	20.2	12.6	12.0	12.3	5.3	3.4	4.2
2	22.2	19.1	20.3	20.4	19.0	19.5	12.2	11.5	11.9	5.5	3.4	4.5
3	22.1	19.8	20.7	19.5	18.4	19.0	11.8	11.2	11.5	7.0	5.3	6.2
4	22.9	19.7	21.0	18.8	17.9	18.3	11.7	10.8	11.3	7.2	6.1	6.6
5	22.7	20.3	21.3	18.0	17.1	17.5	11.8	10.7	11.3	7.2	6.2	6.8
6	21.3	20.3	20.8	17.9	16.8	17.3	11.5	10.8	11.2	8.2	6.4	7.2
7	20.5	18.0	19.1	16.8	15.3	16.0	11.6	10.3	10.9	8.3	6.9	7.5
8	18.7	17.0	17.8	15.6	14.1	14.7	11.5	10.5	10.9	7.6	6.4	7.0
9	18.1	16.3	17.2	14.2	13.0	13.6	11.3	10.5	10.9	7.1	6.3	6.8
10	17.7	15.4	16.7	14.5	12.0	13.0	11.3	10.4	10.8	6.8	6.4	6.6
11	17.1	15.5	16.3	13.1	11.9	12.4	12.1	9.7	11.1	6.8	6.3	6.6
12	18.1	15.6	16.9	12.2	11.4	11.8	10.1	9.0	9.6	6.8	6.4	6.6
13	18.3	16.0	17.3	12.0	10.7	11.4	9.8	8.9	9.3	6.8	6.2	6.5
14	18.7	16.7	17.7	12.1	10.4	11.2	9.5	8.4	8.9	7.5	6.3	6.8
15	20.1	17.8	18.7	11.7	10.5	11.1	8.7	8.3	8.4	7.5	5.9	6.7
16	20.6	18.5	19.2	13.7	11.2	12.6	8.5	7.2	8.1	7.1	6.7	6.9
17	19.8	17.9	18.9	13.5	12.5	13.1	7.2	6.0	6.6	6.9	6.5	6.7
18	20.0	18.3	19.0	12.9	11.1	12.2	7.6	5.9	6.6	6.8	6.3	6.6
19	20.3	17.9	18.8	12.3	10.4	11.2	8.6	6.5	7.8	6.9	6.0	6.5
20	19.4	18.0	18.6	12.0	9.9	10.8	8.6	7.7	8.2	6.9	5.4	6.1
21	19.1	18.0	18.5	11.7	10.2	10.9	8.8	7.5	8.2	6.7	5.5	6.0
22	19.9	18.3	18.8	12.4	10.4	11.3	8.4	7.1	7.6	7.0	5.6	6.2
23	21.7	18.4	19.5	12.2	11.5	11.9	7.5	7.0	7.2	6.5	6.0	6.3
24	21.1	18.9	19.8	12.3	11.7	12.0	8.2	6.7	7.3	7.6	6.1	6.6
25	21.1	18.9	19.8	12.9	11.4	12.1	7.4	5.2	6.5	7.0	6.2	6.5
26	20.5	19.0	19.6	12.4	10.8	11.6	5.8	4.4	5.1	7.8	6.4	7.0
27	21.5	19.2	20.2	12.5	10.6	11.6	6.7	5.7	6.3	7.0	5.9	6.5
28	21.8	19.6	20.5	12.9	11.7	12.4	7.8	6.4	7.1	7.5	6.3	6.8
29	20.7	19.7	20.2	13.3	12.1	12.6	7.3	4.9	6.4	9.5	7.5	8.4
30	21.4	19.5	20.3	12.8	11.8	12.3	6.0	4.7	5.4	9.0	6.5	7.5
31	21.5	20.0	20.7	---	---	---	4.7	3.6	4.2	7.1	5.8	6.5
MONTH	22.9	15.4	19.2	20.9	9.9	13.5	12.6	3.6	8.7	9.5	3.4	6.6

07339000 MOUNTAIN FORK NEAR EAGLETOWN, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.4	6.1	6.7	8.7	8.1	8.4	13.1	10.2	11.6	17.4	14.2	15.9
2	7.3	6.3	6.7	8.8	8.0	8.4	12.6	10.6	11.9	17.7	14.7	16.1
3	8.2	6.2	7.1	8.7	8.0	8.3	11.0	10.1	10.6	18.5	15.5	17.0
4	7.9	6.1	7.0	9.7	8.2	8.8	11.2	10.1	10.7	18.3	14.8	16.4
5	8.0	5.8	6.8	10.8	8.0	9.3	11.5	10.4	11.1	17.5	15.2	16.3
6	8.5	6.3	7.3	10.9	9.1	10.0	11.9	10.2	10.9	17.9	15.7	16.9
7	8.0	6.8	7.4	10.8	8.8	9.5	13.0	11.0	11.9	19.0	16.2	17.3
8	8.0	7.4	7.7	9.3	8.3	8.9	15.1	11.5	13.0	20.5	16.8	18.4
9	8.3	6.7	7.7	9.8	8.7	9.3	17.4	13.3	15.1	20.8	17.4	19.0
10	7.5	6.1	6.8	9.6	8.6	9.1	16.0	13.2	14.7	22.6	18.3	20.3
11	6.7	5.9	6.2	8.9	8.0	8.4	14.4	11.8	12.8	20.2	17.5	19.0
12	6.7	6.2	6.4	11.0	8.4	9.6	13.7	11.4	12.4	21.8	18.3	19.8
13	7.7	6.3	6.9	12.6	9.3	10.9	14.9	11.2	12.9	21.7	19.0	20.1
14	8.1	7.1	7.7	11.3	9.0	9.8	14.7	12.1	13.3	22.5	18.4	20.1
15	9.1	7.8	8.5	11.7	8.9	10.1	17.1	13.7	15.3	23.9	18.7	20.9
16	10.4	8.8	9.7	10.3	8.9	9.5	16.9	14.0	15.8	22.0	17.7	19.9
17	10.9	8.4	9.5	10.1	9.3	9.6	14.9	12.8	13.8	20.1	16.8	18.4
18	10.3	8.3	9.3	9.6	8.9	9.2	15.4	13.7	14.5	18.8	16.4	17.8
19	10.9	8.4	9.4	9.7	8.7	9.3	14.0	12.7	13.1	19.8	16.4	18.0
20	11.5	9.2	10.3	10.5	9.1	9.9	13.0	11.8	12.4	20.8	17.9	19.2
21	11.0	9.8	10.5	10.7	9.5	10.1	15.6	11.7	13.5	19.6	16.5	18.6
22	9.9	7.5	8.8	10.9	9.3	10.1	16.1	14.0	15.2	20.1	15.6	17.6
23	7.9	7.2	7.5	10.7	9.2	10.1	16.8	14.0	15.7	21.5	18.2	19.6
24	7.9	7.1	7.4	11.1	9.6	10.1	16.7	13.2	14.7	21.8	19.1	20.2
25	9.3	7.1	8.0	11.4	10.5	11.0	17.5	14.1	15.7	22.0	18.8	20.3
26	8.8	7.9	8.3	11.1	10.3	10.8	17.6	14.7	16.0	22.8	20.0	21.3
27	8.3	7.7	7.9	10.5	9.7	10.1	17.5	14.5	15.5	24.0	20.4	22.0
28	8.7	7.9	8.3	9.8	9.2	9.5	17.4	14.3	15.7	22.6	20.1	21.5
29	---	---	---	9.7	9.3	9.5	18.6	14.1	16.3	23.1	21.7	22.3
30	---	---	---	10.6	9.5	10.0	20.5	16.0	17.5	23.1	19.2	20.5
31	---	---	---	12.5	9.7	11.0	---	---	---	20.9	17.6	19.5
MONTH	11.5	5.8	7.9	12.6	8.0	9.6	20.5	10.1	13.8	24.0	14.2	19.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.6	16.2	17.6	21.0	17.2	19.1	22.8	19.5	20.7	21.4	18.3	20.0
2	20.2	16.0	17.9	22.4	17.3	19.8	22.5	19.1	20.5	21.4	18.4	20.0
3	21.8	18.3	20.0	23.4	18.9	21.3	23.6	19.4	21.5	22.4	19.0	20.9
4	22.9	20.1	21.1	23.6	19.7	21.6	23.0	19.1	20.9	21.9	19.2	20.7
5	22.9	19.5	20.9	23.2	19.7	21.6	23.9	19.9	21.8	23.1	19.4	21.2
6	21.5	19.7	20.9	21.8	18.3	19.6	23.0	19.0	20.6	23.2	19.6	21.0
7	21.1	19.7	20.3	21.8	18.0	19.3	23.0	19.5	20.8	23.0	19.3	20.8
8	23.5	20.3	21.7	22.1	18.3	19.8	23.6	19.5	21.1	21.5	19.1	20.1
9	25.3	22.3	23.7	22.7	18.6	20.3	23.8	20.4	21.6	21.5	19.5	20.5
10	25.1	22.1	23.8	21.4	17.7	19.5	24.2	20.6	21.8	22.2	19.4	20.9
11	26.2	23.0	24.3	21.5	17.7	19.1	22.2	19.8	21.2	22.1	19.3	20.6
12	25.2	21.1	23.2	22.6	18.6	20.3	22.5	19.5	20.9	22.2	18.8	20.3
13	21.8	17.0	20.4	22.8	19.4	20.9	23.8	19.8	21.9	23.0	19.7	20.9
14	21.1	16.7	19.0	20.7	19.5	20.1	24.3	21.1	22.6	22.9	20.7	21.6
15	20.9	17.4	19.3	22.4	19.6	20.9	24.2	20.2	21.9	21.7	20.5	21.2
16	22.5	18.6	20.5	23.0	19.8	21.1	22.7	19.7	21.0	21.9	20.4	21.1
17	22.3	17.7	19.8	22.2	18.4	20.1	21.9	20.0	20.8	22.1	19.8	21.0
18	21.1	17.1	18.7	21.8	18.5	19.7	21.7	18.8	20.1	21.0	19.4	20.2
19	21.1	17.1	18.7	21.8	19.2	20.1	21.8	18.1	19.9	21.7	19.7	20.6
20	21.3	17.2	19.0	22.2	19.1	20.1	22.9	18.6	20.8	20.4	19.4	19.9
21	19.7	17.7	18.9	23.2	19.6	20.8	23.5	19.3	21.5	20.7	19.3	20.0
22	20.8	17.5	19.0	21.8	18.7	20.0	23.9	19.2	21.3	22.3	19.7	20.8
23	21.1	17.2	19.0	22.8	19.7	20.6	23.7	19.5	21.7	22.7	20.1	21.3
24	22.2	18.0	20.1	22.3	19.6	20.7	23.6	20.1	21.9	22.4	20.3	21.4
25	22.6	18.7	20.7	23.9	20.1	21.8	23.9	20.1	22.1	21.9	19.4	20.5
26	21.5	18.0	19.6	23.5	21.0	22.2	23.5	20.2	21.9	20.8	18.7	19.8
27	21.0	17.0	19.0	23.7	20.4	21.9	22.6	20.6	21.6	21.1	18.3	19.7
28	19.6	17.5	18.5	21.8	19.7	20.8	22.4	19.7	20.8	22.1	18.3	19.7
29	20.0	18.2	19.0	23.6	19.1	21.5	22.2	19.5	20.6	20.3	17.6	19.0
30	20.0	17.4	18.7	25.0	20.6	22.8	21.2	19.2	20.3	20.2	17.7	19.0
31	---	---	---	24.4	20.3	22.1	20.5	18.9	19.5	---	---	---
MONTH	26.2	16.0	20.1	25.0	17.2	20.6	24.3	18.1	21.1	23.2	17.6	20.5
YEAR	26.2	3.4	15.1									

COMANCHE COUNTY--Continued

WELL-IDENTIFICATION NUMBER.--343540098342001. Local number 01N-13W-04 BAA 1.

LOCATION.--Lat 34°35'36", long 098°34'22", Hydrologic Unit 11130203, 4.0 mi southeast of Cache.

GEOLOGIC UNIT.--Arbuckle Group.

WELL CHARACTERISTICS.--Test well, diameter 6 in., depth 997 ft.

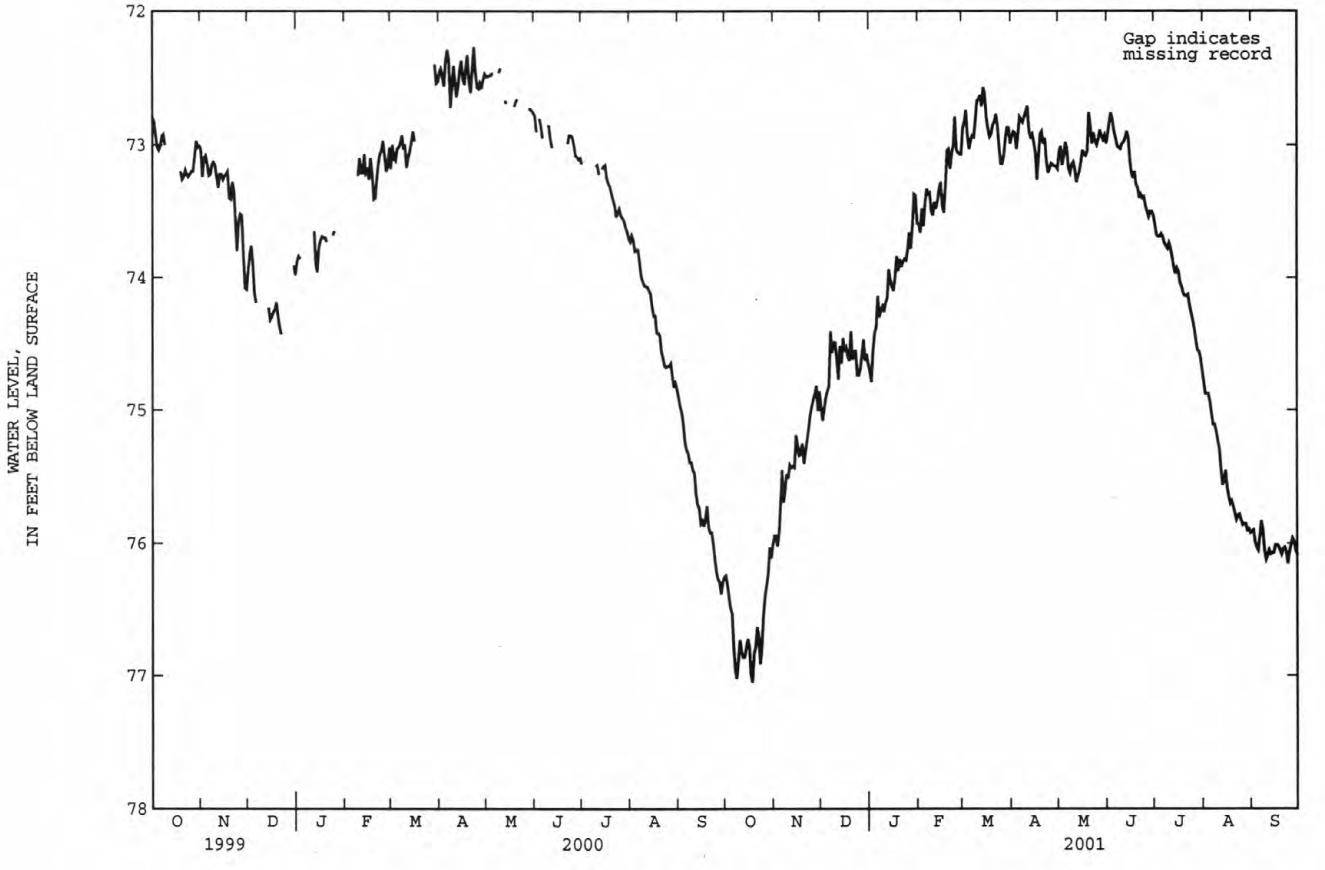
DATUM.--Altitude of land-surface datum is 1,200 ft. Measuring point: top of casing 1.8 ft above land-surface datum.

PERIOD OF RECORD.--1972 to September 1995, October 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.33 ft below land-surface datum, June 1, 1993; lowest water level, 88.62 ft below land-surface datum, May 10, 1972.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	76.53	75.69	74.86	74.38	73.44	73.03	72.93	72.98	72.90	73.67	74.94	76.05
10	76.73	75.51	74.49	74.26	73.53	72.67	72.75	73.13	72.99	73.74	75.23	76.12
15	76.72	75.19	74.46	74.07	73.28	72.62	72.98	73.13	73.11	73.93	75.45	76.07
20	76.78	75.40	74.41	73.86	73.03	72.85	72.90	72.76	73.32	74.14	75.72	76.08
25	76.53	74.98	74.74	73.79	73.04	73.14	73.18	73.00	73.46	74.32	75.82	76.07
EOM	76.01	74.86	74.66	73.59	73.07	72.99	73.18	72.99	73.53	74.70	75.92	76.08
MAX	77.05	76.02	75.08	74.79	73.66	73.14	73.26	73.28	73.54	74.70	75.92	76.15
MIN	76.01	74.82	74.41	73.37	72.79	72.57	72.71	72.76	72.76	73.60	74.79	75.83



PONTOTOC COUNTY

WELL-IDENTIFICATION NUMBER.--343457096404501. Local number 01N-06E-04 CAD 1.

LOCATION.--Lat 34°34'57", long 096°40'45", Hydrologic Unit 11140102, 3.3 mi southwest of Fittstown.

GEOLOGIC UNIT.--Arbuckle Group.

WELL CHARACTERISTICS.--Drilled oil test well, diameter 14 in., depth 396 ft.

DATUM.--Altitude of land-surface datum is 1,155 ft. Measuring point: base of recorder shelter 1.10 ft above land-surface datum.

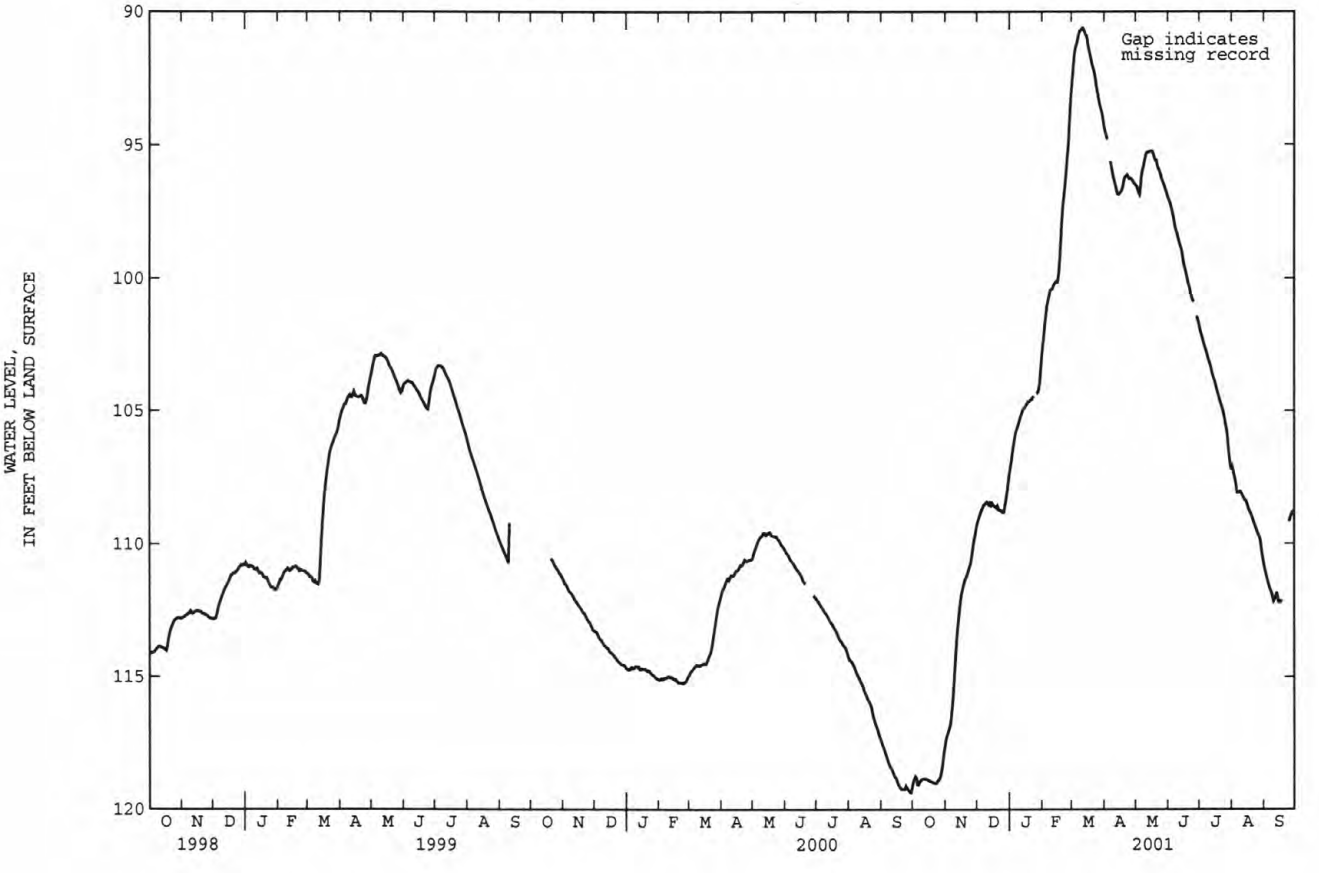
REMARKS.--Well originally 1,707 ft deep.

PERIOD OF RECORD.--December 1958 to August 1997, October 1998 to present.

EXTREMES FOR PERIOD OF RECORD.--Highest observed water level, 70.19 ft below land-surface datum, May 17, 1990; lowest water level, 128.23 ft below land-surface datum, Apr. 10, 1967.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	119.06	116.84	108.74	106.13	101.06	91.20	---	96.60	97.62	102.47	107.88	111.51
10	118.84	114.35	108.43	105.33	100.40	90.63	96.40	95.37	98.47	103.14	108.11	112.16
15	118.89	112.07	108.48	104.88	100.13	90.98	96.82	95.24	99.32	103.85	108.46	112.20
20	118.99	111.28	108.58	104.62	97.28	92.03	96.21	95.58	100.19	104.59	108.99	---
25	118.89	110.60	108.82	---	94.97	93.11	96.25	96.25	100.89	105.33	109.52	109.17
EOM	117.63	109.37	107.47	103.01	92.98	94.31	96.50	96.93	101.71	107.21	110.66	108.77
MAX	119.06	117.39	109.20	---	102.56	94.31	---	96.93	---	107.21	110.66	---
MIN	117.63	109.37	107.47	---	92.98	90.62	---	95.24	---	101.88	107.11	---



WOODWARD COUNTY

WELL-IDENTIFICATION NUMBER.--361714099315101. Local number 21N-22W-23 BBB 1.

LOCATION.--Lat 36°17'25", long 99°31'58", Hydrologic Unit 11100203, 11.0 mi west of Sharon.

GEOLOGIC UNIT.--Ogallala Formation.

WELL CHARACTERISTICS.--Drilled test hole, diameter 6 in., depth 322 ft.

DATUM.--Altitude of land-surface datum is 2,335 ft. Measuring point: top of shelf 3 ft above land-surface datum.

REMARKS.--Digital recorder installed Sept. 30, 1982, mean-daily water levels published thereafter, except Oct. 5, 1993 to Apr. 17, 1994 when bimonthly measurements were made. Satellite telemeter at station since July 10, 2000.

PERIOD OF RECORD.--1957 to 1963, 1965 to September 1995, July 2000 to surrent year.

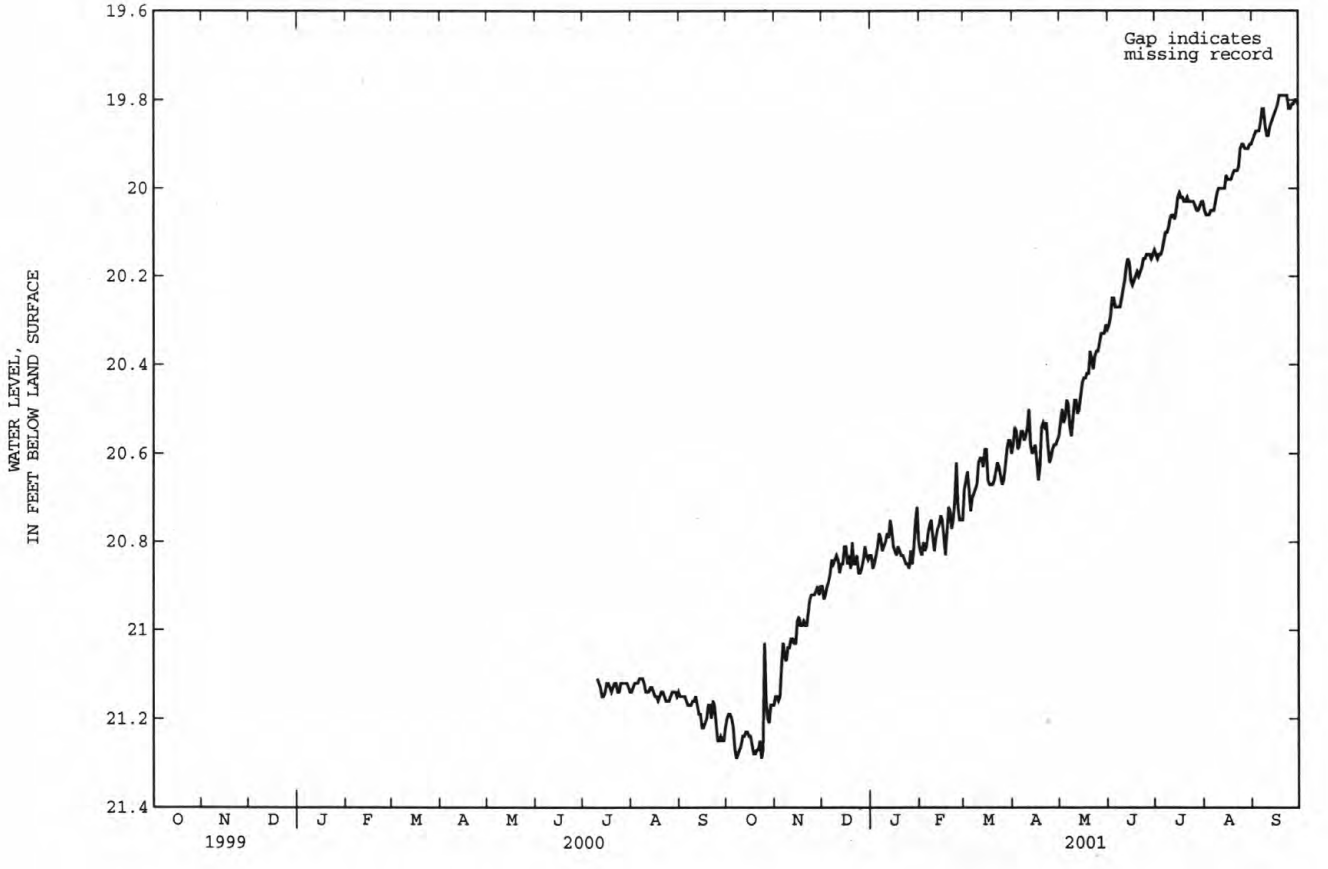
EXTREMES FOR PERIOD OF RECORD.--Highest daily water level, 19.79 ft below land-surface datum, Sept. 18, 2001; lowest water level, 32.64 ft below land-surface datum, May 19, 1971.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	---	---	---	---	---	---	---	---	21.12	21.16
10	---	---	---	---	---	---	---	---	---	21.11	21.14	21.16
15	---	---	---	---	---	---	---	---	---	21.14	21.14	21.22
20	---	---	---	---	---	---	---	---	---	21.13	21.14	21.17
25	---	---	---	---	---	---	---	---	---	21.12	21.16	21.25
EOM	---	---	---	---	---	---	---	---	---	21.14	21.14	21.22
MAX	---	---	---	---	---	---	---	---	---	---	21.16	21.25
MIN	---	---	---	---	---	---	---	---	---	---	21.11	21.15

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.22	21.08	20.89	20.81	20.81	20.73	20.58	20.48	20.27	20.14	20.05	19.87
10	21.26	21.04	20.83	20.80	20.82	20.62	20.54	20.48	20.23	20.07	20.00	19.88
15	21.24	20.98	20.81	20.81	20.75	20.59	20.58	20.44	20.21	20.02	19.97	19.83
20	21.27	20.99	20.80	20.83	20.73	20.66	20.53	20.37	20.20	20.03	19.96	19.79
25	21.03	20.92	20.87	20.86	20.72	20.67	20.61	20.37	20.15	20.03	19.90	19.82
EOM	21.17	20.90	20.83	20.80	20.75	20.60	20.56	20.32	20.14	20.03	19.90	19.81
MAX	21.29	21.16	20.93	20.86	20.83	20.73	20.66	20.56	20.31	20.16	20.06	19.89
MIN	21.03	20.90	20.80	20.72	20.62	20.57	20.50	20.31	20.14	20.01	19.90	19.79



CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

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