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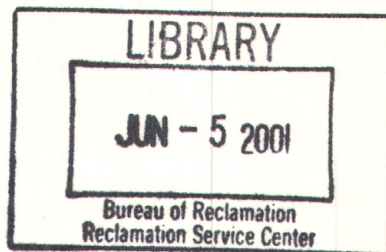
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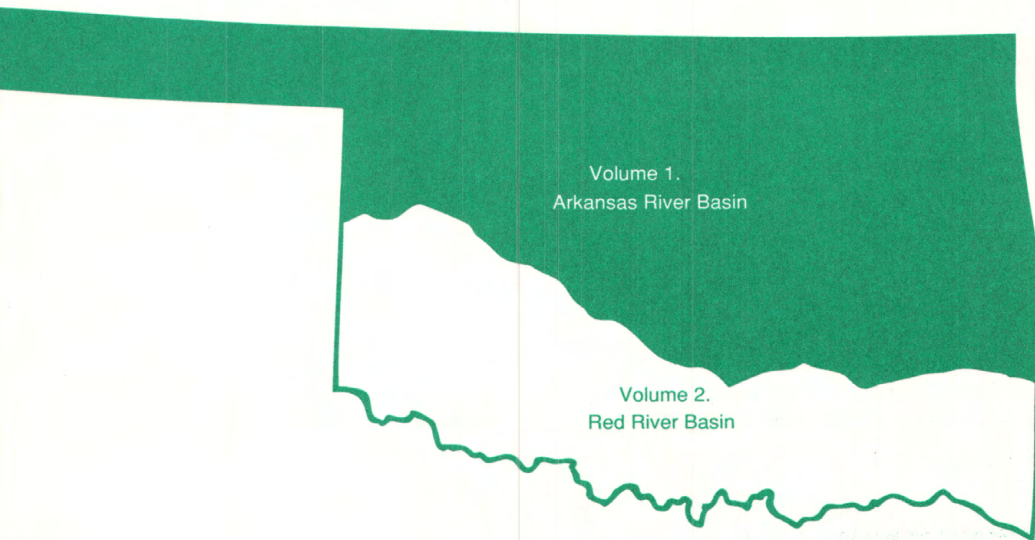
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Water Resources Data Oklahoma Water Year 2000

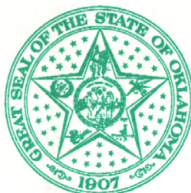


Volume 1. Arkansas River Basin

Water-Data Report OK-00-1



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 2000

1999

OCTOBER

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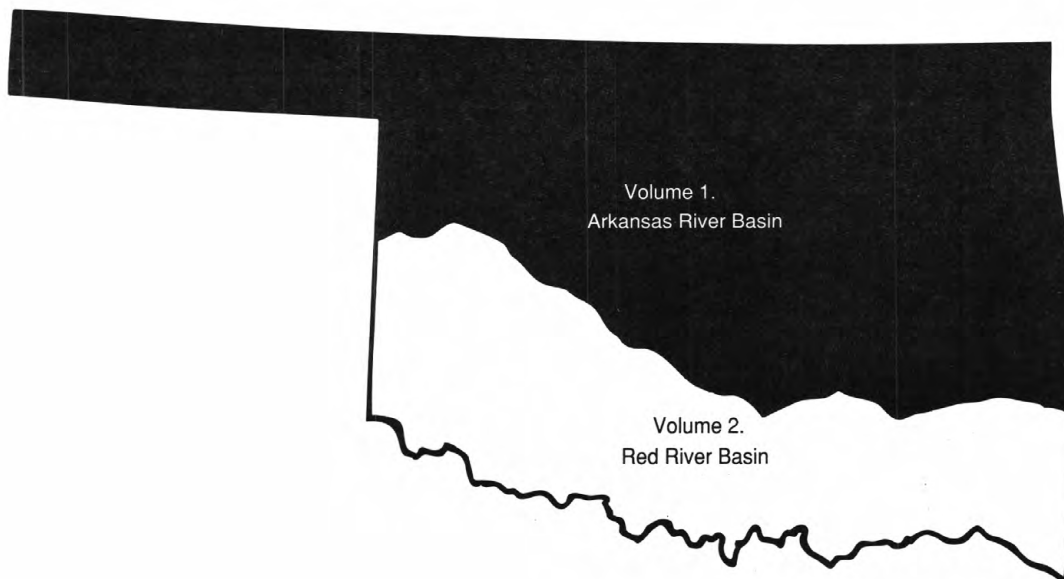
U.S. Department of the Interior
U.S. Geological Survey

Water Resources Data Oklahoma Water Year 2000

Volume 1. Arkansas River Basin

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

Water-Data Report OK-00-1



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

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 2000water 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 134 gaging stations; stage and contents for 16 lakes or reservoirs and 2 gage height stations; water quality for 56 gaging stations; 25 partial-record or miscellaneous streamflow stations and 4 ground-water sites. Also included are lists of discontinued surface-water discharge and water-quality sites. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Oklahoma.			
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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]

	Station Number	Page
<u>LOWER MISSISSIPPI RIVER BASIN</u>		
<u>MISSISSIPPI RIVER</u>		
<u>ARKANSAS RIVER BASIN</u>		
Salt Fork Arkansas River near Alva (d)	07148400	24
Salt Fork Arkansas River at Tonkawa (d)	07151000	26
Chikaskia River near Blackwell (d)	07152000	28
Arkansas River at Ralston (d)	07152500	30
Black Bear Creek at Pawnee (d)	07153000	32
Cimarron River near Kenton (d)	07154500	34
Cimarron River near Forgan (d)	07156900	36
Cimarron River near Waynoka (d)	07158000	38
Cimarron River near Dover (d)	07159100	40
Cottonwood Creek:		
Deer Creek:		
Lake Hefner at Oklahoma City (e)	07159550	42
Bluff Creek above Bethany and Warr Acres Sewage Treatment Plant near Edmond (c)	07159639	44
Deer Creek below Bluff Creek at Oklahoma City (c)	07159643	45
Deer Creek at Oklahoma City (c)	07159650	46
Chisholm Creek at Edmond (c)	07159730	47
Chisholm Creek near Edmond (c)	07159735	48
Cottonwood Creek near Seward (d)	07159750	50
Cimarron River near Guthrie (d)	07160000	52
Skeleton Creek at Enid(d)	07160350	54
Cimarron River near Ripley (d)	07161450	56
Arkansas River at Tulsa (dt)	07164500	58
Joe Creek at 61st Street at Tulsa (d)	07164600	62
Haikey Creek at 101st Street South at Tulsa (d)	07165562	64
Little Haikey Creek at 101st Street South at Tulsa (d)	07165565	66
Arkansas River near Haskell (d)	07165570	68
Verdigris River near Lenapah (d)	07171000	70
Caney River above Coon Creek at Bartlesville (d)	07174400	72
Caney River near Ramona (d)	07175500	74
Verdigris River near Claremore (d)	07176000	76
Bird Creek near Avant (d)	07176500	78
Bird Creek near Sperry (dct)	07177500	80
Flat Rock Creek at Cincinnati Avenue at Tulsa (d)	07177650	90
Coal Creek at Tulsa (d)	07177800	92
Bird Creek near Owasso (dct)	07178000	94
Bird Creek at State Highway 266 near Catoosa (dct)	07178200	104
Dog Creek South of Claremore (dc)	07178520	114
Neosho River near Commerce (d)	07185000	118

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

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[Letters after station names designate type of data: (d) discharge,
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	Station Number	Page
<u>LOWER MISSISSIPPI RIVER BASIN</u>		
<u>MISSISSIPPI RIVER--Continued</u>		
ARKANSAS RIVER BASIN--Continued		
Neosho River at Miami (e)	07185080	120
Tar Creek near Commerce (c)	07185090	123
Tar Creek at 22nd St. Bridge at Miami (c)	07185095	127
Spring River above Devils Hollow near Quapaw (c)	07187995	131
Spring River near Quapaw (dc)	07188000	134
Beaver Creek near Quapaw (c)	07188005	140
Beaver Creek above Spring River near Quapaw (c)	07188007	144
Elk River near Tiff City, MO (d)	07189000	148
Honey Creek:		
Cave Springs Branch near South West City, MO (dc)	07189540	150
Honey Creek near Southwest City, MO (dc)	07189542	156
Lake O' The Cherokees at Langley (e)	07190000	160
Neosho River near Langley (d)	07190500	162
Big Cabin Creek near Big Cabin (d)	07191000	164
Spavinaw Creek near Sycamore (d)	07191220	166
Beaty Creek near Jay (d)	07191222	168
Black Hollow near Spavinaw (d)	07191297	170
Spavinaw Lake at Spavinaw (e)	07191300	172
Lake Hudson near Locust Grove (e)	07191400	174
Neosho River near Chouteau (d)	07191500	176
Illinois River near Pedro, AR(c)	07194830	178
Illinois River at Siloam Springs, AR(c)	07195400	180
Illinois River near Watts (dc)	07195500	182
Illinois River above Flint Creek near Flint(c)	07195610	187
Flint Creek near West Siloam Springs(dc)	07195855	188
Sager Creek near West Siloam Springs(dc)	07195865	192
Flint Creek near Kansas (dc)	07196000	196
Illinois River below Flint Creek near Flint(c)	07196040	201
Illinois River at Chewey(c)	07196090	202
Illinois River near Scraper(c)	07196190	204
Illinois River at No Head Hollow near Tahlequah (c)	07196400	205
Illinois River near Briggs(c)	07196490	206
Illinois River near Tahlequah (dc)	07196500	208
Illinois River near Park Hill(c)	07196520	213
Baron Fork:		
Peachater Creek at Christie (d)	07196973	214
Baron Fork at Eldon (dc)	07197000	216
Baron Fork at Welling(c)	07197080	221
Caney Creek near Barber (dc)	07197360	224
Illinois River near Gore (d)	07198000	228
Canadian River at Bridgeport (d)	07228500	230

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

[Letters after station names designate type of data: (d) discharge,
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	Station Number	Page
<u>LOWER MISSISSIPPI RIVER BASIN</u>		
<u>MISSISSIPPI RIVER--Continued</u>		
ARKANSAS RIVER BASIN--Continued		
Canadian River at Purcell (d)	07229200	232
Little River:		
Elm Creek:		
Stanley Draper Lake (e)	07229445	234
Lake Thunderbird near Norman (e)	07229900	236
Little River below Lake Thunderbird near Norman (d)	07230000	238
Little River near Tecumseh (d)	07230500	240
Little River near Sasakwa (d)	07231000	242
Canadian River at Calvin (d)	07231500	244
Beaver River near Felt (d)	07232250	246
Coldwater Creek near Guymon (d)	07232900	248
Beaver River:		
Palo Duro Creek at Range (d)	07233650	250
Beaver River at Beaver (d)	07234000	252
North Canadian River at Woodward (d)	07237500	254
North Canadian River near Seiling (d)	07238000	256
North Canadian River at Canton (d)	07239000	258
North Canadian River below Weavers Creek near Watonga (d)	07239300	260
North Canadian River near Calumet (dct)	07239450	262
North Canadian River near El Reno (dct)	07239500	278
North Canadian River near Yukon (dc)	07239700	284
Lake Hefner Canal near Oklahoma City (d)	07240000	290
North Canadian River at Highway 66 at Oklahoma City (e)	07240200	292
Lake Overholser at Oklahoma City (e)	07240500	296
North Canadian River blw Lake Overholser near Oklahoma City (dct)	07241000	298
North Canadian River at Britton Road at Oklahoma City (dct)	07241520	308
North Canadian River near Harrah (dct)	07241550	322
North Canadian River near Wetumka (d)	07242000	336
Deep Fork near Warwick (d)	07242380	338
Deep Fork near Beggs (d)	07243500	340
Coal Creek near Henryetta (dt)	07244100	342
Canadian River near Whitefield (d)	07245000	346
Poteau River at Cauthron, AR (d)	07247000	348
Poteau River at Loving (dc)	07247015	350
Black Fork Below Big Creek near Page (dc)	07247250	354
Black Fork at Hodgen (c)	07247345	358
Fourche Maline near Red Oak (d)	07247500	360
Fourche Maline near Leflore (c)	07247650	362
Holson Creek at Summerfield (c)	07247800	364
Poteau River near Panama (d)	07249413	366
Arkansas River at Ft. Smith, AR (dc)	07249455	368

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 STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Arkansas River near Ponca City, OK	07148140	46,530	1976-93
Salt Fork Arkansas River near Winchester, OK	07148350	856	1960-93
Salt Fork Arkansas River near Ingersoll, OK	07148450	1,140	1961-62 1974-79
Salt Fork Arkansas River near Cherokee, OK	07149500	2,439	1941-50
Salt Fork Arkansas River near Jet, OK	07150500	3,202	1938-93
Greasy Creek near Watchorn, OK	07152290	28.0	1974-76
Ranch Creek at Cleveland Dam near Cleveland, OK	07153100	21.9	1945-63
Cimarron River above Ute Creek near Boise City, OK	07155000	1,955	1906-07 1943-46 1947-54
Cimarron River near Boise City, OK	07155500	2,214	1939-42
Cimarron River near Mocane, OK	07157000	8,670	1943-65
Cimarron River near Buffalo	07157950	12,004	1960-94
Cimarron River near Englewood, KS	07157580	10,096	1982-87
Buffalo Creek near Lovedale, OK	07157960	408	1966-93
Cimarron River at Freedom, OK	07157980	12,706	1974-80
Salt Creek near Hitchcock, OK	07158150	44.4	1968-70
Salt Creek near Okeene, OK	07158400	196	1961-67 1974-79
Preacher Creek near Dover, OK	07158500	14.5	1952-57
Turkey Creek near Drummond, OK	07159000	248	1948-70
Cimarron River near Crescent, OK	07159400	16,453	1971-72
Bluff Creek above Lake Hefner near Oklahoma City, OK	07159500	1.62	1950-58
Cottonwood Creek near Navina, OK	07159720	247	1978-80 1982-89
Skeleton Creek near Lovell, OK	07160500	410	1950-93
Cimarron River near Perkins, OK	07161000	17,852	1940-89
Stillwater Creek near Stillwater, OK	07162000	168	1935-38
West Fork Brush Creek near Stillwater, OK	07162500	13.1	1935-38
Council Creek near Stillwater, OK	07163000	31	1934-93

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Cimarron River at Oilton, OK	07163500	18,669	1935-45
Cimarron River at Mannford, OK	07164000	18,849	1939-50 1960-63
Arkansas River near Tullahasse, OK	07165600	75,815	1970-72
Verdigris River near Oologah, OK	07171400	4,339	1961-92
Verdigris River near Sageeyah, OK	07171500	4,402	1939-45
Caney River near Hulah, OK	07173000	733	1938-93
Little Caney River near Copan, OK	07174000	424	1944-58
Little Caney River below Cotton Creek near Copan, OK	07174200	502	1959-81
Caney River at Bartlesville, OK	07174500	1,465	1950-56 1986-87
Sand Creek at Okesa, OK	07174600	139	1960-93
Caney River near Ochelata, OK	07174700	1,753	1956-76
Double Creek subwater shed 5 near Ramona, OK	07175000	2.39	1955-69
Caney River near Collinsville, OK	07175550	2,046	1936-38
Birch Creek below Birch Lake near Barnsdall, OK	07176465	66.0	1977-92
Candy Creek near Wolco, OK	07176800	30.6	1970-81
Hominy Creek below Skiatook Lake near Skiatook, OK	07177410	354	1985-93
Bird Creek at 66th Street near Tulsa, OK	07177600	967	1987-91
Hominy Creek near Skiatook, OK	07177000	340	1944-81
Flat Rock Creek at U.S. Highway 75 at Tulsa, OK	07177700	22.6	1987-91
Mingo Creek at 36th Street North at Tulsa, OK	07178035	56.0	1987-89
Mingo Creek at 46th Street North at Tulsa, OK	07178040	59.9	1987-98
Verdigris River near Inola, OK	07178600	7,911	1945-70
Tar Creek at 22nd Street Bridge at Miami, OK	07185095	44.7	1984-93
Tar Creek at Miami, OK	07185100	52.0	1980-84
Lost Creek at Seneca, MO	07188500	42.0	1949-59
Neosho River near Grove, OK	07189500	9,969	1925-39
Big Cabin Creek near Pyramid Corners, OK	07190600	71.1	1964-72
Spavinaw Creek near Row, OK	07191200	128	1959-62
Pryor Creek near Pryor, OK	07192000	229	1948-63
Neosho River near Wagoner, OK	07192500	12,307	1924-25 1938-49
Neosho River below Fort Gibson Lake near Fort Gibson, OK	07193500	12,495	1951-89
Arkansas River near Muskogee, OK	07194500	96,674	1926-70
Dirty Creek near Warner, OK	07198500	227	1940-46

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

xi

DISCONTINUED SURFACE-WATER STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Deer Creek at Hydro, OK	07228400	274	1961-63 1978-80
Canadian River near Newcastle, OK	07229000	25,763	1939-45
Canadian River near Norman, OK	07229050	25,853	1996-98
Canadian River near Noble, OK	07229100	25,911	1960-61 1964-75
Walnut Creek at Purcell, OK	07229300	202	1966-93
Canadian Sandy Creek near Ada, OK	07229427	198	1987-88
Little River near Norman, OK	07229500	120	1952-55
Little River near Bowlegs, OK	07230597	550	1983-88
Salt Creek near Dewright, OK	07230800	210	1960-63 1966-67
Ti Creek near Blanco, OK	07231965	4.82	1980-81
Brushy Creek near Haileyville, OK	07231975	139	1978-83
Peaceable Creek near Haileyville, OK	07231990	134	1978-83
Gaines Creek near Krebs, OK	07232000	588	1943-63
Blue Creek near Blocker, OK	07232010	12.1	1976-83
Deer Creek near McAlester, OK	07232024	38.3	1979-80
Beaver River near Guymon, OK	07232500	2,139	1938-93
Coldwater Creek near Hardesty, OK	07233000	1,967	1940-64
Beaver River near Hardesty, OK	07233210	5,029	1978-86
Clear Creek near Elmwood, OK	07234100	170	1966-93
Wolf Creek near Shattuck, OK	07235500	1,183	1938-46
Wolf Creek near Fargo, OK	07236000	1,624	1943-76
Wolf Creek near Fort Supply, OK	07237000	1,739	1938-93
Bent Creek near Seiling, OK	07237800	139	1967-70
North Canadian River near Watonga, OK	07239200	12,692	1980-83
North Canadian River near Oklahoma City, OK	07241500	13,354	1939-53 1960-61
Tecumseh Creek at Tecumseh, OK	07241750	2.38	1991-92
North Canadian River at NE 36th Street at Oklahoma City, OK	07241503	13,356	1989-91
Wewoka Creek near Wetumka, OK	07242100	396	1960-64 1967
Deep Fork at Hefner Rd. at Oklahoma City, OK	07242247	66.7	1995-98
Deep Fork near Arcadia, OK	07242350	105	1970-93
Bellcow Creek at Chandler, OK	07242500	46.0	1949-55

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Dry Creek near Kendrick	07243000	69.0	1956-94
Deep Fork near Dewar, OK	07244000	2,307	1938-50
North Canadian River near Eufaula, OK	07244500	17,657	1960-62
Taloka Creek near Stigler, OK	07245030	20.1	1979-81
Sallisaw Creek near Sallisaw, OK	07245500	182	1943-76
Sans Bois Creek near Keota, OK	07246000	346	1939-42
Arkansas River near Sallisaw, OK	07246500	147,757	1948-70
Coal Creek near Spiro, OK	07246615	15.4	1979-82
Fourche Maline near Wilburton, OK	07247450	56.2	1978-81
Red Oak Creek near Red Oak, OK	07247550	12.8	1978-82
Poteau River near Wister, OK	07248500	993	1938-87
Caston Creek at Wister, OK	07248600	72.9	1979-82
Morris Creek at Howe, OK	07248620	19.4	1979-81
Sugarloaf Creek near Monroe, OK	07248700	53.6	1979-81
Poteau River at Poteau, OK	07249000	1,240	1938-45
Brazil Creek near Walls, OK	07249080	69.1	1979-81 1984-85
Owl Creek near McCurtain, OK	07249100	27.9	1978-81

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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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
ARKANSAS RIVER BASIN			
Beaver Creek near Kaw City, OK	07148126		1949, 1954-55, 1961
Arkansas River at Kaw City, OK	07148128	8,670	1948-51, 1961
Arkansas River near Ponca City, OK	07148140	46,530	1977-82, 1987-90
Salt Fork Arkansas River near Winchester, OK	07148350	856	1959-62, 1975-77, 1985-90
Greenwood Creek near Winchester, OK	07148360	41.2	1987-88
Salt Fork Arkansas River near Alva, OK	07148400	1,009	1938-54, 1962, 1977-79, 1985-90
Salt Fork Arkansas River near Ingersoll, OK	07148450	1,140	1961-62, 1973-80
Salt Fork Arkansas River near Cherokee, OK	07149500	2,439	1941-49
Cottonwood Canyon Creek near Cherokee, OK	07149704		1944-45
Salt Fork Arkansas River near Jet, OK	07150500	3,202	1924, 1938-63, 1965, 1968-90
Salt Fork Arkansas River near Pond Creek, OK	07150597		1951,1962
Pond Creek near Lamont, OK	07150700		1951-55, 1958, 1962
Deer Creek near Tonkawa, OK	07150900	150	1958,1962
Salt Fork Arkansas River at Tonkawa, OK	07151000	4,528	1943-45, 1948, 1951-64, 1968-79, 1985-90
Chikaskia River near Braman, OK	07151900	1,510	1976-77

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Chikaskia River near Blackwell, OK	07152000	1,859	1906, 1938, 1943-45, 1952-53, 1955-56, 1959-64, 1975-80, 1985-90
Chikaskia River near Tonkawa, OK	07152050		1948, 1952, 1960-63
Salt Fork Arkansas River near Marland, OK	07152200		1959-63
Bois D Arc Creek near Ponca City, OK	07152250	100	1952, 1959-63
Salt Fork Arkansas River near White Eagle, OK	07152260		1977-80
Red Rock Creek near Red Rock, OK	07152350		1951-58, 1961-63
Salt Creek near Shidler, OK	07152400		1954-55, 1958, 1961-63
Arkansas River at Ralston, OK	07152500	54,465	1950-63, 1965-93
Black Bear Creek at Pawnee, OK	07153000	576	1944-50, 1952-53, 1955-65, 1967-71, 1977-80, 1985-90
Cimarron River near Kenton, OK	07154500	1,106	1952-53, 1955-56, 1959-63, 1967-68, 1977, 1982, 1987-90
Cimarron River Ab Ute Creek near Boise City, OK	07155000	1,955	1938-48, 1950
Cimarron River near Forgan, OK	07156900	8,536	1967-68, 1970-71, 1974, 1987-90

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Cimarron River near Mocane, OK	07157000	8,670	1942-49, 1952-53, 1955-56, 1959-66, 1977-78
Cimarron River near Englewood, KS	07157580	10,096	1938-42, 1982-87
Buffalo Creek near Lovedale, OK	07157960	408	1917, 1973-80, 1987-90
Cimarron River near Buffalo	07157950	12,004	1953, 1961-63, 1968-94
Cimarron River at Freedom, OK	07157980	12,706	1953, 1973-80
Cimarron River near Waynoka, OK	07158000	13,334	1938-53, 1955-56, 1959-63, 1968-79, 1985-90
Main Creek near Waynoka, OK 23N-16W-03 DDD	07158010	89.7	1986, 1988
Eagle Chief Creek at Cleo Springs, OK 22N-12W-02	07158105	480	1986, 1988, 1991
Salt Creek near Hitchcock, OK	07158150	44.4	1968-70
Salt Creek near Okeene, OK	07158400	196	1973-80, 1986, 1988
Preacher Creek near Dover, OK 18N-08W-13 BBB	07158500	14.5	1952-53, 1986-89
Turkey Creek near Drummond, OK	07159000	248	1947-48, 1952-53, 1955-56, 1976
Cimarron River near Dover, OK	07159100	15,713	1953, 1973-80, 1986-90
Turkey Creek near Dover, OK	07159203		1961-62
Deer Creek Abv Waste Water Trmt Fac near Edmond, OK	07159630		1983-84
Deer Creek Blw Waste Wtr Trmt Fac near Edmond, OK	07159645		1983-84

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Cottonwood Creek near Navina, OK	07159720	247	1977-80, 1982-89
Cottonwood Creek near Seward, OK	07159750	320	1973-82, 1989-91
Cottonwood Creek near Guthrie, OK	07159800	366	1953, 1955-56, 1960-61
Cimarron River near Guthrie, OK	07160000	16,892	1905, 1930-31, 1938-57, 1959-71, 1973-80, 1986-90
Skeleton Creek near Lovell, OK	07160500	410	1950-55, 1975-80, 1985-90
Cimarron River at Perkins	07161000	17,852	1950, 1953-63, 1965-94
Council Creek near Stillwater, OK	07163000	31	1986-90
Cimarron River near Ripley, OK	07161450	17,979	1987-90
Stillwater Creek at Stillwater, OK	07162000	168	1954-55
Council Creek near Stillwater, OK	07163000	31	1986-90
Cimarron River at Oilton, OK	07163500	18,669	1938, 1942, 1944-45, 1981
Cimarron River at Mannford, OK	07164000	18,849	1939-52, 1959-63
Arkansas River at Sand Springs near Tulsa, OK	07164400	74,615	1905, 1946-77, 1980
Polecat Creek Blw Heyburn Res near Heyburn, OK	07165500	123	1944-69, 1971-79
Polecat Creek near Jenks, OK	07165510		1959-63
Arkansas River at Bixby, OK	07165520		1948-49
Snake Creek near Leonard, OK	07165559		1960-61
Arkansas River near Haskell, OK	07165570	75,473	1972-83, 1986-88
Cane Creek near Jamesville, OK	07165581		1960-61
Arkansas River near Tullahassee, OK	07165600	75,815	1969-72

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Arkansas River at Muskogee, OK	07165610		1956, 1958, 1961-63, 1969-70
Verdigris River near S Coffeyville, OK	07170950		1952-53, 1974-78
Verdigris River near Lenapah, OK	07171000	3,639	1940-83, 1985-87, 1989-90
California Creek near Nowata, OK	07171080		1952-53, 1959
Verdigris River near Nowata, OK	07171100		1952-53
East Fork Big Creek near Hollow, OK	07171105	14.4	1979-80, 1982-83
Big Creek near Nowata, OK	07171220		1952-53, 1959, 1981
Salt Creek near Alluwe, OK	07171230		1952-53, 1959
Lightning Creek near Alluwe, OK	07171240		1952-53, 1959
Verdigris River near Talala, OK	07171260		1952-53
Verdigris River near Oologah, OK	07171400	4,339	1961-83, 1986, 1988-89
Verdigris River Ab Caney River near Claremore, OK	07171405		1941, 1945, 1948, 1952-55, 1959, 1961, 1978
Sweetwater Creek near Claremore, OK	07171490		1980-83
Verdigris River near Sageeyah, OK	07171500	4,402	1938, 1940-45, 1961
Caney River near Hulah, OK	07173000	733	1938, 1940-83, 1986
Little Caney River near Copan, OK	07174000	424	1976-77, 1979
Cotton Creek near Copan, OK	07174150		1967-68

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Little Caney River Blw Cotton Cr, near Copan, OK	07174200	502	1944-81, 1983, 1986
Caney River Above Coon Creek at Bartlesville, OK	07174400	1,392	1985-86, 1989-90
Caney River at Bartlesville, OK	07174500	1,465	1944-45, 1947, 1949-51, 1966-68, 1978-82
Sand Creek at Okesa, OK	07174600	139	1951-55, 1960-78, 1980-83, 1985-86, 1989-90
Caney River near Ochelata, OK	07174700	1,753	1959-61
Double Creek SWS 5 near Ramona, OK	07175000	2.39	1957-59, 1964-65, 1967-69
Caney River near Ramona, OK	07175500	1,955	1966-93
Caney River near Collinsville, OK	07175550	2,046	1949-53, 1959
Verdigris River near Claremore, OK	07176000	6,534	1944, 1947-54, 1977-81, 1985-87
Bird Creek at Pawhuska, OK	07176320		1944-46
Bird Creek near Barnsdall, OK	07176350		1949-53
Birch Creek near Barnsdall, OK	07176455		1964-66, 1978, 1980-81, 1983
Birch Creek Blw Birch Lake near Barnsdall, OK	07176465	66	1989-90
Bird Creek at Avant, OK	07176500	364	1945-55, 1957-81, 1983, 1986, 1989-90
Candy Creek near Wolco, OK	07176800	30.6	1978-80
Bird Creek near Skiatook, OK	07176910		1948-50, 1952-53
Hominy Creek near Hominy, OK	07176950		1949-53, 1955

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Hominy Creek near Skiatook, OK	07177000	340	1944-55, 1957-71, 1977-78, 1980-81, 1983, 1986
Hominy C Bl Skiatook Lk near Skiatook, OK	07177410	354	1988-89
Bird Creek at 66th Street near Tulsa, OK	07177600	967	1988-90
Flat Rock Creek at Cincinnati Ave at Tulsa, OK	07177650	8.2	1988-89
Flat Rock Creek at Us Hwy 75 at Tulsa, OK	07177700	22.6	1988-90
Bird Creek near Owasso, OK	07178000	1,022	1948-50, 1987-90
Mingo Creek at 46th Street North at Tulsa, OK	07178040	59.9	1987-98
Bird Creek near Catoosa, OK	07178050	1,080	1963-90
Verdigris River near Inola, OK	07178600	7,911	1940-71, 1976-79
Verdigris River (Newt Graham L&D) near Inola, OK	07178620	7,911	1971-86
Verdigris River near Okay, OK	07178670		1959-63
Neosho River near Commerce, OK	07185000	5,876	1944-54, 1959-73, 1975-83, 1985-89
Neosho River near Langley, OK	07190500	10,335	1944-47, 1949-51, 1956-59, 1975-80, 1988
Big Cabin Creek near Welch, OK	07190590	28.1	1979-83
Big Cabin Creek Tributary Blw Wolfe Ck near Welch, OK	07190597		1980-83
West Fork Big Cabin Creek near Centralia, OK	07190620	13.1	1979-83
Middle Fork Big Cabin Creek near Centralia, OK	07190622		1979-80
Middle Fork Big Cabin Creek near Pyramid Corners, OK	07190625	13.4	1979-83
Big Cabin Creek near Vinita, OK	07190650		1944, 1949-51, 1980
Little Cabin Creek near Vinita, OK	07190850		1948-51
Big Cabin Creek near Big Cabin, OK	07191000	450	1948, 1951-60, 1964-71, 1975-77, 1985-89

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Spavinaw Creek near Sycamore, OK	07191220	133	1972-77, 1980-88
Spavinaw Creek near Colcord, OK	071912213		1980-81
Spavinaw Creek near Jay, OK	07191223		1958-61
Spavinaw Creek near Spavinaw, OK	07191310		1944, 1948-51
Salina Creek near Salina, OK	07191350		1948-53, 1958-59
Neosho River near Chouteau, OK	07191500	11,534	1921, 1940-48, 1950-58, 1960, 1975-80
Pryor Creek near Pryor, OK	07192000	229	1942-44, 1948-58, 1960-63
Pryor Creek at Elliot St Br near Pryor, OK	07192030		1947, 1966-71
Pryor Creek at Hwy 69a near Pryor, OK	07192050		1962-63
Pryor Creek Blw Sulfur Creek near Pryor, OK	07192060		1966-74
Neosho River near Wagoner, OK	07192500	12,307	1930-31, 1938-50
Neosho River below Fort Gibson Lake near Fort Gibson, OK	07193500	12,495	1952-93
Arkansas River near Muskogee, OK	07194500	96,674	1943-71, 1976-80
Bayou Manard near Fort Gibson, OK	07194512		1960-61
Greenleaf Creek near Braggs, OK	07194545		1951-55
Illinois River at Savoy, AR	07194800	167	1968, 1974-91
Illinois River South of Siloam Springs, AR	07195430		1972-81
Flint Creek at Springtown, AR	07195800	14.2	1975-79
Flint Creek North of Siloam Springs, AR	07195850		1972-81
Tahlequah Creek at Tahlequah, OK	07196510	13.4	1976-77
Illinois River blw. Tahlequah Creek near Tahlequah, OK	07196513		1997-99
Peach eater Creek at Christe, OK	07196973	25	1991-93
Dirty Creek near Warner, OK	07198500	227	1940-46, 1960-61, 1977
South Fork near Porum, OK	07198800		1979-82

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Canadian River near Roll, OK	07228200	23,615	1950, 1953, 1961-63, 1974, 1976-77
Canadian River near Taloga, OK	07228250		1938-45
Deer Creek at Hydro, OK	07228400	274	1959-63, 1978-80, 1989
Canadian River at Bridgeport, OK	07228500	25,276	1949-61, 1964, 1970-92
Canadian River near Union City, OK	07228700		1953, 1973
Canadian River Trib near Newcastle, OK	07228960	3.32	1938-45
Canadian River near Noble, OK	07229100	25,911	1963-75
Canadian River at Purcell, OK	07229200	25,939	1953, 1959-63, 1974-80, 1985-90
Walnut Creek at Purcell, OK	07229300	202	1949-50, 1952-53, 1959-61, 1973, 1975-77, 1985-90
Canadian Sandy Creek near Ada, OK	07229427		1986-88
Elm Creek near Moore, OK	07229441		1959-61
Little River Abv Lake Thunderbird near Norman, OK	07229460		1984-85
Little River near Norman, OK	07229500	120	1953, 1956, 1960-61
Clear Creek near Norman, OK	07229601		1960-61
Hog Creek near Stella, OK	07229801		1959-61
Little River Blw Lk Thunderbird near Norman, OK	07230000	257	1953-65, 1975-80, 1985-90
Little River near Tecumseh, OK	07230500	456	1944-64, 1967-70, 1972-75, 1986-90
Little River near Harjo, OK	07230531		1960-61
Little River near Maud, OK	07230558		1960-61
Little River near Bowlegs, OK	07230597		1960-61, 1983-88

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Salt Creek near Pearson, OK	07230700		1959-61
Salt Creek near St Louis, OK	07230731		1959-61
Salt Creek near Dewright, OK	07230800	210	1959-63
Little River near Sasakwa, OK	07231000	865	1951-92
Canadian River at Calvin, OK	07231500	27,952	1944, 1951-53, 1960-61, 1965-95
Gaines Creek near Higgins, OK	07231955	152	1978-93
Pit Creek near Gowen, OK	07231958	5.74	1990-91
Pit Creek near Hartshorne, OK	07231959	8.95	1991-93
Gaines Creek near Gowen, OK	07231960	182	1990-93
Ti Creek near Blanco, OK	07231965	4.82	1980-81
Brushy Creek near Haileyville, OK	07231975	139	1978-81
Peaceable Creek near Haileyville, OK	07231990	134	1978-82
Gaines Creek near Krebs, OK	07232000	588	1944-47, 1949-55, 1959-62
Blue Creek Tributary A near Blocker, OK	07232008		1978-81
Blue Creek Tributary B near Blocker, OK	07232009	0.22	1975-80
Blue Creek near Blocker, OK	07232010	12.1	1975-81
Deer Creek near Mcalester, OK	07232024	38.3	1978-81
Coal Creek near Mcalester, OK	07232027		1960-61
Mathuldy Creek near Crowder, OK	07232029	5.41	1975-81
Rock Creek near Crowder, OK	07232031		1960-61
Gaines Creek near Canadian, OK	07232050		1959-62
Beaver River near Guymon, OK	07232500	2,139	1937-65, 1967-77, 1988, 1990
Beaver River near Hooker, OK	07232630	3,017	1972-73, 1975, 1977, 1979
Coldwater Creek near Hardesty, OK	07233000	1,967	1939-64
Beaver River near Hardesty, OK	07233210	5,029	1938-39, 1979-82
Palo Duro Creek near Range, OK	07233700	1,745	1953-54, 1959-62

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Beaver River at Beaver	07234000	7,955	1952, 1958-59, 1962-63 1968-94
Clear Creek near Elmwood, OK	07234100	170	1987-90
Kiowa Creek near Slapout, OK	07234200	371	1953-54, 1959-60, 1980
Clear Creek near May, OK	07234300	109	1953-54, 1960
Beaver River near Fort Supply, OK	07234500	9,615	1939-51, 1957, 1976
Wolf Creek near Shattuck, OK	07235500	1,183	1938-46
Wolf Creek near Fargo, OK	07236000	1,624	1941-64, 1967-68, 1971-72, 1976, 1978
Wolf Creek near Fort Supply, OK	07237000	1,739	1938-63, 1971, 1973, 1979, 1987-90
North Canadian River at Woodward, OK	07237500	11,589	1955, 1958-59, 1961-63, 1975-95
North Canadian River near Seiling, OK	07238000	12,261	1943-44, 1946-72, 1974-83, 1987-90
North Canadian River at Canton, OK	07239000	12,484	1938-68, 1971-80, 1986-90
North Canadian River near Watonga, OK	07239200	12,692	1943-44, 1949-51, 1954-57, 1959, 1963, 1965
North Canadian R Blw Weavers Ck near Watonga, OK	07239300	12,736	1985-90
North Canadian River near Yukon, OK	07239700	13,183	1952-53, 1974, 1988-89
Lake Hefner Canal near OK City, OK	07240000		1979, 1988

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
North Canadian River near OK City, OK	07241500	13,354	1940, 1942, 1944-50, 1952, 1959-63, 1973, 1975
North Canadian River at NE 36th St at OKC, OK	07241503	13,356	1988-91
North Canadian River near Jones, OK	07241530		1973, 1982
North Canadian River near Shawnee, OK	07241700		1973, 1979-80
North Canadian River near Wetumka, OK	07242000	14,290	1944, 1952-95
Wewoka Creek at Wewoka, OK	07242050		1961-63
Little Wewoka Creek near Wetumka, OK	07242080		1960-63, 1978
Grief Creek near Wetumka, OK	07242090		1961-63
Wewoka Creek near Wetumka, OK	07242100	396	1926, 1950-64, 1984
Fish Creek near Wetumka, OK	07242109		1960-61
North Canadian River near Pierce, OK	07242190	17,712	1959-63
Deep Fork at Portland Ave, OK City, OK	07242200	2.98	1979-80
Deep Fork at Eastern Ave, OK City, OK	07242220	28.2	1973-74
Deep Fork near Witcher, OK	07242250		1959, 1973
Deep Fork at Witcher, OK	07242300		1960-62, 1975-76
Deep Fork near Arcadia, OK	07242350	105	1907, 1969-89
Deep Fork at Warwick, OK	07242380	532	1985-90
Deep Fork near Chandler, OK	07242400		1959-62, 1980
Bellcow Creek at Chandler, OK	07242500	46	1948-50, 1953-54, 1979-80
Deep Fork near Stroud, OK	07242900		1979, 1991

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Dry Creek near Kendrick, OK	07243000	69	1960, 1965-68, 1970-71, 1973-74, 1979, 1985-89
Little Deep Fork near Edna, OK	07243450		1951-57, 1960-62
Deep Fork near Beggs, OK	07243500	2,018	1952-93
Deep Fork near Dewar, OK	07244000	2,307	1938-51, 1960-65, 1979
Deep Fork near Pierce, OK	07244200		1959-63
North Canadian River near Eufaula, OK	07244500	17,657	1952-53, 1959-61
Canadian River near Whitefield, OK	07245000	47,576	1900, 1938-90
Taloka Creek at Stigler, OK	07245020	3.98	1921, 1974, 1978-81
Taloka Creek Trib near Stigler, OK	07245025		1978-81
Taloka Creek near Stigler, OK	07245030	20.1	1978-81
Jackson Creek near Stigler, OK	07245040		1980-81
Little Vian Creek near Vian, OK	07245119		1958-60
Sallisaw Creek near Sallisaw, OK	07245500	182	1959-63, 1976-77
Sans Bois Creek near Kinta, OK	07245703		1960-61
Mule Creek at Sr 31 near McCurtain, OK	07245980	3.64	1981-82
Mule Creek, Upper Gage, near McCurtain, OK	07245990	6.45	1980-83
East Pond Outlet to Mule Creek near McCurtain, OK	07245991		1980-83
Mule Creek, Middle Gage, near McCurtain, OK	07245992	6.49	1981-83
Mule Creek, Lower Gage, near McCurtain, OK	07245994	6.74	1980-83
Sans Bois Creek near Keota, OK	07246000	346	1938-42, 1958-63
Arkansas River near Sallisaw, OK	07246500	14,7757	1943-72
Cache Creek near Cowlington, OK	07246600	20.6	1958-61
Coal Creek near Spiro, OK	07246615	15.4	1910, 1978-81
Poteau River East Of Waldron, AR	07246940	15	1983-96
Poteau River Northwest Of Waldron, AR	07246950	46.1	1983-96

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Poteau River near Hon, AR	07246960	69.5	1993-96
Jones Creek near Hon, AR	07246980	93.6	1993-96
Poteau River at Cauthren, AR	07247000	203	1945-61 1975-79 1991-98
Poteau River South Of Bates, AR	07247012		1972-83
Poteau River at Hontubby, OK	07247025	301	1992
Fourche Maline near Wilburton, OK	07247450	56.2	1978-81
Fourche Maline near Red Oak, OK	07247500	122	1954, 1954, 1956-60, 1978-79, 1992-96
Red Oak Creek near Red Oak, OK	07247550	12.8	1978-81
Poteau River near Wister, OK	07248500	993	1938-40, 1942, 1944-50, 1954-60, 1975-80, 1986
Caston Creek at Wister, OK	07248600	72.9	1975, 1977-81
Morris Creek at Howe, OK	07248620	19.4	1908, 1978-81
Sugarloaf Creek near Monroe, OK	07248700	53.6	1978-81
Poteau River at Poteau, OK	07249000	1,240	1938, 1940-42, 1944
Brazil Creek near Red Oak, OK	07249060	2.74	1978-81
Rock Creek near Red Oak, OK	07249070	12	1978-81
Brazil Creek near Lodi, OK	07249073		1980-81
Brazil Creek near Walls, OK	07249080	69.1	1978-81, 1984-86
Owl Creek near McCurtain, OK	07249100	27.9	1978-81
Brazil Creek near Panama, OK	07249200		1959-61
James Fork near Williams, OK	07249410	198	1976-81
Poteau River near Panama, OK	07249413	1,767	1993-98
Coal Creek Tributary near Bokoshe, OK	07249415	1.26	1976-79
Coal Creek near Panama, OK	07249419	6.67	1976-79
Holi-tuska Creek near Panama, OK	07249422	4.39	1978-81
Poteau River near Braden, OK	07249438		1958-59, 1961-63
Poteau River near Fort Smith, AR	07249440		1972-79

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Lee Creek near Short, OK	07249800	236	1958-61, 1975-77
Little Lee Creek near Short, OK	07249900		1960, 1977-79
Arkansas River at L&d #13 near Van Buren, AR	07250550	150,547	1975-77
08N-06E-26 DDA 1	350756096380501		1978, 1980
08N-06E-23 AAD 1	350924096380401		1978, 1980
09N-05E-23 BBB 1	351440096452001		1974-75
09N-06E-13 DDA 1	351455096370401		1978-79
09N-05E-16 ADD 1	351518096464001		1978-79
09N-06E-17 BBA 1	351538096421101		1978-79
09N-06E-09 CDC 1	351540096405801		1978-79
09N-06E-10 DAA 1	351601096391301		1978-79
09N-06E-04 BCA 1	351706096410801		1978-79
09N-06E-03 AAB 1	351723096392301		1978-79
Squirrel Creek near Shawnee, OK	351815096544301		1983-84
North Canadian River at Shawnee Bridge	351857096553001		1983-84
North Canadian River East of Shawnee, OK	351959096520901		1983-84
North Canadian River Above Lake Eufaula, OK	352305095531001		1983-84
N Canadian River near Prague, OK	352359096401201		1983-84
North Canadian River West of Okemah, OK	352546096242701		1983-84
North Canadian River at 63rd St Bridge, OK City, OK	353211097222501		1983-84
Sallisaw Creek at Bunch, OK	354035094452001		1958-59
Bear Creek near Fallis, OK	354512097075301		1953-55
Eagle Creek near Hectorville, OK	355032095580401		1907, 1979
Tributary to Campbell Creek near Cashion, OK	355032097431501	3.15	1986, 1988
Campbell Creek near Cashion, OK	355032097432301	22.6	1986-88
Pawnee Creek near Crescent, OK	355125097371501	13.1	1986, 1988
Gar Creek near Guthrie, OK	355217097315601	10.6	1986-88
Cox Creek near Crescent, OK	355217097361901	7.47	1986, 1988
Kingfisher Creek near Kingfisher, OK	355342097541001	501	1986-88

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Bird Creek near Kingfisher, OK	355415097464801	8.5	1986-88
Trail Creek near Kingfisher, OK	355421097521601	16.1	1986-87
Baron Fork near Baron, OK	355510094371001		1958-59
East Fork Sooner Creek near Crescent, OK	355540097440701	11.2	1986-88
West Fork Sooner Creek near Crescent, OK	355540097442301	9.79	1986-88
Treaty Creek near Loyal, OK	355810097590501	6.86	1986, 1988
Turkey Creek at Dover, OK	355842097551201	428	1986-88
Cooper Creek near Dover, OK	355902097594501	116	1986-88
Ballard Creek at Ballard, OK	360540094352001		1958-59
Indian Creek near Ringwood, OK	361723098175701	75.4	1986-89
Sand Creek near Fairview, OK	361835098252601	41.8	1986-88
Gypsum Creek near Fairview, OK	361901098260701	13.8	1986, 1988
Cherokee Creek near Sycamore, OK	361919094394501		1980-81
Spavinaw Creek near Jay, OK	362059094470601		1980-81
Beaty Creek near Sycamore, OK	362119094463001		1980-81
Cheyenne Creek near Orienta, OK	362137098370501	38.8	1986, 1988
Cottonwood Creek at Orienta, OK	362150098282301	54.3	1986, 1988
Barney Creek near Orienta, OK	362414098420201	41.1	1986, 1988
Griever Creek near Waynoka, OK	362446098470001	88.8	1986, 1988
West Creek near Waynoka, OK	362933098554201	31.9	1986, 1988
24N-23E-08 B1 OWRB 24R, Well on Monkey	363324094502501		1980-81
Sand Creek near Belva, OK	363436098590301	54.1	1986, 1988
Chimney Creek near Belva, OK	363731099015301	27.5	1986, 1988
Doe Creek near Freedom, OK	363823099065201	14.2	1986, 1988
Long Creek near Freedom, OK	364244099070801	53.1	1986, 1988

WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

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DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
Anderson Creek near Freedom, OK	364521099053901	34.5	1986, 1988
27N-23E-05 BDA 1 OWRB 22B, Neosho R near I-44	365108094511801		1980-82
27N-23E-06 AAD 1 WRB 22a, Neosho R Ab Tar C	365112094514401		1980-82
27N-23E-05 BBB 1 OWRB 22, Tar C Ab Neosho R	365118094513201		1981-82
28N-23E-30 Ddd 1 OWRB 21, Tar C at Hwy 10	365215094514001		1980-81
28N-23E-30 Ddb 1 OWRB 20, Tar C at Central	365230094514301		1980-82, 1984
28N-23E-30 Aac 1 Tar C at Rockdale Blvd	365255094514301		1984-85
28N-23E-19 Abb 1 OWRB 16, Tar C at 22nd Ave	365359094520401		1980-81, 1984-86
28N-23E-18 Abb 1 OWRB 14b, Tar C Blw Spring	365451094520401		1981-82
28N-22E-07 CAA 1 OWRB 14a, Weir Blw Site 14	365522094521301		1981, 1984
28N-23E-09 BCC 1 OWRB 15, Garrett C	365523094503201		1980, 1985
28N-23E-07 BBD 1 OWRB 13, Cactus Mine Disch	365533094522801		1979-83
28N-23E-05 CCC 1 OWRB 5, Tar C near Commerce	365544094513201		1980, 1984-85
29N-23E-31 DCD 1 OWRB 10, Tar C at Hwy 66	365637094511201		1980-82, 1984-85
29N-23E-32 BCA 3 Tar C Below Mine Trib	365710094504401		1984-85
29N-23E-32 BCA 1 Mine Trib at Tar C, South	365714094504401		1983-85
29N-23E-32 BBD 2 Mine Trib Pond	365715094504301		1984-85
29N-23E-32 BBD 3 Outflow from Mine Trib Pd	365715094504302		1984-85
29N-23E-32 BAC 1 Mine Trib S of Rr Culvert	365720094503801		1983-85
29N-23E-32 BAB 1 1132 M from Rr Borehole	365723094503511		1984-85
29N-23E-32 BAB 3 138 M from Rr Borehole	365723094503513		1984-85
29N-23E-32 BAB 20 Mine Trib, N of Rr Culvert	365723094503520		1984-85
29N-23E-29 CDC 3 Lavrion Tailings Pond/col	365730094503301		1984-85
29N-23E-29 CCD 1 OWRB 4t, Tailings Runoff	365730094504601		1980-81, 1985
29N-23E-29 CCD 3 OWRB Site 4 Tar C at Lytl	365732094504400		1980-82
29N-23E-29 CCD 2 OWRB Site 4a Tar C Ab Lyt	365732094504401		1980-82
29N-23E-29 CAC 2 Lytle C 400 M Ab Site 4	365744094503200		1981, 1985
29N-23E-29 CAC 1 Collapse W of Lytle C	365744094503201		1984-85

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WATER RESOURCES DATA — OKLAHOMA, 2000
DISCONTINUED SURFACE-WATER DISCHARGE OR SURFACE-WATER-QUALITY STATIONS

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

Station name	Station number	Drainage area (mi ²)	Period of record
ARKANSAS RIVER BASIN			
29N-23E-29 BCA 1 Tar C Above Mine Disch	365807094504301		1984-85
29N-23E-29 ABD 1 Lytle C Above Mine Disch	365811094501301		1984-85
29N-23E-18 AAC 1 OWRB 7, Tar C at State Ln	365956094510701		1980-82, 1984-85
34S-23E-35 DDC 1 Tar C at Rt 166	370153094511101		1984-85

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 134 streamflow-gaging stations, and 25 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 56 streamflow-gaging stations; (4) water-level records for 4 observation wells.

This series of annual reports for Oklahoma began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to include, in one volume, data on quantity and quality of surface water. Data on ground-water levels were added to this format from 1975-79 and 1990 to present.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Oklahoma were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface Water Supply of the United States, Parts 7A and 7B." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 under the title "Ground-Water Levels in the United States," and 1980 to 1989 under the title "Ground-Water Levels in Observation Wells in Oklahoma." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Books and Open-File Reports Section, U.S. Geological Survey, Federal Center, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is

identified as "U.S. Geological Survey Water-Data Report OK-00-1" 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

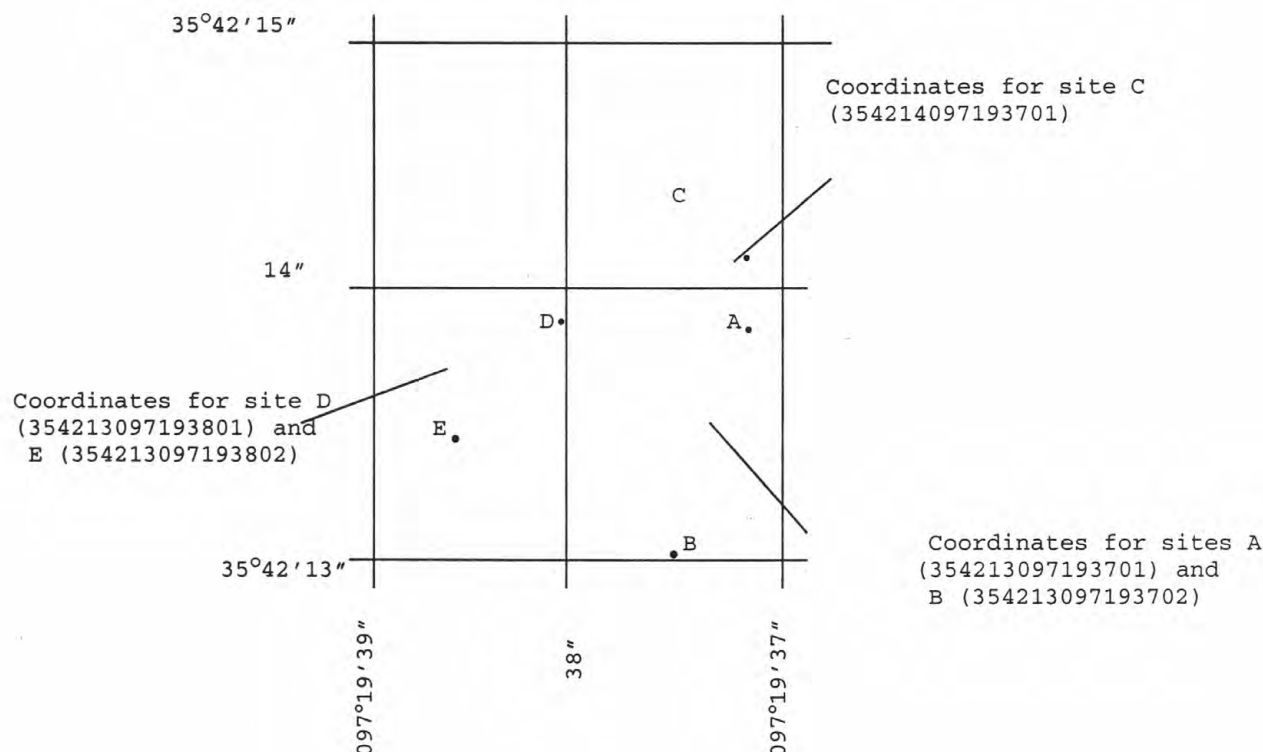
The surface-water and ground-water records published in this report are for the 2000 water year that began Oct. 1, 1999 and ended Sept. 30, 2000. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, 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 indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation 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 1-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

Volume 1: ARKANSAS RIVER BASIN

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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/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 C1. 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 turbidimetric 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 district are:

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

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

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

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

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

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

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

Reference Samples--Reference material is a solution or material prepared by a laboratory 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 properties are similar to the environmental sample properties.

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

duplicate is the special case consisting of two samples. Replicate samples are collected and analyzed to establish the amount of variability in the data contributed by some part of the collection and analytical process. 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 ($\mu\text{g/L}$) 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 $\mu\text{g/L}$ 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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 analysing 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 (ft³/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 [(ft³/s)/mi²] 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 (m²), 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:

<u>Classifi- cation</u>	<u>Size (mm)</u>	<u>Method of analysis</u>
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-size 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

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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 3.7×10^{10} radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

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

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

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

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

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

Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, 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 [$\text{mg C}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and

$[\text{mg C}/(\text{m}^3 \cdot \text{time})]$ 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 [$\text{mg O}/(\text{m}^2 \cdot \text{time})$] for periphyton and macrophytes and $[\text{mg O}/(\text{m}^3 \cdot \text{time})]$ 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

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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 (ft³/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 planimeted. All areas shown are those for the stage when the planimeted 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 hierarchical 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	<u>Hexagenia</u>
Species	<u>hexagenia limbata</u>

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-A10. *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 soluble waste transport and buildup in surface waters using tracers*, by F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A20. 1993. 38 pages.
- 3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 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.
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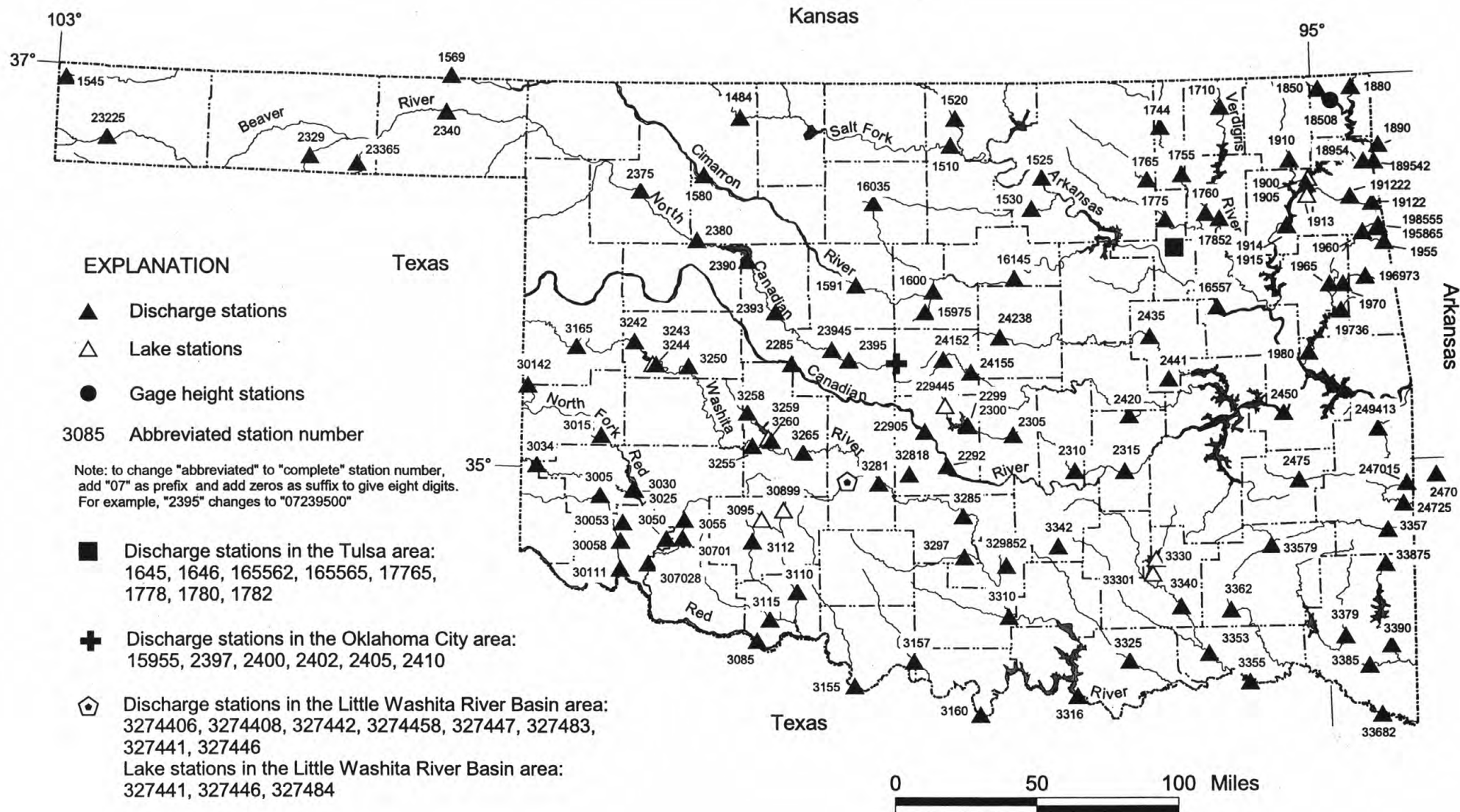


Figure 1.--Locations of continuous surface-water stations for water-year 2000.

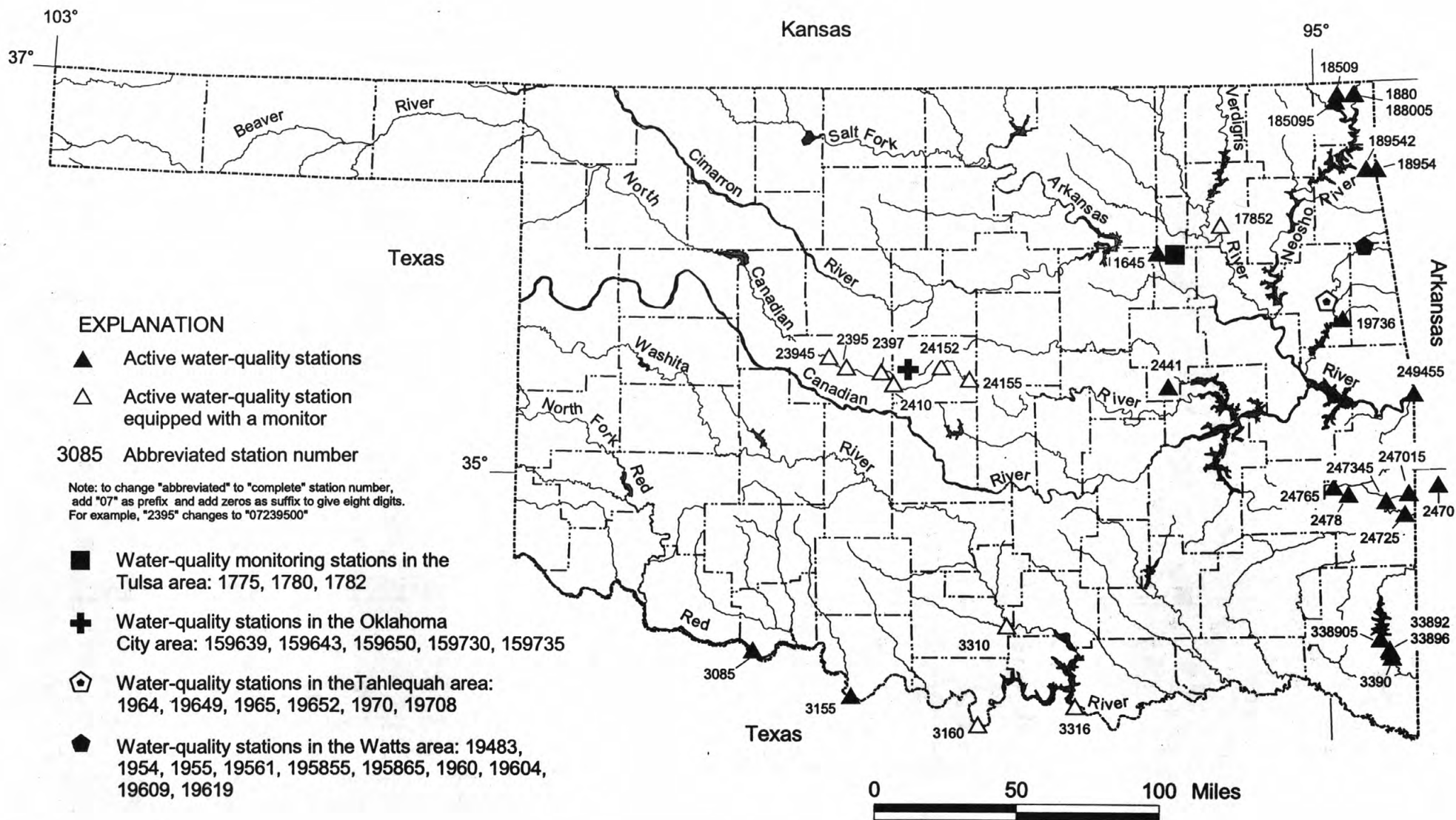


Figure 2.--Locations of water-quality stations for water-year 2000.

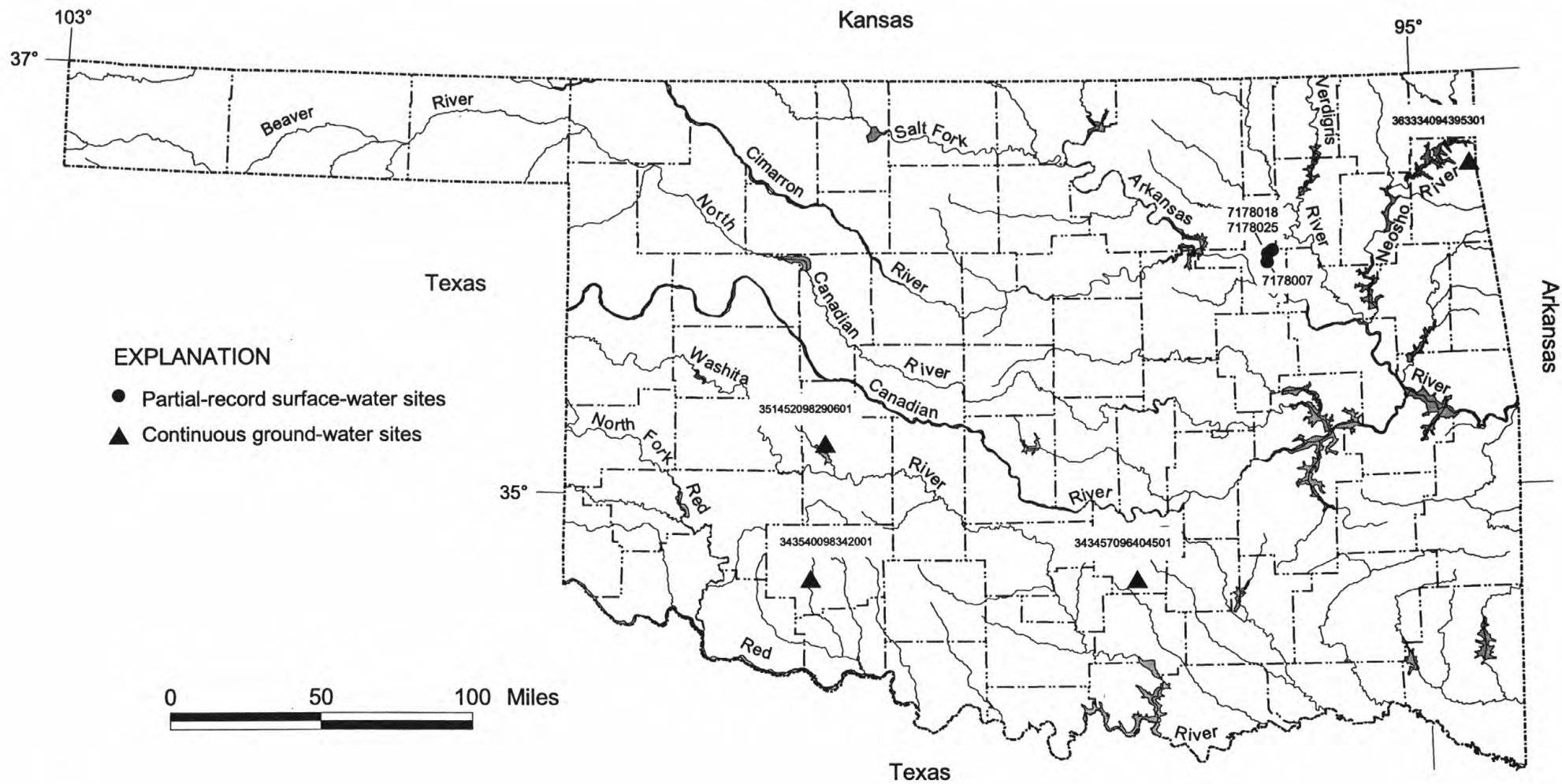


Figure 3.--Locations of partial-record surface-water stations and ground-water wells for water-year 2000.

LOCATION.--Lat 36°48'54", long 98°38'52", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.18, T.27 N., R.13 W., Woods County, Hydrologic Unit 11060002, at bridge on U.S. Highway 281, 1.0 mi northeast of Alva, 23.0 mi upstream from Medicine Lodge River, and at mile 141.0.

PERIOD OF RECORD.--April 1904 to December 1905 (gage heights only), October 1937 to September 1951, monthly discharge only for some periods, published in WSP 1311. Occasional low-flow measurements water years 1952-54, 1977-79. October 1979 to current year.

GAGE.--Water stage recorder. Datum of gage is 1,292.04 ft above sea level. April 1904 to December 1905, chain gage at site 0.8 mi upstream at different datum, and February 1938 to September 1951, water stage recorder at present site and at datum 5.00 ft higher.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 24	0530	9,040	14.42	May 26	1330	10,200	14.70

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	64	75	86	95	150	634	255	249	144	82	11
2	61	56	81	88	97	259	729	391	291	126	74	9.8
3	57	57	82	86	104	627	590	349	268	111	66	10
4	57	60	98	85	110	548	495	299	229	99	64	10
5	60	64	105	87	112	316	447	265	192	88	56	8.7
6	62	67	101	91	109	247	422	245	160	81	47	6.9
7	59	69	100	91	106	224	392	234	144	77	45	6.9
8	64	69	99	93	103	268	355	222	126	77	44	8.6
9	70	71	113	92	99	273	325	229	113	68	41	8.6
10	76	71	104	92	98	236	299	208	106	59	39	7.4
11	74	66	99	92	97	208	295	202	102	52	37	6.1
12	69	66	97	93	93	195	289	193	103	52	35	5.4
13	62	67	94	93	94	190	285	180	102	51	32	6.0
14	57	68	93	90	95	182	286	169	112	52	29	6.5
15	54	65	92	87	96	189	286	165	116	49	26	6.8
16	54	67	91	86	95	277	301	164	100	54	25	7.8
17	50	74	90	85	91	311	295	163	96	53	24	7.5
18	51	77	87	87	88	435	277	160	89	51	24	6.6
19	55	77	89	88	88	573	269	155	89	45	24	5.5
20	56	75	92	86	94	438	259	147	89	41	21	5.8
21	57	77	89	85	92	338	241	147	99	192	20	6.3
22	59	75	88	86	102	334	234	148	169	688	19	6.8
23	56	71	87	87	121	3690	233	144	115	517	17	6.9
24	58	67	89	84	139	6920	233	139	92	277	17	8.8
25	60	68	89	87	186	1680	230	144	83	205	15	8.7
26	63	71	90	88	319	990	222	6060	526	165	14	7.4
27	64	74	89	80	301	819	218	1690	513	135	13	7.8
28	64	75	86	78	193	649	211	1150	281	120	11	7.4
29	60	73	85	96	165	1080	203	597	220	105	12	6.6
30	59	75	84	111	---	864	194	406	173	95	13	5.5
31	59	---	85	100	---	637	---	305	---	89	12	---
TOTAL	1874	2076	2843	2760	3582	24147	9749	15325	5147	4018	998	224.1
MEAN	60.5	69.2	91.7	89.0	124	779	325	494	172	130	32.2	7.47
MAX.	76	77	113	111	319	6920	729	6060	526	688	82	11
MIN	50	56	75	78	88	150	194	139	83	41	11	5.4
AC-FT	3720	4120	5640	5470	7100	47900	19340	30400	10210	7970	1980	445

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

MEAN	105	107	76.0	82.7	98.8	198	214	274	255	132	101	79.0
MAX	620	542	251	269	227	822	620	856	689	411	598	557
(WY)	1986	1999	1997	1998	1987	1987	1999	1993	1989	1982	1996	1996
MIN	2.35	.95	14.8	15.3	17.4	29.2	22.5	27.1	31.3	5.17	2.66	.94
(WY)	1992	1981	1981	1981	1981	1981	1981	1992	1994	1984	1980	1980

ARKANSAS RIVER BASIN

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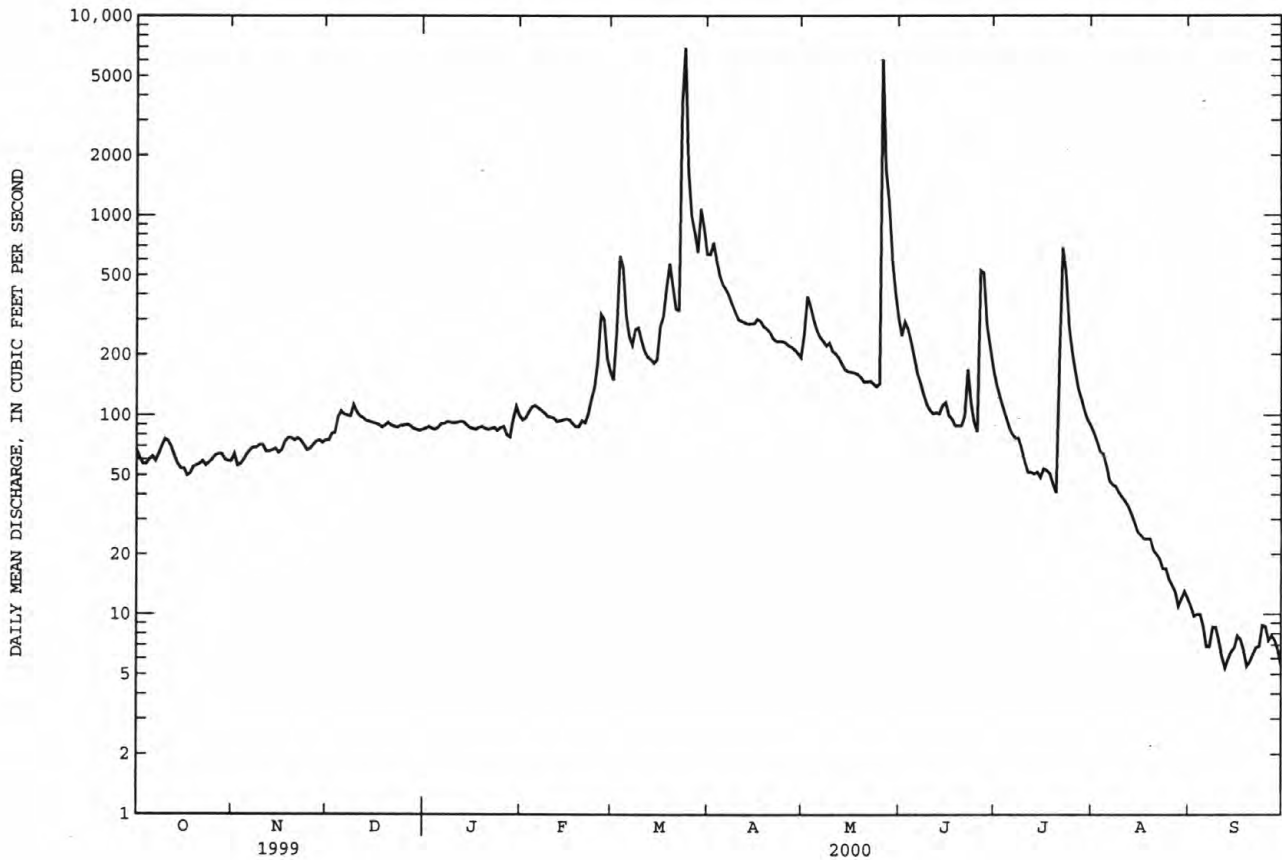
07148400 SALT FORK ARKANSAS RIVER NEAR ALVA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	90359		72743.1		^a 144	
ANNUAL MEAN	248		199		295	
HIGHEST ANNUAL MEAN					40.5	
LOWEST ANNUAL MEAN					7880	
HIGHEST DAILY MEAN	2420	Apr 15	6920	Mar 24	^b .43	Mar 24 1987
LOWEST DAILY MEAN	33	Sep 10	5.4	Sep 12	^c 12800	Aug 24 1984
ANNUAL SEVEN-DAY MINIMUM	35	Sep 4	6.5	Sep 17	15.24	Aug 18 1984
INSTANTANEOUS PEAK FLOW			10200	May 26	104100	Oct 10 1985
INSTANTANEOUS PEAK STAGE			14.70	May 26	302	Oct 10 1985
ANNUAL RUNOFF (AC-FT)	179200		144300		68	
10 PERCENT EXCEEDS	539		321		6.4	
50 PERCENT EXCEEDS	131		91			
90 PERCENT EXCEEDS	57		15			

^aAverage discharge, water years 1938-51, 158 ft³/s.

^bNo flow in several uears 1939-48.

^cMaximum discharge for period of record 27,000 ft³/s, Oct. 23, 1941, from rating curve extended above 13,000 ft³/s.



ARKANSAS RIVER BASIN

07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK

LOCATION.--Lat 36°40'19", long 97°18'33", in NW 1/4 SE 1/4 sec.4, T.25 N., R.1 W., Kay County, Hydrologic Unit 11060004, on left bank near end of bridge on U.S. Highway 77 in Tonkawa, 4 mi downstream from Thompson Creek, 7.8 mi upstream from Chikaskia River, and at mile 33.8.

DRAINAGE AREA.--4,528 mi², of which 8 mi² is probably noncontributing.

PERIOD OF RECORD.--September 1903 to October 1905 (gage heights only), October 1935 to current year. Monthly discharge only for some periods, published as Arkansas River (Salt Fork) near Tonkawa 1903-4 and as "near Tonkawa" 1905.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 930.22 ft above sea level. September 1903 to October 1905, nonrecording gage near present site at different datum. Jan. 2, 1936 to Jan. 22, 1939, nonrecording gage, and Jan. 23, 1939 to June 20, 1960, water-stage recorder at site 100 ft upstream at same datum.

REMARKS.--No estimated daily discharge. Records poor Oct 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept.30. Some regulation since June 1941 by Great Salt Plains Lake, 69.5 mi upstream (station 07150000). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1923, reached a stage of 26.8 ft, from information by U.S. Army Corps of Engineers.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 11,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 18	1200	16,800	19.27	Mar 25	1900	21,600	21.03

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	519	447	271	479	469	1050	8840	803	4950	1690	724	59
2	461	312	295	466	468	1120	7990	887	4500	1630	648	59
3	353	261	556	479	467	943	7440	1010	4080	1610	574	59
4	257	249	1530	457	464	2620	6730	931	3640	1280	499	58
5	264	260	5740	445	468	3100	6150	955	3290	1110	419	57
6	260	231	5770	479	473	2420	5590	970	2870	1000	398	57
7	250	219	3580	479	452	2160	5050	940	2500	866	393	57
8	231	225	2390	458	453	1970	4580	920	2180	741	323	56
9	235	231	3670	454	464	2100	4110	1070	1880	651	284	56
10	233	251	6690	450	448	2160	3690	1000	1600	599	269	56
11	250	249	3590	468	438	1690	3350	1210	1380	557	229	55
12	241	240	1890	460	419	1550	2970	1170	1220	516	192	55
13	221	227	1330	441	374	1440	2640	1100	1100	423	170	56
14	245	211	1100	433	403	1330	2440	892	1050	397	147	55
15	221	215	965	426	419	1270	2210	827	977	330	145	55
16	186	200	998	452	384	4870	2060	746	845	309	130	55
17	224	194	819	470	381	14700	2520	674	872	293	109	54
18	198	204	730	419	354	16200	2370	678	861	262	105	56
19	135	218	661	433	371	10300	1980	697	817	224	103	54
20	147	248	629	419	430	6480	1800	727	787	212	98	53
21	165	214	612	407	403	4490	1770	610	846	330	87	53
22	176	195	597	402	403	3950	1490	582	906	405	85	55
23	182	261	609	395	446	6280	1340	583	953	661	82	56
24	161	1830	579	409	745	17100	1250	569	1350	895	74	60
25	150	1820	571	404	2380	20700	1210	1120	1990	1080	71	61
26	148	993	543	418	3700	17000	1160	1910	2960	1160	69	61
27	148	527	535	411	3040	11400	1130	2610	2590	1240	71	60
28	163	389	523	406	1710	9680	1050	3410	1720	1190	62	60
29	191	306	511	421	1180	9240	848	4750	1670	1040	60	58
30	600	272	523	473	---	10000	789	5310	1760	921	60	57
31	680	---	496	480	---	10800	---	5290	---	820	60	---
TOTAL	7895	11699	49303	13693	22606	200113	96547	44951	58144	24442	6740	1703
MEAN	255	390	1590	442	780	6455	3218	1450	1938	788	217	56.8
MAX	680	1830	6690	480	3700	20700	8840	5310	4950	1690	724	61
MIN	135	194	271	395	354	943	789	569	787	212	60	53
AC-FT	15660	23200	97790	27160	44840	396900	191500	89160	115300	48480	13370	3380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2000, BY WATER YEAR (WY)

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
MEAN	906	826	446	407	597	1130	1365	1748	1632	992	696	650							
MAX	9412	9203	2129	2124	5171	6455	7916	12770	8379	8821	6157	3448							
(WY)	1987	1999	1998	1998	1949	2000	1973	1993	1995	1951	1995	1949							
MIN	.64	4.82	3.56	7.52	10.9	10.6	13.6	8.78	7.92	5.69	5.50	.000							
(WY)	1957	1955	1955	1957	1957	1955	1955	1956	1956	1954	1956	1956							

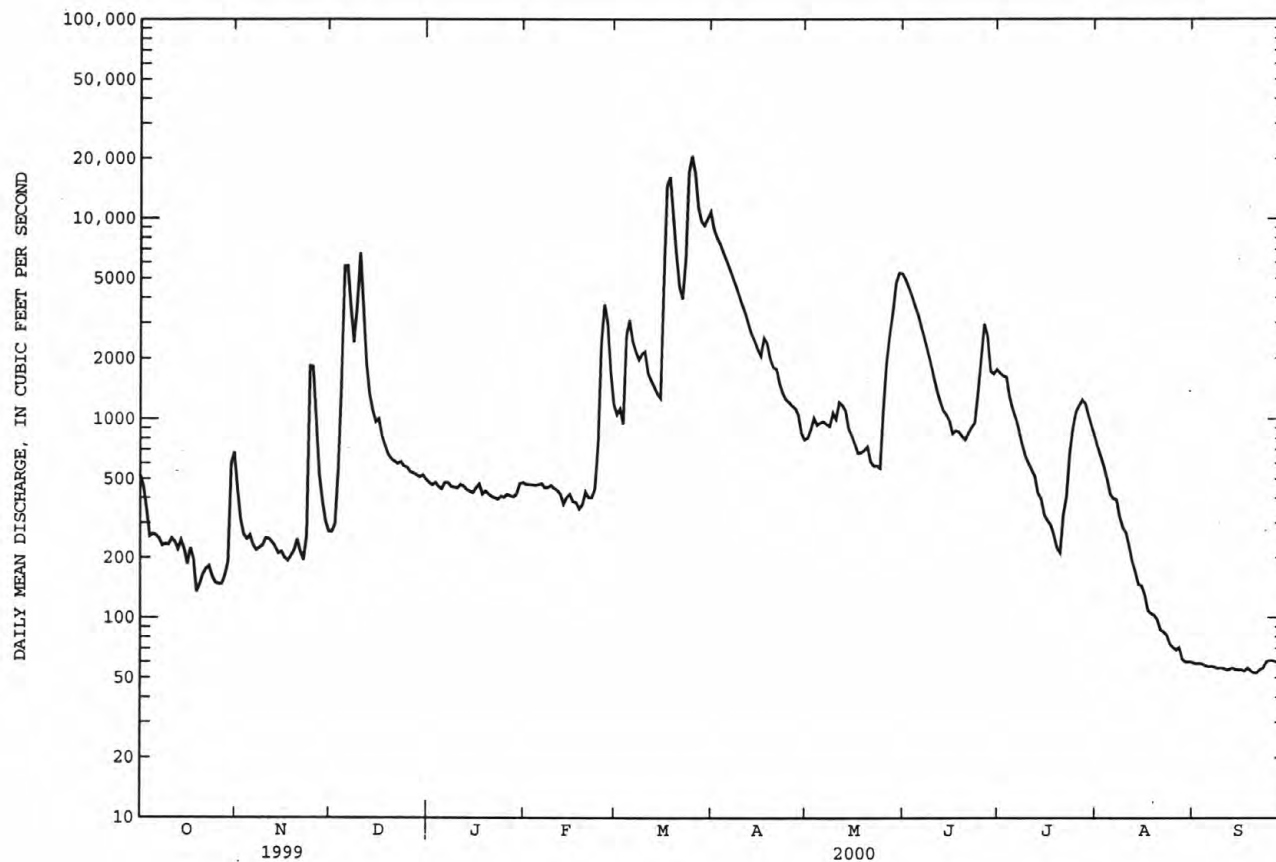
ARKANSAS RIVER BASIN

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07151000 SALT FORK ARKANSAS RIVER AT TONKAWA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1942 - 2000	
ANNUAL TOTAL	1013630		537836		950	
ANNUAL MEAN	2777		1469		3717	1999
HIGHEST ANNUAL MEAN					95.5	1954
LOWEST ANNUAL MEAN					57800	Oct 12 1973
HIGHEST DAILY MEAN	25300	Jun 25	20700	Mar 25	^a .00	Aug 31 1956
LOWEST DAILY MEAN	135	Oct 19	53	Sep 20,21	.00	Aug 31 1956
ANNUAL SEVEN-DAY MINIMUM	159	Oct 19	54	Sep 15	97300	Oct 11 1973
INSTANTANEOUS PEAK FLOW			21600	Mar 25	28.98	Oct 11 1973
INSTANTANEOUS PEAK STAGE			21.03	Mar 25	688600	
ANNUAL RUNOFF (AC-FT)	2011000		1067000		2190	
10 PERCENT EXCEEDS	7410		3680		272	
50 PERCENT EXCEEDS	835		523		35	
90 PERCENT EXCEEDS	227		71			

^aAlso occurred Sept. 12, 14-16, 1956.



ARKANSAS RIVER BASIN

07152000 CHIKASKIA RIVER NEAR BLACKWELL, OK

LOCATION.--Lat 36°48'41", long 97°16'37", in NE 1/4 NW 1/4 sec.23, T.27 N., R.1 W., Kay County Hydrologic Unit 11060005, near left bank on downstream side of State Highway 11 bridge at northeast edge of Blackwell, 0.1 mi downstream from Bitter Creek, and at mile 28.3.

DRAINAGE AREA.--1,859 mi².

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

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 967.41 ft above sea level. See WSP 1921 for history of changes prior to April, 1952.

REMARKS.--Records good. Some regulation at low flow by Lake Blackwell, capacity 3,600 acre-ft, 12.6 mi upstream from station. Small diversion made from reservoir for municipal supply of city of Blackwell. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 10, 1923, reached a stage of about 34 ft, present site and datum, from information provided by local residents, discharge 100,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 5	0830	8,330	20.58	Mar 25	0530	38,300	32.23
Dec 10	0300	9,390	22.02	May 27	1730	15,100	27.01
Mar 3	2030	10,900	23.93	Jun 25	0830	12,200	25.07
Mar 17	0400	25,400	30.52				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	286	416	183	260	252	517	2000	486	782	759	397	53
2	209	292	189	259	243	479	1840	497	766	773	321	51
3	176	191	433	260	234	7120	1650	532	1750	604	277	51
4	160	171	3250	257	254	6770	1400	538	1070	497	250	50
5	153	162	7730	257	257	1990	1210	491	661	431	228	47
6	152	158	3960	256	268	1230	1110	454	551	375	210	49
7	151	155	1590	259	264	968	1030	434	479	334	192	53
8	148	155	1240	264	256	978	926	425	436	301	183	53
9	676	159	4990	264	250	2090	857	794	393	268	180	52
10	806	166	7400	266	247	1380	802	1060	356	247	170	51
11	212	164	1850	264	241	924	866	566	335	231	161	50
12	171	165	856	259	236	826	759	454	321	217	151	43
13	160	165	611	250	235	772	724	394	308	203	142	41
14	156	164	490	243	228	674	704	354	1060	192	135	42
15	158	162	413	239	228	662	696	334	4910	180	127	37
16	145	163	372	238	227	14800	837	329	2010	171	118	35
17	141	165	348	239	225	20400	1510	329	1180	173	112	34
18	133	165	339	239	241	6520	1120	331	907	174	105	34
19	140	164	334	240	324	3820	831	316	706	239	101	34
20	131	159	324	234	395	2700	708	302	647	246	96	37
21	132	159	309	233	339	1740	650	292	2160	300	96	33
22	132	166	300	236	294	1310	609	280	4660	2430	92	35
23	133	1110	290	234	487	6620	585	268	1790	4670	87	41
24	131	1360	286	231	1530	26900	589	256	4860	2660	81	43
25	132	448	280	230	2600	29400	589	251	10600	1310	77	51
26	133	286	277	226	4850	6190	550	1150	5500	875	78	129
27	140	239	273	233	1940	3040	527	12600	6960	595	73	126
28	141	216	268	e206	926	2240	492	8820	2280	711	68	105
29	142	200	269	e203	647	3740	470	2270	1150	647	62	92
30	618	189	269	260	---	5600	461	1300	892	711	57	82
31	1000	---	266	266	---	3190	---	964	---	628	56	---
TOTAL	7298	8034	39989	7605	18718	165590	27102	37871	60480	22152	4483	1634
MEAN	235	268	1290	245	645	5342	903	1222	2016	715	145	54.5
MAX	1000	1360	7730	266	4850	29400	2000	12600	10600	4670	397	129
MIN	131	155	183	203	225	479	461	251	308	171	56	33
AC-FT	14480	15940	79320	15080	37130	328400	53760	75120	120000	43940	8890	3240

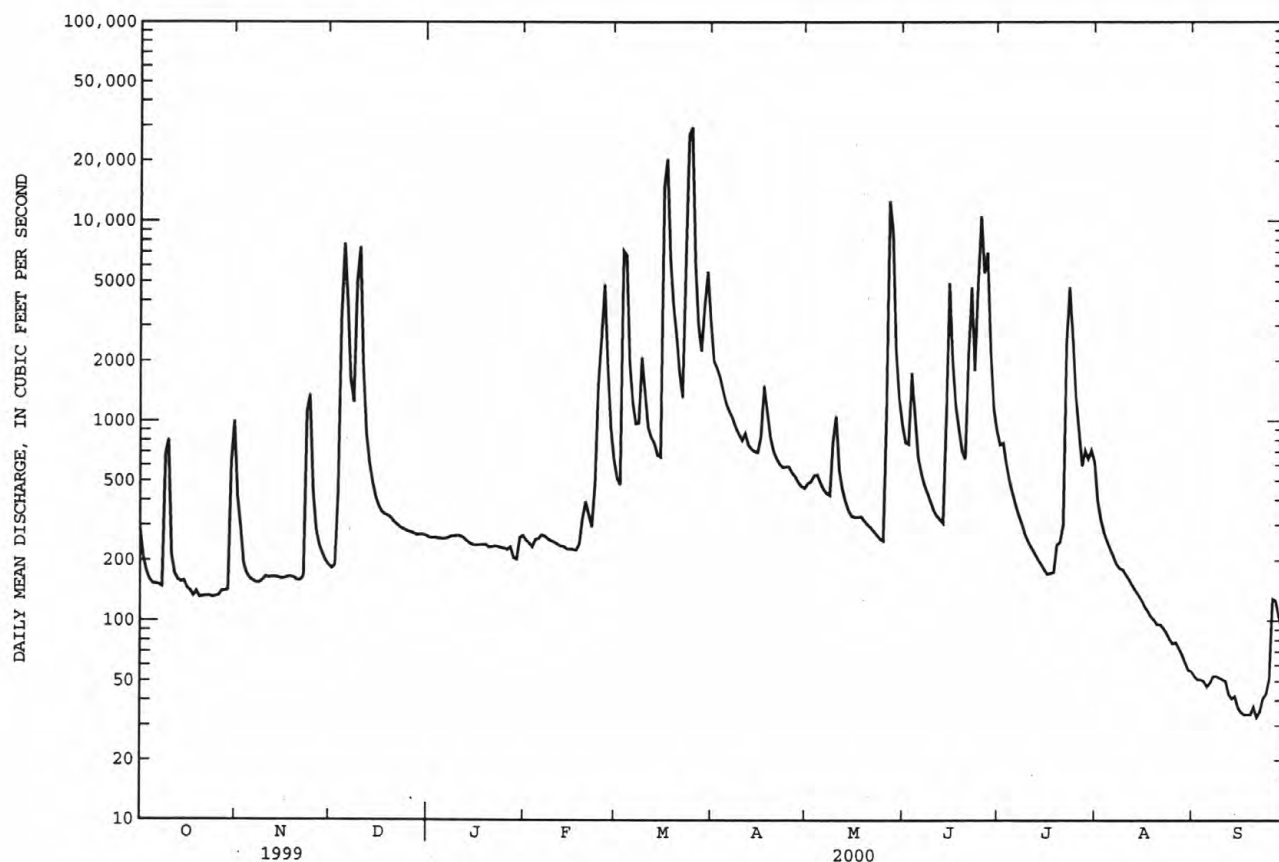
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2000, BY WATER YEAR (WY)

	MEAN	541	524	283	252	371	724	807	1065	1071	554	344	476
MAX	5244	5880	1649	1659	3732	5342	4748	8589	5093	5129	2467	3395	
(WY)	1960	1999	1945	1949	1949	2000	1944	1993	1951	1951	1995	1973	
MIN	.90	1.08	1.34	4.35	10.3	30.7	29.4	27.1	26.1	6.17	.55	.64	
(WY)	1957	1955	1955	1957	1957	1957	1955	1956	1972	1954	1936	1956	

e Estimated

07152000 CHIKASKIA RIVER NEAR BLACKWELL, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1936 - 2000	
ANNUAL TOTAL	531913		400956		589	
ANNUAL MEAN	1457		1096		1993	
HIGHEST ANNUAL MEAN					71.0	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	31200	Jul 2	29400	Mar 25	69500	Jun 22 1942
LOWEST DAILY MEAN	114	Sep 3	33	Sep 21	a.00	Jul 18 1954
ANNUAL SEVEN-DAY MINIMUM	117	Aug 29	35	Sep 16	.00	Aug 12 1954
INSTANTANEOUS PEAK FLOW			38300	Mar 25	85000	Jun 22 1942
INSTANTANEOUS PEAK STAGE			32.23	Mar 25	34.40	Nov 1 1998
ANNUAL RUNOFF (AC-FT)	1055000		795300		426600	
10 PERCENT EXCEEDS	3300		2180		888	
50 PERCENT EXCEEDS	413		283		143	
90 PERCENT EXCEEDS	144		92		23	

^aNo flow at time in 1954 and 1956.

ARKANSAS RIVER BASIN

07152500 ARKANSAS RIVER AT RALSTON, OK

LOCATION.--Lat 36°30'15", long 96°43'41", in NE 1/4 NE 1/4 sec.2, T.23 N., R.5 E., Pawnee County, Hydrologic Unit 11060006, on right upstream abutment of bridge on State Highway 18 at Ralston, 2 mi downstream from Salt Creek, 2 mi upstream from Grayhorse Creek, and at mile 594.0. Prior to Feb. 10, 1988, gage was near left bank on downstream side of pier of bridge.

DRAINAGE AREA.--54,465 mi², of which 7,615 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1922 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 776.70 ft above sea level. Oct. 1, 1925 to Nov. 13, 1935, nonrecording gage at site of former highway bridge 1,200 ft downstream at same datum. Nov. 14, 1935 to Feb. 23, 1939, nonrecording gage near left bank on downstream side of bridge at same datum. Feb. 24, 1939 to Feb. 10, 1988, gage was near left bank on downstream side of pier of bridge at same datum.

REMARKS.--Records fair. Flow regulated since April 1976 by Kaw Lake (station 07148130) 59.7 mi upstream; some regulation by Great Salt Plains Lake (station 07150000) since 1941. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 11, 1923, reached a stage of 23.8 ft, referred to outside gage on basis of stages observed in 1923 and 1944 at site 1,200 ft downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13900	2170	2270	2860	2070	20500	34000	4650	8250	10100	11400	810
2	12100	2160	1970	2820	2820	21200	32000	4650	7190	11500	9140	936
3	6970	1450	2400	2720	2510	24800	28300	5900	7600	11900	5270	890
4	6280	1160	4590	2780	2440	21000	26700	4550	8270	12200	3890	932
5	6070	981	7550	2980	2450	26100	25100	4260	8350	11000	2670	868
6	4050	858	16900	3160	2460	21500	23800	4320	7630	9670	2850	783
7	2870	796	19300	3180	2470	21100	21500	4270	7520	8550	2680	785
8	1890	1880	13800	3330	2500	21100	18000	4010	6430	8270	2700	793
9	1780	3030	22000	3540	2500	16000	16100	15300	6150	8050	2730	681
10	2140	3440	23300	3760	2490	12100	15500	12300	5780	8030	1680	554
11	2550	2700	27100	4100	2430	10400	15100	9950	4830	8060	1670	486
12	3140	1530	16300	5530	2430	9970	14800	8810	3410	8040	1630	454
13	3510	1470	10600	6760	1600	9200	13200	8060	2830	7950	1390	507
14	4770	1350	15700	6890	1780	8360	11100	5980	2920	7490	1190	453
15	5050	1310	23500	6930	1660	8080	9750	5140	3870	7310	1260	400
16	3470	1400	22500	6890	2010	13500	8360	5050	8740	7490	1190	e382
17	2450	1880	14900	6900	2360	22200	7560	3800	13600	7690	1220	e371
18	1660	2000	8830	6900	2950	41000	8770	3620	13500	7970	1070	e364
19	1690	1690	6200	6860	2790	36400	10200	3510	11100	7970	1130	e348
20	1620	1620	5850	6820	2700	23500	9200	2980	10700	8310	1230	332
21	987	1630	5520	6680	2450	23100	6110	1960	14600	9580	929	368
22	843	1670	5350	6080	2670	22300	7720	1710	11300	9730	884	393
23	781	1670	6160	3390	4230	29300	6060	1510	12700	9830	852	348
24	752	1680	6130	2760	6040	33700	6040	1900	15200	12300	836	362
25	727	2440	4570	3340	9080	46100	6690	2990	13200	13600	830	364
26	703	5090	3690	3430	12000	60700	7810	9170	24000	12200	806	391
27	688	4030	3530	3170	15500	50000	5960	9080	19200	12800	913	398
28	828	3070	3430	2850	14100	31500	4510	10600	13800	13300	828	409
29	725	2550	3250	2690	15300	28200	4380	16200	9430	13100	788	454
30	1250	2300	3210	2510	---	28000	4240	10300	7020	12900	871	535
31	1530	---	3230	2020	---	33200	---	8630	---	12600	804	---
TOTAL	97774	61005	313630	134630	128790	774110	408560	195160	289120	309490	67331	16151
MEAN	3154	2034	10120	4343	4441	24970	13620	6295	9637	9984	2172	538
MAX	13900	5090	27100	6930	15500	60700	34000	16200	24000	13600	11400	936
MIN	688	796	1970	2020	1600	8080	4240	1510	2830	7310	788	332
AC-FT	193900	121000	622100	267000	255500	1535000	810400	387100	573500	613900	133600	32040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2000, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	4992	5726	3851	3826	4515	8579	9411	10010	11240	7763	4736	3765												
MAX	41580	41300	10120	12450	17510	27120	25300	52840	41910	25780	21280	17660												
(WY)	1987	1999	2000	1993	1993	1987	1984	1993	1995	1999	1995	1989												
MIN	161	251	453	500	487	402	305	2001	2139	908	390	205												
(WY)	1992	1981	1983	1977	1981	1981	1981	1996	1988	1991	1978	1984												

e Estimated

ARKANSAS RIVER BASIN

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07152500 ARKANSAS RIVER AT RALSTON, OK--Continued

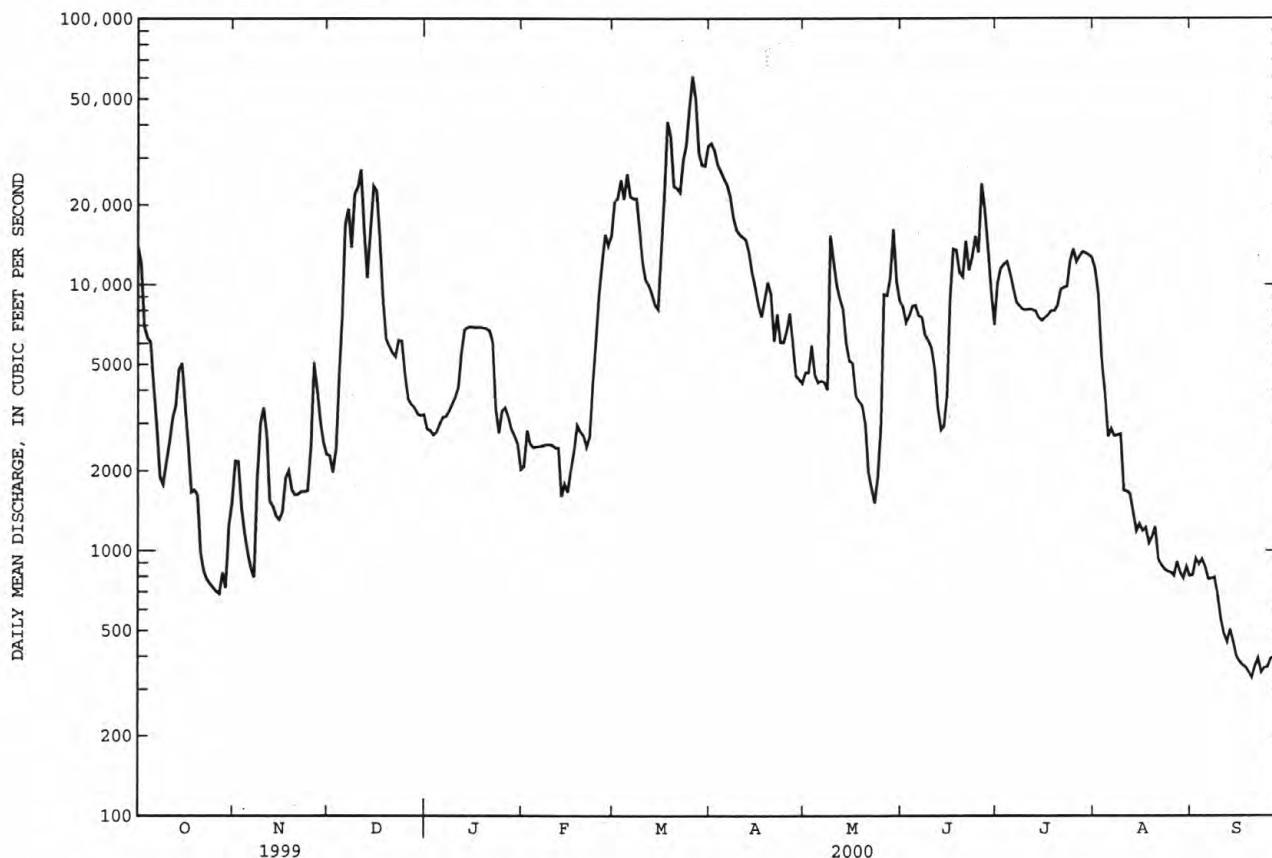
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1977 - 2000	
ANNUAL TOTAL	4655889		2795751		^a 6538	
ANNUAL MEAN	12760		7639		16810	
HIGHEST ANNUAL MEAN					1292	
LOWEST ANNUAL MEAN					170000	
HIGHEST DAILY MEAN	60500	Jun 25	60700	Mar 26	^b 52	
LOWEST DAILY MEAN	688	Oct 27	332	Sep 20	103	
ANNUAL SEVEN-DAY MINIMUM	743	Oct 23	359	Sep 18	^c 174000	
INSTANTANEOUS PEAK FLOW			67700	Mar 26	^d 22.20	
INSTANTANEOUS PEAK STAGE			14.74	Mar 26	4737000	
ANNUAL RUNOFF (A-FT)	9235000		5545000		16300	
10 PERCENT EXCEEDS	29800		19700		3090	
50 PERCENT EXCEEDS	7320		4530		490	
90 PERCENT EXCEEDS	1890		823			

^aPrior to regulation by Kaw Lake, water years 1926-75, 4,826 ft³/s.

^bMinimum daily discharge for period of record, 14 ft³/s, Oct. 12, 1956.

^cMaximum for period of record, 211,000 ft³/s, Oct. 13, 1973.

^dMaximum for period of record, 22.98 ft, Oct. 13, 1973.



ARKANSAS RIVER BASIN

07153000 BLACK BEAR CREEK AT PAWNEE, OK

LOCATION.--Lat 36°20'37", long 96°47'57", on east line of SE 1/4 NE 1/4 sec.31, T.22 N., R.5 E., Pawnee County, Hydrologic Unit 11060006, on downstream side of left pier of bridge on State Highway 18 in north Pawnee, 300 ft downstream from Skedee Creek, and at mile 23.4.

DRAINAGE AREA.--576 mi².

PERIOD OF RECORD.--July 1944 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 802.73 ft, sea level (levels by U.S. Army Corps of Engineers). Prior to Sept. 21, 1944, nonrecording gage at present site and datum; also Aug. 27, 1953 to Apr. 29, 1954, temporary nonrecording gage at site 500 ft downstream at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 19, 1943, reached a stage of 28.19 ft, from floodmark, discharge 17,800 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 9	2300	6,200	13.12	May 26	0900	6,430	13.48

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	184	20	52	46	160	698	789	409	203	295	3.9
2	33	106	21	50	48	129	2170	377	276	156	186	3.9
3	29	73	25	50	48	606	1160	222	207	1910	137	4.2
4	31	53	626	52	46	980	600	161	191	963	103	4.1
5	24	42	2060	47	45	466	404	122	153	431	81	4.3
6	21	35	1270	45	44	297	298	99	121	305	65	4.1
7	20	30	728	43	42	221	236	85	97	210	53	3.6
8	19	30	513	45	42	308	176	72	78	151	47	4.2
9	19	25	3250	50	41	314	137	425	62	109	40	4.5
10	19	23	5230	49	40	223	119	1310	51	85	34	4.3
11	19	22	2900	49	39	179	109	551	52	72	29	4.3
12	20	21	1580	47	41	184	95	317	80	66	27	3.9
13	19	23	1010	44	39	151	99	216	62	e61	24	3.5
14	17	25	691	41	36	122	108	152	52	e58	21	3.4
15	17	21	475	39	35	105	97	115	83	e60	19	3.3
16	16	18	345	38	34	317	112	91	137	e53	19	3.2
17	13	19	258	38	49	701	131	75	293	e46	18	3.5
18	14	20	206	39	130	1030	133	63	1300	e39	15	3.4
19	14	19	165	38	151	675	115	53	600	e31	13	3.5
20	14	18	135	37	82	416	108	44	525	24	11	3.9
21	13	18	111	36	59	278	84	41	920	124	11	3.9
22	14	19	94	35	53	309	70	37	2150	562	9.7	4.1
23	14	21	84	35	177	1660	151	33	716	1350	9.0	3.6
24	14	21	79	34	156	2530	148	30	1090	477	8.1	3.8
25	17	20	73	34	177	1730	91	462	1450	281	7.7	3.7
26	21	20	69	34	622	1070	68	4360	982	205	7.1	3.6
27	16	22	67	37	525	825	78	3320	951	164	6.5	3.4
28	15	21	62	39	319	582	65	2380	523	118	5.9	3.1
29	17	20	58	41	225	419	57	1490	365	400	5.3	3.2
30	781	20	55	46	---	325	113	902	269	1570	4.6	3.4
31	494	---	54	48	---	263	---	610	---	458	4.2	---
TOTAL	1832	1009	22314	1312	3391	17575	8030	19004	14245	10742	1316.1	112.8
MEAN	59.1	33.6	720	42.3	117	567	268	613	475	347	42.5	3.76
MAX	781	184	5230	52	622	2530	2170	4360	2150	1910	295	4.5
MIN	13	18	20	34	34	105	57	30	51	24	4.2	3.1
AC-FT	3630	2000	44260	2600	6730	34860	15930	37690	28250	21310	2610	224

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2000, BY WATER YEAR (WY)

	MEAN	226	161	102	74.8	124	288	316	498	348	180	109	177
MAX	4025	2359	720	595	1013	1607	1583	2933	2181	950	1592	1354	
(WY)	1987	1975	2000	1993	1987	1990	1999	1993	1957	1997	1992	1945	
MIN	.000	.000	.023	.37	.73	.90	1.14	2.28	4.68	.30	.000	.000	
(WY)	1955	1955	1967	1957	1968	1954	1955	1956	1966	1954	1954	1954	

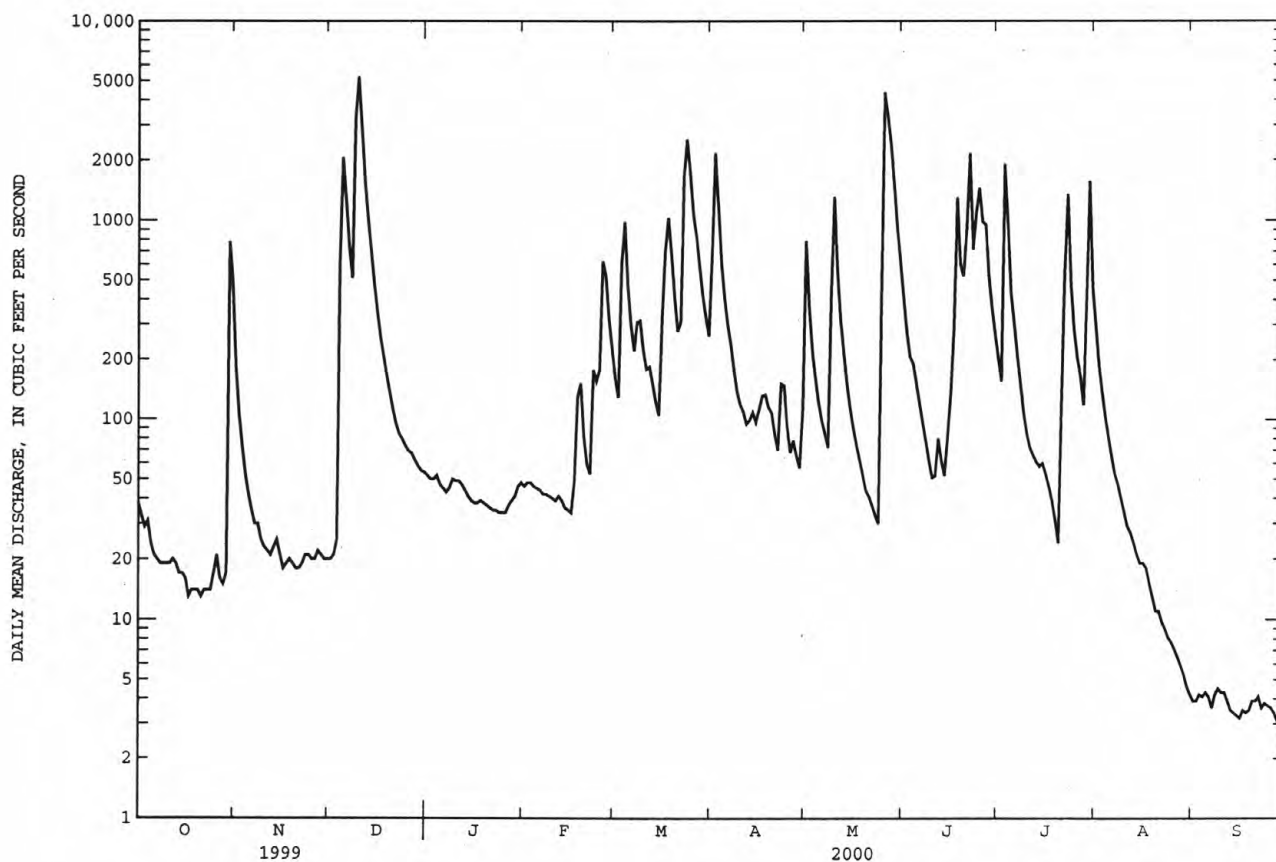
e Estimated

ARKANSAS RIVER BASIN

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07153000 BLACK BEAR CREEK AT PAWNEE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1945 - 2000	
ANNUAL TOTAL	229106		100882.9		217	
ANNUAL MEAN	628		276		835	
HIGHEST ANNUAL MEAN					23.1	
LOWEST ANNUAL MEAN					1987	
HIGHEST DAILY MEAN	11000	Apr 26	5230	Dec 10	25400	Oct 3 1959
LOWEST DAILY MEAN	11	Sep 4	3.1	Sep 28	.00	at times
ANNUAL SEVEN-DAY MINIMUM	12	Sep 1	3.4	Sep 13	.00	Jul 17 1954
INSTANTANEOUS PEAK FLOW			6430	May 26	30200	Oct 3 1959
INSTANTANEOUS PEAK STAGE			13.48	May 26	31.43	Oct 3 1959
ANNUAL RUNOFF (AC-FT)	454400		200100		157500	
10 PERCENT EXCEEDS	1740		720		415	
50 PERCENT EXCEEDS	117		60		16	
90 PERCENT EXCEEDS	18		7.5		1.1	



ARKANSAS RIVER BASIN

07154500 CIMARRON RIVER NEAR KENTON, OK

LOCATION.--Lat 36°55'36", long 102°57'31", in SW 1/4 sec.4, T.5 N., R.1 E., Cimarron County, Hydrologic Unit 11040001, near right bank on downstream side of pier of county road bridge, 1.5 mi upstream from North Carrizo Creek, 1.7 mi northeast of Kenton, 2.2 mi downstream from Carrizozo Creek, and at mile 594.0.

DRAINAGE AREA.--1,106 mi², of which 68 mi² is probably noncontributing.

PERIOD OF RECORD.--April 1904 to July 1905 (gage heights only), October 1950 to current year.

REVISED RECORDS.--WSP 1711: 1956 (M).

GAGE.--Water-stage recorder. Datum of gage is 4,262.08 ft above sea level. April 1904 to July 1905 nonrecording gage at site 0.9 mi upstream at different datum. Oct. 1, 1950 to Sept. 19, 1967, water-stage recorder at same site and at datum 5.00 ft higher.

REMARKS.--No estimated daily discharge. Records fair. Extensive diversions for irrigation upstream from station. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 26	1115	2,180	12.88	Jul 29	0930	3,630	14.48

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	3.0	3.3	3.5	2.7	2.6	2.6	.95	.32	2.9	4.9	.00
2	3.5	2.9	3.1	3.1	2.7	3.0	2.0	.60	.21	2.1	1.9	.00
3	3.8	2.8	3.1	3.1	2.6	3.2	1.7	.47	.33	1.9	2.0	.00
4	4.3	2.8	3.2	3.7	2.6	3.1	1.5	.26	.28	1.7	1.6	.00
5	3.9	3.0	3.2	3.6	2.6	2.8	1.5	.20	.14	1.2	1.2	.00
6	3.6	3.0	3.2	3.4	2.6	2.6	1.5	.32	.06	.80	.83	.00
7	3.3	2.9	3.7	3.4	2.6	2.7	1.4	.31	.00	1.1	.56	.00
8	7.2	3.1	3.9	3.6	2.6	3.0	1.4	.26	.00	1.1	.31	.00
9	5.8	2.6	3.1	3.6	2.6	2.9	1.3	.33	.00	.95	3.4	.00
10	4.1	2.4	3.2	3.7	2.6	2.8	1.3	.29	.00	10	1.5	.00
11	3.5	2.7	3.2	3.7	2.6	2.6	1.4	.36	.00	43	.84	.00
12	3.3	3.7	3.2	3.6	2.7	2.6	1.4	.43	.08	2.3	.65	.00
13	3.4	3.3	3.2	3.5	2.6	2.6	1.4	.28	.13	.78	.42	.00
14	3.1	3.0	3.4	3.5	2.6	2.5	1.3	.20	.01	.41	.28	.00
15	2.8	2.3	3.3	3.2	2.6	2.5	1.3	.18	.00	.30	.18	.00
16	2.8	3.1	3.3	3.1	2.6	2.9	1.2	.16	.00	.36	.06	.00
17	3.1	3.0	3.4	3.1	2.6	3.0	.84	.11	.00	.58	.01	.00
18	3.3	2.8	3.4	3.1	2.6	2.9	.85	.09	.00	.66	.38	.00
19	3.5	2.8	3.8	3.3	2.6	2.7	.78	.14	.00	.90	1.4	.00
20	3.5	2.9	3.4	3.5	2.7	2.5	.96	.14	.00	.41	2.8	.00
21	3.4	3.1	3.2	3.5	2.6	2.3	.58	.14	.00	.28	1.8	.00
22	3.4	3.4	3.3	3.5	2.6	2.5	.45	.12	.00	.15	1.0	.00
23	3.3	3.4	3.5	3.0	2.5	3.1	.53	.13	.00	.04	.48	.00
24	3.3	3.5	3.6	2.8	2.5	3.0	.60	.13	.00	.00	.26	.00
25	3.3	3.5	3.6	2.7	2.4	2.5	.52	.16	.00	.00	.11	.00
26	3.2	3.5	3.6	2.7	2.5	2.1	.51	.18	494	.00	.03	.00
27	3.2	3.5	3.5	2.9	2.4	1.9	.47	.12	70	.18	.00	.00
28	3.1	3.4	3.6	2.9	2.2	1.7	.63	.12	146	.03	.00	.00
29	2.9	3.3	3.7	2.9	2.5	1.7	.52	.07	27	1280	.00	.00
30	2.7	3.3	3.7	2.8	---	1.6	.83	.19	6.9	149	.00	.00
31	2.8	---	3.9	2.7	---	2.1	---	.24	---	20	.00	---
TOTAL	109.9	92.0	105.8	100.7	74.6	80.0	33.27	7.68	745.46	1523.13	28.90	0.00
MEAN	3.55	3.07	3.41	3.25	2.57	2.58	1.11	.25	24.8	49.1	.93	.000
MAX	7.2	3.7	3.9	3.7	2.7	3.2	2.6	.95	494	1280	4.9	.00
MIN	2.7	2.3	3.1	2.7	2.2	1.6	.45	.07	.00	.00	.00	.00
AC-FT	218	182	210	200	148	159	66	15	1480	3020	57	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

	MEAN	10.1	1.96	2.10	2.00	1.75	1.47	5.57	35.6	32.1	33.4	52.5	25.9
MAX	334	12.1	9.59	8.07	6.76	4.42	116	525	514	204	406	235	
(WY)	1966	1966	1966	1988	1966	1958	1977	1955	1965	1958	1965	1963	
MIN	.000	.000	.000	.000	.000	.002	.000	.029	.000	.000	.000	.000	
(WY)	1965	1965	1965	1965	1994	1994	1965	1975	1954	1993	1972	1956	

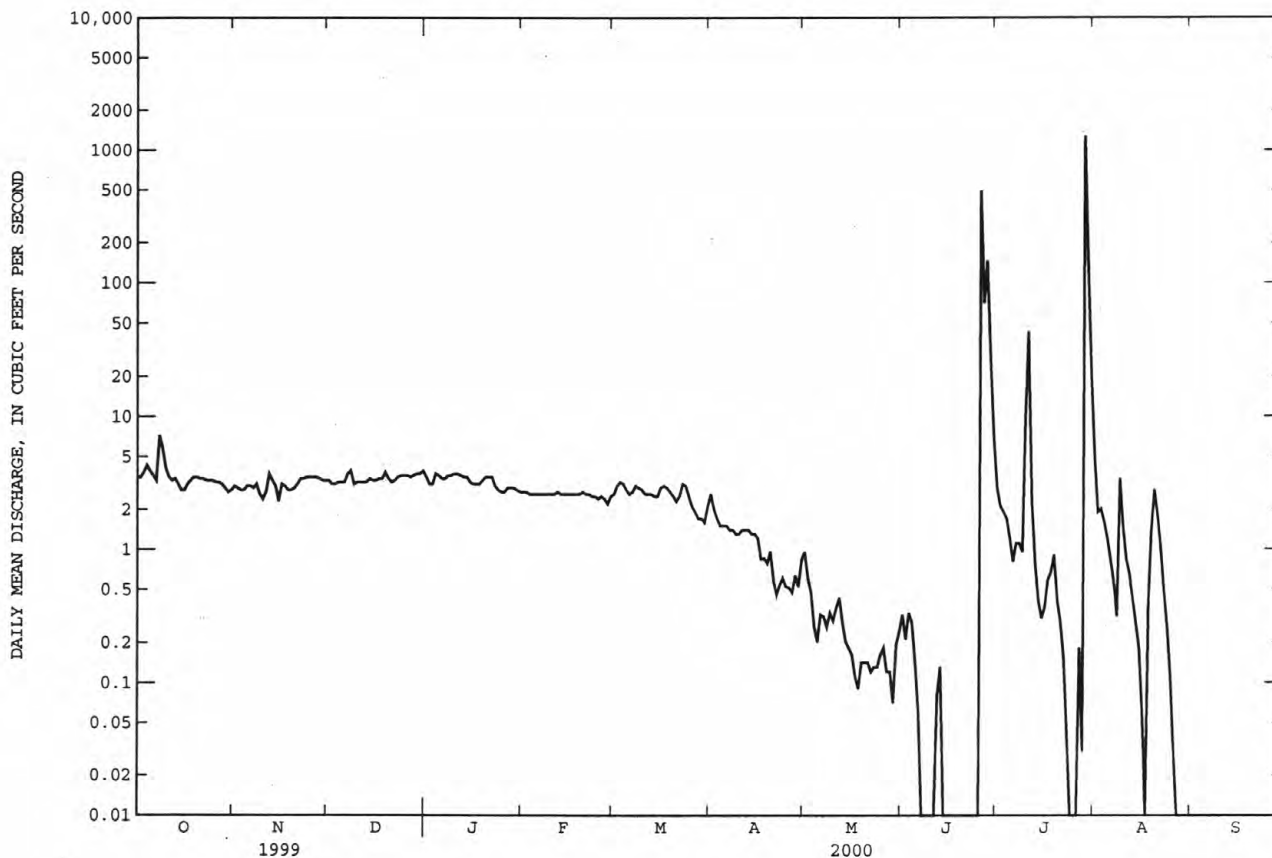
ARKANSAS RIVER BASIN

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07154500 CIMARRON RIVER NEAR KENTON, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1951 - 2000
ANNUAL TOTAL	9379.32	2901.44	
ANNUAL MEAN	25.7	7.93	17.2
HIGHEST ANNUAL MEAN			95.2 1965
LOWEST ANNUAL MEAN			.65 1993
HIGHEST DAILY MEAN	3290 May 2	1280 Jul 29	11000 Jun 17 1965
LOWEST DAILY MEAN	.65 Jul 31	.00 several days	.00 most years
ANNUAL SEVEN-DAY MINIMUM	.82 Jan 12	.00 Jun 15	.00 Jun 14 1952
INSTANTANEOUS PEAK FLOW		3630 Jul 29	^a 43400 Oct 17 1965
INSTANTANEOUS PEAK STAGE		14.48 Jul 29	^b 22.32 Oct 17 1965
ANNUAL RUNOFF (AC-FT)	18600	5760	12430
10 PERCENT EXCEEDS	6.0	3.5	7.5
50 PERCENT EXCEEDS	2.8	2.5	.91
90 PERCENT EXCEEDS	1.0	.00	.00

^aFrom rating curve extended above 7,000 ft³/s, on basis on contracted-opening measurement of peak flow.
^bPresent datum.



ARKANSAS RIVER BASIN

07156900 CIMARRON RIVER NEAR FORGAN, OK

LOCATION.--Lat 37°00'40", long 100°29'29", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.8, T.35 S., R.29 W., Meade County, KS, Hydrologic Unit 11040006, on downstream side of bridge on Kansas State Highway 23, 0.8 mi north of Oklahoma-Kansas State Line, 7.8 mi north of Forgan, and at mile 375.7.

DRAINAGE AREA.--8,536 mi², of which 4,316 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1965 to September 1986, October 1987 to current year.

REVISED RECORDS.--WDR OK-91-1 gage datum.

GAGE.--Water-stage recorder. Datum of gage is 2,320.05 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Natural flow affected by irrigational development. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	32	39	43	44	38	85	69	26	29	24	19
2	29	31	40	41	44	71	68	71	29	28	24	19
3	30	32	40	44	46	79	59	67	31	26	23	21
4	30	34	44	44	46	63	50	56	32	24	22	21
5	31	34	43	44	43	53	48	50	30	22	20	21
6	31	34	41	44	43	46	46	49	28	21	20	20
7	32	34	40	43	43	46	45	46	27	21	22	20
8	62	35	40	43	42	48	41	43	26	22	20	20
9	62	35	40	43	42	45	41	44	25	20	25	19
10	47	35	38	43	42	42	41	43	27	19	76	19
11	42	35	39	42	40	42	40	40	35	20	88	19
12	37	35	39	43	41	41	40	39	35	34	43	19
13	35	35	39	44	42	41	40	38	33	32	33	20
14	33	35	42	45	42	41	39	37	44	28	28	19
15	32	36	43	46	41	41	39	37	31	25	25	19
16	32	36	42	45	41	46	38	37	27	23	25	19
17	32	36	44	46	41	50	38	35	29	28	25	19
18	33	36	42	46	40	53	38	38	29	38	32	20
19	31	35	43	45	39	50	36	39	30	35	30	19
20	32	36	42	43	39	47	36	38	28	31	28	20
21	33	37	41	43	40	48	35	36	44	43	26	20
22	32	36	41	44	43	64	34	36	39	48	26	21
23	32	37	41	45	43	117	36	35	34	42	27	22
24	32	37	41	43	41	97	36	34	33	36	28	25
25	32	38	41	42	41	73	39	36	31	31	26	26
26	32	37	41	43	40	63	37	43	28	29	24	26
27	32	38	40	45	40	52	39	37	29	27	22	25
28	32	38	41	45	40	48	37	35	33	26	21	25
29	34	38	41	46	39	48	40	29	32	26	20	23
30	33	38	42	45	---	46	42	27	30	26	20	23
31	33	---	43	45	---	62	---	26	---	25	20	---
TOTAL	1079	1065	1273	1363	1208	1701	1283	1290	935	885	893	628
MEAN	34.8	35.5	41.1	44.0	41.7	54.9	42.8	41.6	31.2	28.5	28.8	20.9
MAX	62	38	44	46	46	117	85	71	44	48	88	26
MIN	29	31	38	41	39	38	34	26	25	19	20	19
AC-FT	2140	2110	2520	2700	2400	3370	2540	2560	1850	1760	1770	1250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	MEAN	67.3	54.1	56.0	55.6	59.4	59.1	69.6	74.0	61.6	47.3	49.6	46.8
MAX	751	114	102	110	167	111	376	476	364	211	208	210	
(WY)	1966	1972	1973	1967	1978	1973	1976	1977	1978	1967	1972	1966	
MIN	26.1	32.1	30.7	38.0	39.8	38.6	32.1	23.8	22.0	20.5	19.1	20.8	
(WY)	1992	1998	1990	1996	1994	1996	1996	1986	1986	1991	1983	1995	

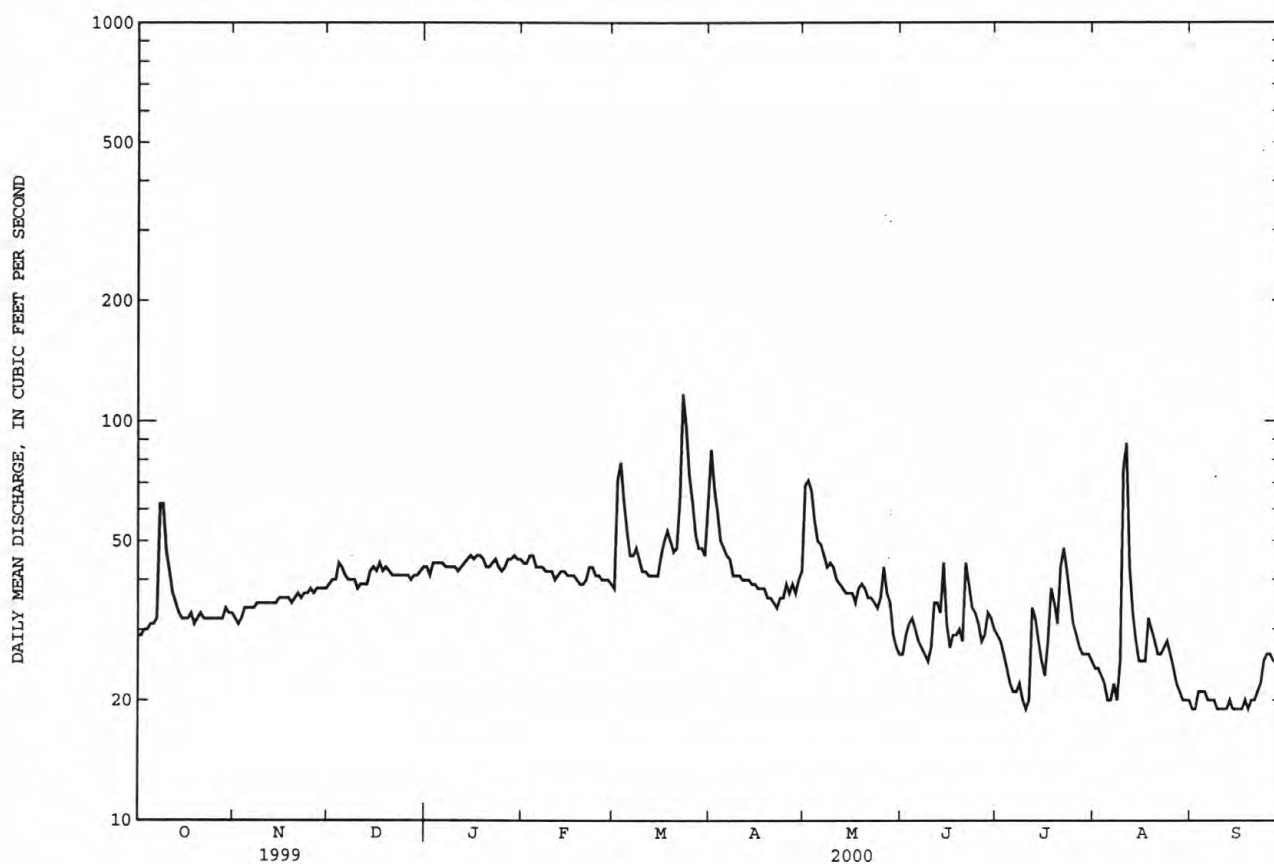
ARKANSAS RIVER BASIN

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07156900 CIMARRON RIVER NEAR FORGAN, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1966 - 2000
ANNUAL TOTAL	16606	13603	58.4
ANNUAL MEAN	45.5	37.2	145
HIGHEST ANNUAL MEAN			34.7
LOWEST ANNUAL MEAN			1966
HIGHEST DAILY MEAN	854 May 7	117 Mar 23	7490 Oct 20 1965
LOWEST DAILY MEAN	18 Aug 26	19 several days	^a 13 Jun 19 1988
ANNUAL SEVEN-DAY MINIMUM	19 Aug 26	19 Sep 9	15 Jul 13 1986
INSTANTANEOUS PEAK FLOW		228 Aug 11	21200 Oct 20 1965
INSTANTANEOUS PEAK STAGE		3.41 Aug 11	8.10 Oct 20 1965
ANNUAL RUNOFF (AC-FT)	32940	26980	42280
10 PERCENT EXCEEDS	55	46	82
50 PERCENT EXCEEDS	40	37	45
90 PERCENT EXCEEDS	25	22	27

^aAlso occurred June 20, 1988, and Aug. 2, 1991.



LOCATION.--Lat 36°31'02", long 98°52'45", in NW 1/4 NE 1/4 sec.35, T.24 N., R.16 W., Woods County, Hydrologic Unit 11050001, near left bank on downstream side of bridge on U.S. Highway 281, 4.0 mi south of Waynoka, and at mile 247.0.

PERIOD OF RECORD.--September 1903 to December 1905 (gage heights and discharge measurements only), October 1937 to current year.
Monthly discharge only for some periods, published in WSP 1311.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Diversions for irrigation above station. U.S. Army Corps of Engineers satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 26	1300	11,800	10.74	No other peak greater than base discharge.			

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	103	146	192	234	280	913	438	219	424	138	e.48
2	102	104	148	187	232	465	1010	502	354	366	89	e.45
3	97	104	155	196	263	1060	931	441	454	322	e49	e.44
4	97	107	190	203	272	667	786	436	492	278	e28	e.42
5	92	109	297	195	253	595	692	410	383	238	e19	.40
6	87	112	280	210	241	475	643	377	262	207	e13	e.39
7	84	117	235	204	234	408	592	352	198	187	e9.9	e.38
8	109	119	233	203	226	530	531	316	159	171	e7.0	e.37
9	161	119	235	210	218	471	490	364	126	151	e5.8	e.36
10	147	121	220	211	210	415	474	367	111	134	e4.9	e.36
11	126	121	206	208	203	425	451	312	98	127	e4.0	e.36
12	118	121	198	204	194	398	418	262	171	130	e3.3	e.37
13	122	120	188	199	189	366	408	226	126	167	e2.8	e.38
14	116	118	184	196	187	333	400	204	1180	153	e2.4	e.39
15	109	117	180	193	187	312	402	192	1350	118	e2.1	e.40
16	101	119	175	194	182	378	424	185	814	100	e1.8	e.39
17	93	121	183	200	179	588	422	183	565	93	e1.6	e.38
18	89	120	189	201	182	685	421	179	416	90	e1.4	e.38
19	93	121	191	199	182	654	412	158	324	85	e1.3	e.37
20	93	120	191	193	181	578	377	152	264	80	e1.1	e.36
21	94	122	195	191	184	500	363	147	824	163	e1.0	e.36
22	96	124	192	192	198	533	352	144	1140	378	e.92	e.65
23	98	129	195	196	295	3270	365	135	617	387	e.85	e1.2
24	100	125	198	207	261	3480	372	131	487	223	e.80	e1.8
25	102	123	200	211	351	2370	354	137	396	191	e.74	e1.9
26	104	126	204	213	457	1490	349	6020	1820	168	e.68	e1.8
27	105	131	210	225	488	1090	349	2480	1590	141	e.65	e1.7
28	104	136	213	224	368	875	335	1040	908	127	e.60	1.6
29	102	139	213	230	318	850	322	678	667	117	e.56	1.5
30	103	145	207	227	---	897	326	451	518	96	e.53	1.4
31	100	---	200	229	---	768	---	305	---	92	e.50	---
TOTAL	3255	3613	6251	6343	7169	26206	14684	17724	17033	5704	393.23	21.74
MEAN	105	120	202	205	247	845	489	572	568	184	12.7	.72
MAX	161	145	297	230	488	3480	1010	6020	1820	424	138	1.9
MIN	84	103	146	187	179	280	322	131	98	80	.50	.36
AC-FT	6460	7170	12400	12580	14220	51980	29130	35160	33780	11310	780	40

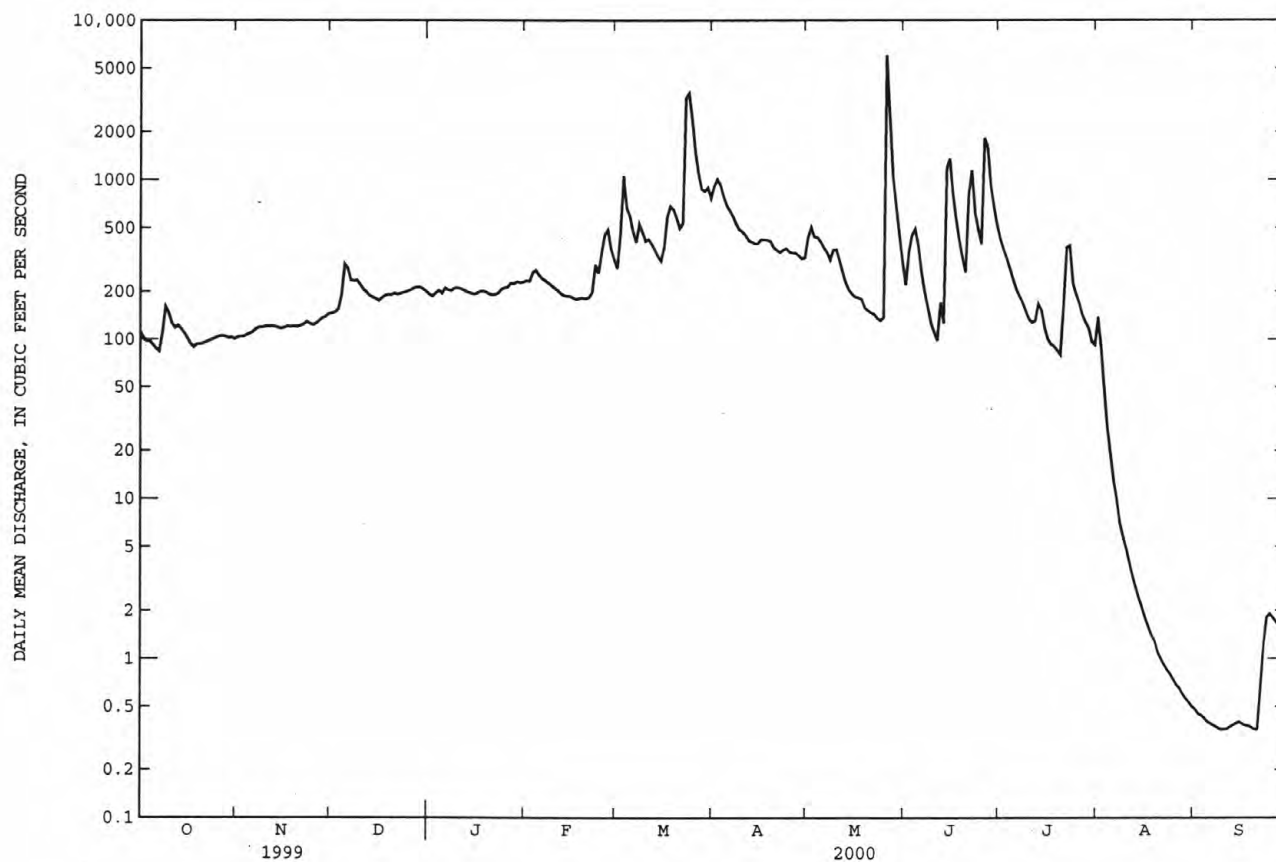
MEAN	211	131	120	133	184	256	372	783	602	338	226	260
MAX	2644	651	493	465	1011	2196	2944	5673	3674	3826	2507	1475
(WY)	1942	1999	1974	1998	1949	1973	1942	1957	1957	1950	1950	1973
MIN	.000	.000	1.98	2.65	30.1	12.6	6.00	10.6	.60	.008	.000	.000
(WY)	1940	1981	1955	1940	1957	1955	1956	1967	1966	1974	1970	1956

e Estimated

07158000 CIMARRON RIVER NEAR WAYNOKA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	167408		108396.97		302	
ANNUAL MEAN	459		296		1081	1957
HIGHEST ANNUAL MEAN					43.2	1991
LOWEST ANNUAL MEAN					51600	May 16 1957
HIGHEST DAILY MEAN	6030	Jul 1	6020	May 26	.00	at times
LOWEST DAILY MEAN	14	Aug 31	.36	Sep 9-11,20,21	.00	Sep 3 1939
ANNUAL SEVEN-DAY MINIMUM	17	Aug 28	.37	Sep 7	.00	May 16 1957
INSTANTANEOUS PEAK FLOW			11800	May 26	^a 94500	May 16 1957
INSTANTANEOUS PEAK STAGE			10.74	May 26	15.10	May 16 1957
ANNUAL RUNOFF (AC-FT)	332100		215000		218600	
10 PERCENT EXCEEDS	972		581		495	
50 PERCENT EXCEEDS	233		192		88	
90 PERCENT EXCEEDS	92		1.4		.56	

^aFrom rating curve extended above 45,000 ft³/s on basis of contracted-opening measurement of peak flow.



ARKANSAS RIVER BASIN

07159100 CIMARRON RIVER NEAR DOVER, OK

LOCATION.--Lat 35°57'06", long 97°54'51", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.14, T.17 N., R.7 W., Kingfisher County, Hydrologic Unit 11050002, near right bank on downstream bridge on U.S. Highway 81, 1.0 mi downstream from Turkey Creek, 2.0 mi south of Dover, 2.5 mi upstream from Kingfisher Creek, and at mile 160.6.

DRAINAGE AREA.--15,713 mi², of which 4,926 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1973 to current year.

REVISED RECORDS.--OK-95-1: 1994

GAGE.--Water-stage recorder. Datum of gage is 999.19 ft above sea level.

REMARKS.--No estimated daily discharge. Records poor Oct.1 to June 30 due to lack of measurements and funding; records good July 1 to Sept. 30. U.S. Army Corps of Engineers' telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 24	0600	32,700	19.40	May 28	0230	16,300	17.18

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR.	MAY	JUN	JUL	AUG	SEP
1	256	353	340	357	339	627	2000	625	1500	1650	320	46
2	315	269	341	349	335	620	2470	512	1230	1290	272	45
3	281	235	344	346	335	1260	2220	482	1090	1050	248	43
4	249	223	694	338	347	4840	2000	538	1510	895	255	44
5	237	220	3150	340	352	2750	1650	489	1390	784	221	42
6	234	215	2890	335	369	1420	1370	467	1170	687	194	39
7	226	213	1470	335	356	1100	1180	426	1070	612	175	39
8	222	213	1030	335	334	1040	1060	389	899	551	157	39
9	223	211	2350	342	323	1090	952	400	788	502	145	39
10	223	207	7110	338	311	1090	853	391	716	456	135	39
11	231	209	3670	334	300	930	781	384	671	419	132	37
12	252	208	1490	330	294	771	759	418	635	393	124	34
13	246	209	909	321	284	708	729	350	591	376	115	36
14	227	208	730	314	281	684	700	307	599	368	108	34
15	217	209	633	308	271	639	666	278	677	351	98	32
16	205	210	566	309	271	648	766	261	2180	346	92	34
17	196	213	523	307	363	894	1080	258	2320	336	89	33
18	188	216	492	307	294	3310	979	226	1830	308	83	32
19	182	209	466	309	269	3600	740	216	1640	286	82	31
20	180	213	454	307	263	2610	627	202	1190	272	77	27
21	177	208	441	306	261	1780	571	184	1220	343	71	30
22	177	213	429	300	269	1310	536	170	1860	604	68	33
23	176	1740	418	295	332	8960	494	172	3200	1010	67	31
24	177	1720	408	297	545	29600	465	160	2020	1210	64	32
25	177	1100	399	294	1140	20200	444	385	2610	900	61	35
26	180	557	390	307	3760	8440	435	592	1750	585	60	40
27	182	440	383	332	2150	5190	434	9020	2730	454	55	41
28	180	389	374	344	1050	3430	443	14800	6090	397	52	43
29	195	362	371	343	781	2410	425	6160	3160	360	50	43
30	696	350	363	339	---	1900	478	2940	2180	359	49	40
31	799	---	359	332	---	2090	---	2020	---	344	46	---
TOTAL	7706	11542	33987	10050	16579	115941	28307	44222	50516	18498	3765	1113
MEAN	249	385	1096	324	572	3740	944	1427	1684	597	121	37.1
MAX	799	1740	7110	357	3760	29600	2470	14800	6090	1650	320	46
MIN	176	207	340	294	261	620	425	160	591	272	46	27
AC-FT	15280	22890	67410	19930	32880	230000	56150	87710	100200	36690	7470	2210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2000, BY WATER YEAR (WY)

	MEAN	807	907	504	407	566	1284	1196	2251	1598	601	542	621
MAX	9071	5171	1864	1549	2410	4840	6442	11750	6969	2131	2622	2311	
(WY)	1987	1999	1998	1998	1987	1998	1999	1993	1995	1999	1995	1996	
MIN	40.2	45.1	70.2	61.8	75.6	77.4	60.7	146	207	45.3	29.5	13.8	
(WY)	1985	1985	1977	1977	1981	1977	1981	1996	1984	1974	1984	1984	

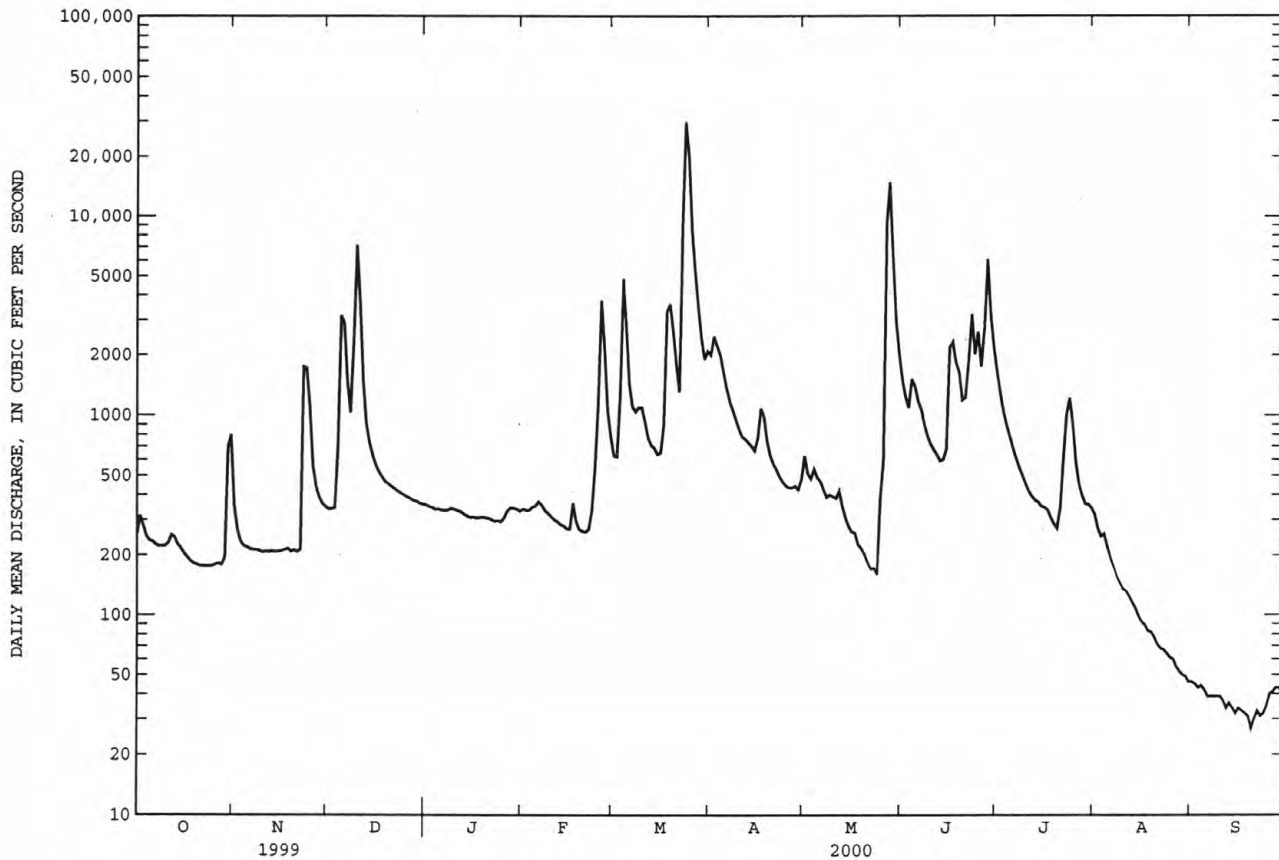
ARKANSAS RIVER BASIN

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07159100 CIMARRON RIVER NEAR DOVER, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1974 - 2000	
ANNUAL TOTAL	646655		342226		942	
ANNUAL MEAN	1772		935		2804	
HIGHEST ANNUAL MEAN					265	
LOWEST ANNUAL MEAN					1987	
HIGHEST DAILY MEAN	27200	Apr 25	29600	Mar 24	80200	Oct 3 1986
LOWEST DAILY MEAN	167	Sep 10	27	Sep 20	4.3	Sep 23 1980
ANNUAL SEVEN-DAY MINIMUM	173	Sep 4	31	Sep 18	7.5	Sep 19 1980
INSTANTANEOUS PEAK FLOW			32700	Mar 24	123000	Oct 3 1986
INSTANTANEOUS PEAK STAGE			19.40	Mar 24	^a 26.10	Oct 3 1986
ANNUAL RUNOFF (AC-FT)	1283000		678800		682200	
10 PERCENT EXCEEDS	4130		2010		1920	
50 PERCENT EXCEEDS	633		350		252	
90 PERCENT EXCEEDS	212		61		62	

^aFrom high-water mark.



ARKANSAS RIVER BASIN

07159550 LAKE HEFNER AT OKLAHOMA CITY, OK

LOCATION.--Lat 35°34'58", long 97°35'43", in NW 1/4 SE 1/4 sec.23, T.13 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, on south side of dam on Bluff Creek, 50 ft north of intake structure, 3.0 mi northeast of Hefner Canal at Oklahoma City (07240000) and 6.0 mi northeast of Bethany.

DRAINAGE AREA.--9.69 mi². The source of water for Lake Hefner is mainly diversion of water from the North Canadian River at Lake Overholser through Bluff Creek Canal and runoff in the drainage basin.

PERIOD OF RECORD.--November 17, 1999 to September 2000.

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

REMARKS.--Reservoir is formed by an earthen dam which is more than 3 mi long and has a maximum height of 112 ft. The reservoir was constructed in 1947 by the City of Oklahoma City as a public water supply primary use structure. Capacity, 107,000 acre-ft, elevation, 1209.0 ft, top of stone wall; normal pool, 75,355 acre-ft, elevation, 1199.0 ft. Figures given herein represent total contents. Capacity table supplied by City of Oklahoma City.

EXTREMES FOR CURRENT PERIOD.--(November 17 to September 30) Maximum contents, 77,200 acre-ft, July 3, elevation 1,199.69 ft; minimum, 55,000 acre-ft, at times, elevation, 1,190.36 ft.

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

1186.0	44,834	1199.0	75,355
1190.0	54,250	1202.0	99,000
1195.0	65,441	1209.0	107,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	55300	73800	71500	69500	75300	73800	73100	76900	72900	66000
2	---	---	55200	73700	71400	69400	75300	75700	72800	77100	72700	65800
3	---	---	55000	73700	71300	69500	75200	76200	72900	77100	72600	65500
4	---	---	55000	73600	71300	69400	75100	76200	72800	77100	72400	65300
5	---	---	55000	73500	71200	69300	75000	76100	72900	76900	72200	65100
6	---	---	55100	73400	71100	69300	74700	76000	72800	76800	71900	64900
7	---	---	55100	73400	71000	69200	74800	76100	72600	76600	71800	64700
8	---	---	55000	73300	70900	69000	74700	75900	72500	76400	71500	64500
9	---	---	55000	73300	70700	69100	74600	75900	72200	76200	71300	64200
10	---	---	56200	73200	70800	69100	74200	75800	72200	76000	71100	64000
11	---	---	58400	73100	70700	69000	74300	75500	72100	75700	70900	63900
12	---	---	60500	73000	70600	68900	74300	75600	72000	75600	70700	63700
13	---	---	61700	72900	70600	68700	74300	75500	71900	75500	70500	63500
14	---	---	62900	72900	70500	68800	74200	75300	71700	75300	70300	63300
15	---	---	64100	72700	70400	68500	74100	75200	71700	75100	70000	63100
16	---	---	65400	72600	70300	68600	74100	74900	71500	74900	69800	62800
17	---	56600	67300	72600	70300	68500	74000	74800	71700	74700	69600	62700
18	---	55500	69200	72500	70200	68500	73900	74700	71800	74500	69300	62400
19	---	56300	71000	72400	70100	68400	73900	74500	73500	74300	69100	62000
20	---	56200	71800	72300	70000	68500	73800	74400	74800	74000	68800	62000
21	---	55300	71800	72300	69900	68200	73600	74300	75900	74000	68600	61700
22	---	55900	73300	72100	69800	68300	73600	74200	76100	74200	68400	61300
23	---	55800	74400	72000	69600	68300	73400	74100	76000	74100	68100	61400
24	---	55700	74500	72000	69800	68300	73300	73900	75900	74000	67900	61300
25	---	55600	74400	71900	70000	70000	73200	73800	75800	73800	67700	61100
26	---	55400	74300	71800	69800	72300	73100	73800	75900	73700	67400	60900
27	---	55300	74200	71900	69800	74100	73100	73800	77100	73500	67200	60800
28	---	55300	74100	71800	69600	75400	73000	73700	77100	73400	67000	60700
29	---	55200	74000	71700	69600	75500	72900	73600	77100	73300	66700	60500
30	---	55100	73900	71700	---	75400	72600	73300	77000	73200	66400	60300
31	---	---	73900	71600	---	75300	---	73300	---	73100	66200	---
MAX.	---	56600	74500	73800	71500	75500	75300	76200	77100	77100	72900	66000
MIN	---	55100	55000	71600	69600	68200	72600	73300	71500	73100	66200	60300
(+)	---	1190.40	1198.43	1197.52	1196.71	1198.99	1197.93	1198.21	1199.61	1198.10	1195.31	1192.77
(++)	---	---	+18800	-2300	-2000	+5700	-2700	+700	+3700	-3900	-6900	-5900

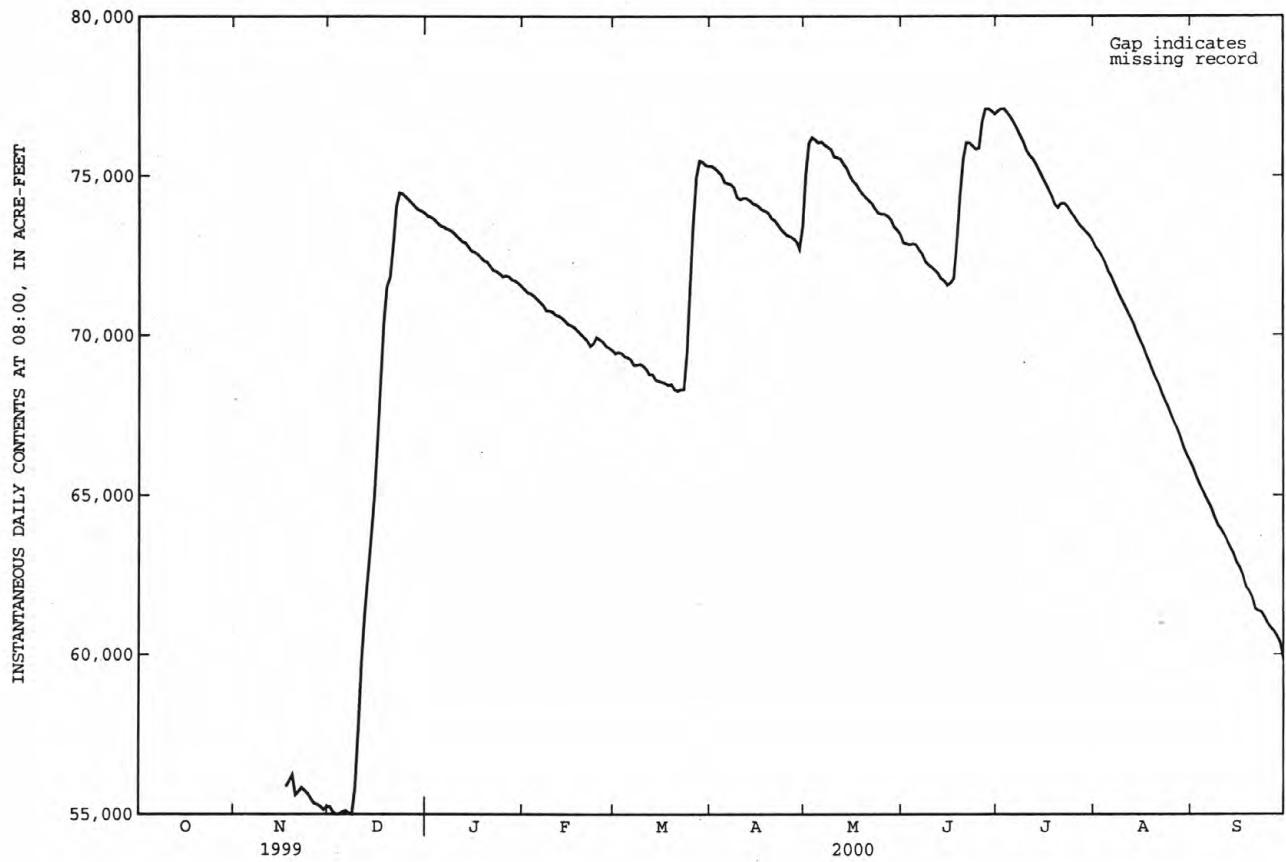
(+) ELEVATION, IN FEET, AT END OF MONTH

(++) CHANGE IN CONTENTS, IN ACRE-FEET

ARKANSAS RIVER BASIN

43

07159550 LAKE HEFNER AT OKLAHOMA CITY, OK--Continued



ARKANSAS RIVER BASIN

07159639 BLUFF CREEK ABOVE BETHANY AND WARR ACRES SEWAGE TREATMENT PLANT NEAR EDMOND, OK

LOCATION.--Lat 35°40'02", long 97°35'45", in NE 1/4, NW 1/4, sec 26, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, at county road bridge 0.4 mi upstream of Deer Creek and 0.6 mi west of State Highway 74.

PERIOD OF RECORD.--November 1983 to September 1984; August 1993 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY									
22...	1235	80020	1028	32	735	79	6.6	8.1	908
JUN									
15...	0940	80020	1028	13	734	77	6.3	8.2	830
JUL									
24...	1517	80020	1028	16	737	92	7.2	8.1	570
AUG									
10...	1130	80020	1028	3.1	740	81	6.1	8.2	1100
SEP									
14...	1220	80020	1028	1.3	737	73	5.7	8.2	1160

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	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)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)
MAY									
22...	33.4	22.5	232	283	0	<.01	E.01	<.02	.10
JUN									
15...	24.5	23.2	180	220	0	<.01	<.01	<.02	.08
JUL									
24...	32.1	26.0	147	179	0	<.01	<.01	<.02	.08
AUG									
10...	36.9	28.3	231	282	0	<.01	<.01	<.02	<.02
SEP									
14...	34.6	25.8	196	239	0	<.01	<.01	<.02	<.02

DATE	DISUL- FOTON UNFILT RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT REC (UG/L) (82614)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)
MAY								
22...	<.03	<.01	<.01	75	<.03	<.01	<.01	<.02
JUN								
15...	<.03	<.01	<.01	65	<.03	<.01	<.01	<.02
JUL								
24...	<.03	<.01	<.01	56	<.03	<.01	<.01	<.02
AUG								
10...	<.03	<.01	<.01	65	<.03	<.01	<.01	<.02
SEP								
14...	<.03	<.01	<.01	93	<.03	<.01	<.01	<.02

ARKANSAS RIVER BASIN

45

07159643 DEER CREEK BELOW BLUFF CREEK AT OKLAHOMA CITY, OK

LOCATION.--Lat 35°40'56", long 97°35'26", in NE 1/4, NW 1/4, sec 23, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, 0.3 mi upstream of County Road and 0.5 mi downstream of confluence of Bluff Creek.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY									
31...	1024	80020	1028	16	744	84	6.8	8.0	1090
JUN									
16...	0950	80020	1028	19	730	84	6.7	8.1	960
JUL									
26...	1200	80020	1028	28	738	85	6.8	7.9	868
AUG									
10...	1515	80020	1028	11	739	127	9.3	8.1	1180
SEP									
14...	1330	80020	1028	5.4	737	88	6.8	7.8	1160

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINIT 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)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)
MAY									
31...	32.5	24.6	205	250	0	<.01	<.01	<.02	.02
JUN									
16...	21.6	24.5	276	337	0	<.01	<.01	<.02	.06
JUL									
26...	32.1	25.0	204	249	0	<.01	<.01	<.02	.04
AUG									
10...	39.8	29.9	217	265	0	<.01	<.01	<.02	.02
SEP									
14...	36.6	26.4	153	187	0	<.01	<.01	<.02	.03

DATE	DISUL- FOTON UNFILTR RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT. REC (UG/L) (82614)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)
MAY								
31...	<.07	<.01	<.01	79	<.03	<.01	<.01	<.02
JUN								
16...	<.03	<.01	<.01	83	<.03	<.01	<.01	<.02
JUL								
26...	<.03	<.01	<.01	58	<.03	<.01	<.01	<.02
AUG								
10...	<.03	<.01	<.01	67	<.03	<.01	<.01	<.02
SEP								
14...	<.03	<.01	<.01	81	<.03	<.01	<.01	<.02

ARKANSAS RIVER BASIN

07159650 DEER CREEK AT OKLAHOMA CITY, OK

LOCATION.--Lat 35°41'24", long 97°35'06", in SW $\frac{1}{4}$, NW $\frac{1}{4}$, sec 13, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, at bridge on 220th St., 0.4 mi east of State Highway 74.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY									
26...	1348	80020	1028	40	728	88	7.1	8.0	1070
JUN									
16...	1140	80020	1028	26	732	81	6.6	8.0	1040
JUL									
25...	1200	80020	1028	62	741	73	6.0	8.0	939
AUG									
30...	1230	80020	1028	14	737	84	6.4	7.6	1220
SEP									
19...	1105	80020	1028	14	731	73	6.1	7.6	1160

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	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)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)
MAY									
26...	32.1	23.7	191	233	0	<.01	M	<.02	.08
JUN									
16...	21.3	23.1	148	181	0	<.01	<.01	<.02	.06
JUL									
25...	25.4	23.8	173	211	0	<.01	<.01	<.02	.05
AUG									
30...	40.2	27.6	113	138	0	<.01	<.03	<.04	E.05
SEP									
19...	31.1	22.1	103	126	0	<.01	<.01	<.02	.06

DATE	DISUL- FOTON UNFILT RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)
MAY								
26...	<.07	<.01	<.01	78	<.03	<.01	<.01	<.02
JUN								
16...	<.03	<.01	<.01	89	<.03	<.01	<.01	<.02
JUL								
25...	<.03	<.01	<.01	54	<.03	<.01	<.01	<.02
AUG								
30...	<.07	<.03	<.01	101	<.09	<.03	<.02	<.06
SEP								
19...	<.03	<.01	<.01	102	<.03	<.01	<.01	<.02

ARKANSAS RIVER BASIN

47

07159730 CHISHOLM CREEK AT EDMOND, OK

LOCATION.--Lat 35°38'03", long 97°31'56", in SE 1/4, SE 1/4, sec 17, T.14 N., R.3 W., Oklahoma County, Hydrologic Unit 11050002, at bridge on 206th St., 0.2 mi west of Western Ave., 1.8 mi south of Logan County line.

PERIOD OF RECORD.--August 1993 to current year, previously published as 07159690.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY 26...	1500	80020	1028	13	728	72	5.6	7.8	463
JUN 15...	1130	80020	1028	4.6	733	83	6.7	7.9	507
JUL 25...	1400	80020	1028	11	737	89	7.0	7.8	319
AUG 25...	1000	80020	1028	.04	739	61	4.7	8.2	700
SEP 14...	1018	1028	1028	.00	737	--	--	--	--

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	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)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)
MAY 26...	30.2	25.7	124	151	0	<.01	E.01	<.02	.47
JUN 15...	31.4	24.0	140	171	0	<.01	<.01	<.02	.29
JUL 25...	27.9	26.0	109	133	0	<.01	.15	<.02	.19
AUG 25...	33.2	26.8	192	234	0	<.01	<.03	<.04	<.04
SEP 14...	32.1	--	--	--	--	--	--	--	--

DATE	DISUL- FOTON UNFILTR RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT. REC (UG/L) (82614)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)
MAY 26...	<.07	<.01	<.01	73	E.03	<.01	<.01	<.02
JUN 15...	<.03	<.01	<.01	97	<.03	<.01	<.01	<.02
JUL 25...	<.03	<.01	<.01	55	<.03	<.01	<.01	<.02
AUG 25...	<.07	<.03	<.01	49	<.09	<.03	<.02	<.06
SEP 14...	--	--	--	--	--	--	--	--

ARKANSAS RIVER BASIN

07159735 CHISHOLM CREEK NEAR EDMOND, OK

LOCATION.--Lat 35°43'32", long 97°31'37", in NW 1/4, NW 1/4, sec 4, T.14 N., R.3 W., Oklahoma County, Hydrologic Unit 11050002, at county road bridge 0.2 mi east of Western Avenue on the Logan County line.

PERIOD OF RECORD.--August 1993 to current year, previously published as 07159695.

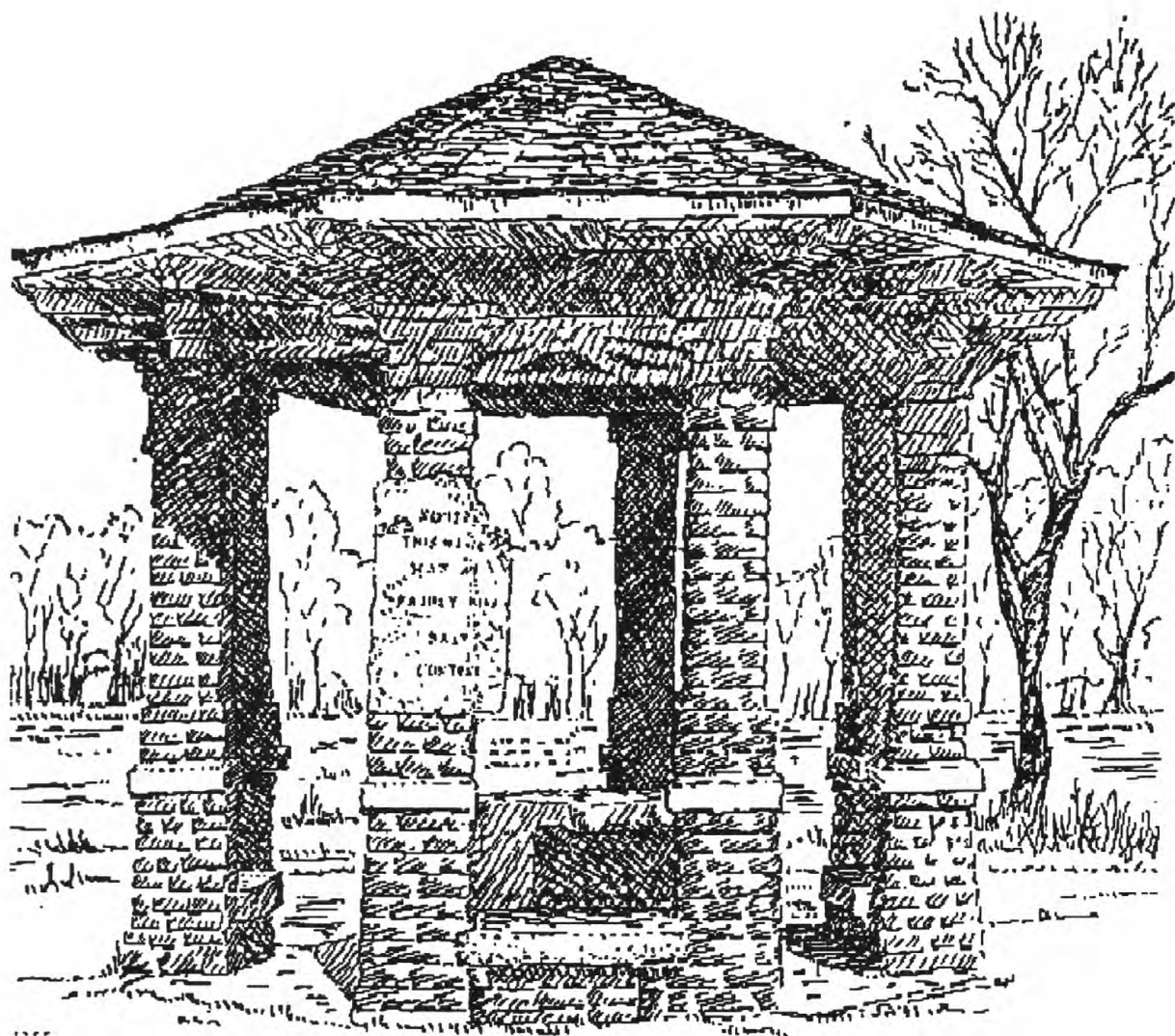
REMARKS.--Samples were collected monthly from May through September and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
MAY 23...	1033	80020	1028	17	729	103	8.4	8.0	810
JUN 14...	1305	80020	1028	11	736	79	6.1	8.0	861
JUL 27...	1030	80020	1028	9.6	739	72	5.6	7.8	521
AUG 25...	1450	80020	1028	4.5	738	160	11.2	8.5	1050
SEP 19...	1215	80020	1028	2.6	731	93	7.6	8.1	1030

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LITY 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)	CARBO- PHENO- THION WATER UNFLTRD (UG/L) (39786)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	DEF TOTAL (UG/L) (39040)	DI- AZINON, TOTAL (UG/L) (39570)
MAY 23...	32.7	23.3	214	261	0	<.01	E.01	<.02	.28
JUN 14...	26.3	26.5	156	190	0	<.01	E.01	<.02	.08
JUL 27...	26.4	26.1	100	122	0	<.01	.13	<.02	.16
AUG 25...	40.7	32.2	155	172	8	<.01	<.03	<.04	<.04
SEP 19...	34.2	23.2	125	152	0	<.01	<.01	<.02	E.02

DATE	DISUL- FOTON UNFLTR RECOVER (UG/L) (39011)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT. REC (UG/L) (82614)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	MALA- THION, TOTAL (UG/L) (39530)	METHYL PARA- THION, TOTAL (UG/L) (39600)	PARA- THION, TOTAL (UG/L) (39540)	PHORATE TOTAL (UG/L) (39023)
MAY 23...	<.03	<.01	<.01	82	<.03	<.01	<.01	<.02
JUN 14...	<.03	<.01	<.01	82	<.03	<.01	<.01	<.02
JUL 27...	<.03	<.01	<.01	67	<.03	<.01	<.01	<.02
AUG 25...	<.07	<.03	<.01	31	<.09	<.03	<.02	<.06
SEP 19...	<.03	<.01	<.01	105	<.03	<.01	<.01	<.02



Pavilion at Mineral Wells Park, Guthrie

ARKANSAS RIVER BASIN

07159750 COTTONWOOD CREEK NEAR SEWARD, OK

LOCATION.--Lat 35°48'49", long 97°28'40", in SW $\frac{1}{4}$ sec.36, T.16 N., R.3 W., Logan County, Hydrologic Unit 11050002, on downstream left bank, 1.2 mi north of Seward on Broadway Road, 6.5 mi southwest of Guthrie, and at mile 16.2.

DRAINAGE AREA.--320 mi².

PERIOD OF RECORD.--March 1973 to September, 1982, November 1989 to current year.

REVISED RECORDS.--OK-95-1: 1993 (M)

GAGE.--Water-stage recorder. Datum of gage is 936.49 ft sea level. March 1973 to September 1982 gage at site 0.9 mi upstream at datum 10 ft higher.

REMARKS.--Records fair. Low flow sustained by part of sewage effluent from Oklahoma City. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 1	2000	4,230	21.24	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	109	28	52	51	42	70	2970	48	285	e51	15
2	32	64	27	50	48	40	438	1650	38	380	e46	17
3	31	52	59	52	40	189	259	333	114	930	e42	16
4	31	48	131	55	46	143	154	237	104	365	e39	15
5	30	45	302	55	40	72	110	187	132	237	e39	16
6	28	43	132	50	43	54	89	156	130	177	e36	21
7	26	42	81	48	39	43	70	144	60	143	e31	18
8	26	40	63	44	36	81	57	130	36	122	e29	19
9	31	39	533	48	33	87	49	134	26	107	e30	18
10	37	36	1170	51	35	40	48	218	e25	97	e28	19
11	32	39	400	47	35	25	49	141	e23	83	e27	22
12	30	36	279	43	35	20	52	115	e22	72	e28	26
13	28	38	174	40	34	16	109	92	21	65	e27	23
14	28	37	121	37	33	13	84	76	e20	58	e23	23
15	26	40	95	39	31	12	64	69	48	69	19	25
16	25	42	79	41	29	20	116	71	30	60	21	23
17	33	41	72	43	31	23	142	71	174	57	23	22
18	31	42	66	40	31	79	84	69	611	50	21	26
19	29	48	64	37	32	60	68	66	195	e45	20	26
20	27	46	63	35	29	47	62	58	150	e42	20	23
21	26	39	59	36	28	32	49	51	291	50	22	25
22	26	43	57	36	30	30	40	57	763	327	22	26
23	22	41	56	36	56	143	41	115	288	337	17	27
24	21	33	55	36	76	494	46	72	173	141	16	27
25	24	36	56	33	51	225	41	79	447	107	15	47
26	28	36	54	33	128	134	42	121	1830	101	14	42
27	26	33	53	37	65	96	40	97	687	74	13	32
28	23	35	53	44	49	72	88	131	487	63	14	29
29	24	34	53	48	44	61	109	78	622	57	15	29
30	146	34	52	55	---	65	74	63	404	54	14	27
31	193	---	52	58	---	52	---	56	---	52	13	---
TOTAL	1154	1291	4539	1359	1258	2510	2744	7907	7999	4807	775	724
MEAN	37.2	43.0	146	43.8	43.4	81.0	91.5	255	267	155	25.0	24.1
MAX	193	109	1170	58	128	494	438	2970	1830	930	51	47
MIN	21	33	27	33	28	12	40	51	20	42	13	15
AC-FT	2290	2560	9000	2700	2500	4980	5440	15680	15870	9530	1540	1440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	87.2	193	120	92.5	118	243	219	470	407	101	72.4	103																
MAX	267	1218	570	265	336	1591	803	2267	2909	467	246	546																
(WY)	1975	1975	1992	1975	1975	1990	1990	1993	1995	1975	1996	1973																
MIN	12.0	15.2	17.6	17.6	22.8	19.8	22.1	42.5	24.9	18.2	8.58	17.4																
(WY)	1977	1977	1977	1978	1977	1977	1978	1981	1976	1976	1976	1980																

e Estimated

ARKANSAS RIVER BASIN

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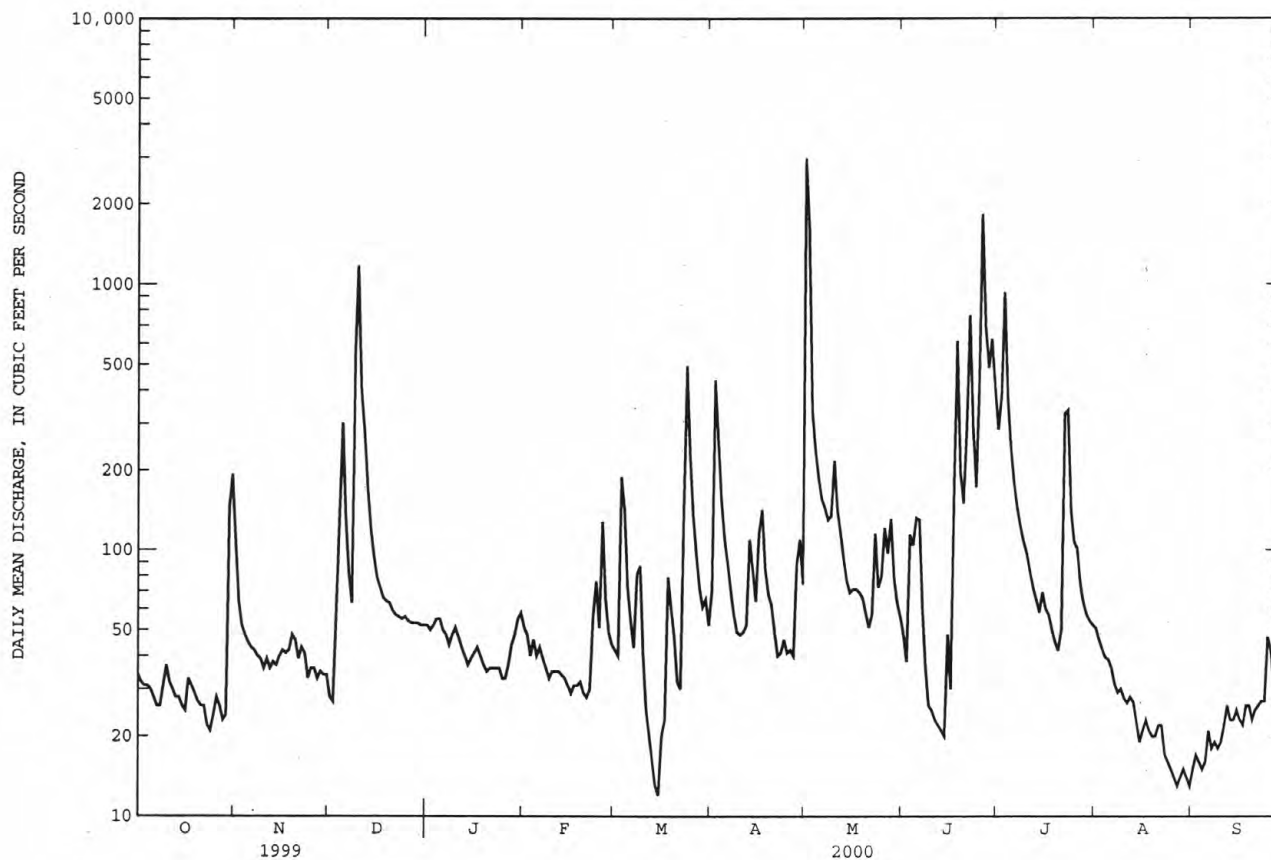
07159750 COTTONWOOD CREEK NEAR SEWARD, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1973 - 2000	
ANNUAL TOTAL	54973		37067		175	
ANNUAL MEAN	151		101		438	1993
HIGHEST ANNUAL MEAN					42.9	1981
LOWEST ANNUAL MEAN					29300	May 9 1993
HIGHEST DAILY MEAN	5180	Apr 26	2970	May 1	^a 6.1	Aug 15 1976
LOWEST DAILY MEAN	15	Aug 25	12	Mar 15	6.7	Aug 11 1976
ANNUAL SEVEN-DAY MINIMUM	17	Sep 1	14	Aug 25	^b 43500	Jun 9 1995
INSTANTANEOUS PEAK FLOW			4230	May 1	^c 34.47	Jun 9 1995
INSTANTANEOUS PEAK STAGE			21.24	May 1		
INSTANTANEOUS LOW FLOW			9.6	Aug 24		
ANNUAL RUNOFF (AC-FT)	109000		73520		126600	
10 PERCENT EXCEEDS	260		175		322	
50 PERCENT EXCEEDS	78		46		56	
90 PERCENT EXCEEDS	27		22		19	

^aAlso occurred on Aug. 22, 23, 1976.

^bFrom indirect measurement.

^cFrom high-water mark.



ARKANSAS RIVER BASIN

07160000 CIMARRON RIVER NEAR GUTHRIE, OK

LOCATION.--Lat 35°55'14", long 97°25'32", near center of east line of sec.29, T.17 N., R.2 W, Logan County, Hydrologic Unit 11050002, on downstream side left bank of State Highway 77 bridge, 1.6 mi downstream from Cottonwood Creek, 2.5 mi north of Guthrie, 6.1 mi upstream from Skeleton Creek, and at mile 121.4.

DRAINAGE AREA.--16,892 mi², of which 4,926 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1937 to September 1976, October 1983 to current year. Monthly discharge only for some periods, published in WSP's 1311 and 1731.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 896.50 ft above sea level (U.S. Army Corps of Engineers' bench mark). Prior to Mar. 19, 1939, nonrecording gage at railway bridge 1,200 ft upstream at datum 4.00 ft higher. From Mar. 19, 1939, to Sept. 21, 1967, the datum was 4.00 ft higher, from Sept. 21, 1967, to Sept. 30, 1976, the datum was 2.00 ft higher at recording gage 125 ft upstream from railway bridge. From Sept. 14, 1967, to Sept. 30, 1976, supplementary water-stage recorder at present site and datum.

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 16,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 10	1400	17,900	8.63	May 28	1300	22,100	9.39
Mar 24	1630	45,200	11.88	Jun 26	0830	28,500	10.19

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e361	1370	477	651	e568	1070	5090	7050	2490	4430	494	98
2	e354	760	466	e627	e568	922	8500	8980	1880	4510	468	98
3	420	e580	504	e615	e556	1060	8150	2290	2570	5570	409	98
4	e415	e540	730	e600	e562	2820	5350	1400	2050	3100	382	97
5	e405	e510	2170	e582	e547	6600	4180	1240	2090	1990	366	95
6	e395	e480	5310	e615	e547	3090	3330	1070	1940	1550	352	93
7	e373	e470	3340	e615	e547	1740	2710	971	1580	1320	324	93
8	e368	e500	1600	e612	e550	1490	2240	900	1430	1160	311	92
9	e365	e440	4670	e615	e541	1700	1890	886	1250	1040	288	91
10	e358	e420	15700	e612	e544	1640	1660	943	1120	951	e270	92
11	e355	e410	10600	e618	e529	1580	1530	823	1040	878	e243	90
12	e346	e405	4820	e612	e526	1330	1430	749	973	819	e223	90
13	e337	e400	2480	e597	e517	1130	1390	805	926	779	e203	89
14	e335	e397	e1690	e591	499	1070	1360	710	896	753	e182	88
15	309	e395	e1200	e568	e494	1050	1230	641	885	729	e165	87
16	e290	e390	e1000	e582	e488	1070	1270	597	956	712	147	87
17	e287	e389	e900	e574	e490	1090	1630	558	3300	680	137	87
18	e278	e390	e840	e571	e584	1590	2000	538	8120	673	139	86
19	e275	e388	e780	e571	e726	4910	1600	526	4440	638	137	84
20	263	e390	720	e577	e587	4720	1230	511	2830	611	132	83
21	262	e387	e690	e577	e535	3210	1030	492	2410	702	129	84
22	262	e390	e680	e559	516	2190	925	497	7740	973	126	82
23	265	368	e720	e550	538	4210	860	497	5630	2130	125	84
24	e260	2020	e740	e553	660	39000	814	505	5370	1500	122	87
25	e262	2010	e750	e535	941	32600	767	2000	5610	1550	119	88
26	e270	1290	e740	e535	2270	17500	732	3450	24800	1190	114	104
27	e307	758	e710	e541	4700	12300	731	2850	11100	826	108	101
28	e300	616	e680	e556	2520	9020	731	19900	10500	645	105	98
29	e327	548	665	e556	1390	6800	743	15400	12100	566	104	96
30	520	507	677	e568	---	5060	833	6340	6880	515	102	93
31	1160	---	663	e574	---	4190	---	3610	---	497	99	---
TOTAL	11084	18918	67712	18109	25040	177752	65936	87729	134906	43987	6625	2735
MEAN	358	631	2184	584	863	5734	2198	2830	4497	1419	214	91.2
MAX	1160	2020	15700	651	4700	39000	8500	19900	24800	5570	494	104
MIN	260	368	466	535	488	922	731	492	885	497	99	82
AC-FT	21990	37520	134300	35920	49670	352600	130800	174000	267600	87250	13140	5420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

	MEAN	1079	875	564	483	675	1254	1614	2580	2271	915	658	887
MAX	13800	8748	2874	2266	4063	6603	9372	20630	14860	4220	4182	3988	
(WY)	1987	1999	1993	1993	1987	1998	1999	1993	1995	1950	1995	1989	
MIN	.79	.70	1.39	6.38	21.7	24.7	66.5	63.0	58.6	9.58	26.1	8.03	
(WY)	1953	1955	1955	1940	1957	1955	1956	1971	1953	1954	1943	1954	

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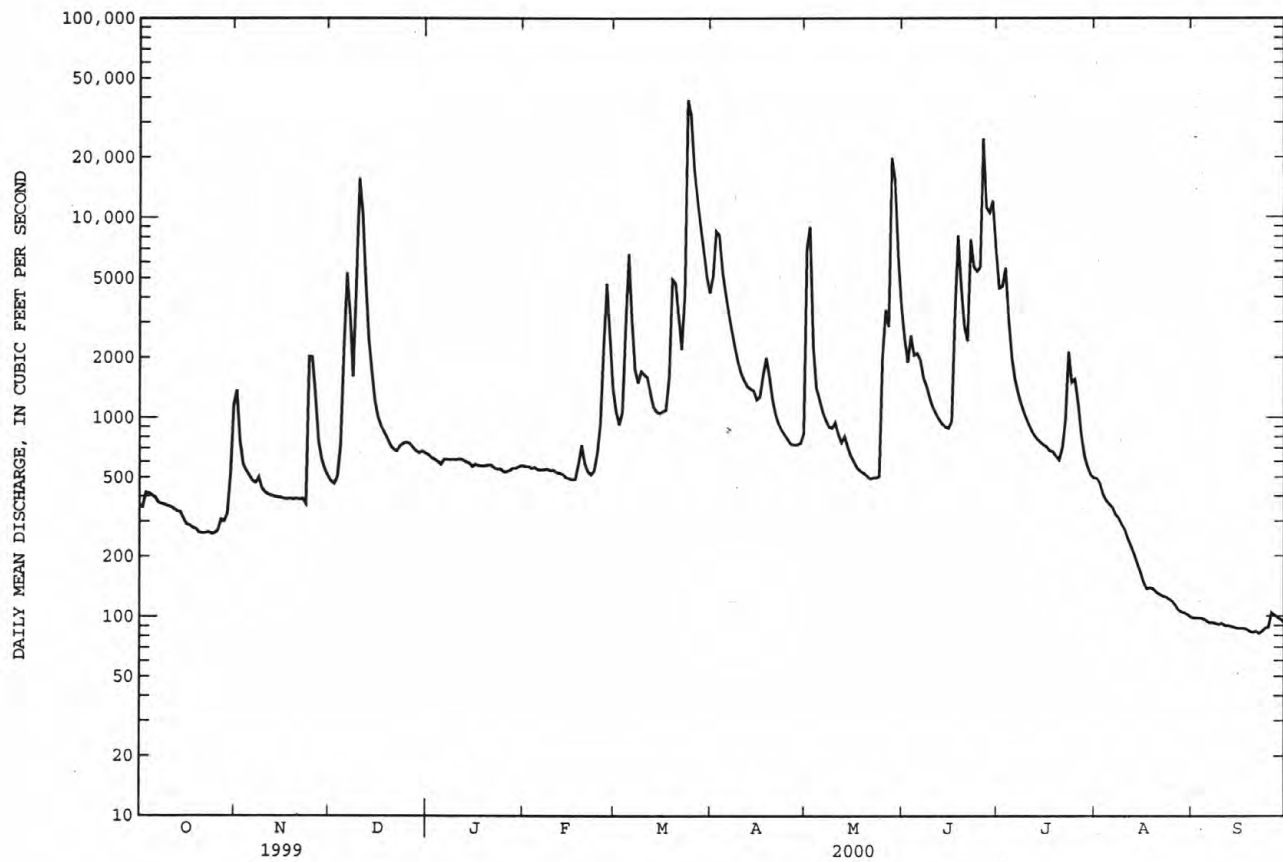
ARKANSAS RIVER BASIN

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07160000 CIMARRON RIVER NEAR GUTHRIE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	1043467		660533		1151	
ANNUAL MEAN	2859		1805		3901	
HIGHEST ANNUAL MEAN					192	
LOWEST ANNUAL MEAN					1987	
HIGHEST DAILY MEAN	44900	Apr 26	39000	Mar 24	112000	May 17 1957
LOWEST DAILY MEAN	220	Sep 5	82	Sep 22	^a .30	Oct 20 1939
ANNUAL SEVEN-DAY MINIMUM	233	Sep 1	84	Sep 17	.39	Oct 19 1939
INSTANTANEOUS PEAK FLOW			45200	Mar 24	158000	May 17 1957
INSTANTANEOUS PEAK STAGE			11.88	Mar 24	18.58	May 17 1957
ANNUAL RUNOFF (AC-FT)	2070000		1310000		833900	
10 PERCENT EXCEEDS	7200		4560		2260	
50 PERCENT EXCEEDS	1200		632		348	
90 PERCENT EXCEEDS	352		118		57	

^aAlso occurred Oct. 21-22, Nov. 2, 1939.



ARKANSAS RIVER BASIN

07160350 SKELETON CREEK AT ENID, OK

LOCATION.--Lat 36°22'34", long 97°48'00", in NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec.24, T.22 N., R.6 W., Garfield County, Hydrologic Unit 11050002, on left bank, 600 ft below confluence of Boggy Creek, at mile 47.5.

DRAINAGE AREA.--70.3 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 1,110.48 ft above sea level.

REMARKS.--Records fair. Low flows regulated by releases of effluent from the City of Enid water treatment plant, 1 mile upstream. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 10, 1973, stage unknown, discharge 81,000 ft³/s, from slope-area measurement of peak flow at Southgate Road, one mile below gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	14	12	13	16	23	67	55	11	12	8.4	5.5
2	9.2	14	16	13	e12	75	39	20	32	13	7.7	5.6
3	11	12	84	15	17	71	18	18	16	11	8.1	4.9
4	11	12	333	14	19	38	16	18	12	11	8.0	5.0
5	13	11	151	15	15	27	14	20	12	10	7.7	6.4
6	12	11	44	14	14	22	16	18	11	12	7.2	6.1
7	12	12	22	13	13	20	16	21	13	10	7.6	6.9
8	16	13	17	17	14	39	18	20	13	11	7.7	7.2
9	12	14	598	15	15	19	16	21	13	11	7.4	7.3
10	14	13	148	15	13	16	17	20	10	11	8.2	6.8
11	12	14	47	14	16	21	16	21	10	10	8.3	7.9
12	11	12	27	13	15	16	19	18	13	12	7.8	6.9
13	12	14	23	14	13	17	19	16	10	11	6.2	8.0
14	13	14	20	13	14	17	20	15	75	10	6.6	7.9
15	16	15	19	13	12	20	24	17	13	11	6.2	7.2
16	17	14	17	13	12	52	82	19	9.7	10	6.0	8.0
17	17	15	17	13	13	58	18	31	173	10	6.1	6.8
18	13	12	18	13	13	34	20	17	44	11	7.0	7.2
19	16	14	16	14	13	25	19	17	28	12	7.2	5.9
20	14	11	17	13	12	24	18	14	15	15	6.0	4.9
21	13	12	17	14	11	21	17	14	13	129	6.5	5.6
22	14	16	16	12	28	55	18	39	15	386	6.8	7.5
23	14	20	15	13	62	1210	20	13	12	51	8.9	7.1
24	13	15	15	14	17	223	22	12	55	17	8.9	7.2
25	12	12	13	13	443	51	23	119	15	18	9.0	6.0
26	14	11	12	14	84	36	20	330	35	13	9.3	5.9
27	15	12	14	16	38	24	16	457	17	10	6.4	6.2
28	18	11	14	15	28	17	16	65	15	10	8.1	7.2
29	50	14	15	e15	25	16	28	18	11	14	6.8	7.1
30	253	12	15	e17	---	15	27	14	12	9.3	6.0	7.7
31	25	---	14	16	---	14	---	11	---	9.0	6.6	---
TOTAL	702.2	396	1806	436	1017	2316	699	1508	733.7	890.3	228.7	199.9
MEAN	22.7	13.2	58.3	14.1	35.1	74.7	23.3	48.6	24.5	28.7	7.38	6.66
MAX	253	20	598	17	443	1210	82	457	173	386	9.3	8.0
MIN	9.2	11	12	12	11	14	14	11	9.7	9.0	6.0	4.9
AC-FT	1390	785	3580	865	2020	4590	1390	2990	1460	1770	454	397

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000
MEAN	58.8	54.8	49.6	33.1	51.8
MAX	145	147	66.2	60.2	101
(WY)	1999	1999	1998	1999	1997
MIN	22.7	13.2	14.7	11.6	28.9
(WY)	2000	2000	1997	1997	1998

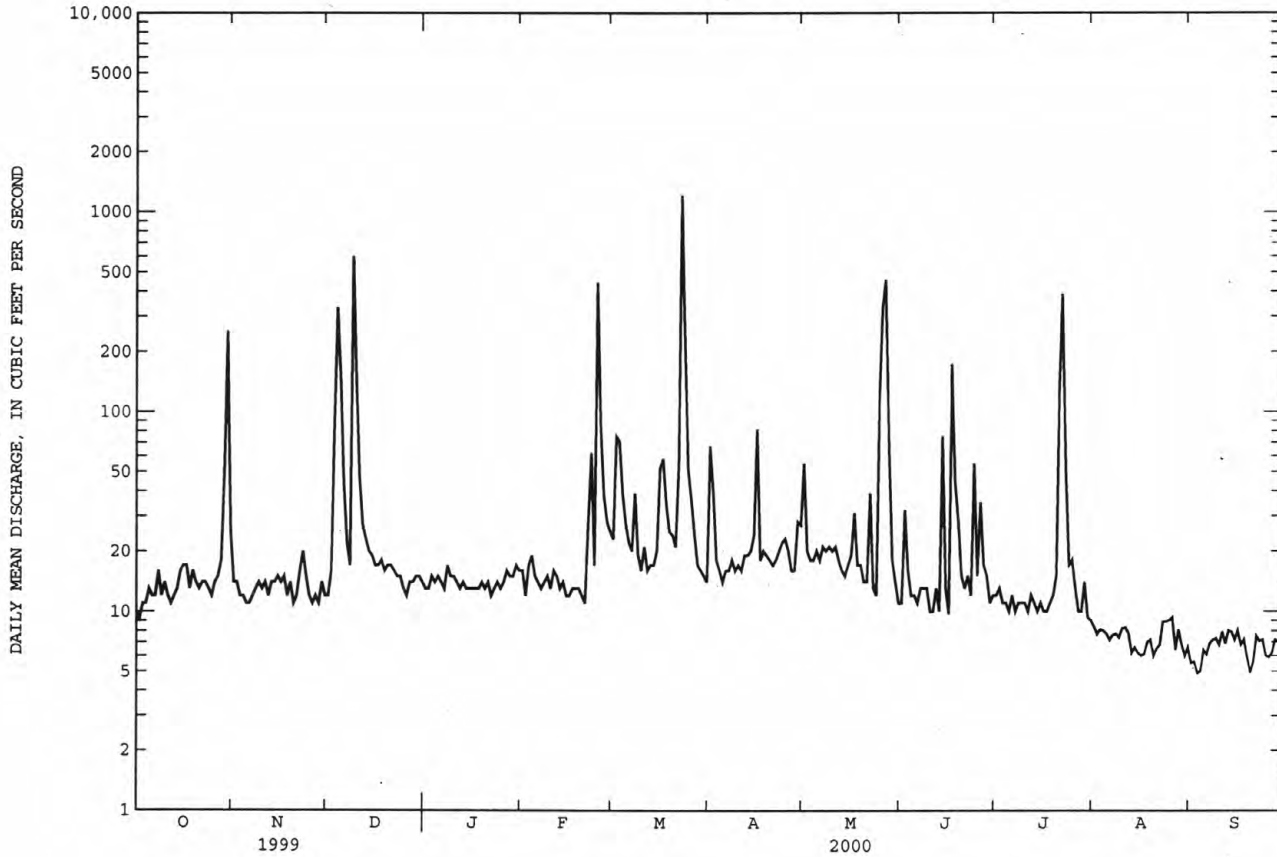
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ARKANSAS RIVER BASIN

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07160350 SKELETON CREEK AT ENID, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1996 - 2000
ANNUAL TOTAL	28048.2	10932.8	
ANNUAL MEAN	76.8	29.9	58.1
HIGHEST ANNUAL MEAN			98.4
LOWEST ANNUAL MEAN			29.9
HIGHEST DAILY MEAN	2520 Apr 25	1210 Mar 23	3350 Nov 1 1998
LOWEST DAILY MEAN	7.1 Sep 5	4.9 Sep 3,20	4.3 Sep 20 1998
ANNUAL SEVEN-DAY MINIMUM	8.9 Aug 31	5.7 Aug 30	5.1 Aug 18 1998
INSTANTANEOUS PEAK FLOW		2010 Mar 23	8180 Nov 1 1998
INSTANTANEOUS PEAK STAGE		7.82 Mar 23	14.70 Nov 1 1998
ANNUAL RUNOFF (AC-FT)	55630	21690	42060
10 PERCENT EXCEEDS	148	39	67
50 PERCENT EXCEEDS	21	14	15
90 PERCENT EXCEEDS	12	7.2	7.2



ARKANSAS RIVER BASIN

07161450 CIMARRON RIVER NEAR RIPLEY, OK

LOCATION.--Lat 35°59'09", long 96°54'43", in SE 1/4 SE 1/4 sec.31, T.18 N., R.4 E., Payne County, Hydrologic Unit 11050003, on right bank at downstream side of bridge on State Highway 33, 2.2 mi upstream from Stillwater Creek, 2.5 mi south of Ripley, 2.8 mi downstream from Sand Creek, 7.0 mi east of Perkins, and at mile 79.2.

DRAINAGE AREA.--17,979 mi² of which 4,926 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 795.86 ft above sea level.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 10	2300	18,300	15.65	May 29	0400	21,300	15.98
Mar 25	0030	45,100	19.57	Jun 27	0545	37,200	18.47

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	569	1470	616	1120	1020	1900	3910	2500	2980	5180	824	157
2	566	1560	600	1110	999	1620	6730	7210	2280	4930	685	149
3	546	890	621	1110	1000	1730	8900	5790	1860	10500	623	145
4	547	719	793	1090	988	2400	6050	2560	2380	5080	563	141
5	587	620	2130	1070	967	3570	4540	1880	2030	2910	506	137
6	556	576	4490	1060	991	5160	3770	1640	1890	2080	461	131
7	528	547	4650	1040	995	3100	3400	1390	1890	1670	435	129
8	520	530	2930	1040	997	2390	2930	1260	1850	1420	398	128
9	524	513	4060	1060	979	2220	2620	1280	1590	1230	366	123
10	517	508	13500	1040	954	2260	2360	1430	1310	1090	344	116
11	518	497	14500	1050	918	2120	2210	1710	1120	979	329	110
12	516	495	7280	1040	907	1950	2030	1210	1070	888	312	112
13	510	495	4620	1010	902	1720	2010	1020	864	826	300	112
14	507	493	3170	989	886	1520	1950	974	827	762	289	115
15	509	483	2480	974	874	1420	1860	910	778	725	281	109
16	512	484	2110	960	860	1450	1780	811	772	679	267	103
17	482	486	1870	951	841	1470	1780	766	1090	660	256	101
18	457	475	1700	949	1150	1560	2060	747	3380	635	255	100
19	463	490	1600	959	1300	2090	2240	750	6610	619	240	94
20	459	475	1520	932	1120	4070	1960	732	3360	590	230	103
21	453	482	1450	930	948	3900	1660	722	4530	1000	222	96
22	451	485	1400	926	879	3060	1540	637	6830	1430	212	92
23	444	497	1350	915	918	3050	1450	660	7230	1700	202	105
24	438	487	1320	906	932	28000	1350	637	4780	2910	194	122
25	433	1410	1290	915	1070	35600	1300	1160	4270	1820	188	113
26	436	1870	1260	904	1760	17400	1230	4740	13300	1610	180	103
27	437	1370	1240	950	4260	11100	1190	9050	27200	1350	174	111
28	437	915	1200	994	4130	8700	1130	9360	7830	1060	170	139
29	429	745	1180	1010	2720	6540	1110	17500	10000	1580	164	136
30	789	667	1160	1030	---	5070	1250	9200	8630	1940	159	131
31	894	---	1150	1020	---	4200	---	4590	---	1170	158	---
TOTAL	16034	21734	89240	31054	37265	172340	78300	94826	134531	61023	9987	3563
MEAN	517	724	2879	1002	1285	5559	2610	3059	4484	1968	322	119
MAX	894	1870	14500	1120	4260	35600	8900	17500	27200	10500	824	157
MIN	429	475	600	904	841	1420	1110	637	772	590	158	92
AC-FT	31800	43110	177000	61600	73920	341800	155300	188100	266800	121000	19810	7070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	939	2128	1929	1430	1577	3704	4166	4674	4470	1573	1543	1469	
MAX	3156	11490	4585	3541	4723	9824	12610	26790	18300	4301	5520	4554	
(WY)	1999	1999	1999	1993	1999	1990	1999	1993	1995	1999	1995	1989	
MIN	193	238	233	287	244	234	402	317	593	251	259	113	
(WY)	1991	1991	1991	1991	1991	1991	1991	1996	1996	1990	1991	2000	

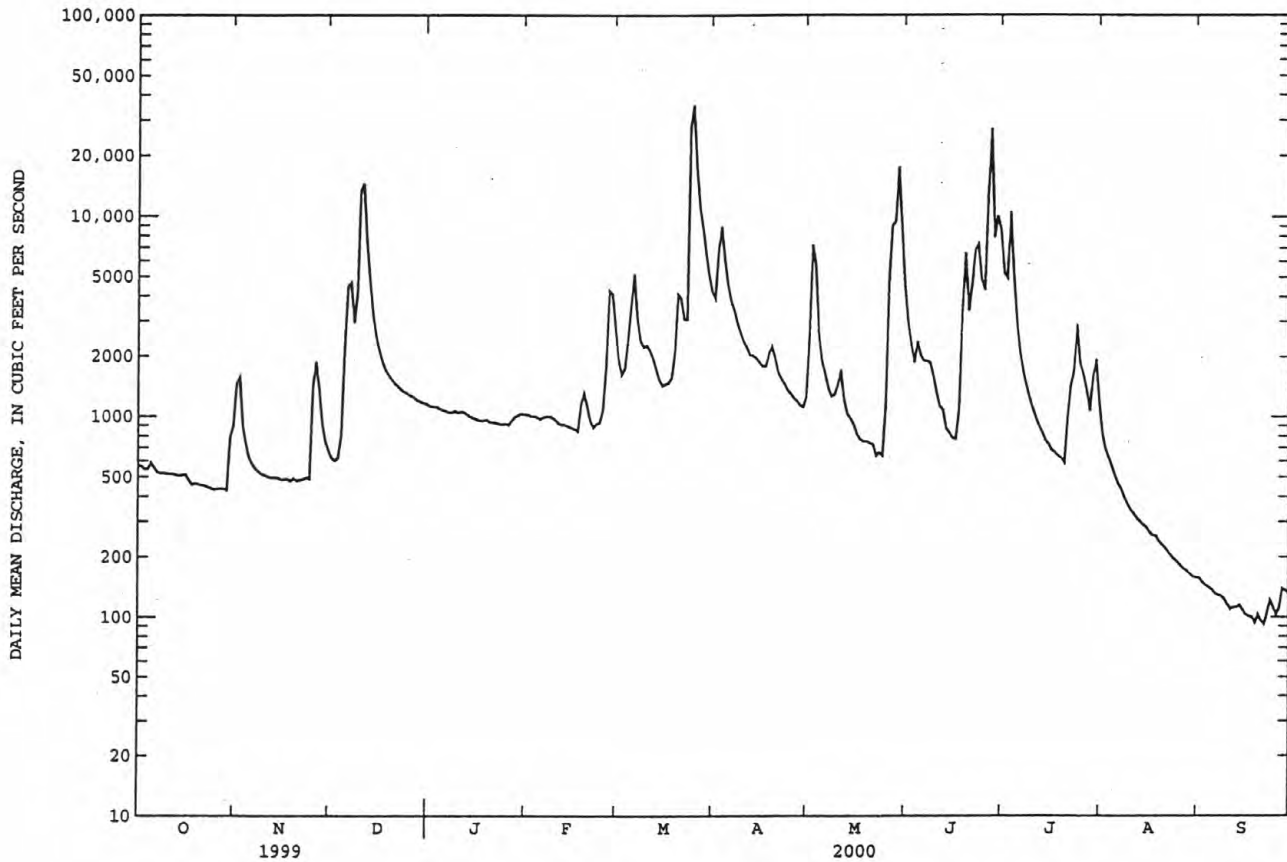
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ARKANSAS RIVER BASIN

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07161450 CIMARRON RIVER NEAR RIPLEY, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	1561880		749897		2467	
ANNUAL MEAN	4279		2049		5533	1999
HIGHEST ANNUAL MEAN					437	1991
LOWEST ANNUAL MEAN					137000	May 10 1993
HIGHEST DAILY MEAN	62700	Apr 26	35600	Mar 25	84	Oct 23 1991
LOWEST DAILY MEAN	429	Oct 29	92	Sep 22	87	Oct 19 1991
ANNUAL SEVEN-DAY MINIMUM	436	Oct 23	98	Sep 16	141000	May 10 1993
INSTANTANEOUS PEAK FLOW			45100	Mar 25	28.36	May 10 1993
INSTANTANEOUS PEAK STAGE			19.57	Mar 25		
ANNUAL RUNOFF (AC-FT)	3098000		1487000		1787000	
10 PERCENT EXCEEDS	10400		4600		5230	
50 PERCENT EXCEEDS	2210		1010		884	
90 PERCENT EXCEEDS	510		186		260	



ARKANSAS RIVER BASIN

07164500 ARKANSAS RIVER AT TULSA, OK

LOCATION.--Lat 36°08'26", long 96°00'22", in NE 1/4 SW 1/4 sec.11, T.19 N., R.12 E., Tulsa County, Hydrologic Unit 11110101, at right abutment on downstream side of 11th Street bridge in Tulsa, 10.1 mi upstream from Polecat Creek, 15.1 mi downstream from Keystone Dam, and at mile 523.7.

DRAINAGE AREA.--74,615 mi², of which 12,541 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1925 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage- height records collected in this vicinity since 1904 are published in reports of the National Weather Service.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 615.23 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Feb. 2, 1939, nonrecording gage and Feb. 2, 1939 to Sept. 30, 1952, water-stage recorder at datum 3.00 ft higher.

REMARKS.--Records fair below 5.0 ft gage height and good above. Except for 109 mi² intervening area, flow completely regulated by Keystone Lake (station 07164200) since September 1964. Prior to September 1964, minor regulation by John Martin Lake in Colorado and by Great Salt Plains Lake (station 07150000). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1904, 22.8 ft, June 13, 1923, present datum, from reports of National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8860	851	851	4980	9140	20600	39300	9360	18600	15500	14800	3390
2	8690	939	843	6850	6940	20700	39300	11200	17400	15600	12700	2820
3	9790	2510	869	7540	5260	21200	38500	12500	14900	15700	10100	875
4	8750	1550	1490	5370	2630	21200	40800	12400	14600	15700	6890	1920
5	8730	2210	857	5620	2730	21400	42100	11100	10600	15700	5380	4360
6	8640	1120	943	6380	2000	24600	38200	14700	3650	15700	4520	3580
7	8500	870	8450	5350	1770	28900	31400	570	10300	15600	7670	2510
8	8150	1380	9130	4480	2090	28200	27700	4940	10100	15500	3470	2930
9	1960	1060	9630	3690	2130	26000	26700	13800	5340	15500	3620	2120
10	872	1190	20500	2610	2540	18800	23500	15100	2810	15600	3860	831
11	2620	918	41300	3410	3060	11400	20100	14900	3150	15800	4160	2290
12	3450	893	41800	4170	2740	11200	19700	14800	7690	15600	1880	6190
13	3320	861	40900	e7630	575	8030	19300	14500	4210	15500	212	6540
14	2820	779	36100	e7700	3290	6170	17300	14300	4460	15500	3140	5610
15	2230	841	29900	e7330	5710	9790	15000	14200	7280	15600	5350	2760
16	1540	941	27100	e7720	2930	8710	14700	13100	9980	15600	5220	1950
17	872	1310	20800	e7170	1690	14800	11300	8210	5670	13300	2600	1060
18	1850	1590	18700	e7690	1570	21100	6950	7420	11600	7950	2790	1020
19	1990	1180	18400	e8420	1840	25100	7110	6190	12800	16500	1550	1340
20	2460	860	13800	e10200	1300	32400	6910	3300	12600	16400	634	2500
21	2940	810	7290	e8500	533	34200	6890	3510	6770	16000	589	2330
22	2750	770	6370	e5770	1480	32700	6870	3190	2050	14000	1590	1200
23	1630	854	6690	e4410	5190	31700	6810	5670	9890	13700	2190	1840
24	853	752	6750	5980	6570	30300	7760	4570	10000	13000	2070	1130
25	1650	906	5870	7640	7130	e33500	10500	4500	9720	9820	1850	924
26	1370	1010	7240	8840	7140	e44000	10600	6210	7110	11700	1570	2100
27	1290	958	3950	8390	8860	e51900	9810	8290	551	16400	794	1200
28	1030	3810	7720	7380	11400	50600	2510	19700	6970	15900	2240	1970
29	1520	4480	7500	3040	13700	50600	9420	20000	12400	15000	3710	1250
30	1130	2400	7000	2480	---	46300	8270	19700	14800	14900	3710	2270
31	851	---	6000	8510	---	39900	---	19000	---	14800	5390	---
TOTAL	113108	40603	414743	195250	123938	826000	565310	330930	268001	459070	126249	72880
MEAN	3649	1353	13380	6298	4274	26650	18840	10680	8933	14810	4073	2429
MAX	9790	4480	41800	10200	13700	51900	42100	20000	18600	16500	14800	6540
MIN	851	752	843	2480	533	6170	2510	570	551	7950	212	831
AC-FT	224300	80540	822600	387300	245800	1638000	1121000	656400	531600	910600	250400	144600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

	MEAN	7617	7886	5267	5333	5744	11230	12770	14440	15030	9817	5877	5546
MAX	72720	54540	16830	19850	22500	42890	44460	81400	69820	37630	32970	23280	
(WY)	1987	1999	1993	1998	1993	1987	1973	1993	1995	1999	1995	1989	
MIN	491	457	582	483	494	490	557	881	2595	1314	1129	893	
(WY)	1965	1983	1983	1967	1967	1977	1981	1967	1966	1991	1980	1998	

e Estimated

ARKANSAS RIVER BASIN

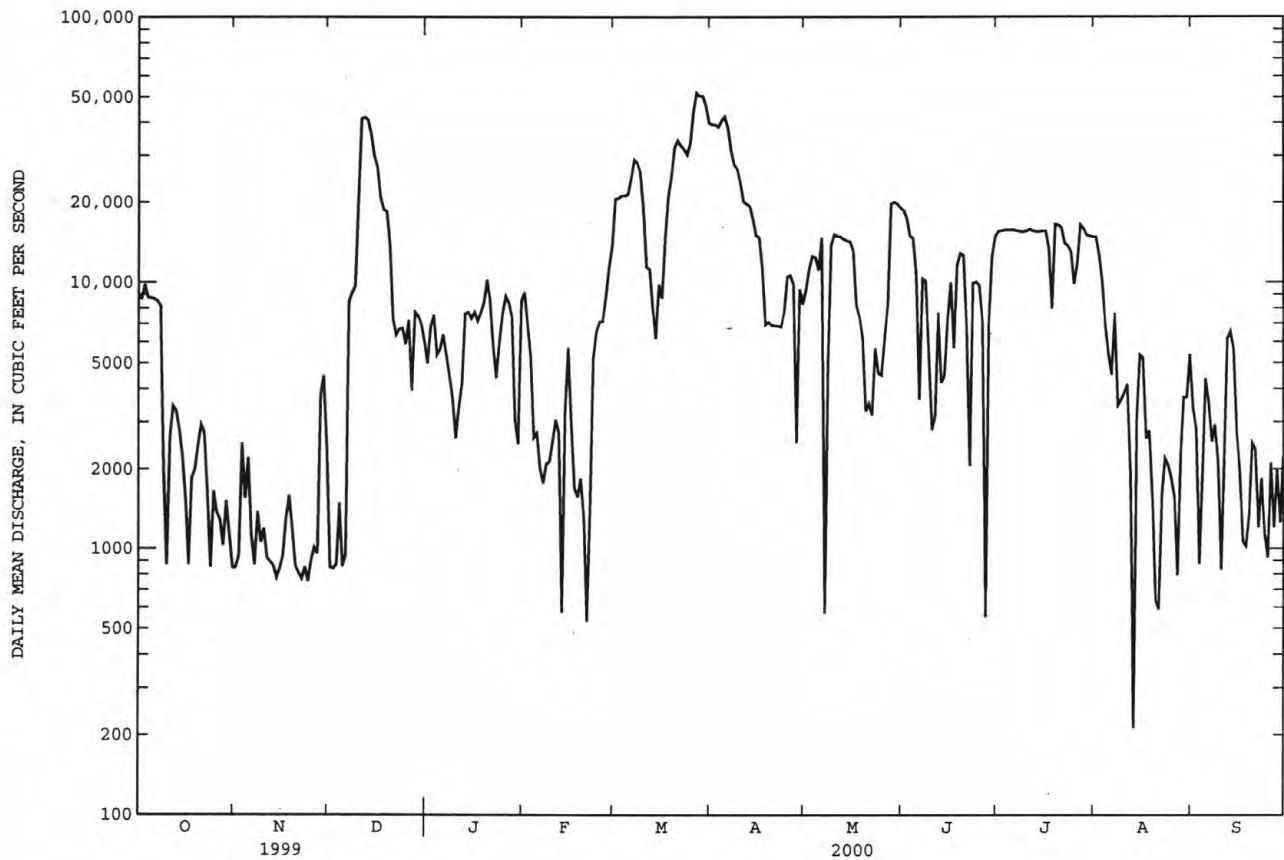
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07164500 ARKANSAS RIVER AT TULSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	6410600		3536082		^a 8887	
ANNUAL MEAN	17560		9661		22930	
HIGHEST ANNUAL MEAN					1813	
LOWEST ANNUAL MEAN					261000	
HIGHEST DAILY MEAN	57900	May 27	51900	Mar 27	Oct 5 1986	
LOWEST DAILY MEAN	281	Apr 4	212	Aug 13	^b 33	
ANNUAL SEVEN-DAY MINIMUM	852	Nov 20	852	Nov 20	277	
INSTANTANEOUS PEAK FLOW			53400	Mar 27	307000	
INSTANTANEOUS PEAK STAGE			10.64	Mar 27	25.21	
ANNUAL RUNOFF (AC-FT)	12720000		7014000		6438000	
10 PERCENT EXCEEDS	45300		21100		22800	
50 PERCENT EXCEEDS	8760		6880		4340	
90 PERCENT EXCEEDS	1120		994		705	

^aPrior to regulation 1926-64, 6,554 ft³/s.

^bMinimum daily for period of record, 27 ft³/s, Oct. 12, 13, 1956.



ARKANSAS RIVER BASIN

07164500 ARKANSAS RIVER AT TULSA, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-61, March 1977 to current year.

CHEMICAL QUALITY DATA.--Water years 1960-61, March 1977 to September 1995.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1977 to July 1985, October 1987 to May 1998.

WATER TEMPERATURE: March 1977 to July 1985, October 1987 to current year.

INSTRUMENTATION.--Water temperature monitor provides continuous readings.

REMARKS.--Prior to September 1985, once-daily observer's readings were published. Water-quality monitor records for these periods are available upon request at the District office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 7,820 microsiemens, Feb. 16, 1978; minimum, 299 microsiemens, Nov. 5, 1994.

WATER TEMPERATURE: Maximum, 34.0 C, July 18, 1994; minimum, 0.0 C on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 33.5°C, Sep. 3; minimum, 3.5°C, Jan. 27, Feb. 2, 5.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.9	20.9	21.4	18.0	16.5	17.4	12.3	10.8	11.6	8.2	5.9	7.0
2	21.7	20.7	21.1	16.5	13.0	13.8	13.6	11.2	12.4	8.6	6.7	7.6
3	21.5	20.1	20.7	15.7	11.4	13.4	13.9	12.6	13.2	6.9	6.1	6.5
4	21.0	19.1	19.8	15.9	14.3	15.1	13.7	12.6	13.1	6.3	4.1	5.2
5	20.6	18.9	19.7	18.1	14.8	16.3	12.8	9.7	11.3	6.3	4.3	5.3
6	20.9	19.5	20.2	18.6	16.7	17.7	9.9	8.5	9.3	6.9	5.0	5.9
7	21.0	19.2	20.2	19.0	17.4	18.2	12.4	9.8	11.1	7.2	4.8	6.1
8	21.3	19.2	20.1	18.5	17.6	18.1	12.7	11.2	12.0	7.3	6.6	7.0
9	21.7	19.2	20.4	17.9	17.0	17.6	12.4	10.6	11.9	8.7	6.8	7.5
10	23.7	20.6	22.0	17.8	16.8	17.4	11.8	10.0	10.8	7.7	6.1	7.1
11	23.0	20.8	22.0	17.6	16.3	17.0	11.1	10.6	10.9	7.4	5.9	6.8
12	22.2	19.0	20.2	17.8	16.3	17.1	10.7	9.6	10.3	8.1	5.9	6.9
13	21.6	19.3	20.2	18.3	16.9	17.6	9.7	8.8	9.2	7.1	5.3	6.2
14	21.5	18.6	19.5	19.1	17.3	18.1	9.6	8.4	9.0	6.7	4.8	5.7
15	21.7	19.4	20.2	17.3	16.2	16.7	8.9	7.7	8.2	7.8	5.5	6.6
16	21.7	19.8	20.4	16.4	15.4	16.0	---	---	---	8.1	7.1	7.5
17	20.0	16.8	18.2	16.8	15.5	16.2	---	---	---	7.9	6.8	7.2
18	17.8	16.0	16.8	17.3	15.8	16.6	---	---	---	7.1	6.1	6.6
19	17.5	16.6	17.2	17.2	15.3	16.0	---	---	---	7.8	6.6	7.1
20	18.6	16.5	17.3	15.5	13.9	14.6	---	---	---	6.6	4.6	5.7
21	19.7	17.1	18.2	15.4	13.4	14.5	---	---	---	6.8	5.0	5.9
22	19.1	17.3	18.1	16.8	15.0	15.9	---	---	---	8.1	5.9	6.9
23	18.5	16.3	17.2	16.7	14.4	15.6	---	---	---	7.1	5.6	6.5
24	17.4	15.7	16.6	14.4	13.1	13.7	7.3	5.8	6.7	6.3	4.3	5.2
25	18.0	15.0	16.3	13.2	12.0	12.7	7.6	5.3	6.4	6.3	4.2	5.3
26	18.4	16.6	17.6	13.3	12.0	12.7	7.4	5.8	6.6	5.4	4.5	4.9
27	18.7	17.2	18.1	14.2	12.3	13.4	6.8	5.5	5.9	4.8	3.4	4.4
28	18.7	17.5	18.1	15.0	13.3	14.0	7.0	4.6	5.8	5.8	4.2	5.0
29	19.2	17.6	18.5	14.2	12.6	13.5	7.4	5.3	6.4	5.2	4.3	4.7
30	19.2	17.2	17.9	13.3	12.3	12.9	7.6	6.2	6.9	6.0	4.1	5.0
31	17.7	16.7	17.1	---	---	---	7.3	5.8	6.6	6.5	4.3	5.3
MONTH	23.7	15.0	19.1	19.1	11.4	15.7	---	---	---	8.7	3.4	6.1

07164500 ARKANSAS RIVER AT TULSA, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	5.5	4.2	4.6	11.4	9.1	10.0	14.2	13.8	13.9	19.5	17.4	18.4
2	5.9	3.5	4.6	10.0	9.4	9.7	15.1	13.7	14.1	21.0	18.0	19.3
3	6.8	4.3	5.6	10.6	9.8	10.3	14.3	13.3	13.8	21.1	18.0	19.4
4	6.5	4.9	5.7	12.8	10.2	11.2	14.6	12.9	13.8	21.9	18.2	19.8
5	6.1	3.6	4.9	12.8	10.4	11.5	15.3	13.2	14.1	21.2	18.4	19.7
6	6.8	4.2	5.6	13.0	10.8	11.8	15.6	13.5	14.4	20.5	18.4	19.4
7	7.5	5.7	6.7	12.3	10.9	11.6	15.4	13.8	14.4	24.1	20.5	22.1
8	7.5	5.2	6.6	12.9	11.1	11.9	15.4	12.6	13.9	25.9	22.1	24.0
9	7.9	6.7	7.3	13.2	11.1	11.9	15.7	13.4	14.4	22.2	20.2	21.2
10	9.8	6.8	8.2	11.7	10.5	11.2	15.7	13.7	14.7	23.5	19.9	21.5
11	6.8	5.0	5.6	12.7	10.0	11.2	16.5	14.7	15.4	24.4	21.0	22.3
12	6.6	4.6	5.5	13.4	10.2	11.7	15.0	14.0	14.5	24.0	21.8	22.8
13	8.5	6.6	7.4	14.0	11.2	12.5	17.2	14.2	15.4	23.3	20.2	21.6
14	7.9	5.5	6.6	14.4	11.8	13.2	17.7	14.5	15.8	23.5	20.0	21.6
15	8.5	5.1	6.7	15.2	12.1	13.5	16.6	14.6	15.5	21.6	20.0	20.5
16	7.6	5.7	6.7	13.5	10.8	11.5	17.0	14.8	15.7	22.3	20.4	21.2
17	7.5	6.8	7.1	11.1	10.6	10.9	18.3	14.4	16.1	22.6	21.4	22.0
18	7.4	6.0	6.9	11.7	11.0	11.3	20.2	15.3	17.6	24.1	21.3	22.5
19	8.1	5.2	6.6	11.8	10.7	11.2	20.0	17.2	18.6	22.6	20.3	21.5
20	8.9	5.9	7.5	13.0	10.8	11.7	19.5	14.9	16.9	24.5	20.2	22.3
21	10.4	8.7	9.5	11.6	10.6	11.0	19.2	15.0	17.0	26.1	21.1	23.5
22	12.9	9.9	11.1	10.7	9.9	10.4	18.4	15.6	17.0	27.5	21.8	24.4
23	11.6	9.1	10.3	10.9	9.8	10.3	17.9	15.6	16.7	28.5	22.7	25.0
24	11.6	7.7	9.5	12.0	9.9	10.7	19.5	15.7	17.5	29.0	22.7	25.1
25	12.5	9.2	10.7	12.4	10.3	11.1	20.5	16.1	18.1	25.1	21.7	23.1
26	10.3	8.1	9.2	13.3	11.0	12.1	19.4	17.3	18.4	25.7	22.2	23.6
27	10.7	7.5	9.0	14.4	12.3	13.2	20.4	17.0	18.5	25.4	22.0	23.7
28	10.9	7.8	9.2	14.3	12.9	13.5	21.3	16.9	19.0	26.3	22.7	24.4
29	9.5	8.5	9.0	13.9	13.2	13.5	20.3	17.1	18.7	26.9	23.7	25.1
30	---	---	---	14.8	13.5	14.0	19.5	17.6	18.6	27.2	23.8	25.2
31	---	---	---	15.3	13.5	14.2	---	---	---	27.8	24.6	25.8
MONTH	12.9	3.5	7.4	15.3	9.1	11.7	21.3	12.6	16.1	29.0	17.4	22.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	27.8	24.8	26.0	28.2	24.9	26.3	30.9	27.3	28.9	31.5	27.7	29.4
2	26.3	25.0	25.4	28.1	25.1	26.4	30.7	27.3	28.9	30.9	27.8	29.5
3	26.1	24.7	25.3	28.0	25.4	26.5	30.0	27.1	28.5	33.5	29.1	31.0
4	27.2	24.8	25.7	28.8	25.3	26.8	30.7	27.2	28.8	31.4	28.4	29.4
5	27.1	24.4	25.6	28.8	25.3	26.9	31.2	26.9	28.9	29.0	26.3	27.9
6	26.8	22.7	24.9	29.2	25.6	27.2	31.3	26.9	29.0	28.9	25.9	27.5
7	27.3	23.4	25.2	29.3	25.8	27.4	31.1	27.3	29.1	29.3	26.3	27.9
8	27.7	23.4	25.4	29.7	26.1	27.7	31.9	27.1	29.2	29.3	26.4	28.0
9	26.7	23.7	25.1	29.8	26.3	27.9	---	---	---	28.3	26.2	27.2
10	25.9	24.4	24.8	30.0	26.4	28.0	---	---	---	30.8	26.1	28.0
11	26.8	24.1	25.3	30.2	26.7	28.3	32.4	28.0	29.8	31.4	26.7	28.8
12	27.9	24.6	26.1	30.6	27.0	28.5	31.3	27.9	29.6	29.5	26.7	28.2
13	29.4	24.8	26.7	30.7	27.3	28.8	32.7	29.0	30.6	30.2	26.4	28.2
14	27.1	24.0	25.6	31.3	27.2	29.1	32.3	28.5	30.1	30.3	26.6	28.2
15	28.4	24.2	26.2	31.5	27.5	29.4	31.2	27.3	29.1	27.8	24.8	25.9
16	26.6	23.8	24.9	31.3	28.0	29.4	32.2	28.2	30.0	26.2	23.9	24.9
17	23.8	22.6	23.3	29.7	28.1	28.8	31.7	27.9	29.8	26.8	23.0	24.7
18	25.9	22.6	24.4	30.7	28.0	29.2	30.2	26.8	28.2	26.8	22.2	24.2
19	26.4	24.2	25.1	32.7	29.3	30.7	30.5	26.8	28.7	25.5	21.3	23.4
20	27.2	24.4	25.7	31.1	28.6	29.4	31.5	27.6	29.4	24.5	22.9	23.7
21	26.9	23.7	24.5	31.3	27.3	29.4	31.8	27.0	29.3	24.0	22.3	23.2
22	28.6	23.1	25.4	30.9	28.1	29.3	31.1	27.7	29.5	26.9	21.9	24.1
23	28.1	24.3	26.0	31.1	27.9	29.2	31.4	28.2	29.9	27.3	23.7	25.5
24	28.2	24.2	26.0	31.0	28.0	29.4	31.1	28.1	29.6	23.7	17.5	20.9
25	27.1	25.6	26.2	29.5	27.0	28.1	31.1	28.0	29.8	18.6	15.0	16.8
26	26.8	24.3	25.6	30.9	27.2	28.9	31.2	28.0	29.7	21.3	16.8	19.6
27	27.9	24.9	26.4	29.2	27.3	28.3	32.0	28.2	30.0	23.3	18.8	20.8
28	26.5	24.4	25.5	29.7	27.6	28.6	31.8	28.1	29.8	23.1	20.2	21.7
29	27.4	24.0	25.6	30.2	27.6	28.7	31.2	27.6	29.4	24.4	20.5	22.2
30	27.5	24.3	25.7	30.0	27.3	28.6	30.9	27.6	29.2	22.5	20.4	21.4
31	---	---	---	30.2	27.3	28.7	31.0	27.7	29.2	---	---	---
MONTH	29.4	22.6	25.5	32.7	24.9	28.4	---	---	---	33.5	15.0	25.4
YEAR	33.5	3.4	18.2									

ARKANSAS RIVER BASIN

07164600 JOE CREEK AT 61ST STREET AT TULSA, OK

LOCATION.--Lat 36°04'32", long 95°57'37", in SE 1/4 SE 1/4 sec.31, T.19 N., R.13 E., Tulsa County, Hydrologic Unit 11110101, at right upstream abutment of 61st Street bridge, .2 mi west of Lewis Avenue, 4 mi north of Jenks and at mile 2.1.

DRAINAGE AREA.--12.2 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 620.96 ft above sea level.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--23,000 ft³/s, May 26, 1984, slope-area measurement at 71st Street, gage height undetermined at 61st Street.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	6.7	1.6	2.2	4.0	3.2	10	119	2.0	6.6	e1.3	1.1
2	1.9	1.7	11	5.9	5.7	178	2.2	2.0	51	6.5	e1.2	2.3
3	1.6	2.9	60	28	4.2	156	1.8	1.0	75	6.9	e1.2	1.0
4	1.7	4.0	467	2.2	2.6	13	1.7	.80	e3.0	6.2	e1.1	1.2
5	2.2	2.2	13	2.6	4.6	7.4	2.2	23	2.3	16	e.93	15
6	2.4	1.8	4.6	2.0	2.4	6.1	2.1	1470	2.1	14	e.92	.89
7	2.2	1.6	3.0	2.0	2.4	8.4	2.3	14	2.3	6.4	1.1	.68
8	2.5	1.6	3.7	4.6	2.4	31	1.9	5.2	2.1	5.7	1.3	1.0
9	6.2	1.6	507	2.7	2.4	4.5	2.5	162	2.3	5.7	1.1	.88
10	4.2	1.7	29	2.2	2.3	4.4	3.2	5.8	25	5.5	4.1	.80
11	3.6	1.6	7.1	2.0	2.0	34	48	3.7	111	6.1	1.2	.74
12	2.8	2.6	4.2	2.2	2.0	5.5	2.7	2.5	5.1	50	.84	.69
13	2.6	1.4	4.2	1.6	2.0	4.9	3.4	1.7	3.9	22	.88	.68
14	2.3	1.1	3.3	2.0	2.0	24	4.0	1.3	215	2.0	.79	1.0
15	1.7	.97	2.9	2.7	2.0	2.1	4.9	18	5.1	1.5	.79	1.1
16	1.7	1.1	2.9	2.9	2.0	7.4	37	2.3	6.7	1.3	.79	.88
17	1.0	1.8	2.8	2.7	30	125	5.2	18	164	1.2	.81	1.1
18	1.1	2.1	2.1	2.3	3.0	67	6.4	1.5	5.4	1.9	.73	1.1
19	1.2	2.4	2.9	2.1	2.0	10	7.3	1.4	12	1.4	1.5	4.0
20	1.3	2.4	2.0	3.1	2.0	4.3	43	1.4	6.2	13	.87	1.6
21	2.0	2.4	4.1	2.9	2.4	4.9	6.7	1.7	114	513	.76	1.1
22	1.1	237	2.4	2.9	77	47	8.7	1.7	10	52	.80	1.6
23	1.2	24	2.2	2.6	113	74	83	1.6	6.7	5.7	2.3	1.4
24	1.1	2.4	2.0	2.5	6.2	10	9.2	1.9	133	2.6	.99	154
25	1.4	2.0	2.2	2.5	73	3.5	7.3	144	7.4	9.3	.91	3.4
26	1.6	2.0	2.1	3.0	6.5	129	7.7	239	248	2.0	1.2	2.4
27	1.4	1.8	1.9	16	4.2	6.7	8.2	286	8.0	116	1.3	1.4
28	1.4	1.3	3.8	65	3.9	2.6	8.3	5.1	160	e4.5	1.4	1.4
29	1.8	.97	2.9	11	4.4	14	9.5	3.1	9.4	e15	1.4	1.3
30	201	1.1	2.9	7.6	---	2.0	328	2.9	7.2	e1.5	1.4	1.4
31	17	---	2.1	6.3	---	2.0	---	2.3	---	e1.3	1.1	---
TOTAL	277.2	318.24	1162.9	200.3	372.6	991.9	668.4	2543.90	1405.2	902.8	37.01	207.14
MEAN	8.94	10.6	37.5	6.46	12.8	32.0	22.3	82.1	46.8	29.1	1.19	6.90
MAX	201	237	507	65	113	178	328	1470	248	513	4.1	154
MIN	1.0	.97	1.6	1.6	2.0	2.0	1.7	.80	2.0	1.2	.73	.68
AC-FT	550	631	2310	397	739	1970	1330	5050	2790	1790	73	411

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	16.3	20.3	16.8	11.2	14.7	24.9	33.0	43.4	32.1	16.8	12.5	21.3	
MAX	53.4	54.1	45.3	24.1	37.2	65.6	71.3	107	86.9	44.6	35.2	43.5	
(WY)	1999	1997	1993	1998	1997	1998	1999	1995	1995	1994	1997	1999	
MIN	3.29	2.02	2.36	2.47	2.02	5.42	2.85	12.2	1.87	3.22	1.19	6.90	
(WY)	1998	1990	1990	1997	1998	1996	1989	1997	1988	1990	2000	2000	

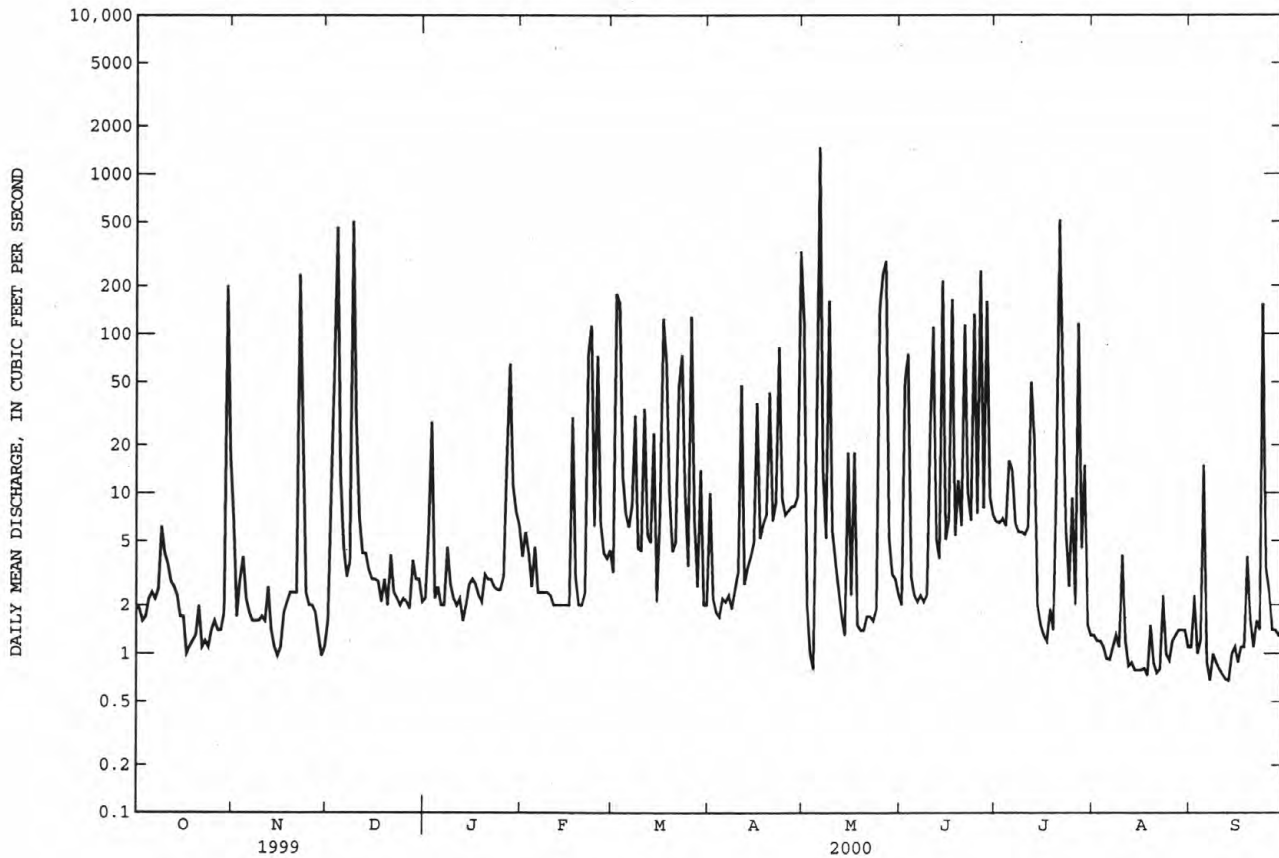
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ARKANSAS RIVER BASIN

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07164600 JOE CREEK AT 61ST STREET AT TULSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	11691.25	9087.59	
ANNUAL MEAN	32.0	24.8	22.6
HIGHEST ANNUAL MEAN			35.2
LOWEST ANNUAL MEAN			9.49
HIGHEST DAILY MEAN	852 Apr 26	1470 May 6	1470 May 6 2000
LOWEST DAILY MEAN	.76 Aug 17	.68 Sep 7, 13	.28 Jul 4 1996
ANNUAL SEVEN-DAY MINIMUM	1.3 Oct 17	.78 Sep 7	.59 Jun 25 1996
INSTANTANEOUS PEAK FLOW		11600 May 6	11600 May 6 2000
INSTANTANEOUS PEAK STAGE		10.00 May 6	10.00 May 6 2000
ANNUAL RUNOFF (AC-FT)	23190	18030	16340
10 PERCENT EXCEEDS	61	50	40
50 PERCENT EXCEEDS	4.1	2.6	3.5
90 PERCENT EXCEEDS	1.6	1.1	1.1



ARKANSAS RIVER BASIN

07165562 HAIKEY CREEK AT 101ST STREET SOUTH AT TULSA, OK

LOCATION.--Lat 36°01'01", long 95°50'55", in NW 1/4 NW 1/4 sec.29, T.18 N., R.14 E., Tulsa County, Hydrologic Unit 11110101, near right downstream abutment of 101st Street South bridge, 1.0 mi downstream from unnamed tributary, 2.0 mi upstream from Little Haikey Creek, and at mile 6.4.

DRAINAGE AREA.--17.8 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 617.82 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	9.7	1.5	.74	6.5	1.9	4.3	389	5.8	6.0	2.4	.41
2	1.1	2.2	1.5	.56	1.8	86	7.8	15	5.1	4.1	2.0	.38
3	1.0	1.3	24	32	2.1	272	3.1	16	9.7	3.9	1.7	.35
4	1.0	1.0	612	3.0	2.7	21	2.0	7.7	8.1	4.4	2.1	.36
5	1.3	.77	28	1.3	1.4	8.1	2.0	36	7.6	4.9	1.1	2.0
6	1.0	.66	6.8	.99	1.0	5.6	2.0	2090	7.7	4.6	1.0	8.9
7	.78	.63	4.1	1.2	.79	4.6	1.8	58	13	3.8	1.1	e1.8
8	.75	.62	2.4	1.5	.95	15	1.7	16	3.5	2.7	.99	e.30
9	.72	.62	477	2.5	1.3	5.1	1.6	235	6.2	1.5	.90	e.29
10	.72	.63	157	1.5	1.2	4.0	1.7	25	3.1	2.5	.79	e.29
11	.71	.63	8.9	1.2	1.3	12	30	19	67	1.7	.98	e.28
12	1.8	.70	6.2	.85	1.3	6.1	4.4	20	12	.89	.81	e.27
13	.06	.78	3.2	.67	1.2	4.1	2.0	4.8	2.8	20	.76	e.26
14	.00	.79	2.1	.53	1.4	e8.2	1.6	3.3	98	2.0	.73	e.26
15	.00	.67	1.6	.45	2.0	5.0	.96	10	9.9	1.1	.70	e.25
16	.00	.54	1.5	.44	1.3	3.6	10	11	3.2	.88	.68	e.24
17	.00	.55	1.4	.51	28	e60	1.7	6.8	242	.79	.61	e.23
18	.00	.49	1.2	.61	7.1	e85	1.2	6.5	20	.70	.75	e.23
19	.00	.52	1.3	.40	2.1	e35	.93	4.8	100	.55	.59	.31
20	.00	.50	1.2	.42	1.5	e13	5.3	1.8	40	4.9	.53	.25
21	.00	.53	1.1	4.0	1.4	e5.0	1.3	1.7	126	269	.59	.21
22	.00	141	1.1	.46	1.6	37	.85	5.3	23	18	.71	.23
23	.00	372	1.1	.43	347	102	1.8	5.8	11	5.0	.69	.20
24	.00	5.9	1.0	.43	9.0	38	2.7	2.2	247	3.0	.83	19
25	.00	2.6	1.0	.43	38	7.5	1.1	52	21	4.0	.83	1.8
26	.00	2.1	.92	.51	11	22	.75	338	697	2.4	.80	.56
27	.03	1.9	.88	.69	4.2	19	.62	419	46	257	.57	.21
28	.09	1.8	.90	15	2.5	4.7	.61	40	149	8.0	.67	.12
29	.16	1.7	.99	14	1.9	3.3	.63	11	22	28	.44	.05
30	114	1.6	.83	6.3	---	2.9	73	17	7.9	4.5	.73	.00
31	11	---	.97	5.4	---	2.4	---	7.6	---	2.9	.67	---
TOTAL	137.52	555.43	1353.69	99.02	483.54	899.1	169.45	3875.3	2014.6	673.71	28.75	40.04
MEAN	4.44	18.5	43.7	3.19	16.7	29.0	5.65	125	67.2	21.7	.93	1.33
MAX	114	372	612	32	347	272	73	2090	697	269	2.4	19
MIN	.00	.49	.83	.40	.79	1.9	.61	1.7	2.8	.55	.44	.00
AC-FT	273	1100	2690	196	959	1780	336	7690	4000	1340	57	79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	19.9	24.5	22.2	13.1	17.4	33.8	35.9	41.9	37.5	19.8	11.1	20.0
MAX	75.9	68.2	62.3	41.9	38.7	120	82.3	125	97.2	72.3	49.6	54.3
(WY)	1999	1995	1993	1998	1993	1990	1990	2000	1995	1994	1989	1993
MIN	.74	.39	1.67	1.59	.65	6.22	5.07	13.5	3.63	.47	.36	1.33
(WY)	1989	1996	1990	1997	1996	1991	1989	1996	1990	1990	1991	2000

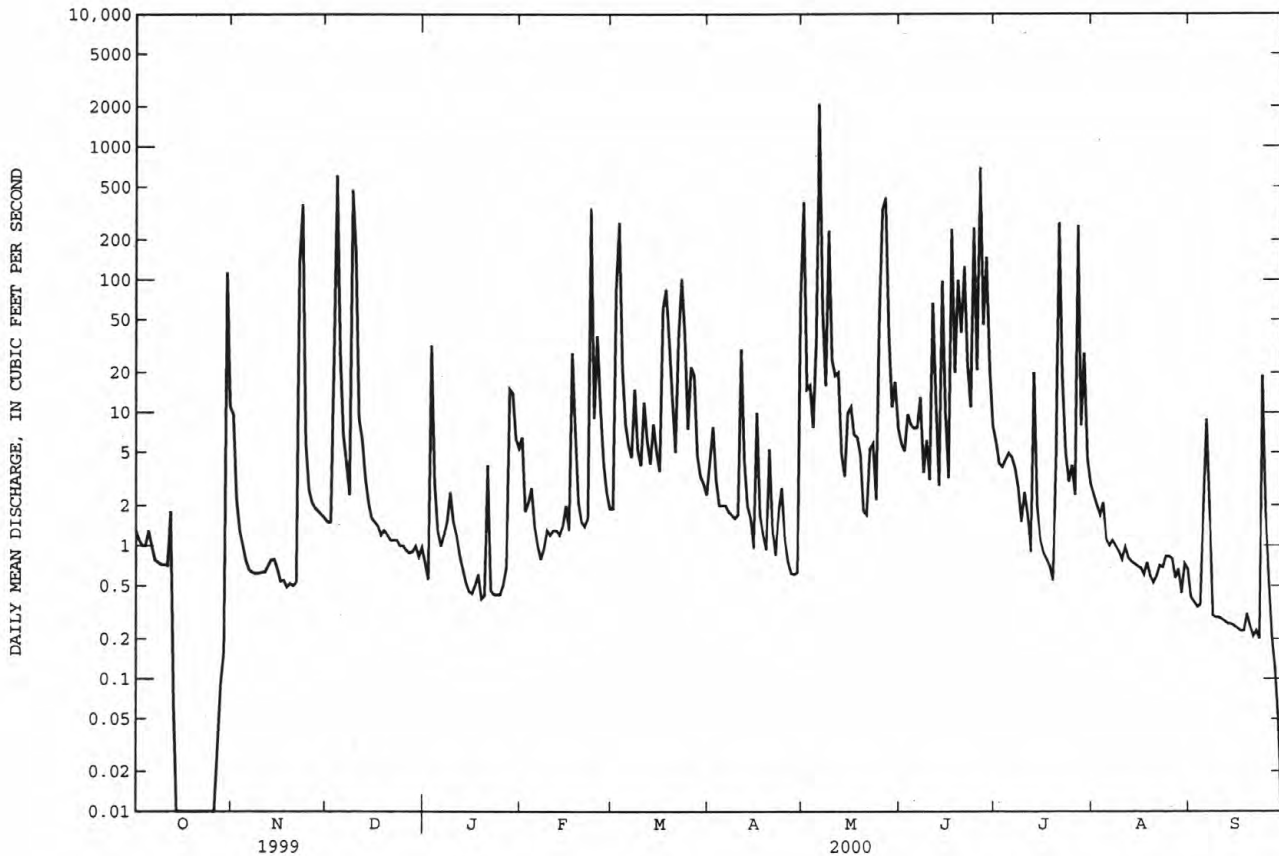
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ARKANSAS RIVER BASIN

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07165562 HAIKEY CREEK AT 101ST STREET SOUTH AT TULSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1989 - 2000
ANNUAL TOTAL	10143.56	10330.15	
ANNUAL MEAN	27.8	28.2	24.8
HIGHEST ANNUAL MEAN			33.8
LOWEST ANNUAL MEAN			11.0
HIGHEST DAILY MEAN	1000 Apr 25	2090 May 6	2150 Oct 5 1998
LOWEST DAILY MEAN	.00 Oct 14	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 14	.00 Oct 14	.00 Oct 12 1988
INSTANTANEOUS PEAK FLOW		7100 May 6	7100 May 6 2000
INSTANTANEOUS PEAK STAGE		17.56 May 6	17.56 May 6 2000
ANNUAL RUNOFF (AC-FT)	20120	20490	17940
10 PERCENT EXCEEDS	32	36	38
50 PERCENT EXCEEDS	1.9	1.8	2.4
90 PERCENT EXCEEDS	.41	.31	.00



ARKANSAS RIVER BASIN

07165565 LITTLE HAIKEY CREEK AT 101ST STREET SOUTH AT TULSA, OK

LOCATION.--Lat 36°01'03", long 95°51'38", in SE 1/4 SW 1/4 sec.19, T.18 N., R.14 E., Tulsa County, Hydrologic Unit 11110101, near right upstream abutment of 101st Street South bridge, and at mile 2.0.

DRAINAGE AREA.--5.45 mi².

PERIOD OF RECORD.--October 1987 to current year.

REVISED RECORDS.--WDR OK-92-1: 1988, 89 (M).

GAGE.--Water-stage recorder. Datum of gage is 626.21 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	6.5	.33	.33	2.4	2.5	7.5	87	.32	1.7	1.9	.00
2	.46	1.4	.35	.34	.95	23	3.7	e7.0	2.8	1.1	.57	.00
3	.28	.42	11	6.8	1.4	54	1.3	e3.0	6.1	.72	.45	.00
4	.48	.31	115	2.8	1.5	11	.28	e1.9	4.8	.43	.26	.00
5	.40	.34	15	.52	.74	3.5	.23	33	.46	.24	.19	.78
6	.29	.39	5.0	.55	.56	3.1	.25	589	.10	.17	.11	.51
7	.22	.52	1.5	.89	.45	2.1	4.6	21	.07	.13	.09	.08
8	.28	.94	1.0	.91	.25	12	2.1	7.5	.39	.08	.05	.00
9	.33	.51	87	.94	.69	2.2	.80	51	.34	.06	.02	.00
10	.48	.20	21	.61	.17	1.8	.29	9.4	.96	.01	.00	.05
11	.52	.26	7.7	.38	.20	6.7	12	4.1	27	.05	.02	.00
12	.59	.25	5.2	.35	.13	2.7	1.1	2.8	3.4	.22	.08	.00
13	.52	.25	2.2	.55	.11	1.5	.01	1.5	.55	1.9	.07	.00
14	.36	.62	1.2	.32	.10	5.3	1.8	1.0	30	.31	.06	.00
15	.27	.80	1.1	.30	2.6	1.9	2.1	5.2	3.7	.16	.03	.00
16	.12	.69	.74	.38	.87	1.5	7.6	1.6	1.6	.08	.02	.00
17	.17	.24	.61	.80	8.2	12	1.0	1.2	60	.00	.00	.03
18	.19	.21	.42	.34	3.6	17	.64	.92	7.5	.06	.00	.14
19	.11	.37	.15	.45	.83	12	.60	.71	56	.09	.04	.00
20	.08	.37	.32	1.2	.56	3.4	8.9	.71	13	3.3	.02	.00
21	.08	.42	.52	1.2	.52	4.0	1.4	.72	37	94	.00	.00
22	.00	73	.58	.31	1.4	14	.72	.68	8.1	14	.00	.00
23	.00	36	.74	.64	50	18	.77	.53	2.3	2.4	.00	.00
24	.00	3.1	.43	1.2	6.3	13	3.1	.53	41	.87	.00	21
25	.00	1.1	.10	1.5	12	5.8	.52	18	6.0	6.5	.06	.62
26	.00	.79	.11	1.7	8.0	20	.37	127	196	1.2	.13	.18
27	.22	.55	.16	3.0	1.7	14	.27	124	8.9	81	.01	.10
28	.10	.47	.19	5.3	.91	3.5	.21	9.5	37	5.7	.00	.04
29	.04	.47	2.7	4.5	.23	2.2	.10	2.7	7.8	8.5	.00	.01
30	36	.36	4.1	3.0	---	.34	67	1.1	3.0	2.0	.00	.00
31	13	---	1.0	2.9	---	.27	---	.60	---	5.3	.00	---
TOTAL	56.10	131.85	287.45	45.01	107.37	274.31	131.26	1114.90	566.19	232.28	4.18	23.54
MEAN	1.81	4.39	9.27	1.45	3.70	8.85	4.38	36.0	18.9	7.49	.13	.78
MAX	36	73	115	6.8	50	54	67	589	196	94	1.9	21
MIN	.00	.20	.10	.30	.10	.27	.01	.53	.07	.00	.00	.00
AC-FT	111	262	570	89	213	544	260	2210	1120	461	8.3	47

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	5.70	8.60	7.27	3.67	4.79	11.0	10.6	14.7	10.7	5.55	3.58	6.33
MEAN	5.70	8.60	7.27	3.67	4.79	11.0	10.6	14.7	10.7	5.55	3.58	6.33
MAX	24.0	32.9	19.9	13.1	11.5	28.3	23.1	45.2	42.1	17.4	15.4	15.2
(WY)	1999	1995	1993	1998	1997	1990	1999	1995	1999	1994	1997	1993
MIN	.12	.15	.40	.27	.12	1.61	1.44	3.00	.15	.042	.13	.78
(WY)	1989	1996	1990	1997	1996	1991	1989	1988	1988	1990	2000	2000

e Estimated

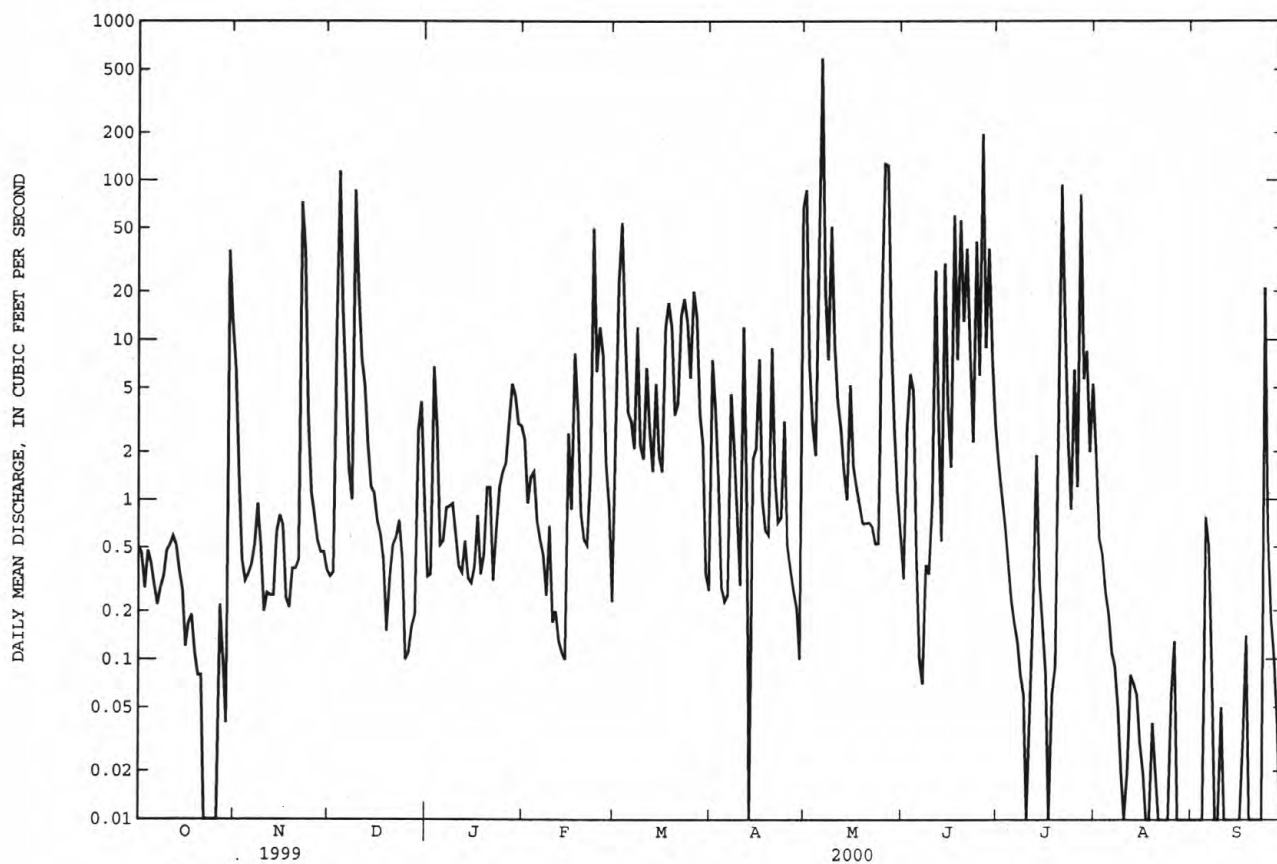
ARKANSAS RIVER BASIN

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07165565 LITTLE HAIKEY CREEK AT 101ST STREET SOUTH AT TULSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	3538.80	2974.44	
ANNUAL MEAN	9.70	8.13	7.71
HIGHEST ANNUAL MEAN			15.7 1995
LOWEST ANNUAL MEAN			2.73 1991
HIGHEST DAILY MEAN	258 Apr 26	589 May 6	589 May 6 2000
LOWEST DAILY MEAN	.00 Oct 22	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.02 Oct 20	.00 Aug 28	.00 Sep 5 1988
INSTANTANEOUS PEAK FLOW		4300 May 6	4300 May 6 2000
INSTANTANEOUS PEAK STAGE		19.00 May 6	^a 19.00 May 6 2000
ANNUAL RUNOFF (AC-FT)	7020	5900	5580
10 PERCENT EXCEEDS	20	13	15
50 PERCENT EXCEEDS	1.2	.63	.84
90 PERCENT EXCEEDS	.20	.01	.00

^aFrom high-water mark.



ARKANSAS RIVER BASIN

07165570 ARKANSAS RIVER NEAR HASKELL, OK

LOCATION.--Lat 35°49'15", long 95°38'19", in SW 1/4 NW 1/4 sec.32, T.16 N., R.16 E., Wagoner County, Hydrologic Unit 11110101, near left, downstream abutment of old bridge downstream from State Highway 104, 2.0 mi east of Haskell, 23.5 mi upstream from Verdigris River, and at mile 483.7.

DRAINAGE AREA.--75,473 mi², of which 12,541 mi² probably is noncontributing.

PERIOD OF RECORD.--June 1972 to current year.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above sea level.

REMARKS.--Records fair. Except for 858 mi² intervening area, flow regulated by Keystone Lake (station 07164200) 55.1 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6960	e860	1720	6270	8800	21600	46900	16400	24100	20200	17500	5250
2	7800	e863	e880	5560	8870	25000	46800	14800	23700	20300	17300	3520
3	7620	e863	e860	7470	5980	27500	46000	14500	21200	20200	13000	2490
4	8270	1990	1270	7810	3890	28100	45500	14700	19600	20000	10700	1580
5	7060	1290	5710	5280	2360	26900	49100	14300	19200	19800	8470	2250
6	7010	1450	1540	5950	2220	26800	47800	46900	10700	19800	5780	4120
7	7090	989	1320	5850	2030	34700	43100	49200	8620	19800	6070	3470
8	6950	e1150	9760	4850	2170	36600	38200	17900	13700	19700	7610	2860
9	7700	e1400	11000	3950	2340	35100	35900	16500	12000	19700	3930	2890
10	1780	e1000	16300	3110	2900	30700	33900	23100	7640	19600	4090	2270
11	1070	e990	38300	2450	3920	19100	27200	22000	5480	19900	4340	1890
12	3320	e917	45100	3120	3670	14900	25100	20600	5380	19800	3750	2890
13	3190	e881	44900	8600	3130	14600	24300	19600	9280	19800	2160	6760
14	3110	e863	44000	8110	1980	9180	23500	19100	6590	19600	1260	6950
15	2710	e881	37500	7820	4150	10100	19200	18800	7350	19500	3590	5760
16	1950	e899	36000	8640	6460	12200	17900	18900	10600	19500	5050	2920
17	1540	e881	28400	7330	3570	12600	17200	15300	14600	19400	4660	2270
18	849	899	24000	8010	2580	23100	10500	11300	9010	13900	2680	2170
19	1910	1260	22100	8810	2360	27600	7640	10800	18900	14200	2660	2190
20	1790	1080	21500	10800	2410	36000	7550	8260	18200	20300	1830	2170
21	2500	e881	12900	10400	2170	41300	7390	5530	16700	23700	1150	2490
22	3190	e881	8660	7740	1980	40700	6890	5520	11400	19500	1120	2390
23	2830	1490	7720	4890	3790	40400	6730	5060	7850	17900	1560	2130
24	1530	1150	7320	4100	8350	40600	6800	7600	14200	17200	2290	1940
25	780	e881	7250	7030	8810	44300	9730	7390	14500	14700	2030	1720
26	1310	e863	6920	8130	9820	51200	11600	8440	18400	12300	1900	2250
27	1390	e846	7410	8700	9330	57100	11900	10800	14400	18000	1660	2210
28	1180	e881	5200	8010	12000	56500	9390	18600	5370	20800	1390	2210
29	985	3670	7980	5960	14000	55800	4790	26100	16000	18700	2420	2110
30	1420	4120	7820	2540	---	57000	8590	25700	19100	17900	3670	2210
31	1390	---	7350	2270	---	48100	---	24600	---	17700	3620	---
TOTAL	108184	37069	478690	199560	146040	1005380	697100	538300	403770	583400	149240	88330
MEAN	3490	1236	15440	6437	5036	32430	23240	17360	13460	18820	4814	2944
MAX	8270	4120	45100	10800	14000	57100	49100	49200	24100	23700	17500	6950
MIN	780	846	860	2270	1980	9180	4790	5060	5370	12300	1120	1580
AC-FT	214600	73530	949500	395800	289700	1994000	1383000	1068000	800900	1157000	296000	175200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2000, BY WATER YEAR (WY)

MEAN	9476	9544	6638	6776	7694	14990	15930	18240	18450	11510	6898	5813
MAX	75500	58300	19930	23470	25540	50990	46910	85550	78480	44980	32540	23690
(WY)	1987	1999	1993	1998	1993	1987	1973	1993	1995	1999	1995	1989
MIN	576	646	802	567	549	722	638	2472	5074	1671	1171	870
(WY)	1979	1981	1981	1981	1977	1977	1977	1981	1988	1991	1984	1998

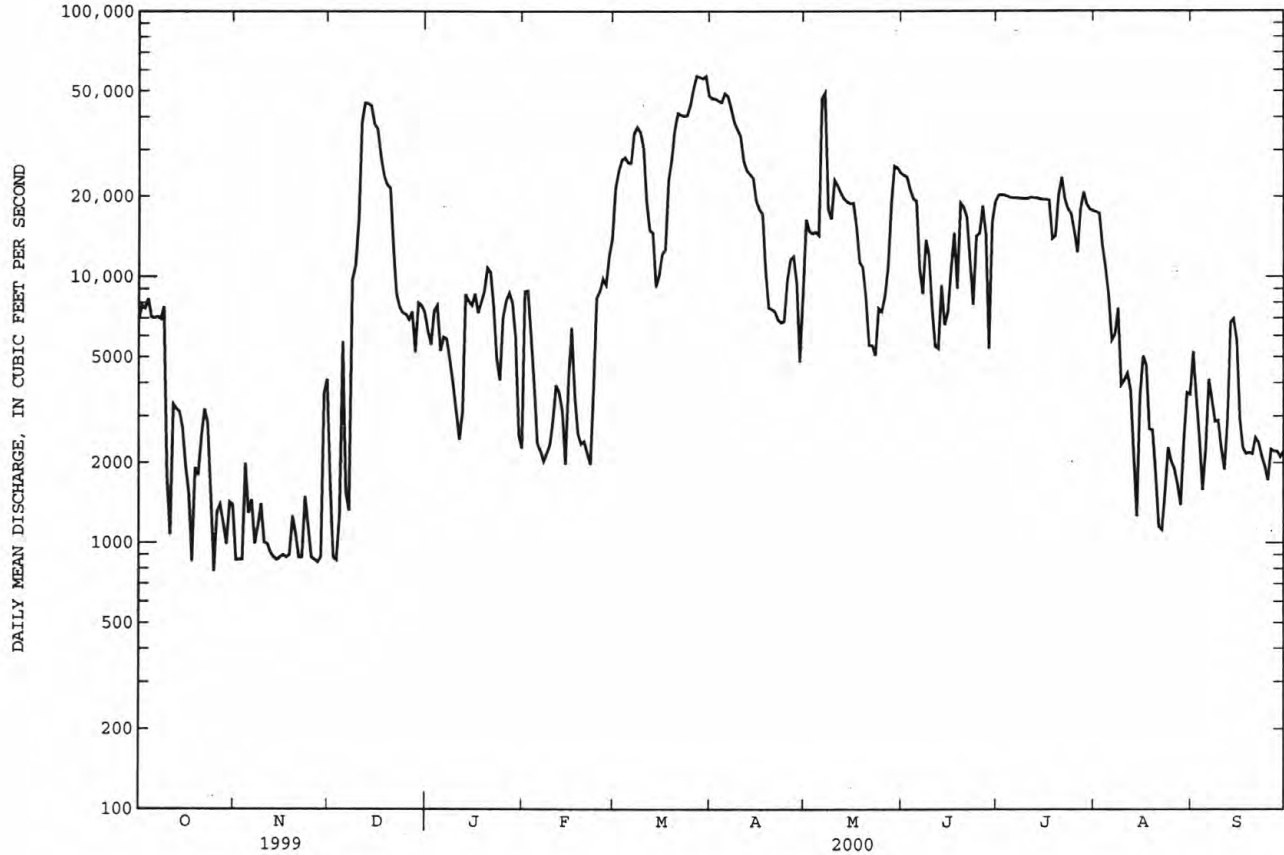
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ARKANSAS RIVER BASIN

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07165570 ARKANSAS RIVER NEAR HASKELL, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1973 - 2000	
ANNUAL TOTAL	7208773		4435063		11010	
ANNUAL MEAN	19750		12120		25680	
HIGHEST ANNUAL MEAN					2097	
LOWEST ANNUAL MEAN					243000	
HIGHEST DAILY MEAN	73800	Apr 26	57100	Mar 27	87	Oct 5 1986
LOWEST DAILY MEAN	780	Oct 25	780	Oct 25	369	Sep 13 1988
ANNUAL SEVEN-DAY MINIMUM	889	Nov 12	889	Nov 12	259000	Feb 25 1977
INSTANTANEOUS PEAK FLOW			87400	May 6	22.82	Oct 5 1986
INSTANTANEOUS PEAK STAGE			15.28	May 6	7973000	
ANNUAL RUNOFF (AC-FT)	14300000		8797000		27400	
10 PERCENT EXCEEDS	49400		27800		6030	
50 PERCENT EXCEEDS	9430		7640		881	
90 PERCENT EXCEEDS	1360		1320			



ARKANSAS RIVER BASIN

07171000 VERDIGRIS RIVER NEAR LENAPAH, OK

LOCATION.--Lat 36°51'04", long 95°35'09", NE 1/4, SW 1/4, sec.3, T.27 N., R.16 E., Nowata County, Hydrologic Unit 11070103, on right bank on downstream side of county road bridge, 2.8 mi east of Lenapah, 5.5(revised) mi upstream from Cedar Creek, and at mile 144.6.

DRAINAGE AREA.--3,639 mi².

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

REVISED RECORDS.--WSP 977: 1942 (M). WSP 1117: drainage area.

GAGE.--Water-stage recorder. Datum of gage is 644.90 ft above sea level.

REMARKS.--Records fair. Some regulation since April 1949 by Fall River Reservoir in Kansas. Flow regulated since 1960 by Toronto Lake in Kansas. Flow has been further regulated since 1966 by Elk City Lake in Kansas. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3930	82	481	691	646	6170	2310	1130	180	10700	265	15
2	5590	79	466	495	644	7640	2520	818	154	12000	227	16
3	5480	74	486	345	604	10100	2130	634	156	11800	270	22
4	5330	75	1980	306	546	11000	1890	550	191	11500	296	26
5	5160	263	5850	295	488	8480	1760	494	179	11300	282	28
6	4930	353	6220	287	264	6760	1660	984	316	11000	239	32
7	3290	314	2670	277	154	6320	1590	1640	265	9800	250	35
8	1960	211	2960	276	157	6060	1430	997	214	6570	255	36
9	1500	142	5480	276	184	3940	1160	24300	153	4130	238	38
10	1160	106	8650	276	193	1830	1120	20200	96	3540	182	39
11	623	83	7910	273	175	1400	1870	1970	67	3450	127	39
12	345	71	5410	285	144	1700	1330	1120	51	2760	96	38
13	239	66	4650	1000	105	2050	848	914	44	1590	76	41
14	196	64	4850	1290	68	2180	500	763	97	1060	61	40
15	177	63	5320	1200	48	1960	368	696	2890	901	52	39
16	173	63	5560	751	38	4600	329	662	1760	779	46	38
17	e169	67	5430	557	36	13100	423	640	5790	730	40	38
18	165	66	4340	489	74	10700	640	643	7540	699	36	37
19	138	67	2500	468	579	9390	614	684	1760	479	33	34
20	105	65	2050	458	1870	11200	613	659	2450	309	30	30
21	78	69	2010	451	1910	10200	662	639	18100	552	27	29
22	65	96	1480	450	1770	9720	617	605	11600	948	28	27
23	56	123	915	447	1760	10400	835	547	2820	1630	28	36
24	50	468	827	476	2040	12200	1100	605	2720	985	28	42
25	47	1780	766	584	2740	11300	545	1020	5100	971	26	41
26	45	798	751	634	4460	7410	405	2670	13000	632	23	41
27	44	637	745	643	5670	6080	361	1940	21800	663	21	55
28	44	595	751	654	3240	4800	336	769	19400	1870	20	69
29	44	529	866	657	3240	4930	329	449	6780	763	19	65
30	66	499	874	652	---	5240	483	291	6740	494	18	57
31	87	---	738	648	---	3240	---	220	---	365	16	---
TOTAL	41286	7968	93986	16591	33847	212100	30778	70253	132413	114970	3355	1123
MEAN	1332	266	3032	535	1167	6842	1026	2266	4414	3709	108	37.4
MAX	5590	1780	8650	1290	5670	13100	2520	24300	21800	12000	296	69
MIN	44	63	466	273	36	1400	329	220	44	309	16	15
AC-FT	81890	15800	186400	32910	67140	420700	61050	139300	262600	228000	6650	2230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2000, BY WATER YEAR (WY)

	MEAN	2401	3090	2141	1705	2231	4370	4209	4303	5061	2339	839	1049
MAX	27970	15440	11000	7998	8983	17130	16300	12540	19160	13920	5364	5614	
(WY)	1987	1975	1993	1973	1985	1973	1988	1994	1995	1976	1985	1989	
MIN	15.5	20.0	29.2	17.6	20.0	19.7	30.2	366	84.3	17.9	16.1	9.99	
(WY)	1981	1981	1967	1981	1981	1981	1981	1992	1972	1980	1983	1980	

e Estimated

ARKANSAS RIVER BASIN

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07171000 VERDIGRIS RIVER NEAR LENAPAH, OK--Continued

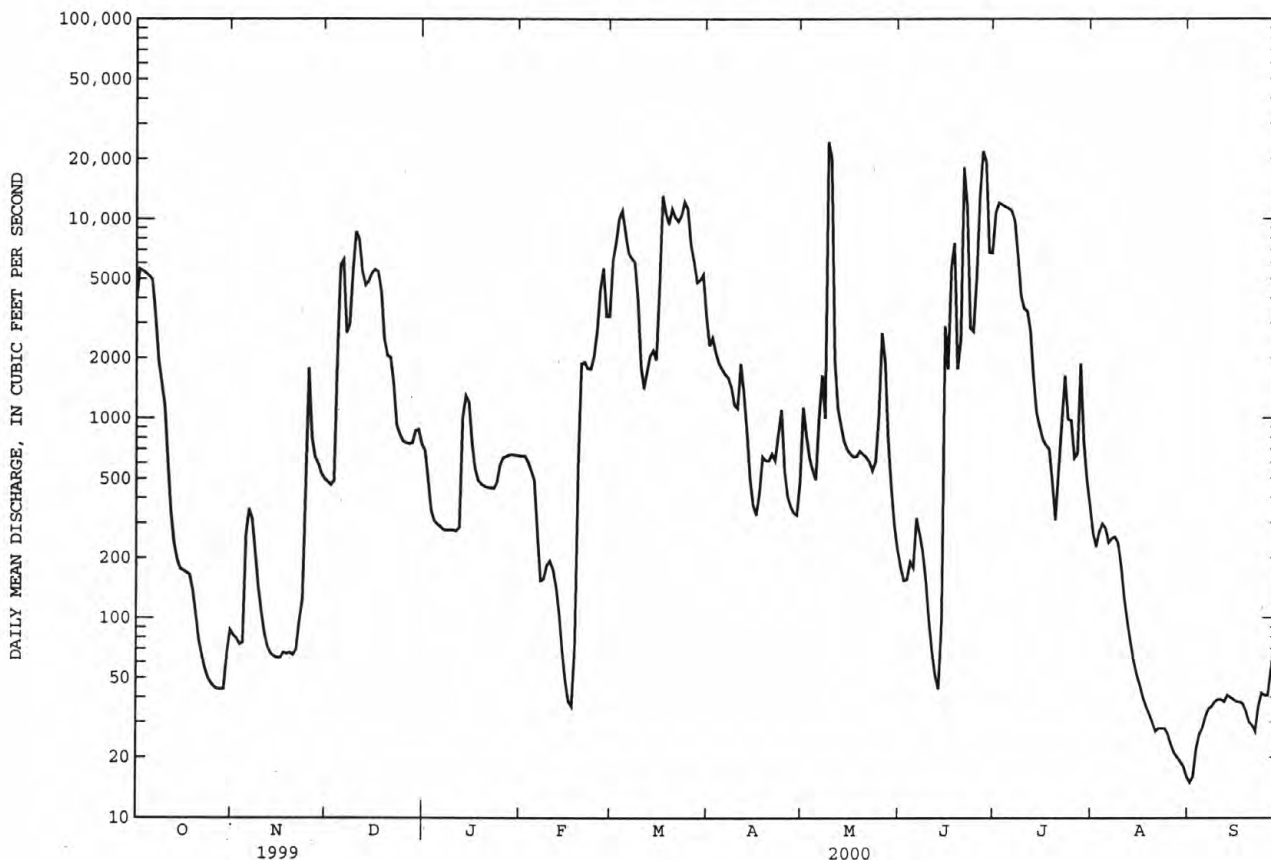
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1967 - 2000	
ANNUAL TOTAL	1486014		758670		^a 2810	
ANNUAL MEAN	4071		2073		6227	
HIGHEST ANNUAL MEAN					301	
LOWEST ANNUAL MEAN					76200	
HIGHEST DAILY MEAN	31000	Apr 26	24300	May 9	Oct 5 1986	
LOWEST DAILY MEAN	32	Sep 1	15	Sep 1	Sep 30 1980	
ANNUAL SEVEN-DAY MINIMUM	34	Aug 30	18	Aug 27	Sep 26 1980	
INSTANTANEOUS PEAK FLOW			31700	May 9	Oct 5 1986	
INSTANTANEOUS PEAK STAGE			29.36	May 9	Jul 4 1976	
ANNUAL RUNOFF (AC-FT)	2948000		1505000		2036000	
10 PERCENT EXCEEDS	10600		6250		8850	
50 PERCENT EXCEEDS	1720		604		652	
90 PERCENT EXCEEDS	75		39		39	

^aPrior to regulation, water years 1939-59, 2,084 ft³/s.

^bMinimum daily discharge for period of record, no flow at times in 1939, 1940, and 1956.

^cMaximum discharge for period of record, 137,000 ft³/s, May 20, 1943.

^dMaximum gage height for period of record, 40.44 ft, May 20, 1943 (from floodmark).



ARKANSAS RIVER BASIN

07174400 CANEY RIVER ABOVE COON CREEK AT BARTLESVILLE, OK

LOCATION.--Lat 36°45'20", long 95°58'19", in NE 1/4 NE 1/4 sec.12, T.26 N, R.12 E, Washington County, Hydrologic Unit 11070106, at right bank in city of Bartlesville water intake tower, 0.2 mi upstream from State Highway 123 bridge and low-water dam, 0.5 mi downstream from Atchison, Topeka, and Santa Fe railroad bridge, 1.0 mi upstream from confluence with Coon Creek, 2.7 mi downstream from confluence with Butler Creek, 5.0 mi upstream from confluence with Sand Creek, and at mile 68.7.

DRAINAGE AREA.--1,392 mi².

PERIOD OF RECORD.--October 1985 to current year.

GAGE.--Water-stage recorder. Datum of gage is 653.33 ft above sea level.

REMARKS.--Records poor. Considerable regulation by Hulah Lake (station 07172500) 27.0 mi upstream, and Copan Lake (station 07174300) 12.0 mi upstream. Diversion at gage for municipal water supply by the city of Bartlesville. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	33	e40	45	41	3350	1740	427	1090	5310	46	e28
2	32	38	e52	49	41	3350	1580	268	182	5420	46	e28
3	31	43	78	58	198	3650	1330	1230	31	5360	42	e28
4	31	44	365	435	273	3230	2810	1900	32	5280	35	e30
5	33	42	502	616	185	3050	3060	659	44	5190	36	e32
6	34	41	221	622	126	3010	1840	1090	29	4850	35	e33
7	34	e40	214	328	129	2950	1530	1040	26	2440	33	e37
8	36	e39	2340	69	144	2470	708	575	26	1450	35	e32
9	39	e38	2880	30	134	2360	387	12300	26	1380	33	e34
10	39	e37	3170	29	137	1620	389	6680	27	1370	33	e30
11	33	e37	2840	29	133	599	1670	782	30	1360	34	e28
12	34	e37	2690	30	85	780	2690	3560	38	1320	64	e28
13	37	e38	2640	30	28	558	3840	5000	36	824	50	e27
14	42	e38	2670	30	25	3090	3750	4980	40	409	32	e27
15	41	e38	2590	30	27	3550	1520	4520	38	72	30	e26
16	34	e39	1840	30	29	3940	1040	3350	40	51	32	e26
17	34	e39	1470	32	35	3870	1030	2970	219	51	28	e26
18	37	e40	611	33	62	3810	1710	1990	219	51	32	e26
19	41	e40	488	35	79	3960	1790	1790	149	53	31	e26
20	42	e38	458	33	52	3870	307	1770	1780	65	27	e27
21	27	e36	185	38	45	3760	47	1740	3000	66	31	e28
22	26	e55	459	46	42	3770	38	1720	805	64	30	e29
23	27	e90	715	45	62	4400	47	1690	1400	55	30	34
24	29	e60	183	43	965	4300	276	1620	3460	53	30	33
25	30	e52	30	54	1220	4110	147	1070	2110	52	28	21
26	30	e47	29	68	1330	4020	1100	643	3580	52	30	21
27	30	e44	30	74	1220	3980	1220	134	641	52	28	20
28	31	e41	31	66	1320	3930	1110	109	2890	48	28	21
29	31	e39	34	46	3140	4700	188	603	3480	48	28	21
30	57	e39	38	41	---	4130	52	626	4240	48	27	22
31	33	---	44	41	---	3460	---	965	---	46	e27	---
TOTAL	1067	1282	29937	3155	11307	101627	38946	67801	29708	42890	1051	829
MEAN	34.4	42.7	966	102	390	3278	1298	2187	990	1384	33.9	27.6
MAX	57	90	3170	622	3140	4700	3840	12300	4240	5420	64	37
MIN	26	33	29	29	25	558	38	109	26	46	27	20
AC-FT	2120	2540	59380	6260	22430	201600	77250	134500	58930	85070	2080	1640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2000, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	1550	1121	988	882	809	1948	1806	2035	2326	1413	209	335			
MAX	14800	3512	2663	4075	2721	4606	5185	5054	5315	6486	1448	2635			
(WY)	1987	1999	1987	1993	1987	1990	1988	1993	1999	1995	1995	1989			
MIN	13.2	30.7	27.7	27.4	24.7	23.2	46.2	31.1	46.5	29.4	22.5	12.8			
(WY)	1988	1996	1991	1991	1996	1996	1996	1996	1996	1988	1988	1987			

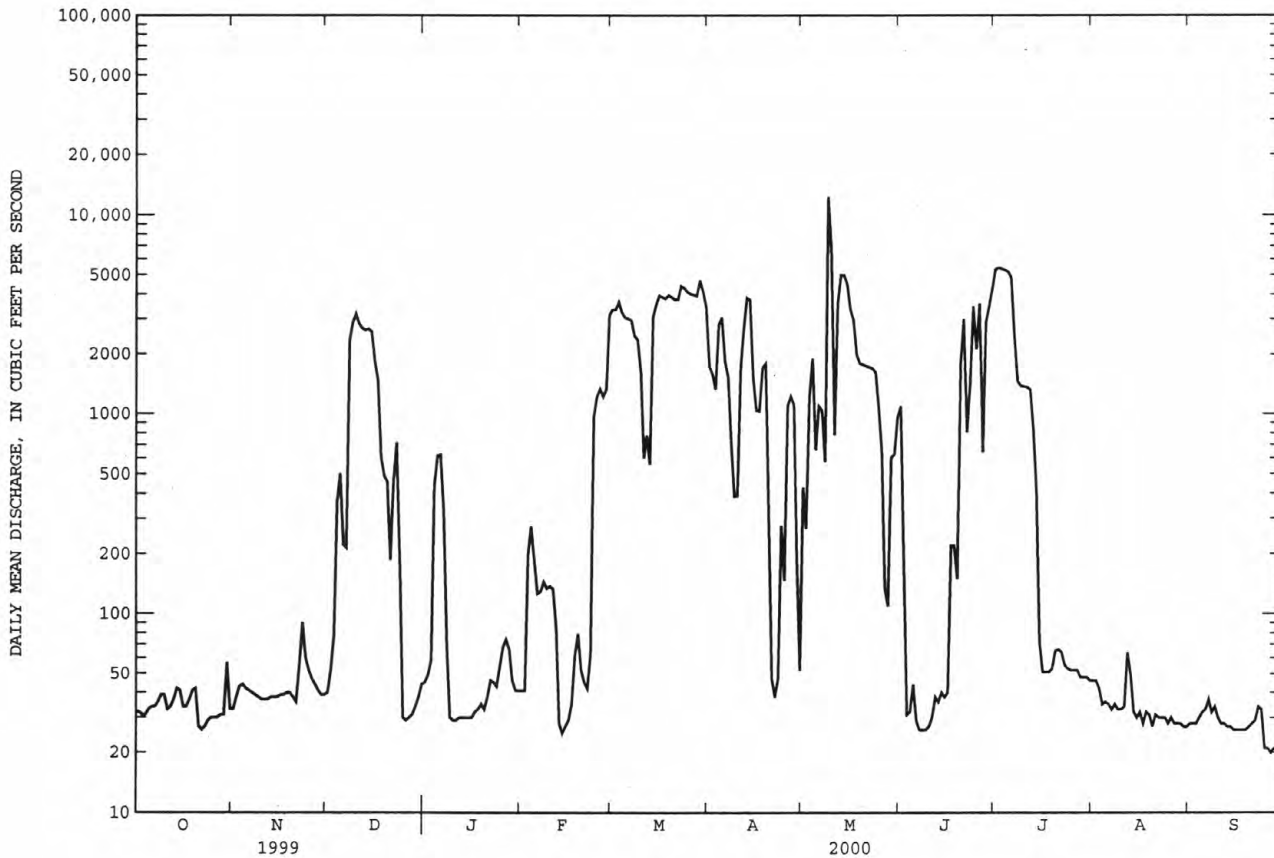
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ARKANSAS RIVER BASIN

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07174400 CANEY RIVER ABOVE COON CREEK AT BARTLESVILLE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1986 - 2000	
ANNUAL TOTAL	698659		329600		1288	
ANNUAL MEAN	1914		901		2888	1987
HIGHEST ANNUAL MEAN					43.7	1996
LOWEST ANNUAL MEAN					5.7	Oct 5 1986
HIGHEST DAILY MEAN	7760	Jun 20	12300	May 9	64900	Feb 1 1997
LOWEST DAILY MEAN	22	Jan 15	20	Sep 27	6.1	Jan 31 1997
ANNUAL SEVEN-DAY MINIMUM	24	Jan 13	23	Sep 24	94500	Oct 4 1986
INSTANTANEOUS PEAK FLOW			15700	May 9	27.70	Oct 4 1986
INSTANTANEOUS PEAK STAGE			15.97	May 9	932800	
ANNUAL RUNOFF (AC-FT)	1386000		653800		4420	
10 PERCENT EXCEEDS	5530		3380		173	
50 PERCENT EXCEEDS	501		52		26	
90 PERCENT EXCEEDS	33		28			



ARKANSAS RIVER BASIN

07175500 CANEY RIVER NEAR RAMONA, OK

LOCATION.--Lat 36°30'32", long 95°50'30", in NE 1/4 NW 1/4 sec.5, T.23 N., R.14 E., Washington County, Hydrologic Unit 11070106, on left bank near downstream abutment of county road bridge, 1 mi upstream from Buck Creek, 2.2 mi downstream from Double Creek, 4.5 mi southeast of Ramona, and at mile 32.0.

DRAINAGE AREA.--1,955 mi².

PERIOD OF RECORD.--September 1945 to current year. Monthly discharge only for some periods, published in WSP 1311. Previous reports have included Caney River near Collinsville from Oct. 1935 to Feb. 1939; this record has been separated from Ramona.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1241: 1939.

GAGE.--Water-stage recorder. Datum of gage is 586.43 ft above sea level. Sept. 1, 1945, to Feb. 15, 1946, nonrecording gage at present site and datum.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Flow regulated since February 1950 by Hulah Lake (station 07172500), and since April 1983 by Copan Lake (station 07174300). U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	68	44	68	64	3050	3280	1840	1320	4690	112	e34
2	67	52	46	68	63	3140	2200	1840	1080	5590	98	37
3	59	47	54	67	64	4960	2130	776	263	5670	90	30
4	53	49	1500	70	139	5670	1790	1330	115	5580	82	31
5	51	52	2610	316	198	3770	2890	1310	128	5450	67	33
6	50	51	1170	416	158	3130	2580	2200	150	5330	61	34
7	49	47	450	409	130	2930	1450	7500	107	4280	58	40
8	49	46	681	230	131	2820	1170	2880	92	2050	56	36
9	48	44	2940	116	131	2390	486	6800	82	1460	51	38
10	47	43	5900	78	128	2060	347	12800	78	1410	53	33
11	46	43	4500	71	123	1390	481	13700	79	1380	48	29
12	48	43	2990	71	120	2050	2990	8000	82	1360	50	31
13	45	44	2600	69	106	1850	3130	5860	88	1230	66	31
14	43	44	2450	67	67	1730	3650	6010	100	796	88	31
15	41	44	2480	66	56	3430	2910	5640	150	405	53	30
16	43	45	2160	65	56	4450	1040	4840	160	148	44	27
17	42	45	1420	64	61	5760	863	3690	720	104	46	26
18	40	45	1010	63	86	5020	982	3130	1890	107	42	26
19	39	45	432	62	160	5300	1510	2280	1020	107	42	27
20	41	43	374	60	231	4940	1150	2140	1330	110	45	28
21	42	41	340	58	163	4120	265	2070	5180	145	41	28
22	47	48	190	57	132	3860	155	2020	7680	159	38	32
23	43	110	398	58	165	4890	140	1970	2700	150	39	35
24	41	88	470	57	312	6520	412	1920	4160	118	36	34
25	41	57	179	56	1480	5230	562	3100	7240	107	39	35
26	44	50	89	57	2000	4670	381	4440	6600	101	34	41
27	45	48	78	64	1540	5350	876	3950	6600	102	34	37
28	43	46	75	70	1100	4570	871	1170	2430	97	34	36
29	42	44	73	70	1620	4460	650	704	3620	927	34	36
30	56	44	72	67	---	7570	200	992	3870	247	32	36
31	96	---	70	64	---	5250	---	941	---	137	e32	---
TOTAL	1521	1516	37845	3174	10784	126330	41541	117843	59114	49547	1645	982
MEAN	49.1	50.5	1221	102	372	4075	1385	3801	1970	1598	53.1	32.7
MAX	96	110	5900	416	2000	7570	3650	13700	7680	5670	112	41
MIN	39	41	44	56	56	1390	140	704	78	97	32	26
AC-FT	3020	3010	75070	6300	21390	250600	82400	233700	117300	98280	3260	1950
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)												
MEAN	1876	1533	1389	1139	1255	3047	2961	2939	3080	1602	299	551
MAX	19540	4390	3596	5204	4208	7228	6989	8547	9766	8233	2021	3178
(WY)	1987	1987	1993	1993	1987	1990	1988	1993	1995	1995	1995	1989
MIN	35.4	50.1	65.5	48.2	43.9	41.4	114	62.7	70.1	30.2	34.9	32.7
(WY)	1993	1996	1996	1996	1996	1996	1996	1996	1988	1984	1984	2000

e Estimated

ARKANSAS RIVER BASIN

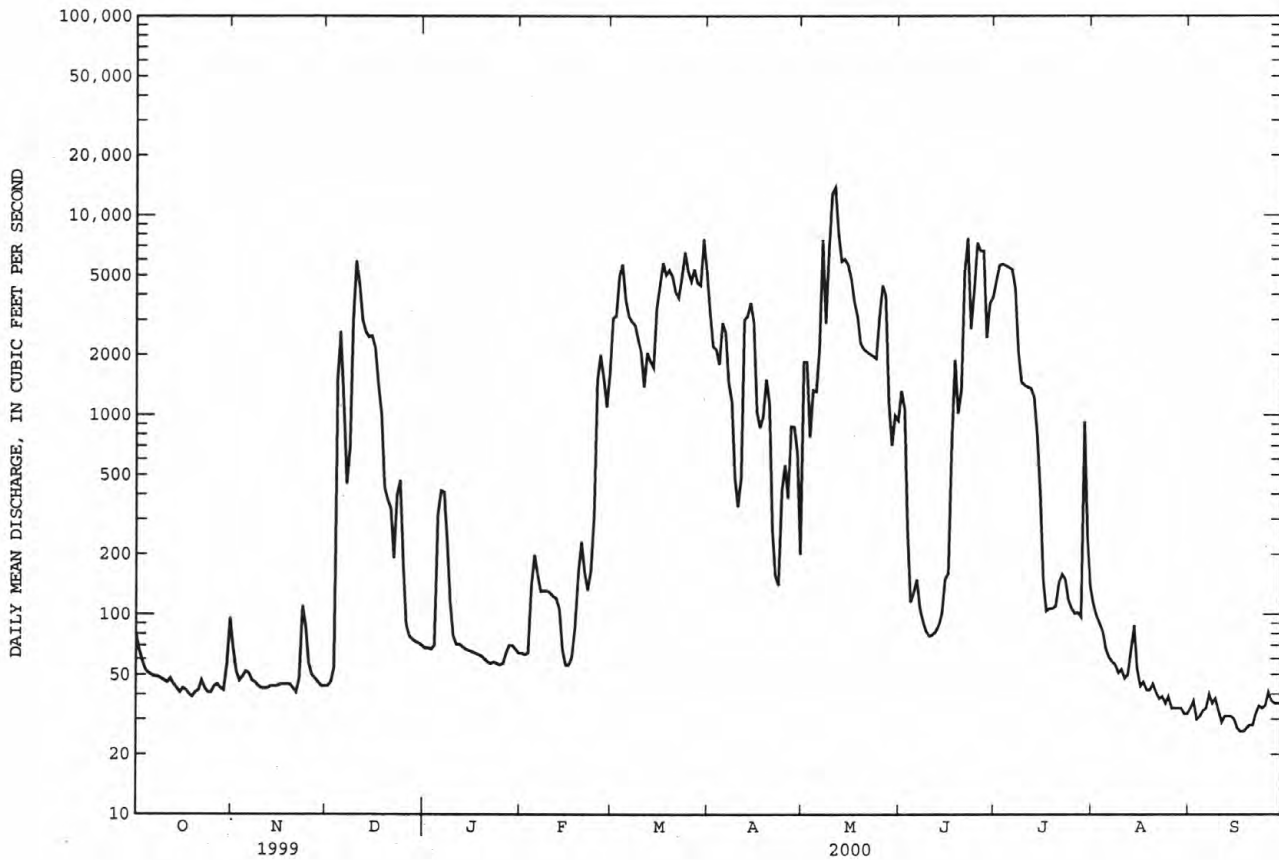
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07175500 CANEY RIVER NEAR RAMONA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	893091		451842		^a 1807	
ANNUAL MEAN	2447		1235		3887	1987
HIGHEST ANNUAL MEAN					107	1996
LOWEST ANNUAL MEAN					71700	Oct 5 1986
HIGHEST DAILY MEAN	21000	Apr 27	13700	May 11	^b 13	Sep 16 1984
LOWEST DAILY MEAN	39	Oct 19	26	Sep 17,18	16	Jul 31 1984
ANNUAL SEVEN-DAY MINIMUM	41	Oct 15	27	Sep 15	85600	Oct 5 1986
INSTANTANEOUS PEAK FLOW			16400	May 11	31.16	Oct 5 1986
INSTANTANEOUS PEAK STAGE			28.10	May 11	1309000	
ANNUAL RUNOFF (AC-FT)	1771000		896200		5620	
10 PERCENT EXCEEDS	6610		4470		369	
50 PERCENT EXCEEDS	597		116		44	
90 PERCENT EXCEEDS	47		39			

^aAverage discharge since regulation by Hulah Lake and before regulation by Copan Lake, 32 years (water years 1951-82), 925 ft³/s.

^bNo flow Sept. 11-Nov. 3, 1956.



ARKANSAS RIVER BASIN

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OK

LOCATION.--Lat 36°18'26", long 95°41'52", NE 1/4 NW 1/4 sec.15, T.21 N., R.15 E., Rogers County, Hydrologic Unit 11070105, on left bank on downstream side of bridge on State Highway 20, 2.3 mi downstream from Caney River, 4.5 mi west of Claremore, 12.4 mi upstream from Bird Creek, and at mile 76.0.

DRAINAGE AREA.--6,534 mi².

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

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 538.62 ft above sea level. Prior to Feb. 24, 1939, and May 17 to Aug. 24, 1967, non-recording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Some regulation since 1949 by dams in Kansas, and since February 1950 by Hulah Lake (station 07172500). Flow regulated since May 1963 by Oologah Lake (station 07171300), 14.3 mi upstream from station, and since April 1983 by Copan Lake (station 07174300). U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	157	124	63	544	3850	10600	10300	2700	1500	28100	6720	68
2	119	113	62	544	3850	10100	8430	3380	1620	28600	272	60
3	96	80	86	553	3840	12800	8330	2160	1020	29100	173	65
4	83	68	3420	543	3840	14600	7630	1830	404	28700	153	69
5	74	67	4970	543	3920	12300	8210	2380	220	27000	135	68
6	68	70	2350	922	4000	10500	8740	6300	218	24200	111	68
7	67	71	1070	1010	3950	10100	7350	9340	244	19400	99	64
8	64	67	589	978	3910	9940	7390	7100	182	15800	94	69
9	63	63	1880	747	3910	9620	6970	6540	158	14500	92	72
10	60	60	8560	615	3150	9270	6460	12700	144	12500	86	71
11	59	59	12000	554	2020	8780	7030	16000	176	8020	86	70
12	58	58	9690	540	2030	8710	7830	22500	203	5240	86	62
13	58	59	10700	536	2020	7710	7740	24100	147	4070	81	49
14	59	58	14200	1040	1370	4930	5030	21000	222	2300	85	46
15	57	58	14100	1970	178	6000	4120	19700	234	1900	132	41
16	55	59	12100	1970	122	7020	2460	19000	261	1460	101	40
17	52	61	7530	1970	123	10400	1440	17800	512	1210	83	40
18	54	62	7050	2090	134	12500	1410	16900	1640	1160	77	37
19	54	63	6550	2740	167	12600	1700	13400	3200	903	79	34
20	54	63	6200	2730	281	12300	2020	6890	4800	373	76	32
21	56	62	3930	2730	360	11300	1240	6800	6250	468	80	36
22	58	72	925	2730	274	12200	626	4740	10000	479	78	40
23	61	171	747	2730	1970	14600	506	2250	8630	461	72	40
24	63	246	1090	3120	5440	17200	489	2180	11200	420	69	60
25	60	165	1020	3870	5920	16700	935	4170	16800	367	68	56
26	58	105	706	3860	7270	15700	717	4960	16000	350	68	48
27	58	83	592	3860	7040	15900	776	6990	12300	1180	68	49
28	59	75	565	3860	7950	11500	1200	5570	15900	4820	65	54
29	60	70	559	3860	10400	10500	1330	6960	18200	13100	63	47
30	89	67	556	3860	---	12500	927	6890	25900	13400	67	45
31	92	---	551	3850	---	13500	---	6210	---	13300	78	---
TOTAL	2125	2499	134411	61469	93289	352380	129336	289440	158285	302881	9597	1600
MEAN	68.5	83.3	4336	1983	3217	11370	4311	9337	5276	9770	310	53.3
MAX	157	246	14200	3870	10400	17200	10300	24100	25900	29100	6720	72
MIN	52	58	62	536	122	4930	489	1830	144	350	63	32
AC-FT	4210	4960	266600	121900	185000	698900	256500	574100	314000	600800	19040	3170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2000, BY WATER YEAR (WY)

MEAN	3409	4636	3916	3422	3365	6822	7914	7368	7912	4669	1243	1295
MAX	47570	23150	16250	15850	11470	23920	25200	23480	25370	22340	7284	7538
(WY)	1987	1975	1993	1993	1975	1985	1988	1973	1995	1995	1995	1989
MIN	24.1	18.0	47.4	37.9	31.3	23.2	107	87.2	84.0	42.5	52.7	53.3
(WY)	1967	1967	1979	1981	1967	1967	1971	1971	1972	1966	1965	2000

ARKANSAS RIVER BASIN

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07176000 VERDIGRIS RIVER NEAR CLAREMORE, OK--Continued

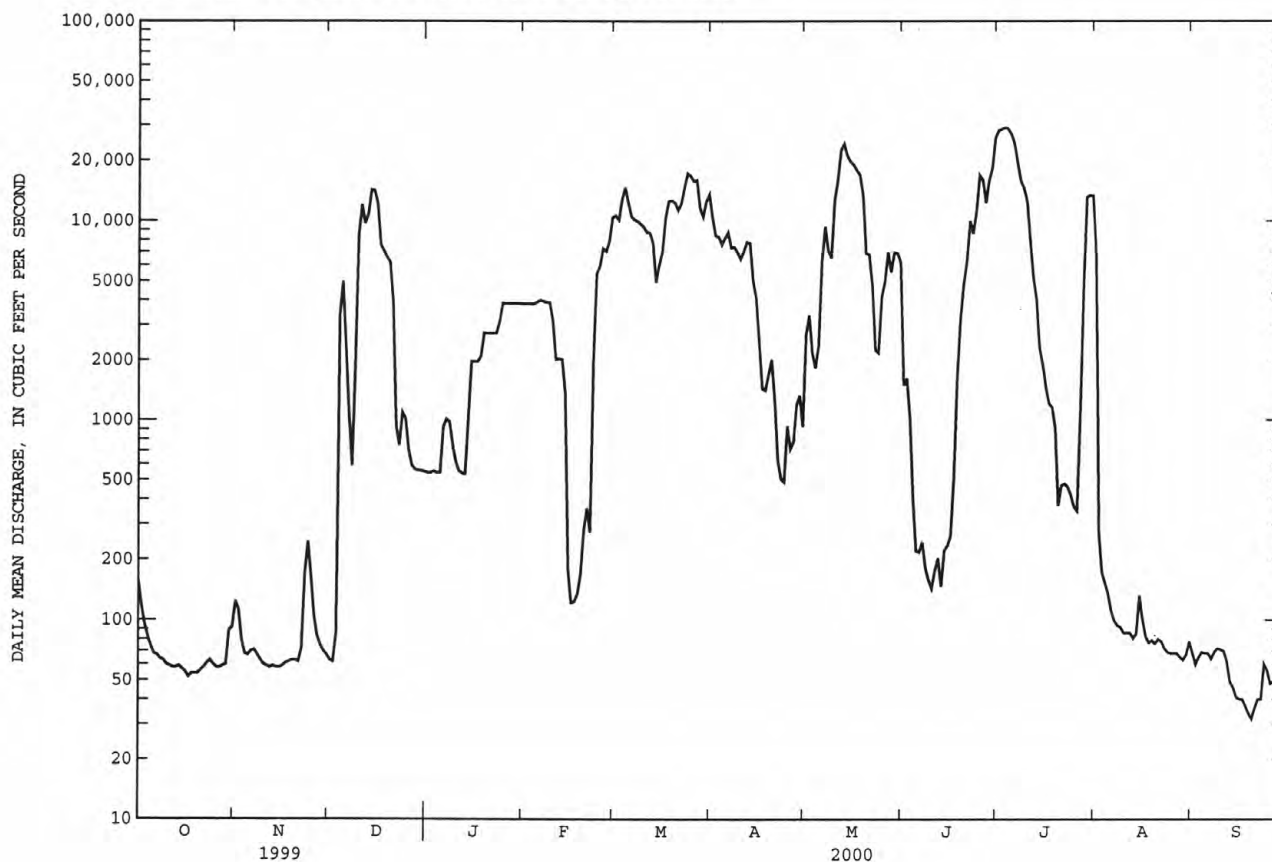
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1965 - 2000	
ANNUAL TOTAL	2854395		1537312		^a 4666	
ANNUAL MEAN	7820		4200		10940	
HIGHEST ANNUAL MEAN					234	
LOWEST ANNUAL MEAN					77700	
HIGHEST DAILY MEAN	30500	May 24	29100	Jul 3	^b 3.4	
LOWEST DAILY MEAN	52	Oct 17	32	Sep 20	8.6	
ANNUAL SEVEN-DAY MINIMUM	55	Oct 15	37	Sep 16	^c 78400	
INSTANTANEOUS PEAK FLOW			29800	Jul 3	^d 44.99	
INSTANTANEOUS PEAK STAGE			23.41	Jul 3	3380000	
ANNUAL RUNOFF (AC-FT)	5662000		3049000		14300	
10 PERCENT EXCEEDS	21000		12700		1100	
50 PERCENT EXCEEDS	3660		1020		64	
90 PERCENT EXCEEDS	64		59			

^aPrior to regulation by Oologah Lake, water years 1936-62, 3,723 ft³/s.

^bNo flow at times in 1936, 1939, 1940, 1956.

^cMaximum discharge for period of record, 182,000 ft³/s, May 21, 1943.

^dMaximum gage height for period of record, 55.05 ft, May 21, 1943.



LOCATION.--Lat 36°29'12", long 96°03'50", in SW 1/4 NW 1/4 sec.7, T.23 N., R.12 E., Osage County, Hydrologic Unit 11070107, 150 ft upstream from county road bridge at Avant, 2.4 mi upstream from Candy Creek, and at mile 54.2.

PERIOD OF RECORD.--August 1945 to current year, published as Bird Creek near Avant Oct. 1, 1973, to Sept. 30, 1993.

GAGE.--Water-stage recorder. Datum of gage is 651.28 ft above sea level.

REMARKS.--No estimated daily discharge. Records fair. Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft). Flow regulated since March 1977 by Birch Lake (capacity 19,200 acre-ft), located on Birch Creek, 12.1 mi upstream. Small diversions upstream for municipal water supply for the cities of Pawhuska and Barnsdall. U.S. Army Corps of Engineers satellite telemeter at station.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	58	18	37	31	134	359	2460	805	499	100	22
2	48	43	18	37	33	201	1830	623	695	449	96	21
3	42	29	22	37	37	1810	655	705	150	425	91	22
4	37	25	1880	37	41	799	351	529	136	397	84	26
5	34	22	1480	36	43	340	231	183	140	370	41	25
6	33	21	385	38	41	289	182	12700	130	347	30	24
7	32	19	168	36	38	554	146	2220	60	279	29	23
8	32	18	109	35	35	751	126	683	46	59	27	23
9	31	17	3070	36	32	520	105	14000	40	41	28	23
10	31	17	3190	38	32	170	90	2480	37	37	27	23
11	28	15	826	41	31	244	447	1080	37	35	26	23
12	27	15	434	45	29	1360	620	1590	82	34	25	22
13	25	14	257	43	29	930	558	1400	111	34	25	21
14	22	15	203	40	28	475	167	1140	72	32	24	22
15	21	16	267	37	27	281	125	843	55	31	24	21
16	21	16	236	37	26	2690	114	815	85	30	25	21
17	20	17	202	34	30	1970	148	771	1710	31	25	21
18	19	17	120	32	37	2600	138	617	1840	31	24	20
19	20	17	109	31	178	1850	109	588	552	31	24	20
20	20	18	102	30	152	1110	104	566	1020	34	24	21
21	20	18	98	28	104	808	101	550	6440	41	23	21
22	20	18	93	28	84	802	94	455	3160	57	23	22
23	20	20	84	28	152	4440	81	134	1130	50	24	22
24	20	19	54	27	562	2190	2100	66	5540	46	24	23
25	21	19	47	26	669	1100	356	1950	2240	44	24	22
26	21	19	45	26	1310	1790	183	4690	4790	41	24	21
27	21	20	44	27	411	2590	127	1010	1790	39	23	22
28	21	20	43	28	233	944	103	843	1230	39	23	22
29	21	20	41	27	168	1800	87	960	836	2200	23	22
30	31	19	40	28	---	1970	89	874	580	162	23	21
31	35	---	39	29	---	816	---	832	---	78	22	---
TOTAL	851	621	13724	1039	4623	38328	9926	58357	35539	6023	1055	662
MEAN	27.5	20.7	443	33.5	159	1236	331	1882	1185	194	34.0	22.1
MAX	57	58	3190	45	1310	4440	2100	14000	6440	2200	100	26
MIN	19	14	18	26	26	134	81	66	37	30	22	20
AC-FT	1690	1230	27220	2060	9170	76020	19690	115800	70490	11950	2090	1310

MEAN	181	276	215	163	326	578	560	684	615	182	69.7	161
MAX	1940	1319	753	749	1376	2264	1214	2177	2642	1174	400	1059
(WY)	1987	1986	1993	1993	1985	1990	1988	1993	1995	1995	1989	1986
MIN	3.94	4.19	5.63	3.61	4.87	12.5	6.95	12.4	22.0	10.3	6.07	5.20
(WY)	1980	1981	1979	1981	1981	1996	1981	1996	1988	1984	1985	1982

ARKANSAS RIVER BASIN

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07176500 BIRD CREEK AT AVANT, OK--Continued

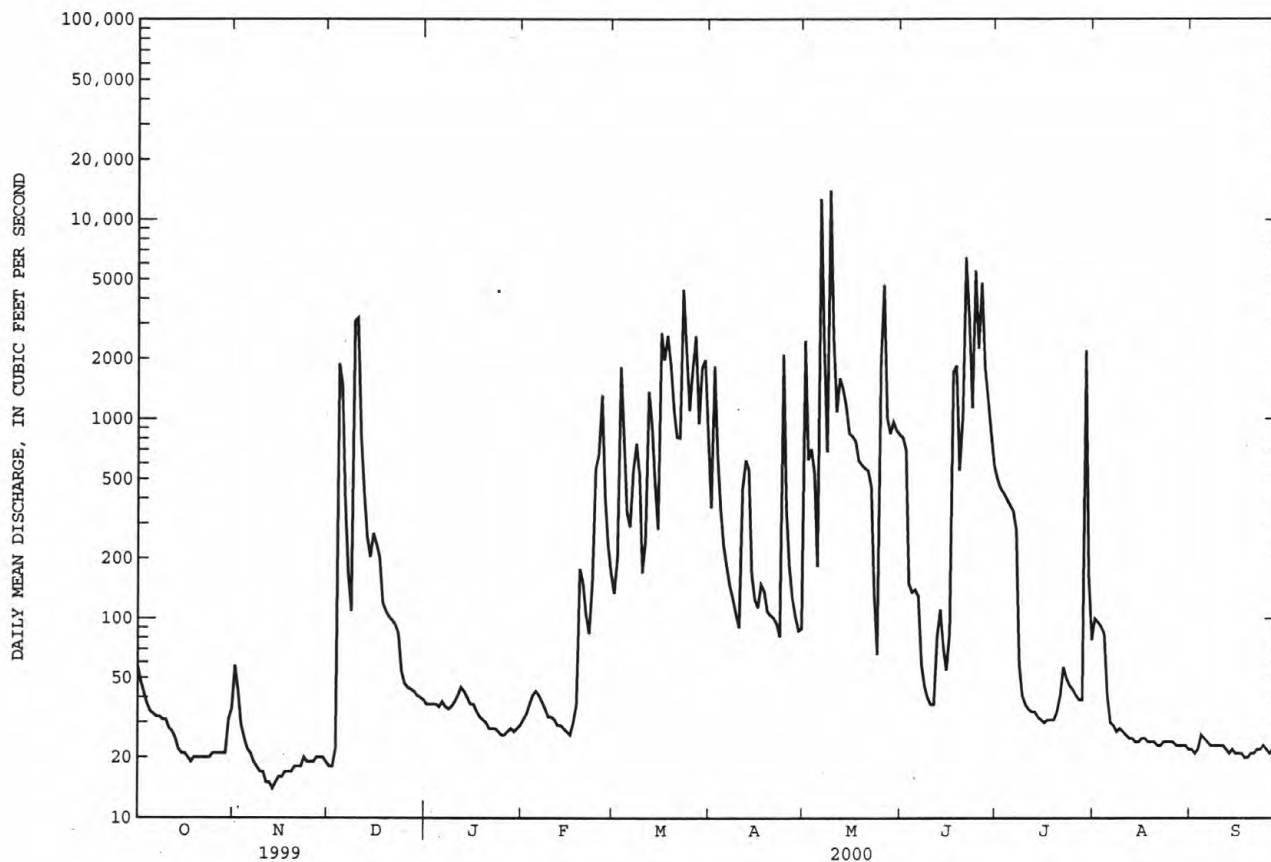
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1978 - 2000	
ANNUAL TOTAL	187417		170748		^a 334	
ANNUAL MEAN	513		467		673	
HIGHEST ANNUAL MEAN					43.9	
LOWEST ANNUAL MEAN					25900	
HIGHEST DAILY MEAN	14900	Apr 25	14000	May 9	May 9 1993	
LOWEST DAILY MEAN	14	Jul 30	14	Nov 13	^b .05	
ANNUAL SEVEN-DAY MINIMUM	15	Nov 10	15	Nov 10	.29	
INSTANTANEOUS PEAK FLOW			21900	May 6	^c 27900	
INSTANTANEOUS PEAK STAGE			20.64	May 6	^d 30.70	
ANNUAL RUNOFF (AC-FT)	371700		338700		241700	
10 PERCENT EXCEEDS	1190		1320		758	
50 PERCENT EXCEEDS	74		41		47	
90 PERCENT EXCEEDS	19		21		7.1	

^aPrior to regulation, water years 1946-76, 200 ft³/s.

^bNo flow at times most years 1946-76.

^cMaximum discharge for period of record, 32,400 ft³/s, gage height 31.40 ft, Oct. 2, 1959.

^dMaximum gage height for period of record, 32.03 ft, Mar. 11, 1974.



ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OK

LOCATION.--Lat 36°16'42", long 95°57'14", in NW 1/4 NW 1/4 sec.29, T.21 N., R.13 E., Tulsa County, Hydrologic Unit 11070107, near downstream side of right abutment of county road bridge, 1.5 mi upstream from Delaware Creek, 2.4 mi downstream from Hominy Creek, 2.5 mi southeast of Sperry, and at mile 25.0.

DRAINAGE AREA.--905 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1921: 1943.

GAGE.--Water-stage recorder. Datum of gage is 579.43 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and Birch Lake (capacity 19,200 acre-ft). Flow regulated since August 20, 1989 by Skiatook Lake (capacity 322,300 acre-ft) when conservation pool was first reached. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1915 reached a stage similar to flood of Oct. 31, 1941, 30.14 ft, from information provided by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	225	78	52	54	66	211	598	2170	3030	3410	145	143
2	201	95	53	51	68	190	935	1200	3120	3390	188	142
3	188	87	107	53	71	2620	842	1230	1570	3200	156	142
4	180	73	1950	52	75	1750	497	1220	1200	2270	134	145
5	175	66	3150	64	79	637	356	990	1180	1900	238	146
6	172	63	808	72	82	398	285	7870	1020	485	196	146
7	172	60	401	73	81	460	239	12700	298	404	182	147
8	170	59	261	70	77	761	202	3790	210	263	176	146
9	168	57	820	68	74	704	176	5620	190	103	162	146
10	167	56	5820	71	70	389	154	10000	183	84	151	147
11	164	54	1390	73	66	268	338	2810	183	188	150	146
12	163	53	632	76	67	934	754	3500	179	187	156	145
13	160	52	416	79	66	942	1080	4760	248	185	155	145
14	158	51	300	78	64	666	922	4650	296	175	152	144
15	154	51	285	75	63	420	502	4310	171	161	152	143
16	108	50	297	73	61	1090	472	4200	156	158	151	143
17	98	51	266	72	66	1910	463	4160	541	156	150	143
18	97	52	217	70	75	2350	452	4030	2730	156	147	143
19	96	52	152	68	84	1950	188	3830	1050	156	149	141
20	95	53	140	65	258	1190	154	2910	1440	156	150	141
21	95	54	131	64	194	851	147	2830	2730	232	150	141
22	59	61	123	63	153	789	145	2800	6540	227	148	142
23	56	137	118	63	210	3370	139	2580	1290	199	147	142
24	58	76	105	63	450	3280	1010	2170	3090	179	147	149
25	58	62	76	62	704	2560	722	2940	5080	171	144	144
26	58	58	68	62	1280	2130	689	3870	3620	166	143	144
27	58	55	64	64	662	4780	526	4110	3360	158	145	144
28	58	53	61	67	398	2680	177	2510	2290	155	144	144
29	58	51	59	67	281	2750	140	3260	2120	2180	145	144
30	80	52	57	66	---	4070	130	3180	2600	825	142	145
31	80	---	55	65	---	2640	---	3090	---	295	141	---
TOTAL	3829	1872	18434	2063	5945	49740	13434	119290	51715	21974	4836	4323
MEAN	124	62.4	595	66.5	205	1605	448	3848	1724	709	156	144
MAX	225	137	5820	79	1280	4780	1080	12700	6540	3410	238	149
MIN	56	50	52	51	61	190	130	990	156	84	134	141
AC-FT	7590	3710	36560	4090	11790	98660	26650	236600	102600	43590	9590	8570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	291	509	477	514	604	1400	1475	1965	1577	802	273
MAX	1504	1649	1168	2208	1500	4949	2891	4824	4890	3421	689
(WY)	1999	1995	1993	1998	1999	1990	1994	1995	1995	1995	1996
MIN	112	47.4	61.9	65.2	66.8	59.7	191	151	175	153	146
(WY)	1993	1996	1990	1994	1996	1996	1996	1996	1998	1996	2000

ARKANSAS RIVER BASIN

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07177500 BIRD CREEK NEAR SPERRY, OK--Continued

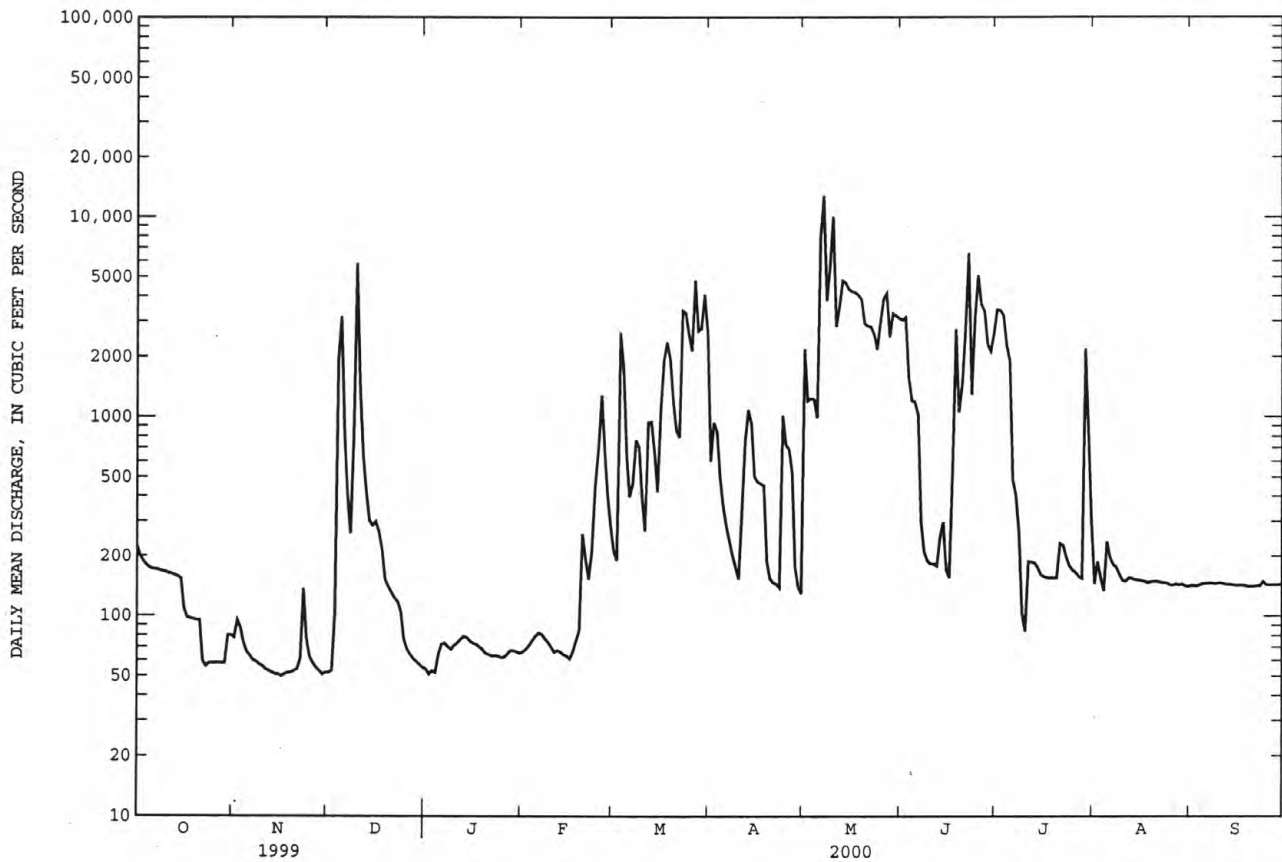
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	468120		297455		^a 851	
ANNUAL MEAN	1283		813		1669	
HIGHEST ANNUAL MEAN					168	
LOWEST ANNUAL MEAN					27500	
HIGHEST DAILY MEAN	19500	Apr 26	12700	May 7	27500	May 10 1993
LOWEST DAILY MEAN	50	Nov 16	50	Nov 16	^b 23	Jul 22 1996
ANNUAL SEVEN-DAY MINIMUM	51	Nov 13	51	Nov 13	34	Oct 19 1995
INSTANTANEOUS PEAK FLOW			14000	May 6	^c 30600	May 10 1993
INSTANTANEOUS PEAK STAGE			26.20	May 6	^d 29.88	May 10 1993
ANNUAL RUNOFF (AC-FT)	928500		590000		616200	
10 PERCENT EXCEEDS	3470		2850		2670	
50 PERCENT EXCEEDS	225		156		172	
90 PERCENT EXCEEDS	63		60		68	

^aPrior to regulation, water years 1939-84, 484 ft³/s.

^bNo flow at times in 1939, 1954-57, 1964-66, 1970.

^cMaximum discharge for period of record, 90,000 ft³/s, Oct. 3, 1959, from rating curve extended.

^dMaximum gage height for period of record, 32.60 ft, Oct. 3, 1959.



ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1987 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1987 to current year.

pH: April 1987 to current year.

WATER TEMPERATURE: April 1987 to current year.

DISSOLVED OXYGEN: April 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1987.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, greater than 2,000 microsiemens, Nov. 1, 1992 and Mar. 31, 1996; minimum, 80 microsiemens, Aug. 20, 1989.

pH: Maximum, 8.6 units, Aug. 27, 1988, Mar. 5, 1991, Apr. 12, 13, 1999; minimum, 5.7 units Sept. 2, 1987.

WATER TEMPERATURE: Maximum, 35.5°C, July 14-16, 1988; minimum, 0.0°C, several days in winter months.

DISSOLVED OXYGEN: Maximum (observed), 17.2 mg/L, Dec. 29, 1993; minimum, 1.4 mg/L, Sept. 26, 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 712 microsiemens, Feb. 23; minimum, 97 microsiemens, May 6, 7.

pH: Maximum, 8.2 units, Feb. 20; minimum, 7.1 units, May 6, 7, 8.

WATER TEMPERATURE: Maximum, 32.8°C, July 16, 17; minimum 1.9°C, Jan. 28.

DISSOLVED OXYGEN: Maximum, 16.0 mg/L, Dec. 23; minimum, 4.6 mg/L, July 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	240	237	238	345	339	341	335	330	331	425	418	421
2	245	240	243	351	342	345	346	335	341	432	425	429
3	254	245	250	345	330	337	573	340	392	433	425	428
4	245	241	243	330	318	327	443	122	268	460	433	451
5	245	242	244	318	313	314	394	122	301	501	446	454
6	245	244	245	315	313	314	355	294	322	584	501	558
7	246	244	245	315	312	314	296	291	295	516	423	442
8	246	244	245	315	313	314	291	279	285	423	365	388
9	246	245	245	317	315	316	395	204	289	374	366	370
10	247	245	246	319	316	317	272	167	209	377	373	375
11	246	245	246	320	318	319	193	167	177	378	375	376
12	246	245	245	321	319	320	222	193	203	385	378	382
13	248	245	246	322	320	321	228	208	218	385	380	382
14	249	245	248	323	321	322	252	228	240	395	385	388
15	245	242	243	324	323	323	263	252	258	396	388	391
16	264	242	250	324	322	323	270	262	265	399	392	394
17	267	263	266	324	323	324	279	259	273	420	399	413
18	263	261	262	329	324	326	260	252	255	412	407	409
19	264	262	263	332	328	329	274	260	268	413	408	410
20	265	262	264	332	329	330	286	274	281	418	413	415
21	266	264	265	330	327	329	320	286	300	420	418	419
22	294	266	273	332	316	329	297	293	295	421	419	419
23	328	294	313	546	317	391	313	297	302	444	421	430
24	328	327	328	417	363	389	335	313	326	444	433	439
25	328	324	325	387	362	372	357	335	348	433	431	432
26	327	324	325	364	355	360	368	357	362	435	433	434
27	333	327	329	355	350	352	380	368	374	435	432	434
28	334	330	333	355	352	354	390	380	386	436	432	433
29	332	330	331	355	342	349	399	390	394	445	436	441
30	342	324	329	342	330	336	422	399	414	446	444	445
31	389	342	359	---	---	---	421	414	417	451	445	447
MONTH	389	237	274	546	312	335	573	122	303	584	365	421

ARKANSAS RIVER BASIN

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07177500 BIRD CREEK NEAR SPERRY, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	453	449	451	351	346	348	274	258	267	508	232	306
2	454	452	453	353	342	348	282	266	276	232	203	220
3	454	449	451	427	204	274	350	281	317	226	200	209
4	483	451	465	226	205	212	357	304	340	239	219	225
5	484	467	474	238	205	217	304	295	299	224	219	221
6	469	466	468	260	238	252	320	304	312	229	97	163
7	468	465	467	293	260	276	330	320	325	130	97	119
8	465	463	464	339	254	297	346	330	340	217	130	168
9	464	461	462	280	232	248	360	346	352	221	128	186
10	462	456	459	254	234	243	376	360	368	176	138	150
11	464	454	457	298	254	272	471	356	394	240	176	211
12	464	456	459	326	277	305	356	282	331	237	210	227
13	459	453	455	322	285	315	287	258	275	213	207	209
14	454	453	453	330	256	288	288	272	279	210	206	207
15	454	450	451	364	330	349	280	258	264	210	206	208
16	453	449	451	377	283	349	260	257	259	211	210	210
17	453	448	451	287	231	254	261	258	260	212	210	211
18	464	447	454	287	228	249	307	261	273	214	212	213
19	464	460	463	233	213	224	387	307	364	215	212	214
20	547	459	514	233	226	229	417	385	400	215	212	214
21	514	499	503	248	229	240	438	417	429	213	211	212
22	499	480	493	290	248	256	438	428	435	212	207	211
23	712	473	538	290	158	230	428	418	423	216	207	211
24	655	479	534	258	205	233	491	330	408	227	214	218
25	564	420	525	209	202	205	490	330	353	273	187	224
26	676	375	485	217	202	207	490	277	298	286	117	201
27	480	373	429	237	188	205	296	271	276	193	125	149
28	373	362	367	226	187	212	333	296	324	229	179	217
29	374	351	365	223	217	219	331	330	330	229	214	221
30	---	---	---	240	211	221	334	322	331	215	213	214
31	---	---	---	258	223	237	---	---	---	214	212	213
MONTH	712	351	464	427	158	259	491	257	330	508	97	206
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	213	197	209	216	214	215	240	227	232	276	273	275
2	206	189	200	215	211	213	322	239	268	276	273	274
3	217	191	205	212	210	211	285	260	263	275	273	274
4	229	217	225	214	207	209	282	261	272	289	271	280
5	229	228	228	207	203	205	403	255	295	283	272	274
6	243	227	230	207	186	194	257	253	255	275	271	273
7	282	243	263	189	185	187	254	249	253	272	270	271
8	294	273	279	207	185	194	252	247	249	271	268	270
9	283	276	279	251	207	227	258	251	254	271	269	269
10	290	283	286	286	245	268	263	256	259	271	267	269
11	324	290	300	494	262	358	280	263	270	271	268	270
12	307	300	304	265	259	262	272	261	264	270	268	269
13	318	306	313	286	260	272	267	263	264	268	265	267
14	568	279	334	277	271	273	266	263	265	267	264	266
15	354	329	336	283	272	277	267	263	265	267	261	264
16	399	348	367	285	281	283	267	262	266	263	258	260
17	399	335	360	287	284	285	273	265	267	260	256	259
18	375	253	297	290	287	288	270	267	268	260	256	258
19	256	209	224	299	290	295	275	266	269	258	256	257
20	228	215	221	306	299	302	272	268	270	257	255	257
21	231	171	211	499	252	332	281	269	272	255	251	253
22	174	145	164	403	302	336	275	272	273	257	253	254
23	205	169	187	348	305	323	277	268	275	258	255	257
24	215	143	189	327	319	322	281	274	277	263	251	255
25	183	132	166	334	315	319	282	275	277	251	250	250
26	190	135	163	315	306	310	282	268	276	250	246	248
27	211	126	165	306	303	305	281	268	276	248	246	247
28	220	208	214	305	302	303	278	268	274	248	245	246
29	213	208	210	348	161	243	279	271	275	247	244	246
30	214	211	212	203	189	195	276	272	274	246	244	245
31	---	---	---	227	203	216	276	273	274	---	---	---
MONTH	568	126	245	499	161	265	403	227	267	289	244	262

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.8	7.7	7.7	7.7	7.6	7.6	7.5	7.4	7.5	7.8	7.7	7.7
2	7.8	7.7	7.7	7.8	7.7	7.7	7.5	7.5	7.5	7.8	7.7	7.7
3	7.8	7.7	7.8	7.8	7.7	7.7	7.5	7.5	7.5	7.8	7.7	7.7
4	7.9	7.7	7.8	7.8	7.7	7.7	7.6	7.2	7.5	7.8	7.8	7.8
5	7.9	7.7	7.8	7.7	7.6	7.7	7.7	7.3	7.6	7.9	7.8	7.8
6	7.9	7.7	7.8	7.6	7.6	7.6	7.8	7.7	7.7	7.8	7.7	7.8
7	7.9	7.7	7.8	7.6	7.5	7.6	7.8	7.7	7.8	7.9	7.8	7.9
8	8.0	7.7	7.8	7.5	7.5	7.5	7.7	7.7	7.7	8.0	7.8	7.9
9	7.9	7.7	7.8	7.5	7.4	7.5	7.7	7.6	7.7	7.9	7.8	7.9
10	7.9	7.7	7.8	7.5	7.4	7.4	7.7	7.5	7.7	8.0	7.9	7.9
11	7.9	7.7	7.8	7.5	7.4	7.4	7.7	7.7	7.7	8.0	7.9	7.9
12	7.9	7.7	7.8	7.5	7.4	7.4	7.7	7.7	7.7	8.0	7.9	7.9
13	7.9	7.7	7.8	7.5	7.4	7.4	7.8	7.7	7.8	7.9	7.9	7.9
14	7.9	7.7	7.8	7.5	7.4	7.4	7.8	7.8	7.8	8.0	7.9	7.9
15	7.8	7.7	7.8	7.5	7.4	7.4	7.9	7.8	7.8	7.9	7.8	7.9
16	7.8	7.6	7.7	7.5	7.4	7.4	7.9	7.8	7.9	7.9	7.8	7.9
17	7.8	7.7	7.8	7.5	7.4	7.4	7.9	7.8	7.9	7.8	7.7	7.8
18	7.8	7.7	7.7	7.5	7.4	7.4	7.9	7.8	7.8	7.8	7.7	7.8
19	7.8	7.7	7.8	7.5	7.4	7.4	7.8	7.8	7.8	7.8	7.8	7.8
20	7.8	7.7	7.8	7.5	7.4	7.4	7.8	7.7	7.8	7.9	7.8	7.8
21	7.8	7.7	7.8	7.5	7.4	7.5	7.8	7.8	7.8	7.9	7.8	7.8
22	7.8	7.7	7.8	7.5	7.4	7.5	7.8	7.8	7.8	7.9	7.8	7.8
23	7.8	7.7	7.8	7.6	7.4	7.5	7.8	7.7	7.8	7.9	7.8	7.8
24	7.8	7.7	7.8	7.4	7.3	7.4	7.8	7.8	7.8	7.9	7.8	7.8
25	7.9	7.7	7.8	7.4	7.4	7.4	7.8	7.7	7.8	7.9	7.8	7.8
26	7.8	7.7	7.8	7.5	7.4	7.5	7.8	7.7	7.7	7.9	7.8	7.8
27	7.8	7.7	7.8	7.5	7.5	7.5	7.8	7.7	7.7	7.9	7.8	7.8
28	7.8	7.7	7.7	7.5	7.5	7.5	7.8	7.7	7.8	7.9	7.8	7.8
29	7.8	7.7	7.7	7.5	7.4	7.5	7.8	7.7	7.8	7.9	7.8	7.8
30	7.7	7.6	7.7	7.5	7.4	7.4	7.8	7.7	7.7	7.9	7.8	7.8
31	7.6	7.6	7.6	---	---	---	7.8	7.7	7.7	7.9	7.8	7.8
MAX	8.0	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.9	8.0	7.9	7.9
MIN	7.6	7.6	7.6	7.4	7.3	7.4	7.5	7.2	7.5	7.8	7.7	7.7

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.8	7.5	7.6
2	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.6	7.5	7.6
3	7.8	7.8	7.8	7.8	7.5	7.6	8.1	7.8	7.8	7.7	7.5	7.6
4	7.9	7.8	7.9	7.7	7.6	7.6	8.0	7.9	8.0	7.8	7.7	7.7
5	7.9	7.8	7.8	7.7	7.6	7.6	7.9	7.9	7.9	7.8	7.8	7.8
6	7.9	7.8	7.8	7.7	7.6	7.7	7.9	7.9	7.9	7.8	7.1	7.3
7	7.9	7.8	7.8	7.8	7.7	7.7	7.9	7.9	7.9	7.3	7.1	7.2
8	7.9	7.8	7.8	7.9	7.7	7.8	8.0	7.9	7.9	7.5	7.1	7.2
9	7.9	7.8	7.8	7.7	7.7	7.7	8.1	7.9	8.0	7.5	7.3	7.5
10	7.9	7.8	7.8	7.8	7.7	7.7	8.1	7.9	8.0	7.5	7.2	7.3
11	7.9	7.8	7.9	7.8	7.7	7.7	8.1	7.7	7.9	7.6	7.3	7.5
12	7.9	7.8	7.9	7.9	7.7	7.8	7.9	7.7	7.8	7.7	7.5	7.6
13	7.9	7.8	7.9	7.9	7.8	7.9	8.0	7.8	7.9	7.6	7.6	7.6
14	8.0	7.8	7.9	7.9	7.8	7.8	8.1	7.9	8.0	7.6	7.6	7.6
15	8.0	7.8	7.9	7.9	7.9	7.9	8.0	7.8	7.9	7.6	7.6	7.6
16	8.0	7.8	7.9	7.9	7.7	7.9	7.9	7.8	7.8	7.6	7.6	7.6
17	7.9	7.7	7.8	7.8	7.6	7.7	8.0	7.8	7.9	7.6	7.6	7.6
18	7.8	7.7	7.7	7.8	7.7	7.8	8.0	7.8	7.9	7.6	7.6	7.6
19	7.9	7.7	7.8	7.8	7.7	7.7	8.1	7.9	8.0	7.7	7.6	7.6
20	8.2	7.9	8.0	7.8	7.8	7.8	8.0	7.9	8.0	7.6	7.6	7.6
21	8.1	8.0	8.0	7.8	7.8	7.8	8.0	7.8	8.0	7.6	7.6	7.6
22	8.1	7.9	8.0	7.8	7.7	7.8	8.0	7.8	7.9	7.6	7.6	7.6
23	8.1	7.9	7.9	7.8	7.5	7.7	7.9	7.8	7.8	7.6	7.6	7.6
24	8.0	7.8	7.9	7.7	7.6	7.7	7.9	7.7	7.8	7.6	7.5	7.6
25	8.0	7.8	8.0	7.7	7.7	7.7	7.8	7.7	7.7	7.5	7.3	7.5
26	7.9	7.8	7.8	7.7	7.4	7.7	7.8	7.7	7.8	7.6	7.2	7.4
27	7.9	7.8	7.9	7.7	7.3	7.6	7.8	7.8	7.8	7.4	7.2	7.2
28	7.9	7.8	7.9	7.7	7.6	7.7	7.8	7.7	7.7	7.5	7.4	7.5
29	7.9	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.8	7.6	7.5	7.6
30	---	---	---	7.7	7.7	7.7	7.8	7.8	7.8	7.6	7.5	7.6
31	---	---	---	7.8	7.7	7.7	---	---	---	7.6	7.5	7.6
MAX	8.2	8.0	8.0	7.9	7.9	7.9	8.1	7.9	8.0	7.8	7.8	7.8
MIN	7.8	7.7	7.7	7.7	7.3	7.6	7.7	7.7	7.7	7.3	7.1	7.2

ARKANSAS RIVER BASIN

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07177500 BIRD CREEK NEAR SPERRY, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.6	7.4	7.6	7.2	7.2	7.2	7.6	7.5	7.5	7.7	7.3	7.5
2	7.4	7.3	7.4	7.2	7.2	7.2	7.7	7.5	7.6	7.6	7.3	7.4
3	7.4	7.3	7.4	7.3	7.2	7.2	7.8	7.6	7.7	7.6	7.3	7.4
4	7.4	7.4	7.4	7.3	7.2	7.3	8.1	7.7	7.8	7.6	7.3	7.4
5	7.5	7.4	7.4	7.4	7.2	7.3	8.1	7.6	7.9	7.6	7.3	7.4
6	7.5	7.4	7.4	7.7	7.4	7.5	8.0	7.7	7.8	7.6	7.3	7.4
7	7.8	7.5	7.6	7.7	7.5	7.6	7.8	7.6	7.7	7.6	7.3	7.4
8	7.9	7.5	7.6	7.6	7.4	7.5	7.8	7.6	7.7	7.7	7.4	7.5
9	7.8	7.5	7.6	7.5	7.3	7.4	7.8	7.6	7.7	7.7	7.4	7.5
10	7.7	7.5	7.6	7.6	7.4	7.4	7.8	7.6	7.7	7.7	7.4	7.5
11	7.6	7.5	7.6	7.9	7.4	7.6	7.7	7.6	7.7	7.7	7.4	7.5
12	7.7	7.5	7.6	7.9	7.5	7.6	7.8	7.6	7.7	7.7	7.4	7.5
13	7.8	7.5	7.7	7.8	7.4	7.5	7.8	7.6	7.7	7.7	7.4	7.5
14	7.7	7.4	7.6	7.8	7.4	7.6	7.8	7.6	7.7	7.7	7.4	7.5
15	7.6	7.5	7.5	7.8	7.4	7.6	7.8	7.6	7.7	7.7	7.4	7.6
16	7.6	7.6	7.6	7.8	7.5	7.6	7.8	7.6	7.7	7.7	7.4	7.5
17	7.8	7.6	7.7	7.6	7.5	7.5	7.8	7.6	7.7	7.7	7.4	7.6
18	7.6	7.3	7.5	7.7	7.5	7.6	7.9	7.6	7.7	7.8	7.4	7.6
19	7.6	7.5	7.6	7.9	7.5	7.7	7.9	7.7	7.8	7.8	7.5	7.7
20	7.6	7.4	7.6	7.8	7.5	7.7	7.9	7.7	7.8	7.8	7.5	7.7
21	7.6	7.2	7.5	7.8	7.5	7.6	7.9	7.7	7.8	7.8	7.5	7.7
22	7.4	7.3	7.4	7.7	7.7	7.7	7.9	7.7	7.8	7.8	7.5	7.7
23	7.6	7.4	7.5	7.9	7.6	7.7	7.9	7.6	7.7	7.8	7.5	7.7
24	7.6	7.2	7.3	8.0	7.8	7.8	7.8	7.6	7.7	7.8	7.5	7.6
25	7.4	7.2	7.3	7.9	7.8	7.8	7.8	7.6	7.7	7.8	7.6	7.6
26	7.4	7.2	7.3	8.0	7.7	7.8	7.8	7.6	7.7	7.8	7.6	7.7
27	7.5	7.2	7.3	7.9	7.7	7.8	7.8	7.6	7.7	7.8	7.6	7.7
28	7.4	7.3	7.3	7.9	7.7	7.8	7.8	7.6	7.7	7.8	7.7	7.8
29	7.3	7.3	7.3	7.8	7.3	7.3	7.8	7.6	7.7	7.8	7.7	7.7
30	7.3	7.2	7.3	7.5	7.3	7.4	7.9	7.6	7.8	7.9	7.7	7.8
31	---	---	---	7.6	7.5	7.5	7.9	7.6	7.7	---	---	---
MAX	7.9	7.6	7.7	8.0	7.8	7.8	8.1	7.7	7.9	7.9	7.7	7.8
MIN	7.3	7.2	7.3	7.2	7.2	7.2	7.6	7.5	7.5	7.6	7.3	7.4

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.1	18.1	18.9	17.2	16.2	16.8	10.3	9.3	9.7	7.1	5.3	6.2
2	20.6	18.9	19.6	16.2	13.9	15.0	11.1	9.6	10.4	8.4	6.4	7.4
3	20.0	18.9	19.5	14.0	12.7	13.3	12.4	10.9	11.7	8.1	7.2	7.7
4	19.5	17.7	18.4	13.3	12.4	12.8	12.4	10.8	11.4	7.2	5.7	6.6
5	19.1	17.1	18.0	14.2	12.5	13.4	10.9	9.2	10.2	5.7	4.7	5.1
6	19.8	17.7	18.6	16.0	13.9	15.2	9.2	7.8	8.4	5.3	4.4	4.9
7	19.8	18.1	19.0	17.0	15.6	16.4	8.2	7.3	7.7	5.0	4.3	4.6
8	21.3	19.1	20.0	17.5	16.3	16.9	8.7	7.4	7.9	5.6	4.3	5.3
9	21.5	20.4	20.9	17.4	16.6	16.9	9.4	8.7	9.0	6.8	5.6	6.2
10	21.5	19.8	20.7	17.5	16.4	16.8	8.9	8.2	8.4	6.8	6.0	6.5
11	22.2	20.3	21.1	17.0	15.9	16.4	8.2	7.8	7.9	6.8	5.9	6.3
12	22.1	20.5	21.4	16.7	15.4	15.9	8.1	7.8	8.0	7.1	5.8	6.4
13	21.9	20.5	21.2	16.9	15.4	16.1	8.0	7.2	7.6	7.3	6.0	6.8
14	21.7	19.9	20.7	17.0	15.9	16.3	7.4	6.5	7.0	6.2	5.2	5.8
15	21.5	19.5	20.5	16.2	15.0	15.6	6.9	6.1	6.5	6.6	5.2	6.0
16	21.6	21.1	21.3	15.3	14.1	14.6	6.2	5.4	5.8	8.1	6.5	7.5
17	21.1	17.8	19.3	15.2	13.7	14.4	6.4	5.3	5.8	8.5	7.7	8.2
18	17.8	16.2	16.9	15.8	14.1	14.9	6.5	5.9	6.2	8.2	7.6	8.0
19	16.2	15.1	15.7	16.0	15.1	15.4	6.4	5.5	5.9	8.6	7.6	8.1
20	15.9	14.9	15.5	15.1	13.6	14.4	6.2	5.0	5.3	7.9	5.9	7.2
21	16.6	15.5	16.1	14.1	12.9	13.4	5.1	3.7	4.2	5.9	5.4	5.6
22	17.1	16.2	16.6	14.7	13.2	14.0	4.3	3.3	3.8	6.8	5.3	6.0
23	16.3	14.9	15.8	15.1	14.0	14.7	4.1	2.9	3.5	7.2	5.9	6.5
24	14.9	13.5	14.4	14.0	11.6	12.8	4.1	3.3	3.8	5.9	4.4	5.4
25	14.4	13.3	13.8	11.6	10.1	11.1	4.1	3.5	3.8	4.5	3.9	4.2
26	14.9	13.3	14.1	10.6	9.8	10.2	4.9	3.5	4.3	4.1	3.2	3.7
27	15.9	14.0	15.0	11.1	9.7	10.3	4.7	3.6	4.3	3.2	2.1	2.7
28	16.9	15.2	16.1	11.8	10.3	11.0	4.7	3.5	4.0	2.5	1.9	2.2
29	18.0	16.4	17.2	11.6	10.6	11.1	5.6	3.7	4.6	2.8	2.2	2.5
30	17.9	16.7	17.4	10.7	9.8	10.3	6.6	4.7	5.6	3.3	2.1	2.7
31	16.7	16.3	16.5	---	---	---	6.7	5.4	5.9	3.8	2.7	3.2
MONTH	22.2	13.3	18.1	17.5	9.7	14.2	12.4	2.9	6.7	8.6	1.9	5.7

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.7	2.8	3.2	14.7	12.6	13.6	13.1	12.7	13.0	20.9	18.4	19.1
2	3.3	2.4	2.8	14.3	12.2	12.9	13.7	12.4	13.0	19.8	18.6	19.1
3	4.8	2.7	3.8	12.2	9.1	10.1	14.1	13.1	13.5	19.6	17.1	17.8
4	5.2	4.1	4.7	10.0	8.9	9.4	14.6	12.8	13.6	18.6	17.3	18.0
5	4.8	3.9	4.3	11.4	9.6	10.4	16.6	13.0	14.5	18.2	17.2	17.7
6	5.3	3.9	4.7	13.6	10.6	12.0	18.8	15.5	16.8	19.3	17.8	18.7
7	6.3	4.7	5.6	14.9	13.1	14.0	19.1	17.4	18.2	21.0	19.1	19.8
8	6.9	5.5	6.2	15.7	14.3	14.8	18.4	15.9	17.1	23.8	20.4	22.2
9	7.8	6.0	7.1	15.2	13.8	14.5	17.7	15.2	16.3	21.4	18.9	19.8
10	9.7	7.6	8.8	13.8	11.9	13.1	17.0	15.1	16.0	20.4	19.0	19.4
11	9.3	7.9	8.8	11.9	10.5	11.2	18.0	15.9	16.9	23.2	19.0	21.3
12	7.9	7.3	7.7	11.2	9.4	10.4	16.8	14.1	16.0	19.6	18.4	19.1
13	8.2	7.3	7.8	12.1	11.1	11.5	15.6	13.4	14.4	18.8	18.0	18.4
14	8.3	7.2	7.7	12.5	11.1	11.8	15.8	14.2	15.0	18.1	17.3	17.6
15	8.9	6.8	7.8	14.7	12.1	13.4	15.6	14.5	15.2	17.5	17.3	17.4
16	9.4	7.9	8.6	14.1	12.1	13.2	16.0	14.4	15.1	17.7	17.1	17.4
17	8.8	8.2	8.5	12.1	10.4	11.3	15.9	13.8	14.8	18.3	17.3	17.8
18	8.4	7.8	8.2	10.5	9.4	9.9	18.0	14.9	16.1	18.6	17.8	18.2
19	8.3	7.4	7.7	9.4	9.1	9.3	21.6	18.0	19.8	18.7	18.2	18.4
20	9.1	7.2	8.1	10.4	8.6	9.5	21.6	19.7	20.5	18.8	17.6	18.2
21	9.9	8.2	8.9	11.5	10.4	10.9	20.9	18.6	19.9	19.4	17.8	18.5
22	12.0	9.4	10.4	12.4	11.5	11.8	20.9	18.4	19.5	20.0	18.2	19.1
23	13.9	11.5	12.5	12.8	11.6	12.2	20.1	18.6	19.2	19.7	18.6	19.2
24	14.5	12.7	13.4	13.6	12.1	12.9	19.6	18.1	19.0	19.9	18.5	19.1
25	15.2	13.6	14.3	13.4	12.5	12.9	19.5	17.7	18.5	22.1	18.4	20.4
26	14.6	13.1	13.8	12.8	12.1	12.4	19.2	16.1	17.0	22.4	21.6	21.9
27	13.7	12.4	13.0	14.0	12.8	13.6	18.4	16.0	17.1	23.8	21.9	22.8
28	13.6	11.8	12.6	13.6	12.1	13.1	21.3	17.9	19.1	23.8	20.3	21.3
29	14.6	12.4	13.3	12.1	11.6	11.7	21.3	19.1	20.2	21.3	20.0	20.6
30	---	---	---	12.8	11.7	12.3	21.4	19.8	20.5	21.5	20.2	20.8
31	---	---	---	12.9	11.5	12.2	---	---	---	21.6	20.6	21.0
MONTH	15.2	2.4	8.4	15.7	8.6	12.0	21.6	12.4	16.9	23.8	17.1	19.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	21.6	20.7	21.1	22.4	21.4	21.8	29.0	26.0	27.2	29.9	28.1	29.1
2	21.6	20.5	20.9	22.6	21.6	22.0	29.7	26.8	28.3	30.3	28.2	29.3
3	21.5	19.9	20.5	23.0	21.6	22.3	29.9	27.6	28.6	30.5	28.3	29.4
4	20.5	19.4	19.9	23.3	22.0	22.6	30.8	28.1	29.3	30.5	28.3	29.0
5	20.6	19.1	19.9	25.0	22.1	23.0	30.8	28.4	29.6	29.0	27.4	28.2
6	21.4	18.8	20.0	30.0	25.0	27.8	31.2	28.3	29.7	28.5	26.4	27.4
7	24.6	21.4	22.8	30.4	28.1	29.2	31.1	28.8	29.9	28.1	26.0	27.1
8	26.3	22.9	24.3	31.0	28.5	29.6	31.2	28.6	29.9	28.2	26.4	27.4
9	26.1	24.3	25.1	31.0	29.1	30.1	31.5	28.9	30.2	28.2	26.4	27.2
10	25.8	24.8	25.1	31.5	30.4	31.0	31.5	29.0	30.3	28.7	26.5	27.6
11	25.9	24.2	24.9	32.0	29.5	30.8	31.8	29.6	30.8	29.1	27.2	28.2
12	27.0	24.6	25.6	32.0	29.7	30.9	31.7	29.0	30.2	29.0	27.4	28.2
13	28.4	25.6	26.9	32.4	29.7	31.0	31.0	28.7	29.8	28.6	26.6	27.6
14	27.4	25.7	26.7	32.0	29.4	30.7	30.6	28.6	29.6	28.2	26.2	27.2
15	28.2	25.3	26.5	32.4	29.1	30.6	30.7	28.3	29.5	27.8	25.4	26.2
16	28.2	24.9	26.2	32.8	30.1	31.4	31.3	28.9	30.1	26.2	23.6	24.6
17	24.9	21.8	23.3	32.8	30.2	30.9	31.2	29.1	30.3	25.0	22.9	24.0
18	22.4	21.0	21.7	30.5	29.2	29.8	31.1	28.5	29.4	24.9	22.9	23.9
19	22.8	20.8	21.5	31.6	28.4	29.7	29.6	27.4	28.6	24.9	23.1	24.1
20	22.8	21.0	21.9	31.6	28.3	29.5	29.8	27.8	28.9	24.9	23.5	24.0
21	23.5	21.9	22.4	28.5	25.7	27.2	30.0	27.6	28.9	23.8	21.6	22.5
22	22.9	21.9	22.3	28.4	26.6	27.6	30.3	28.0	29.2	25.0	22.0	23.2
23	25.0	22.9	23.9	28.5	25.9	27.1	30.4	28.3	29.4	25.5	24.2	24.9
24	25.4	24.4	24.8	28.8	26.2	27.5	30.6	28.5	29.6	25.1	20.9	22.6
25	25.7	24.3	25.0	28.5	25.8	26.9	30.5	28.5	29.6	20.9	19.2	19.9
26	25.8	24.5	25.1	28.9	26.0	27.2	30.8	28.6	29.8	20.5	18.4	19.5
27	25.7	24.3	24.9	28.8	26.8	27.5	30.9	28.8	30.0	20.9	18.8	19.9
28	25.3	21.9	22.2	27.9	26.4	27.0	30.8	28.7	29.8	21.5	19.5	20.5
29	22.5	21.4	21.8	27.4	24.2	25.5	30.6	28.4	29.5	21.6	19.9	20.8
30	22.1	21.2	21.6	26.5	24.5	25.3	30.2	28.1	29.3	21.5	19.9	20.8
31	---	---	---	27.6	25.3	26.3	30.2	28.2	29.1	---	---	---
MONTH	28.4	18.8	23.3	32.8	21.4	27.7	31.8	26.0	29.5	30.5	18.4	25.1

ARKANSAS RIVER BASIN

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07177500 BIRD CREEK NEAR SPERRY, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.9	9.6	9.8	9.2	8.4	8.8	11.8	10.7	11.3	15.1	14.7	14.9
2	9.9	9.2	9.6	9.9	8.9	9.4	11.6	10.4	11.3	14.7	14.2	14.5
3	10.1	9.3	9.7	10.0	9.0	9.5	10.9	9.7	10.4	14.5	14.0	14.2
4	10.5	9.5	10.0	10.1	9.6	9.9	---	---	---	15.1	14.1	14.7
5	10.5	9.3	10.1	10.2	9.7	10.0	---	---	---	---	---	---
6	10.5	9.6	10.0	9.9	9.0	9.5	---	---	---	---	---	---
7	10.3	9.4	9.8	9.3	8.6	9.0	---	---	---	---	---	---
8	10.0	9.0	9.5	8.9	8.3	8.7	---	---	---	13.9	12.7	13.4
9	9.6	8.5	8.9	8.9	8.2	8.6	11.0	10.5	10.8	13.1	12.6	12.8
10	10.0	8.2	9.1	8.7	8.1	8.4	12.3	10.5	11.7	13.0	12.6	12.8
11	9.9	8.9	9.4	8.7	8.1	8.4	12.9	12.3	12.7	13.1	12.7	12.9
12	9.8	8.9	9.3	9.1	8.2	8.6	13.1	12.9	13.0	13.2	12.6	12.9
13	9.8	8.9	9.3	9.3	8.5	8.8	13.2	13.1	13.1	12.9	12.4	12.7
14	9.9	8.9	9.4	9.1	8.2	8.7	13.3	13.2	13.3	13.4	12.8	13.1
15	9.9	9.0	9.5	9.1	8.2	8.6	13.8	13.3	13.6	13.5	12.8	13.2
16	9.6	8.5	9.0	9.5	8.4	8.9	14.2	13.8	14.1	13.3	12.1	12.8
17	10.1	8.5	9.4	10.0	8.7	9.3	14.3	14.1	14.2	12.5	11.7	12.1
18	10.7	9.7	10.1	9.7	8.7	9.2	14.3	14.1	14.2	12.4	11.7	11.9
19	11.0	9.9	10.6	9.3	8.1	8.8	14.3	14.0	14.2	12.4	11.7	12.1
20	11.2	10.3	10.8	9.3	8.1	8.6	14.8	14.2	14.5	12.7	11.8	12.3
21	11.1	10.2	10.6	9.6	8.3	9.0	15.3	14.7	15.1	13.6	12.3	13.1
22	10.8	10.0	10.5	9.5	8.7	9.2	15.7	15.1	15.5	13.9	12.7	13.4
23	10.9	10.0	10.5	9.6	7.5	8.9	16.0	15.5	15.8	13.6	12.5	13.1
24	11.3	10.3	10.9	8.0	7.2	7.6	15.9	15.6	15.7	14.0	12.5	13.3
25	11.8	10.7	11.3	9.7	8.0	9.0	15.9	15.5	15.7	14.6	13.2	14.1
26	11.8	10.6	11.3	10.8	9.7	10.4	15.9	15.4	15.5	14.7	13.8	14.3
27	11.3	10.3	10.9	11.0	10.4	10.7	15.7	15.2	15.4	15.0	13.9	14.4
28	10.8	9.8	10.5	10.9	10.2	10.5	15.7	15.5	15.6	15.5	14.2	15.0
29	10.4	9.3	10.0	10.9	10.0	10.4	15.7	15.2	15.4	15.8	14.8	15.3
30	9.6	8.1	9.0	11.1	10.1	10.6	15.4	14.9	15.1	15.9	14.8	15.4
31	8.7	7.8	8.5	---	---	---	15.0	14.8	14.9	15.8	14.6	15.3
MONTH	11.8	7.8	9.9	11.1	7.2	9.2	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	15.4	14.1	14.9	10.0	9.8	9.9	10.5	10.0	10.1	7.8	7.2	7.5
2	15.6	14.1	15.0	10.1	9.7	9.9	10.5	10.1	10.3	8.1	7.6	7.9
3	15.5	14.4	15.1	11.1	10.0	10.6	10.4	9.9	10.1	9.2	7.8	9.1
4	15.2	14.1	14.7	11.4	11.1	11.2	10.0	9.9	9.9	9.6	9.2	9.4
5	15.1	14.2	14.8	11.2	10.9	11.0	9.9	9.3	9.7	9.8	9.5	9.6
6	15.3	14.3	14.8	10.9	10.0	10.5	9.3	8.8	9.1	9.5	6.3	7.6
7	15.0	13.8	14.4	10.0	9.6	9.8	8.9	8.6	8.8	6.3	4.8	5.7
8	14.4	13.4	13.9	9.6	9.4	9.5	9.7	8.7	9.2	8.1	4.8	6.1
9	14.1	12.8	13.6	9.8	9.4	9.6	10.2	9.0	9.6	8.6	6.5	7.5
10	13.3	11.1	12.4	10.0	9.6	9.8	10.0	9.1	9.6	6.9	5.6	6.2
11	11.8	10.8	11.4	10.8	9.9	10.4	10.1	8.2	9.2	8.9	5.8	6.9
12	11.8	10.9	11.4	11.0	10.5	10.7	9.6	8.2	8.9	9.4	8.7	9.0
13	12.2	11.1	11.7	10.6	10.4	10.5	10.3	9.6	10.1	9.9	9.4	9.7
14	12.4	11.1	11.9	10.5	10.2	10.4	10.3	9.8	10.0	10.1	9.8	10.0
15	12.7	11.5	12.2	10.2	9.8	10.0	10.1	9.4	9.8	10.0	9.9	10.0
16	12.7	11.2	12.1	9.8	9.6	9.7	10.3	9.6	9.9	10.0	9.8	9.9
17	12.2	10.5	11.5	10.5	9.6	10.0	10.5	9.8	10.1	9.9	9.4	9.7
18	11.0	10.5	10.7	11.1	10.5	10.7	10.4	9.4	9.9	9.5	9.1	9.3
19	12.1	10.6	11.3	11.2	11.0	11.1	9.4	8.4	8.7	9.4	8.9	9.2
20	13.3	11.4	12.2	11.4	11.0	11.2	8.6	7.4	8.0	9.1	8.6	8.9
21	12.2	11.3	11.7	11.1	10.8	11.0	8.7	7.3	8.0	8.7	7.6	8.1
22	11.7	10.6	11.1	10.9	10.3	10.7	8.7	7.5	8.1	7.9	6.4	7.1
23	10.9	9.4	10.1	10.7	9.8	10.3	8.5	6.8	7.5	---	---	---
24	9.8	8.7	9.3	10.3	10.0	10.2	7.4	6.7	7.0	---	---	---
25	9.8	9.1	9.4	10.9	10.3	10.6	8.5	7.1	7.6	---	---	---
26	9.9	9.2	9.6	11.0	10.5	10.9	9.1	7.8	8.7	---	---	---
27	10.2	9.9	10.1	10.5	9.4	9.9	9.4	8.2	9.2	---	---	---
28	10.4	10.2	10.3	11.1	10.1	10.5	8.3	7.6	8.1	---	---	---
29	10.3	9.3	10.0	11.4	11.1	11.3	7.9	7.5	7.6	---	---	---
30	---	---	---	11.4	10.8	11.0	7.7	6.9	7.5	---	---	---
31	---	---	---	11.4	10.5	11.2	---	---	---	---	---	---
MONTH	15.6	8.7	12.1	11.4	9.4	10.5	10.5	6.7	9.0	---	---	---

ARKANSAS RIVER BASIN

07177500 BIRD CREEK NEAR SPERRY, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	8.6	8.5	8.5	7.2	6.9	7.0	6.9	5.9	6.4
2	9.1	8.3	8.9	8.7	8.5	8.6	7.6	6.8	7.1	7.0	5.9	6.4
3	8.9	8.3	8.7	8.7	8.6	8.6	8.0	6.8	7.4	7.0	5.9	6.4
4	8.9	8.9	8.9	8.8	8.6	8.7	8.7	6.7	7.6	6.8	5.9	6.3
5	9.1	8.9	9.0	8.8	7.9	8.6	8.1	6.5	7.3	7.0	5.8	6.4
6	9.2	8.5	9.1	7.9	7.3	7.5	7.8	6.6	7.0	7.3	6.1	6.7
7	9.0	8.0	8.4	7.8	7.2	7.4	7.4	6.2	6.6	7.5	6.1	6.8
8	9.2	7.6	8.3	7.7	7.1	7.3	7.3	6.0	6.6	7.4	6.2	6.8
9	8.5	7.2	7.8	7.4	6.2	6.8	6.9	6.0	6.4	7.3	6.2	6.8
10	7.8	7.0	7.4	7.4	6.0	6.7	6.5	5.5	6.0	7.4	6.3	6.9
11	7.9	6.9	7.4	8.2	6.3	7.1	7.0	4.7	6.1	7.4	6.1	6.8
12	8.4	6.8	7.5	8.0	5.9	6.8	6.9	5.7	6.3	7.4	6.2	6.8
13	8.0	6.7	7.3	7.1	5.5	6.1	7.1	5.4	6.3	7.5	6.2	7.0
14	7.2	6.5	6.8	7.5	5.5	6.5	7.1	5.7	6.4	7.6	6.5	7.0
15	6.9	6.5	6.7	7.4	5.8	6.6	7.0	5.8	6.4	7.9	6.6	7.3
16	6.9	6.2	6.5	7.2	5.7	6.3	6.8	5.7	6.2	7.9	6.8	7.3
17	7.9	6.9	7.5	6.4	5.5	5.9	6.9	5.2	6.2	8.0	7.0	7.5
18	8.0	6.8	7.4	6.8	5.6	6.1	6.8	5.7	6.2	8.0	7.0	7.5
19	8.2	7.7	8.1	7.7	5.9	6.6	7.0	5.8	6.3	7.9	7.0	7.5
20	8.3	7.8	8.2	7.2	5.7	6.1	6.7	5.6	6.1	8.0	6.8	7.5
21	8.1	6.3	7.6	6.4	5.5	5.8	6.3	5.3	5.8	8.2	7.2	7.7
22	7.3	6.3	6.8	6.4	5.9	6.1	6.0	5.1	5.5	8.2	7.3	7.8
23	7.5	7.3	7.4	7.2	5.8	6.3	---	---	---	8.0	6.7	7.5
24	7.4	5.4	6.6	7.9	6.2	6.9	---	---	---	7.8	7.0	7.3
25	6.6	6.0	6.3	7.5	6.4	6.9	---	---	---	8.9	7.5	8.1
26	6.7	5.7	6.4	8.3	6.5	7.3	---	---	---	9.0	8.1	8.5
27	6.9	6.3	6.6	7.9	6.4	7.3	---	---	---	8.8	8.0	8.4
28	8.2	6.7	8.1	7.9	6.9	7.4	---	---	---	8.8	7.8	8.4
29	8.4	8.2	8.4	7.6	4.6	6.3	---	---	---	8.7	7.7	8.3
30	8.6	8.4	8.5	7.2	6.2	6.9	---	---	---	8.8	7.8	8.3
31	---	---	---	7.2	6.9	7.1	7.2	6.2	6.7	---	---	---
MONTH	---	---	---	8.8	4.6	7.0	---	---	---	9.0	5.8	7.3



Wading measurement

ARKANSAS RIVER BASIN

07177650 FLAT ROCK CREEK AT CINCINNATI AVENUE AT TULSA, OK.

LOCATION.--Lat 36°12'55", long 95°59'42", in SE 1/4 NE 1/4 sec.14, T.20 N., R.12 E., Tulsa County, Hydrologic Unit 11070107, near right upstream abutment of Cincinnati Avenue bridge, 0.5 mi north of Cincinnati Avenue-36th Street North intersection, 2.0 mi south of Turley, and at mile 5.6.

DRAINAGE AREA.--8.2 mi².

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 615.56 ft above sea level.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 6	unknown	8,290	16.50 (HWM)	No other peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.88	.95	e.23	e.81	.87	e1.1	2.5	e44	.26	.29	.02	.00
2	.72	.72	.56	e.80	.98	5.8	2.6	e2.1	3.3	.21	.02	.00
3	.55	.64	1.4	e1.1	1.0	105	2.5	e2.5	1.3	.15	.00	.00
4	.49	.62	239	e1.0	1.0	13	2.2	e1.4	.87	.10	.00	.00
5	.44	.62	21	.96	1.0	5.6	1.9	e1.0	.51	.03	.00	.00
6	.44	.56	e5.7	.93	1.0	3.5	e2.1	e1480	.35	.00	.00	.00
7	.42	e.51	e3.5	.87	1.0	2.9	e1.8	e80	.24	.00	.00	.00
8	.39	e.45	e2.4	.87	1.0	3.5	e1.5	e6.2	.17	.00	.00	.00
9	.39	e.41	.87	.91	1.0	3.4	e1.7	160	.11	.00	.00	.00
10	.39	e.39	33	.96	1.1	2.3	e1.4	e26	.13	.00	.00	.00
11	.39	e.37	e7.0	.96	1.0	5.5	e7.0	3.5	.22	.00	.00	.00
12	.39	e.65	e3.7	.96	.96	4.7	e1.5	2.1	.14	.00	.00	.00
13	.39	e.76	e2.5	.87	1.0	3.3	e1.4	1.4	.08	.00	.00	.00
14	.40	e.58	e2.0	.81	.88	15	e1.1	1.1	3.4	.00	.00	.00
15	.39	e.50	e1.7	.87	.70	7.9	e.98	1.3	.92	.00	.00	.00
16	.39	e.45	e1.5	.87	1.0	25	e5.6	1.3	.48	.00	.00	.00
17	.39	e.41	e1.4	.87	.91	35	e1.0	1.1	.84	.00	.00	.00
18	.43	e.38	e1.3	.87	.81	34	e.98	.87	1.1	.00	.00	.00
19	.50	e.37	e1.2	.87	.78	22	e1.2	.70	.81	.00	.00	.00
20	.46	e.46	e1.1	.81	.70	9.0	e4.8	.60	.72	.00	.00	.00
21	.44	e.37	e1.0	.78	.70	5.7	e.77	.49	2.9	13	.00	.00
22	.47	13	e1.1	.78	.97	11	e.74	.39	1.6	1.5	.00	.00
23	.50	5.0	e1.0	.78	9.9	19	e41	.35	.77	.56	.00	.00
24	.50	e.50	e.97	.78	3.6	17	e2.0	.35	44	.50	.00	.09
25	.50	e.40	e.91	.78	31	8.0	e1.0	1.7	3.9	.16	.00	.00
26	.52	e.33	e.87	.80	e6.0	25	e.76	4.1	91	.12	.00	.00
27	.56	e.30	e.85	.95	e2.4	19	e.64	7.1	4.6	.09	.00	.00
28	.59	e.27	e.84	1.0	e1.6	7.3	e.58	2.1	1.6	.07	.00	.00
29	.63	e.26	e.96	.87	e1.4	4.3	e.54	.88	.95	3.2	.14	.00
30	2.1	e.24	e.92	.87	---	3.5	e92	.50	.50	.59	.00	.00
31	1.2	---	e.82	.88	---	2.9	---	.36	---	.16	.00	---
TOTAL	17.25	31.47	427.43	27.24	76.26	430.2	185.79	1835.49	167.77	20.73	0.18	0.09
MEAN	.56	1.05	13.8	.88	2.63	13.9	6.19	59.2	5.59	.67	.006	.003
MAX	2.1	.13	239	1.1	.31	105	.92	1480	.91	.13	.14	.09
MIN	.39	.24	.23	.78	.70	1.1	.54	.35	.08	.00	.00	.00
AC-FT	34	62	848	54	151	853	369	3640	333	41	.4	.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	2.77	7.20	7.08	5.56	5.81	16.6	14.4	18.3	9.01	1.66	2.60	1.61	
MAX	19.2	31.1	23.0	33.0	15.5	47.8	39.6	59.2	55.7	8.28	17.7	6.54	
(WY)	1999	1997	1988	1997	1988	1998	1999	2000	1995	1994	1997	1993	
MIN	.12	.010	.099	.14	.009	.068	.16	.21	.000	.044	.006	.003	
(WY)	1993	1996	1996	1996	1996	1996	1996	1988	1988	1991	2000	2000	

e Estimated

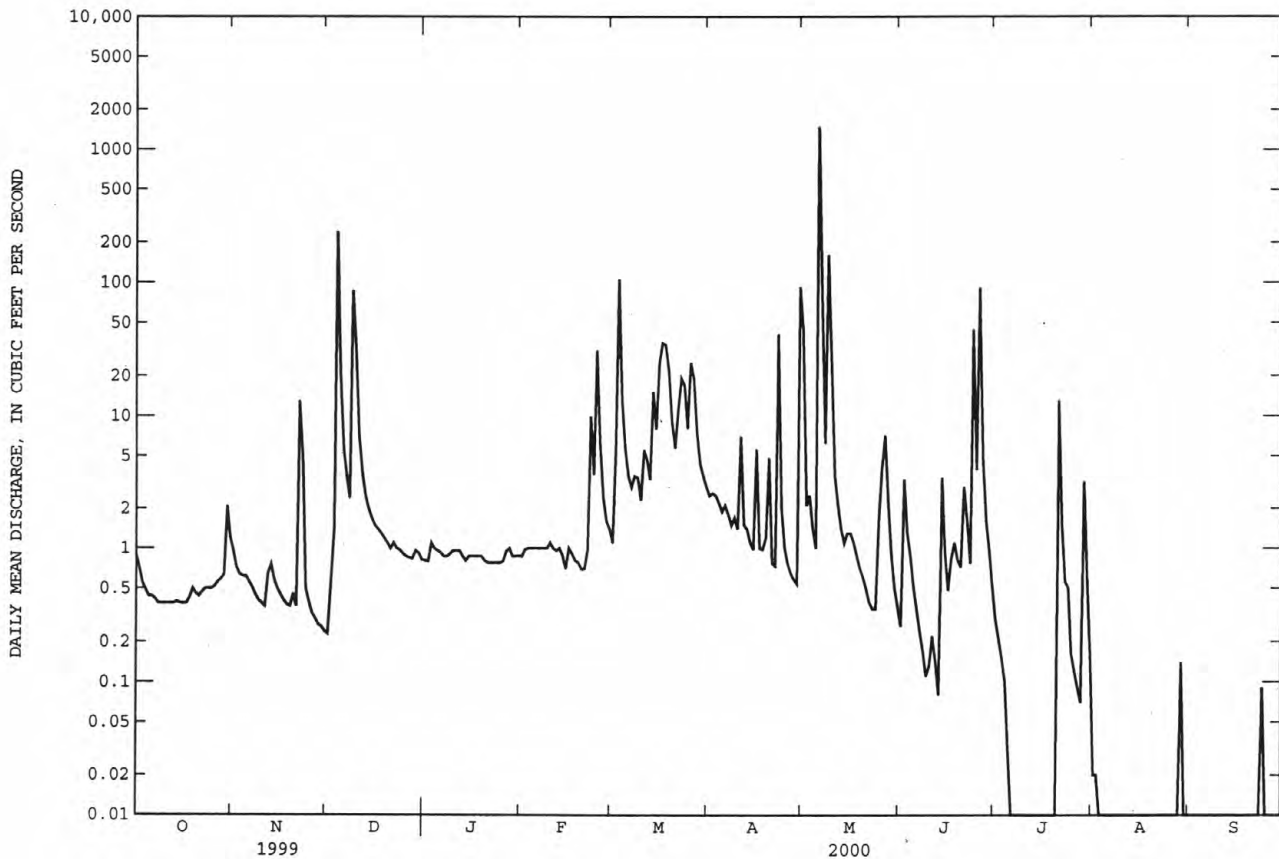
ARKANSAS RIVER BASIN

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07177650 FLAT ROCK CREEK AT CINCINNATI AVENUE AT TULSA, OK.--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	5141.33	3219.90	
ANNUAL MEAN	14.1	8.80	7.64
HIGHEST ANNUAL MEAN			15.3
LOWEST ANNUAL MEAN			.56
HIGHEST DAILY MEAN	905 May 4	1480 May 6	1480 May 6 2000
LOWEST DAILY MEAN	.00 Aug 14	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 14	.00 Jul 6	.00 May 13 1988
INSTANTANEOUS PEAK FLOW		8290 May 6	8290 May 6 2000
INSTANTANEOUS PEAK STAGE		^a 16.50 May 6	^a 16.50 May 6 2000
ANNUAL RUNOFF (AC-FT)	10200	6390	5530
10 PERCENT EXCEEDS	18	6.4	8.7
50 PERCENT EXCEEDS	1.3	.79	.65
90 PERCENT EXCEEDS	.12	.00	.00

^aFrom high-water mark.



ARKANSAS RIVER BASIN

07177800 COAL CREEK AT TULSA, OK

LOCATION.--Lat 36°11'40", long 95°54'50", in SE 1/4 SW 1/4 sec.22, T.20 N., R.13 E., Tulsa County, Hydrologic Unit 11070107, near right downstream abutment of bridge on State Highway 11, .2 mile Northwest of intersection of SH 11 and Apache Street in Tulsa, and at mile 4.1.

DRAINAGE AREA.--7.53 mi².

PERIOD OF RECORD.--January 29, 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 596.84 ft above sea level.

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

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 4	0010	1,140	9.56	Jun 14	0750	1,000	9.28
Apr 30	2035	1,170	9.61	Jul 21	0620	3,380	12.51
May 6	0930	2,580	11.66	Jul 29	0540	1,020	9.32

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e2.6	e4.1	e3.1	1.7	2.9	1.9	4.2	46	e1.7	e2.7	5.8	.50
2	e2.3	e2.6	5.9	1.9	2.2	38	3.7	e2.4	13	e2.2	3.3	.41
3	e2.2	e2.1	42	8.9	2.5	32	2.6	e3.6	e4.5	e1.8	5.0	.49
4	e2.0	e1.9	193	1.7	2.2	5.3	2.2	e1.6	e2.8	e1.6	1.9	.58
5	e1.9	e1.8	11	1.6	1.8	3.6	2.3	e1.3	e2.1	e1.4	1.3	2.7
6	e1.8	e1.7	5.2	1.7	1.9	3.0	2.5	440	e1.9	1.2	1.3	.70
7	e1.8	e1.5	3.9	1.7	1.8	2.6	2.3	32	e1.7	.97	1.8	.43
8	e1.8	e1.4	3.2	2.5	1.9	5.8	1.7	13	1.6	.89	3.1	.38
9	e1.7	e1.4	107	1.9	2.1	2.1	2.0	97	1.6	.79	1.8	.35
10	e1.7	e1.3	17	1.5	1.9	2.1	2.1	16	6.5	1.5	2.8	.61
11	e1.7	e1.3	6.7	1.5	1.7	12	12	10	20	.92	1.5	.54
12	e1.7	e3.5	4.9	1.6	1.6	2.5	1.8	7.5	2.3	.73	1.4	.36
13	e1.7	e4.4	4.0	1.5	1.7	2.1	1.6	e4.2	1.6	1.3	.89	1.1
14	e1.6	e2.1	3.4	1.4	1.4	11	1.5	e2.5	76	.64	.72	.59
15	1.6	e1.8	2.6	1.7	1.5	2.9	1.2	e12	4.2	.53	.69	.33
16	e1.6	e1.6	2.5	1.5	1.5	16	9.7	e2.6	4.1	.91	1.0	.30
17	e1.6	e1.4	2.5	2.0	3.7	32	1.2	e2.3	39	1.4	1.7	.32
18	e1.6	e1.3	2.3	1.5	2.2	19	1.2	e2.1	6.2	.78	2.9	.32
19	e1.9	e1.6	2.3	1.4	1.5	7.5	1.3	e2.0	6.8	2.6	2.3	.29
20	e1.7	e1.4	1.9	1.4	1.2	4.4	7.9	e2.9	4.0	6.0	.62	.36
21	e1.6	e1.3	2.0	1.4	1.3	4.8	.92	e2.1	50	243	.99	.72
22	e1.5	40	1.9	1.5	9.0	10	.89	e1.9	5.8	31	2.6	.60
23	e1.5	20	2.6	1.6	32	22	38	e1.8	3.9	4.2	1.5	.58
24	e1.5	7.4	2.7	1.4	3.1	7.4	e2.5	4.6	67	3.7	.66	36
25	e1.4	e4.8	1.8	1.5	19	4.4	e1.2	49	6.1	5.7	.59	1.0
26	e1.4	e4.0	1.7	1.6	3.3	19	e.92	62	79	4.2	1.1	.87
27	e1.4	e3.6	1.7	2.4	3.0	5.6	e.78	31	5.8	33	.51	.79
28	e1.4	e3.3	1.9	7.6	2.4	3.9	e.70	e4.1	e63	3.9	.42	.62
29	e1.4	e3.2	1.9	4.6	2.2	4.8	e.64	e3.1	e5.6	75	.41	.75
30	e63	e3.1	1.7	3.3	---	5.6	73	e2.3	e4.0	5.0	.43	.64
31	e7.0	---	1.7	3.7	---	3.1	---	e2.0	---	4.9	.44	---
TOTAL	119.6	130.9	446.0	71.2	114.5	296.4	184.55	864.9	491.8	444.46	51.47	54.23
MEAN	3.86	4.36	14.4	2.30	3.95	9.56	6.15	27.9	16.4	14.3	1.66	1.81
MAX	63	40	.193	8.9	32	38	73	440	79	243	5.8	36
MIN	1.4	1.3	1.7	1.4	1.2	1.9	.64	1.3	1.6	.53	.41	.29
AC-FT	237	260	885	141	227	588	366	1720	975	882	102	108

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	MEAN	7.29	8.79	8.18	5.64	5.78	12.6	12.6	15.5	11.2	7.87	5.12	6.85
MAX	33.6	24.9	20.3	13.3	12.2	33.2	34.8	46.3	42.1	24.8	18.7	18.0	
(WY)	1999	1995	1993	1998	1990	1990	1999	1995	1995	1994	1997	1999	
MIN	1.11	.55	.37	.32	.96	1.71	1.62	2.86	1.79	.29	.75	1.81	
(WY)	1993	1996	1997	1997	1996	1992	1989	1988	1988	1991	1991	2000	

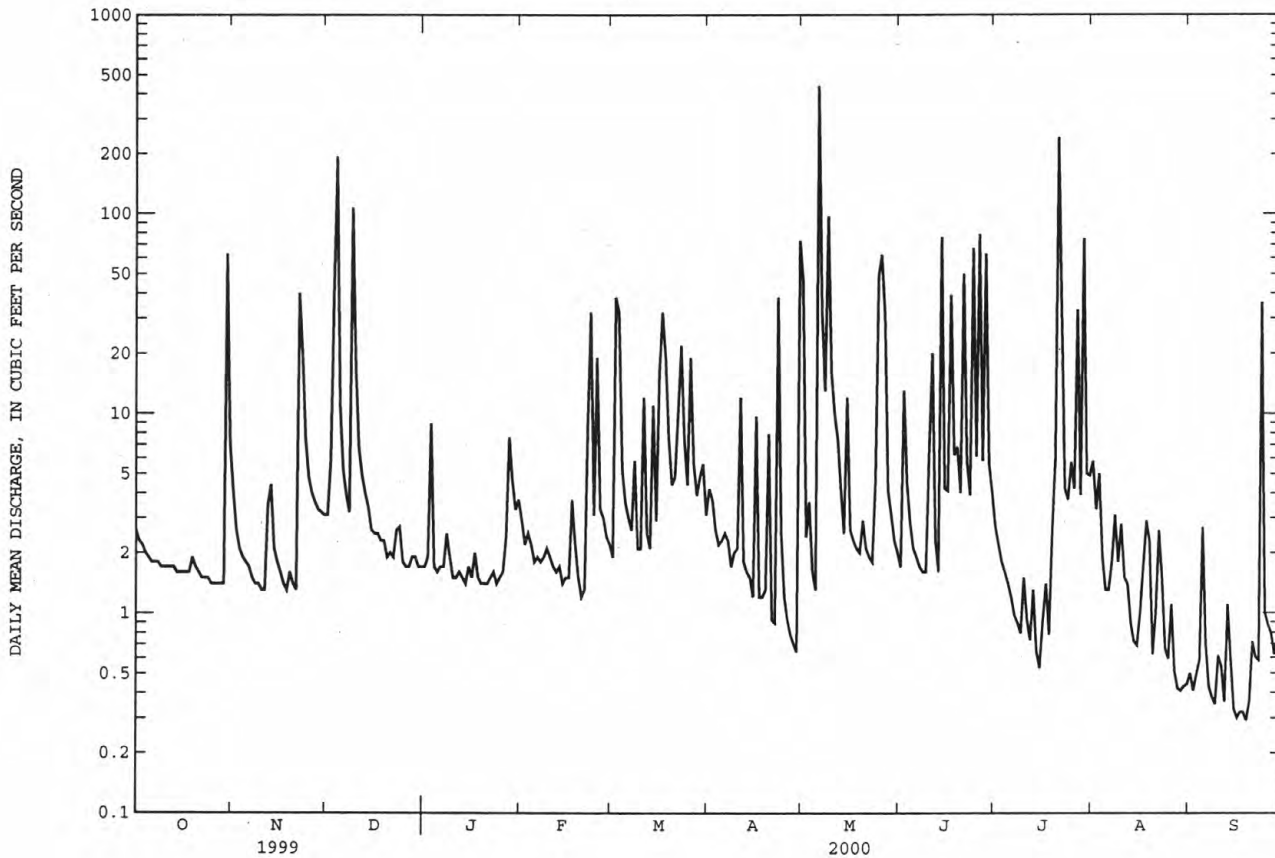
e Estimated

ARKANSAS RIVER BASIN

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07177800 COAL CREEK AT TULSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1988 - 2000
ANNUAL TOTAL	5065.85	3270.01	
ANNUAL MEAN	13.9	8.93	9.03
HIGHEST ANNUAL MEAN			15.8 1999
LOWEST ANNUAL MEAN			3.60 1996
HIGHEST DAILY MEAN	404 Apr 26	440 May 6	782 Oct 5 1998
LOWEST DAILY MEAN	.68 Sep 3	.29 Sep 19	.00 at times
ANNUAL SEVEN-DAY MINIMUM	1.4 Oct 23	.36 Sep 14	.00 Jul 30 1991
INSTANTANEOUS PEAK FLOW		3380 Jul 21	5190 Jun 23 1995
INSTANTANEOUS PEAK STAGE		12.51 Jul 21	14.18 Jun 23 1995
ANNUAL RUNOFF (AC-FT)	10050	6490	6550
10 PERCENT EXCEEDS	26	16	17
50 PERCENT EXCEEDS	3.5	2.0	2.1
90 PERCENT EXCEEDS	1.6	.72	.30



ARKANSAS RIVER BASIN

07178000 BIRD CREEK NEAR OWASSO, OK

LOCATION.--Lat 36°14'54", long 95°52'01", in NW 1/4 NW 1/4 sec.6, T.20 N., R.14 E., Tulsa County, Hydrologic Unit 11070107, at bridge on Mingo Road 1.4 mi upstream from Mingo Creek, 1.5 mi downstream from Coal Creek, 2 mi southwest of Owasso, and at mile 14.1.

DRAINAGE AREA.--1022 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to March 1939, April 1987 to current year.

REVISED RECORDS.--WSP 1311: Drainage area. WRD OK-94-1; 1993 (M).

GAGE.--Water-stage recorder. Datum of gage is 560.17 ft above sea level. Prior to Oct. 1, 1939, gage at same site and datum 1.14 ft lower.

REMARKS.--No estimated daily discharge. Records good. Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and since March 1977 by Birch Lake (capacity 19,200 acre-ft). Flow regulated since August 20, 1989 by Skiatook Lake (capacity 322,300 acre-ft) when conservation pool was first reached. U.S. Geological Survey satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Peak stages, 34.0 ft, Oct. 25, 1908; 28.5 ft, Apr. 15, 1927; 26.3 ft, Apr. 15, 1929; 26.2 ft, June 1935, from information provided by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	112	73	77	73	231	1050	2580	3250	3680	204	162
2	227	106	73	76	72	230	986	2140	3320	3680	191	160
3	206	104	159	85	74	2970	1280	1710	2280	3590	196	162
4	191	90	4330	81	76	2840	639	1820	1580	2850	157	163
5	183	81	4340	84	77	998	432	1490	1520	2610	226	166
6	180	77	1390	95	81	535	328	11000	1450	794	220	167
7	175	75	565	95	80	482	271	15700	423	462	195	165
8	173	74	334	97	78	805	221	8930	221	359	189	165
9	172	73	874	97	75	943	191	5850	192	147	177	165
10	170	75	7480	96	73	541	170	10700	185	105	172	163
11	168	75	2410	97	70	321	255	4840	204	167	157	163
12	166	73	934	98	70	952	780	3470	195	197	172	163
13	164	73	533	100	69	1300	1370	4680	230	205	168	164
14	161	73	372	88	67	945	1310	4610	465	191	167	162
15	159	72	301	79	66	579	622	4330	260	179	180	164
16	132	74	327	76	65	971	553	4190	169	170	181	162
17	105	76	291	75	68	2850	523	4160	420	166	170	162
18	104	79	251	74	76	2950	551	4030	2930	167	167	163
19	106	78	179	72	76	2820	266	3890	1490	166	169	156
20	105	76	161	69	181	1920	183	3240	1830	167	165	154
21	106	76	150	67	184	1220	158	3110	2610	1240	164	150
22	85	95	143	67	140	973	151	3060	7650	514	164	151
23	69	385	138	66	250	3350	170	2930	2140	305	162	151
24	69	162	132	66	388	4020	1020	2660	3060	222	161	193
25	68	104	109	65	849	3200	1270	3000	6710	202	161	163
26	69	88	96	65	1830	2760	853	3880	4790	192	166	156
27	71	81	92	67	987	5090	736	5930	4840	206	166	150
28	71	78	89	72	492	3360	264	2860	2850	192	165	149
29	70	75	88	76	328	3220	166	3380	2730	2580	163	147
30	215	73	83	72	---	4170	173	3360	2990	1670	164	145
31	128	---	79	72	---	3350	---	3290	---	416	164	---
TOTAL	4338	2833	26576	2466	7015	60896	16942	140820	62984	27791	5423	4806
MEAN	140	94.4	857	79.5	242	1964	565	4543	2099	896	175	160
MAX	270	385	7480	100	1830	5090	1370	15700	7650	3680	226	193
MIN	68	72	73	65	65	230	151	1490	169	105	157	145
AC-FT	8600	5620	52710	4890	13910	120800	33600	279300	124900	55120	10760	9530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	371	651	617	589	680	1645	1770	2295	1774	880	324
MAX	1873	2362	1561	2464	1618	5861	3589	5565	5579	3195	747
(WY)	1999	1995	1993	1998	1999	1990	1994	1995	1995	1997	1996
MIN	131	74.0	85.7	79.5	83.9	91.9	240	160	223	181	160
(WY)	1993	1996	1990	2000	1996	1991	1996	1996	1998	1991	2000

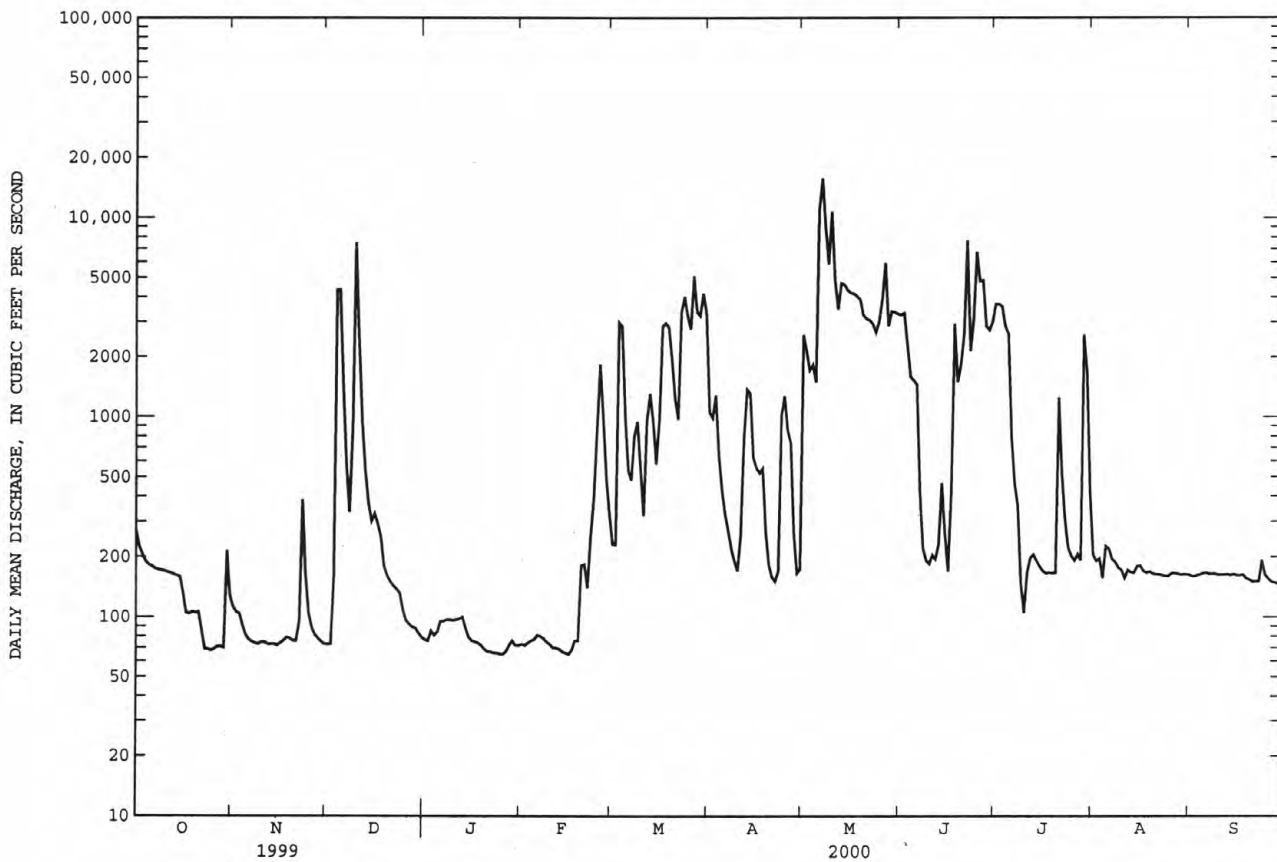
ARKANSAS RIVER BASIN

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07178000 BIRD CREEK NEAR OWASSO, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	539237		362890		995	
ANNUAL MEAN	1477		992		1906	
HIGHEST ANNUAL MEAN					202	
LOWEST ANNUAL MEAN					1995	
HIGHEST DAILY MEAN	24300	Apr 27	15700	May 7	27700	May 11 1993
LOWEST DAILY MEAN	68	Oct 25	65	Jan 25	^a 45	Nov 6 1993
ANNUAL SEVEN-DAY MINIMUM	70	Oct 23	66	Jan 21	58	Jan 1 1994
INSTANTANEOUS PEAK FLOW			16300	May 6	29200	May 11 1993
INSTANTANEOUS PEAK STAGE			21.96	May 6	26.94	May 11 1993
ANNUAL RUNOFF (AC-FT)	1070000		719800		721000	
10 PERCENT EXCEEDS	3680		3260		2930	
50 PERCENT EXCEEDS	273		174		203	
90 PERCENT EXCEEDS	90		73		86	

^aMinimum daily discharge for period of record, 2.0 ft³/s, July 31, Aug. 1, 13-16, 1936, and July 5, 1937.



ARKANSAS RIVER BASIN

07178000 BIRD CREEK NEAR OWASSO, OK--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--May 1987 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1987 to current year.

pH: May 1987 to current year.

WATER TEMPERATURE: May 1987 to current year.

DISSOLVED OXYGEN: May 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1987.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,950 microsiemens, Apr. 1, 1996; minimum, 48 microsiemens, July 18, 1989.

pH: Maximum, 8.9 units, May 17, 1988; minimum, 5.5 units June 14, 15, 1987.

WATER TEMPERATURE: Maximum, 35.0°C, Aug. 2, 3, 1987; minimum, 0.0°C, several days during winter periods.

DISSOLVED OXYGEN: Maximum, 16.3 mg/L, Jan. 17, 1988; minimum, 1.2 mg/L, Sept. 8, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 729 microsiemens, Feb. 24; minimum, 116 microsiemens, May 26.

pH: Maximum, 8.1 units, Feb. 22, Apr. 21; minimum, 7.0 units, May 10, 11, 26, 27.

WATER TEMPERATURE: Maximum, 33.5°C, July 15; minimum, 2.0°C, Feb. 2.

DISSOLVED OXYGEN: Maximum, 15.8 mg/L, Jan. 31; minimum recorded, 5.1 mg/L, July 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	272	264	269	354	309	326	393	388	389	417	402	410
2	264	262	263	384	354	368	391	388	389	431	417	423
3	268	264	266	418	384	404	391	355	377	444	431	439
4	278	268	272	401	380	387	366	153	265	444	441	442
5	278	268	273	383	378	380	349	124	237	481	443	454
6	269	267	268	386	383	385	340	272	317	481	445	457
7	273	268	269	384	378	381	319	298	304	468	445	453
8	272	268	269	379	373	377	304	298	302	468	450	459
9	270	267	268	373	367	370	311	279	293	543	464	519
10	268	267	267	367	366	367	---	---	---	535	463	488
11	268	266	267	367	365	367	188	176	180	465	425	446
12	268	267	267	366	358	362	223	188	202	425	420	423
13	268	267	267	358	354	357	230	216	222	425	418	421
14	268	266	267	357	354	356	250	227	238	424	419	421
15	271	267	268	358	356	357	268	250	259	427	423	425
16	271	270	271	360	357	359	277	268	273	443	427	436
17	272	268	270	364	358	361	288	277	281	463	443	452
18	271	266	269	364	363	363	296	287	291	470	463	467
19	289	269	278	363	356	361	295	279	284	477	469	473
20	294	289	292	356	348	352	303	280	291	482	476	478
21	292	291	292	349	345	347	307	301	304	497	482	490
22	296	292	294	353	342	349	317	307	312	498	490	495
23	300	295	297	386	245	314	336	317	328	495	488	491
24	304	297	300	440	283	385	327	323	325	489	481	485
25	311	300	305	574	401	495	335	326	330	490	482	487
26	324	310	316	575	533	552	350	335	341	494	488	491
27	359	324	341	533	473	502	363	350	356	506	494	501
28	374	359	369	473	408	437	378	363	371	513	506	510
29	379	374	376	408	398	401	386	378	382	509	504	507
30	379	337	360	398	391	394	394	386	389	506	501	503
31	384	310	356	---	---	---	403	392	397	548	504	518
MONTH	384	262	291	575	245	384	---	---	---	548	402	467

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SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	633	548	579	391	385	389	281	243	266	453	241	308
2	659	621	643	387	340	376	286	259	277	269	240	248
3	632	614	625	438	208	293	321	266	287	245	201	214
4	614	563	584	220	197	209	361	321	342	241	206	228
5	563	551	555	236	220	229	362	315	343	227	224	226
6	555	541	549	265	227	246	324	313	317	---	---	---
7	541	531	536	282	265	276	341	324	332	---	---	---
8	548	535	544	337	280	303	355	341	348	---	---	---
9	547	535	541	337	267	281	372	355	361	284	160	222
10	544	536	540	286	247	256	383	372	376	179	144	158
11	548	539	542	325	257	278	399	383	389	253	179	221
12	545	539	541	333	275	309	429	337	390	264	217	251
13	543	539	541	330	284	318	345	249	293	239	203	227
14	547	541	543	321	270	302	291	277	285	233	204	218
15	544	537	540	362	310	336	290	281	285	242	190	221
16	546	535	540	417	361	389	299	272	282	240	205	226
17	545	532	536	270	193	249	288	275	281	238	203	228
18	540	532	535	296	199	253	287	275	279	238	207	227
19	535	528	532	245	184	214	300	283	289	237	214	228
20	563	516	534	243	226	238	364	300	324	239	215	233
21	537	491	513	250	234	242	423	364	396	231	224	228
22	557	528	546	279	250	260	443	423	428	228	223	226
23	576	479	519	---	---	---	453	443	450	228	200	224
24	729	494	561	---	---	---	481	372	437	231	224	227
25	689	521	565	---	---	---	477	330	376	280	197	234
26	656	407	509	226	204	213	442	285	349	311	116	229
27	488	443	474	---	---	---	285	280	282	190	124	148
28	472	384	416	---	---	---	290	280	284	210	187	203
29	385	377	380	---	---	---	330	290	305	214	195	207
30	---	---	---	---	---	---	358	330	347	201	190	195
31	---	---	---	---	---	---	---	---	---	196	190	193
MONTH	729	377	537	---	---	---	481	243	333	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	193	187	190	222	188	214	240	216	226	295	291	294
2	191	175	187	217	203	215	269	237	252	294	292	293
3	201	184	191	216	188	214	271	264	269	296	293	294
4	218	201	210	217	212	215	333	271	308	299	294	297
5	223	218	221	216	211	213	315	294	300	299	295	297
6	225	219	222	233	216	228	375	296	322	306	294	300
7	260	225	242	226	218	222	306	277	286	310	297	303
8	292	260	276	224	214	220	279	277	278	302	294	296
9	326	292	310	230	215	221	278	274	276	307	296	301
10	326	317	321	249	230	238	275	274	274	296	291	293
11	334	322	327	305	249	269	284	275	280	291	285	287
12	385	328	353	458	305	347	301	284	291	287	284	285
13	367	349	359	464	296	361	302	291	298	285	282	284
14	364	291	339	305	296	301	291	287	288	303	282	284
15	408	298	351	315	304	311	288	286	287	284	279	282
16	458	396	418	310	304	305	339	286	309	282	279	281
17	411	387	396	312	305	308	336	303	321	279	276	277
18	---	---	---	312	310	311	303	294	296	296	273	275
19	---	---	---	321	311	314	300	294	297	277	273	275
20	---	---	---	328	303	316	309	297	303	287	271	273
21	---	---	---	306	121	235	300	290	293	306	270	274
22	215	147	172	353	246	303	290	286	288	274	270	271
23	213	192	202	312	286	299	295	289	292	271	269	270
24	263	170	213	354	312	331	296	293	294	284	266	273
25	195	138	170	333	328	331	295	292	293	308	266	279
26	208	138	177	333	328	330	298	293	295	274	267	271
27	193	125	149	333	310	324	298	295	297	271	269	270
28	230	193	219	349	315	326	298	295	297	271	269	270
29	217	214	216	348	162	246	298	296	297	273	271	272
30	217	215	216	204	165	190	297	293	295	273	272	272
31	---	---	---	216	201	207	296	294	295	---	---	---
MONTH	---	---	---	464	121	273	375	216	290	310	266	283
YEAR	729	116	329									

ARKANSAS RIVER BASIN

07178000 BIRD CREEK NEAR OWASSO, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	7.7	7.6	7.6	7.6	7.4	7.5	7.6	7.5	7.6	7.7	7.7	7.7
2	7.7	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.6	7.8	7.7	7.7
3	7.8	7.6	7.7	7.8	7.6	7.7	7.6	7.5	7.6	7.7	7.7	7.7
4	7.9	7.7	7.7	7.9	7.7	7.8	7.8	7.1	7.5	7.8	7.7	7.7
5	7.9	7.7	7.7	7.9	7.7	7.8	7.6	7.1	7.4	7.8	7.7	7.8
6	7.9	7.7	7.7	8.0	7.8	7.8	7.7	7.4	7.6	7.9	7.7	7.8
7	8.0	7.7	7.8	7.9	7.7	7.8	7.6	7.6	7.6	7.9	7.8	7.8
8	7.9	7.7	7.8	7.9	7.7	7.7	7.6	7.6	7.6	7.8	7.7	7.8
9	7.9	7.7	7.7	7.9	7.7	7.7	7.7	7.6	7.6	7.8	7.7	7.8
10	8.0	7.7	7.8	7.8	7.7	7.7	7.6	7.3	7.4	7.9	7.8	7.8
11	7.9	7.7	7.8	7.8	7.7	7.7	7.5	7.4	7.5	7.9	7.8	7.8
12	7.9	7.7	7.7	7.8	7.6	7.7	7.6	7.5	7.5	7.9	7.8	7.8
13	7.9	7.7	7.7	7.8	7.6	7.7	7.6	7.6	7.6	7.9	7.8	7.8
14	7.9	7.7	7.7	7.8	7.6	7.7	7.6	7.6	7.6	7.9	7.8	7.8
15	7.8	7.7	7.7	7.8	7.6	7.7	7.6	7.6	7.6	7.9	7.8	7.8
16	7.8	7.7	7.7	7.7	7.6	7.6	7.7	7.6	7.7	7.8	7.8	7.8
17	7.9	7.7	7.8	7.7	7.6	7.6	7.7	7.7	7.7	7.8	7.7	7.7
18	7.9	7.7	7.8	7.8	7.6	7.6	7.8	7.7	7.7	7.8	7.7	7.7
19	8.0	7.8	7.9	7.7	7.6	7.7	7.7	7.7	7.7	7.7	7.7	7.7
20	8.0	7.8	7.9	7.8	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.7
21	8.0	7.8	7.8	7.8	7.6	7.7	7.7	7.7	7.7	7.8	7.7	7.8
22	7.9	7.8	7.8	7.7	7.5	7.6	7.7	7.7	7.7	7.8	7.7	7.8
23	8.0	7.8	7.8	7.6	7.4	7.5	7.7	7.7	7.7	7.8	7.7	7.8
24	8.0	7.8	7.9	7.5	7.4	7.5	7.7	7.7	7.7	7.9	7.8	7.8
25	8.0	7.8	7.9	7.5	7.4	7.5	7.7	7.7	7.7	7.9	7.8	7.9
26	7.9	7.8	7.8	7.5	7.5	7.5	7.7	7.7	7.7	7.9	7.8	7.8
27	7.9	7.8	7.8	7.5	7.4	7.5	7.7	7.7	7.7	7.9	7.8	7.8
28	7.9	7.8	7.8	7.5	7.3	7.4	7.7	7.7	7.7	7.9	7.8	7.8
29	8.0	7.8	7.8	7.4	7.3	7.4	7.7	7.7	7.7	7.9	7.8	7.8
30	7.8	7.7	7.8	7.5	7.4	7.4	7.7	7.7	7.7	7.9	7.8	7.8
31	7.8	7.4	7.5	---	---	---	7.7	7.7	7.7	7.9	7.8	7.8
MAX	8.0	7.8	7.9	8.0	7.8	7.8	7.8	7.7	7.7	7.9	7.8	7.9
MIN	7.7	7.4	7.5	7.4	7.3	7.4	7.5	7.1	7.4	7.7	7.7	7.7

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.9	7.8	7.8	7.8	7.7	7.8	7.7	7.6	7.6	7.5	7.3	7.4
2	7.9	7.8	7.8	7.7	7.7	7.7	7.7	7.6	7.6	7.3	7.3	7.3
3	7.9	7.8	7.8	7.7	7.3	7.6	7.8	7.7	7.8	7.4	7.2	7.3
4	7.9	7.8	7.9	7.5	7.3	7.5	7.8	7.8	7.8	7.5	7.4	7.5
5	7.9	7.8	7.9	7.5	7.4	7.5	7.8	7.7	7.8	7.5	7.5	7.5
6	7.9	7.9	7.9	7.5	7.4	7.4	7.8	7.7	7.7	---	---	---
7	7.9	7.9	7.9	7.5	7.4	7.4	7.8	7.8	7.8	---	---	---
8	8.0	7.9	7.9	7.6	7.4	7.5	7.9	7.8	7.8	---	---	---
9	8.0	7.9	7.9	7.6	7.4	7.5	8.0	7.8	7.9	7.3	7.1	7.2
10	8.0	7.8	7.9	7.5	7.4	7.4	8.0	7.8	7.9	7.2	7.0	7.2
11	8.0	7.8	7.9	7.5	7.4	7.4	8.0	7.8	7.9	7.3	7.0	7.2
12	7.9	7.8	7.8	7.5	7.3	7.4	7.8	7.5	7.7	7.5	7.3	7.4
13	8.0	7.8	7.8	7.6	7.5	7.5	7.7	7.4	7.6	7.4	7.4	7.4
14	7.9	7.8	7.8	7.6	7.4	7.5	7.8	7.7	7.7	7.4	7.4	7.4
15	7.9	7.8	7.8	7.5	7.4	7.5	7.8	7.6	7.7	7.4	7.4	7.4
16	7.9	7.8	7.8	7.6	7.5	7.5	7.7	7.6	7.6	7.4	7.4	7.4
17	7.8	7.8	7.8	7.5	7.3	7.4	7.7	7.6	7.7	7.4	7.4	7.4
18	7.8	7.7	7.8	7.4	7.3	7.4	7.8	7.6	7.7	7.5	7.4	7.4
19	7.8	7.7	7.8	7.5	7.4	7.5	7.9	7.6	7.7	7.5	7.4	7.5
20	7.7	7.7	7.7	7.6	7.5	7.6	8.0	7.6	7.8	7.5	7.4	7.5
21	8.0	7.7	7.8	7.6	7.6	7.6	8.1	7.7	7.9	7.5	7.4	7.5
22	8.1	7.9	8.0	7.6	7.6	7.6	8.0	7.7	7.8	7.5	7.4	7.5
23	8.0	7.8	7.9	7.6	7.3	7.4	7.9	7.8	7.8	7.5	7.4	7.5
24	7.9	7.7	7.8	7.5	7.2	7.4	7.9	7.6	7.7	7.5	7.4	7.5
25	8.0	7.8	7.9	7.5	7.4	7.5	7.6	7.6	7.6	7.5	7.2	7.4
26	7.9	7.7	7.8	7.5	7.5	7.5	7.6	7.5	7.6	7.4	7.0	7.3
27	7.9	7.8	7.8	7.5	7.2	7.3	7.6	7.6	7.6	7.2	7.0	7.1
28	7.8	7.8	7.8	7.6	7.3	7.4	7.7	7.6	7.6	7.4	7.2	7.3
29	7.8	7.8	7.8	7.6	7.5	7.6	7.6	7.5	7.6	7.4	7.4	7.4
30	---	---	---	7.6	7.5	7.5	7.6	7.5	7.5	7.4	7.4	7.4
31	---	---	---	7.7	7.5	7.6	---	---	---	7.5	7.4	7.4
MAX	8.1	7.9	8.0	7.8	7.7	7.8	8.1	7.8	7.9	---	---	---
MIN	7.7	7.7	7.7	7.4	7.2	7.3	7.6	7.4	7.5	---	---	---

ARKANSAS RIVER BASIN

99

07178000 BIRD CREEK NEAR OWASSO, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.4	7.4	7.4	7.4	7.3	7.3	7.4	7.3	7.3	7.7	7.5	7.5
2	7.4	7.4	7.4	7.3	7.3	7.3	7.4	7.3	7.3	7.6	7.4	7.5
3	7.4	7.3	7.3	7.4	7.3	7.3	7.4	7.3	7.4	7.6	7.5	7.5
4	7.4	7.3	7.4	7.4	7.3	7.4	7.7	7.4	7.5	7.6	7.4	7.5
5	7.5	7.4	7.4	7.4	7.4	7.4	7.7	7.5	7.5	7.8	7.4	7.6
6	7.5	7.4	7.5	7.4	7.4	7.4	7.8	7.6	7.6	7.9	7.6	7.7
7	7.5	7.5	7.5	7.6	7.4	7.5	7.8	7.5	7.6	7.9	7.6	7.7
8	7.7	7.4	7.5	7.6	7.5	7.5	7.7	7.5	7.5	7.9	7.6	7.7
9	7.9	7.6	7.6	7.7	7.5	7.5	7.7	7.5	7.5	7.8	7.6	7.7
10	7.8	7.6	7.7	7.7	7.5	7.5	7.7	7.4	7.5	7.9	7.6	7.7
11	7.8	7.5	7.6	7.5	7.4	7.4	7.7	7.4	7.5	7.9	7.6	7.7
12	7.8	7.5	7.6	7.7	7.4	7.5	7.7	7.4	7.5	7.9	7.6	7.7
13	7.8	7.5	7.6	7.8	7.6	7.6	7.8	7.5	7.6	7.9	7.6	7.7
14	7.7	7.4	7.6	7.8	7.5	7.6	7.8	7.5	7.6	7.9	7.6	7.7
15	7.5	7.4	7.5	7.8	7.5	7.6	7.8	7.5	7.6	7.9	7.6	7.7
16	7.5	7.4	7.5	7.8	7.5	7.6	7.9	7.5	7.6	7.9	7.6	7.7
17	7.6	7.4	7.4	7.6	7.5	7.6	7.9	7.5	7.6	7.9	7.6	7.7
18	7.7	7.3	7.5	7.6	7.5	7.5	7.8	7.5	7.6	7.9	7.6	7.7
19	7.6	7.5	7.6	7.7	7.5	7.6	7.8	7.5	7.6	7.9	7.6	7.7
20	7.6	7.5	7.5	7.7	7.5	7.6	7.9	7.5	7.7	7.9	7.6	7.7
21	7.6	7.4	7.6	7.7	7.2	7.4	7.8	7.6	7.7	7.9	7.6	7.7
22	7.4	7.2	7.3	7.4	7.2	7.3	7.8	7.5	7.6	7.9	7.6	7.7
23	7.4	7.3	7.4	7.4	7.4	7.4	7.8	7.5	7.6	7.8	7.6	7.7
24	7.5	7.2	7.5	7.5	7.4	7.4	7.8	7.5	7.6	7.7	7.6	7.6
25	7.4	7.2	7.3	7.7	7.5	7.5	7.8	7.5	7.6	7.6	7.4	7.5
26	7.4	7.2	7.3	7.8	7.5	7.6	7.8	7.5	7.6	7.7	7.5	7.5
27	7.4	7.2	7.2	7.7	7.6	7.6	7.8	7.5	7.6	7.8	7.5	7.6
28	7.5	7.4	7.4	7.7	7.5	7.6	7.8	7.5	7.6	7.8	7.6	7.7
29	7.4	7.4	7.4	7.6	7.1	7.4	7.7	7.5	7.6	7.8	7.6	7.7
30	7.4	7.4	7.4	7.3	7.2	7.2	7.7	7.5	7.5	7.8	7.6	7.7
31	---	---	---	7.3	7.3	7.3	7.7	7.5	7.5	---	---	---
MAX	7.9	7.6	7.7	7.8	7.6	7.6	7.9	7.6	7.7	7.9	7.6	7.7
MIN	7.4	7.2	7.2	7.3	7.1	7.2	7.4	7.3	7.3	7.6	7.4	7.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.2	17.9	18.5	17.3	15.8	16.7	10.8	9.4	10.0	7.5	5.8	6.5
2	19.8	18.6	19.0	15.9	14.4	15.2	11.2	9.8	10.4	8.2	6.8	7.3
3	20.2	18.7	19.2	15.0	13.6	14.2	11.6	10.5	11.0	7.7	7.1	7.3
4	19.7	18.1	18.8	14.9	13.1	13.8	11.5	11.0	11.3	7.1	6.0	6.6
5	19.5	17.5	18.3	15.8	13.2	14.3	11.1	9.6	10.5	6.7	5.5	5.9
6	19.4	17.3	18.2	16.3	14.0	15.0	9.6	8.1	8.8	6.2	5.3	5.7
7	19.6	17.6	18.5	16.6	14.5	15.4	8.1	7.7	7.9	6.0	4.7	5.3
8	20.6	18.6	19.5	17.0	14.9	15.7	8.3	7.5	7.9	5.9	5.4	5.7
9	21.2	19.5	20.3	17.2	15.3	16.1	9.6	8.3	8.7	7.2	5.6	6.2
10	22.3	20.0	21.0	17.6	15.7	16.5	9.4	8.1	8.5	7.3	5.9	6.4
11	22.4	20.6	21.4	17.4	15.5	16.3	8.1	7.8	7.9	7.4	5.9	6.5
12	22.3	20.4	21.3	18.0	15.6	16.6	8.0	7.8	7.9	8.1	6.1	6.9
13	22.3	20.7	21.4	18.1	15.9	16.8	8.0	7.4	7.7	7.5	6.3	6.8
14	22.0	20.2	21.1	17.6	16.1	16.7	7.7	7.0	7.3	7.0	5.7	6.3
15	21.9	20.4	21.2	16.8	15.4	16.0	7.1	6.4	6.8	7.7	5.8	6.6
16	21.9	20.6	21.1	16.6	14.7	15.5	6.4	5.7	6.0	7.5	6.7	7.1
17	20.6	18.5	19.3	16.6	14.8	15.5	6.1	5.5	5.8	7.9	7.2	7.5
18	18.9	17.7	18.2	16.7	14.9	15.6	6.3	5.7	5.9	8.2	7.2	7.5
19	18.0	16.8	17.3	16.1	14.8	15.4	6.3	5.7	6.0	8.9	7.7	8.1
20	17.3	15.7	16.4	15.3	13.8	14.5	6.0	5.3	5.6	7.7	6.5	7.1
21	16.9	15.3	15.9	15.5	13.6	14.4	5.4	4.6	5.0	7.3	6.0	6.5
22	16.8	15.0	15.7	15.5	14.4	14.9	4.9	4.1	4.4	7.8	6.5	7.0
23	16.0	14.5	15.2	15.9	14.7	15.2	4.7	3.7	4.2	7.4	6.1	6.7
24	15.7	13.8	14.6	14.7	12.7	13.6	4.8	3.9	4.2	6.3	4.9	5.6
25	16.0	13.7	14.7	12.9	11.6	12.3	5.0	3.8	4.3	5.8	4.3	5.0
26	16.4	13.9	15.0	12.5	11.1	11.6	5.3	4.0	4.5	4.8	4.0	4.3
27	16.7	14.3	15.3	12.4	10.8	11.4	5.0	4.1	4.4	4.1	3.0	3.6
28	17.0	14.7	15.8	12.1	10.7	11.2	5.6	3.9	4.6	3.8	2.9	3.2
29	17.8	15.5	16.5	11.4	10.2	10.7	6.0	4.3	5.0	3.3	2.5	2.9
30	16.9	16.2	16.4	10.9	9.5	10.1	6.7	5.1	5.7	3.7	2.2	2.8
31	17.0	16.4	16.7	---	---	---	6.8	5.3	6.0	4.0	2.2	3.0
MONTH	22.4	13.7	18.1	18.1	9.5	14.6	11.6	3.7	6.9	8.9	2.2	5.9

07178000 BIRD CREEK NEAR OWASSO, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	3.0	2.4	2.7	14.2	12.7	13.4	13.0	12.6	12.8	20.2	18.5	19.0
2	3.9	2.0	2.8	13.4	11.9	13.0	13.7	12.7	13.2	19.5	18.4	18.9
3	5.1	2.7	3.7	12.1	8.9	10.5	13.7	13.0	13.4	19.4	18.0	18.7
4	4.9	3.3	4.0	9.6	8.7	9.2	14.1	12.9	13.4	18.8	17.6	18.3
5	5.1	3.1	4.0	10.7	9.4	10.1	15.7	13.6	14.5	18.6	18.2	18.4
6	5.7	3.7	4.5	12.4	10.6	11.6	17.5	14.8	16.0	---	---	---
7	6.5	4.4	5.3	14.4	12.2	13.4	18.6	17.0	17.5	---	---	---
8	7.0	4.9	5.8	15.6	14.3	14.9	18.1	16.5	17.2	---	---	---
9	7.7	5.6	6.6	15.1	14.1	14.7	18.0	15.8	16.7	21.2	15.7	19.2
10	8.9	7.1	7.9	14.5	12.2	13.5	17.1	15.7	16.5	19.9	18.9	19.3
11	8.1	7.3	7.6	12.5	11.0	11.8	17.5	14.3	16.6	22.6	19.9	21.1
12	8.0	7.0	7.4	11.1	10.3	10.6	16.9	16.0	16.5	23.0	18.8	20.2
13	8.8	7.5	8.0	12.1	10.7	11.4	16.0	14.3	14.9	18.8	18.2	18.5
14	9.0	6.9	7.8	12.6	11.5	12.1	15.8	14.9	15.3	18.3	17.4	17.8
15	10.2	7.2	8.4	13.8	12.4	13.1	16.2	15.3	15.7	17.8	17.1	17.4
16	9.2	7.7	8.4	13.9	12.4	13.5	16.4	15.2	15.8	17.7	17.2	17.4
17	8.6	8.4	8.5	12.4	10.6	11.4	16.3	14.8	15.5	18.2	17.5	17.8
18	8.6	7.9	8.4	10.6	9.6	10.1	17.5	15.2	16.3	18.9	17.9	18.3
19	9.6	7.5	8.3	9.6	9.1	9.3	19.2	17.4	18.2	18.8	18.0	18.4
20	9.0	7.4	8.2	10.0	8.7	9.3	20.1	18.0	19.0	18.7	17.9	18.3
21	9.5	8.2	8.8	11.2	10.0	10.6	20.5	18.2	19.2	19.4	17.8	18.6
22	10.8	9.1	10.0	12.2	11.2	11.6	20.2	18.4	19.3	20.0	18.1	19.2
23	12.8	10.6	11.7	12.6	11.8	12.2	19.7	19.1	19.3	20.3	18.8	19.6
24	14.1	12.6	13.4	13.6	12.4	12.9	20.0	18.5	19.1	20.0	18.8	19.5
25	14.7	13.9	14.4	13.6	12.9	13.3	19.3	18.1	18.8	22.1	18.9	20.2
26	14.6	13.5	14.2	13.4	12.5	12.8	19.1	17.2	18.5	22.7	21.5	22.0
27	13.5	12.6	13.1	14.1	12.6	13.5	18.1	16.9	17.4	23.5	21.6	22.5
28	13.6	12.5	12.9	13.9	13.2	13.6	19.3	17.0	18.1	23.5	21.4	22.5
29	14.0	12.4	13.2	13.2	11.5	11.9	20.2	17.8	19.0	21.4	20.0	20.8
30	---	---	---	13.1	11.4	12.2	20.6	19.2	19.8	21.6	20.5	21.1
31	---	---	---	12.6	11.4	12.0	---	---	---	21.7	20.8	21.3
MONTH	14.7	2.0	8.3	15.6	8.7	12.0	20.6	12.6	16.8	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	21.8	20.9	21.4	22.9	21.6	22.2	28.4	26.1	27.2	31.3	29.0	30.1
2	21.6	20.5	20.9	23.0	21.7	22.4	29.3	26.9	28.0	31.3	29.1	30.1
3	21.6	20.5	21.2	23.1	21.8	22.6	30.0	27.8	28.8	31.5	29.2	30.2
4	20.5	19.9	20.3	23.6	22.5	23.1	30.8	28.4	29.4	30.4	29.3	29.8
5	20.5	19.9	20.3	23.7	22.5	23.2	30.9	28.9	29.8	29.9	28.4	29.1
6	20.4	19.7	20.1	27.4	23.7	25.4	31.3	29.4	30.2	29.3	27.4	28.3
7	22.6	20.4	21.4	30.3	27.4	29.0	31.9	29.6	30.6	29.0	27.1	28.0
8	24.7	21.8	23.1	31.0	29.1	29.9	32.2	29.6	30.7	28.9	26.9	27.8
9	25.4	23.6	24.4	32.0	29.3	30.5	32.6	29.8	31.0	28.2	26.9	27.5
10	25.5	24.6	25.0	32.4	29.4	30.7	32.7	30.1	31.2	29.0	26.8	27.8
11	26.1	24.5	25.2	32.0	29.8	30.9	32.8	30.3	31.4	29.4	27.3	28.2
12	26.7	24.7	25.6	32.8	30.5	31.5	32.5	30.5	31.5	29.4	27.6	28.4
13	27.6	25.4	26.4	33.0	30.5	31.6	32.5	30.4	31.3	29.7	27.5	28.5
14	27.1	25.2	26.3	33.0	30.2	31.5	31.8	29.7	30.7	29.6	27.5	28.4
15	27.4	25.2	26.2	33.5	30.4	31.8	31.6	29.3	30.4	28.0	26.5	27.2
16	26.6	25.1	26.0	33.3	30.8	31.9	32.3	29.6	30.8	26.8	25.0	25.9
17	25.1	22.8	24.2	31.9	30.6	31.1	32.5	29.9	31.0	25.8	24.0	24.9
18	22.8	21.0	22.1	31.2	30.1	30.6	31.0	29.5	30.2	25.0	23.2	24.1
19	21.9	21.2	21.6	31.9	29.5	30.6	30.9	28.8	29.8	24.7	22.9	23.7
20	22.8	21.9	22.3	30.9	29.3	29.8	30.8	28.6	29.6	24.0	23.1	23.5
21	23.4	22.2	22.5	29.3	23.2	26.3	30.9	28.5	29.6	23.5	22.1	22.9
22	23.4	21.9	22.4	27.2	25.3	26.3	31.2	28.8	29.9	24.5	22.5	23.4
23	24.7	22.7	23.7	27.9	26.3	27.0	31.5	29.1	30.2	25.1	23.1	23.9
24	25.6	24.6	25.0	28.4	26.6	27.4	31.7	29.4	30.4	23.8	22.0	23.2
25	25.8	24.4	25.1	28.3	26.6	27.3	31.7	29.4	30.5	22.0	20.1	20.9
26	25.7	24.6	25.2	28.9	26.3	27.5	31.6	29.5	30.4	20.5	18.7	19.6
27	25.4	24.4	24.8	28.1	26.8	27.4	31.6	29.5	30.4	20.4	18.2	19.2
28	25.4	22.3	23.8	28.2	26.8	27.4	31.8	29.5	30.5	20.8	18.5	19.6
29	22.7	21.8	22.3	27.5	24.7	25.8	31.8	29.6	30.6	21.2	19.2	20.1
30	22.5	21.5	22.1	26.1	24.6	25.3	31.6	29.4	30.4	21.3	19.7	20.5
31	---	---	---	27.4	25.6	26.4	31.1	29.2	30.2	---	---	---
MONTH	27.6	19.7	23.4	33.5	21.6	27.9	32.8	26.1	30.2	31.5	18.2	25.5
YEAR	33.5	2.0	17.4									

ARKANSAS RIVER BASIN

101

07178000 BIRD CREEK NEAR OWASSO, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	10.3	9.8	10.1	---	---	---	11.6	10.5	11.0	14.1	13.6	13.8
2	10.1	9.7	9.8	---	---	---	11.4	10.8	11.0	13.9	13.2	13.6
3	10.1	9.4	9.7	9.5	7.8	8.6	11.7	10.7	10.9	13.6	13.2	13.4
4	10.2	9.4	9.7	10.6	8.7	9.5	11.5	10.8	11.2	14.1	13.1	13.4
5	10.2	9.3	9.6	11.3	8.9	10.2	---	---	---	14.2	13.4	13.8
6	10.1	9.0	9.5	11.3	9.5	10.3	---	---	---	14.6	13.6	14.0
7	9.6	8.6	9.1	11.0	9.6	10.1	---	---	---	15.0	14.1	14.5
8	8.9	7.8	8.5	10.5	9.3	9.8	---	---	---	14.7	14.3	14.4
9	8.2	7.2	7.8	10.2	8.7	9.4	12.4	12.0	12.2	14.9	14.1	14.4
10	---	---	---	9.8	8.5	9.0	13.5	12.3	13.0	15.0	13.9	14.4
11	---	---	---	9.7	8.4	8.9	13.7	12.9	13.2	15.1	14.1	14.4
12	---	---	---	9.8	8.2	8.8	13.3	12.9	13.1	14.9	13.8	14.2
13	---	---	---	9.7	8.1	8.7	13.1	12.7	12.9	15.0	13.7	14.3
14	---	---	---	9.4	8.1	8.7	13.0	12.7	12.8	15.2	14.1	14.5
15	---	---	---	9.8	8.3	9.0	13.1	12.9	13.0	15.2	13.9	14.5
16	---	---	---	10.2	8.6	9.2	13.4	13.1	13.3	14.9	13.6	14.2
17	---	---	---	10.1	8.4	9.2	13.6	13.4	13.5	14.5	13.5	14.0
18	---	---	---	10.0	8.5	9.2	13.7	13.4	13.5	14.4	13.3	13.8
19	8.7	7.6	8.0	10.0	8.7	9.2	13.4	13.3	13.4	14.0	13.0	13.5
20	9.1	8.1	8.5	10.3	9.0	9.5	13.5	13.1	13.4	13.6	13.0	13.3
21	9.3	8.4	8.8	10.1	9.0	9.5	13.7	13.3	13.6	14.3	13.3	13.7
22	10.0	8.6	9.1	9.8	8.8	9.2	14.1	13.7	13.9	14.6	13.1	13.7
23	10.1	8.8	9.4	9.3	5.5	7.9	14.3	14.0	14.1	14.6	13.3	13.9
24	11.2	9.1	9.9	8.6	7.2	8.4	14.4	14.0	14.2	14.9	13.2	14.2
25	12.2	10.1	10.8	8.9	8.1	8.6	14.4	14.2	14.3	15.1	14.0	14.5
26	11.4	10.0	10.6	9.5	8.4	9.0	14.5	14.2	14.3	15.0	14.0	14.5
27	11.2	9.9	10.5	9.3	8.6	9.0	14.2	14.1	14.2	15.2	14.1	14.6
28	11.0	9.9	10.4	9.5	8.7	9.2	14.2	14.0	14.1	15.5	14.2	14.9
29	10.7	9.7	10.2	10.1	9.2	9.7	14.1	13.9	14.0	15.5	14.6	15.1
30	9.8	8.9	9.5	11.0	10.0	10.5	14.1	13.8	13.9	15.7	15.0	15.3
31	---	---	---	---	---	---	14.2	13.7	13.9	15.8	15.1	15.4
MONTH	---	---	---	---	---	---	---	---	---	15.8	13.0	14.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	15.6	14.9	15.2	9.8	9.2	9.6	11.6	10.6	10.9	8.3	5.8	7.5
2	15.7	14.9	15.3	9.6	9.2	9.4	10.9	10.5	10.6	8.1	7.5	7.9
3	15.4	14.7	15.1	11.4	9.5	10.4	10.8	10.6	10.7	9.2	7.5	8.3
4	15.3	14.5	14.8	11.4	11.1	11.2	10.8	10.7	10.7	9.2	8.6	8.9
5	15.1	14.5	14.8	11.2	10.8	11.0	10.8	10.3	10.5	9.1	8.6	8.9
6	14.9	14.3	14.6	10.9	10.4	10.6	10.3	9.3	9.9	---	---	---
7	14.8	14.0	14.4	10.4	9.7	10.0	9.4	9.1	9.2	---	---	---
8	14.6	13.7	14.1	9.9	8.9	9.5	9.6	9.1	9.3	---	---	---
9	14.1	13.3	13.8	9.6	9.0	9.5	10.4	9.3	9.8	9.0	5.9	7.3
10	13.3	12.4	12.8	10.1	9.5	9.8	11.0	9.9	10.3	6.2	5.0	5.7
11	12.6	12.0	12.3	10.5	10.1	10.3	10.4	8.8	10.0	6.8	5.0	6.2
12	12.4	11.7	12.1	11.3	10.5	10.9	10.0	8.5	9.4	9.1	6.7	8.3
13	12.2	11.4	11.8	10.9	10.7	10.8	11.0	9.7	10.4	9.6	9.0	9.3
14	12.3	11.3	11.8	10.8	10.4	10.6	10.9	10.4	10.7	10.0	9.4	9.7
15	12.3	11.1	11.7	10.4	9.9	10.2	10.8	10.0	10.4	9.9	9.1	9.6
16	12.2	11.2	11.7	10.4	9.7	9.9	10.5	9.9	10.1	10.0	9.3	9.8
17	11.6	11.1	11.4	10.6	10.1	10.4	10.7	9.9	10.3	10.0	9.2	9.6
18	11.8	10.9	11.3	11.2	10.6	11.0	10.7	9.6	10.2	9.8	9.3	9.5
19	11.8	11.1	11.3	11.5	11.2	11.4	9.6	8.7	9.3	10.0	9.3	9.7
20	11.5	10.5	11.1	11.6	11.4	11.5	10.1	8.5	9.1	9.9	9.4	9.8
21	11.9	11.4	11.6	11.4	11.1	11.2	9.8	8.3	8.9	10.0	9.2	9.8
22	12.0	11.0	11.6	11.1	10.8	11.0	9.4	8.2	8.6	9.8	9.2	9.6
23	11.0	9.3	10.5	11.0	10.1	10.7	9.1	7.9	8.3	9.8	9.1	9.5
24	10.1	8.7	9.4	10.8	9.9	10.6	8.6	7.7	8.1	10.0	9.1	9.5
25	9.6	8.8	9.1	10.9	10.6	10.8	7.9	7.4	7.6	9.4	6.8	8.5
26	9.5	8.7	9.2	11.0	10.0	10.8	8.4	7.3	7.7	7.3	6.2	6.7
27	9.9	9.0	9.5	11.0	9.8	10.4	9.2	8.3	8.6	6.7	5.8	6.2
28	10.1	9.4	9.8	11.0	10.2	10.7	9.0	7.8	8.5	8.3	5.9	7.3
29	10.1	9.3	9.8	11.8	11.0	11.5	8.5	7.6	8.1	9.3	8.2	8.8
30	---	---	---	11.8	10.7	11.2	8.0	7.3	7.6	9.2	8.6	8.9
31	---	---	---	11.9	11.4	11.7	---	---	---	9.2	8.6	8.8
MONTH	15.7	8.7	12.1	11.9	8.9	10.6	11.6	7.3	9.5	---	---	---



07191300 Spavinaw Lake near Spavinaw, OK

ARKANSAS RIVER BASIN

07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK

LOCATION.--Lat 36°13'23", long 95°49'09", in SE 1/4 SE 1/4 sec.9, T.20 N., R.14 E., Tulsa County, Hydrologic Unit 11070107, near left downstream abutment of bridge, 2.3 mi downstream from Elm Creek, 5 mi northwest of Catoosa High School, and at mile 9.5.

DRAINAGE AREA.--1,103 mi²

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 545.00 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Flow slightly regulated since 1958 by Bluestem Lake (capacity 17,000 acre-ft) and since March 1977 by Birch Lake (capacity 19,200 acre-ft). Flow regulated since August 20, 1989 by Skiatook Lake (capacity 322,300 acre-ft) when conservation pool was first reached. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	419	250	124	145	160	364	1350	3920	3640	4070	372	205
2	358	194	122	143	145	576	1110	2490	3790	4110	317	201
3	321	177	388	221	154	4070	1490	1710	2620	4010	326	205
4	298	153	5720	174	156	3480	859	1860	1710	3080	261	208
5	285	137	5290	159	152	1300	628	1570	1630	2780	325	221
6	281	126	1770	175	152	803	494	12300	1580	1020	321	229
7	276	120	857	176	153	711	431	16800	617	600	284	211
8	271	119	563	178	150	1080	359	10300	338	492	274	207
9	266	119	2110	183	145	1190	318	6380	292	217	255	206
10	262	116	7920	175	142	784	291	11600	280	148	246	205
11	259	116	3020	174	135	616	461	5550	557	216	221	205
12	254	115	1240	174	134	1080	935	3690	379	274	239	204
13	252	112	837	174	129	1490	1430	5220	343	341	231	208
14	248	110	636	159	128	1240	1430	5230	1310	274	228	208
15	244	110	514	142	125	827	811	4970	533	243	240	212
16	206	113	543	134	122	1100	764	4820	311	228	246	202
17	161	115	488	137	156	3480	699	4760	997	225	228	199
18	160	120	435	135	181	3520	718	4620	3200	227	225	201
19	167	117	335	130	146	3370	416	4460	1780	227	223	197
20	164	114	305	126	273	2170	370	3650	2060	235	216	197
21	169	111	284	122	315	1460	264	3410	3000	2850	216	197
22	143	193	271	120	247	1300	241	3380	7750	1180	214	200
23	114	1450	258	118	890	3460	249	3230	2620	606	215	199
24	113	328	245	122	576	4840	895	2900	3790	374	214	606
25	112	203	204	120	1120	3600	1370	3660	7110	369	214	244
26	112	162	181	121	1890	2990	928	4970	5770	318	210	221
27	115	145	179	132	1200	5530	853	6770	5520	875	207	222
28	115	134	172	158	687	3880	392	3260	3540	388	206	211
29	113	130	170	202	488	3540	255	3850	3100	4620	205	210
30	816	125	167	165	---	4680	305	3850	3220	2330	209	205
31	277	---	156	159	---	3860	---	3720	---	676	208	---
TOTAL	7351	5634	35504	4753	10451	72391	21116	158900	73387	37603	7596	6646
MEAN	237	188	1145	153	360	2335	704	5126	2446	1213	245	222
MAX	816	1450	7920	221	1890	5530	1490	16800	7750	4620	372	606
MIN	112	110	122	118	122	364	241	1570	280	148	205	197
AC-FT	14580	11180	70420	9430	20730	143600	41880	315200	145600	74590	15070	13180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2000, BY WATER YEAR (WY)

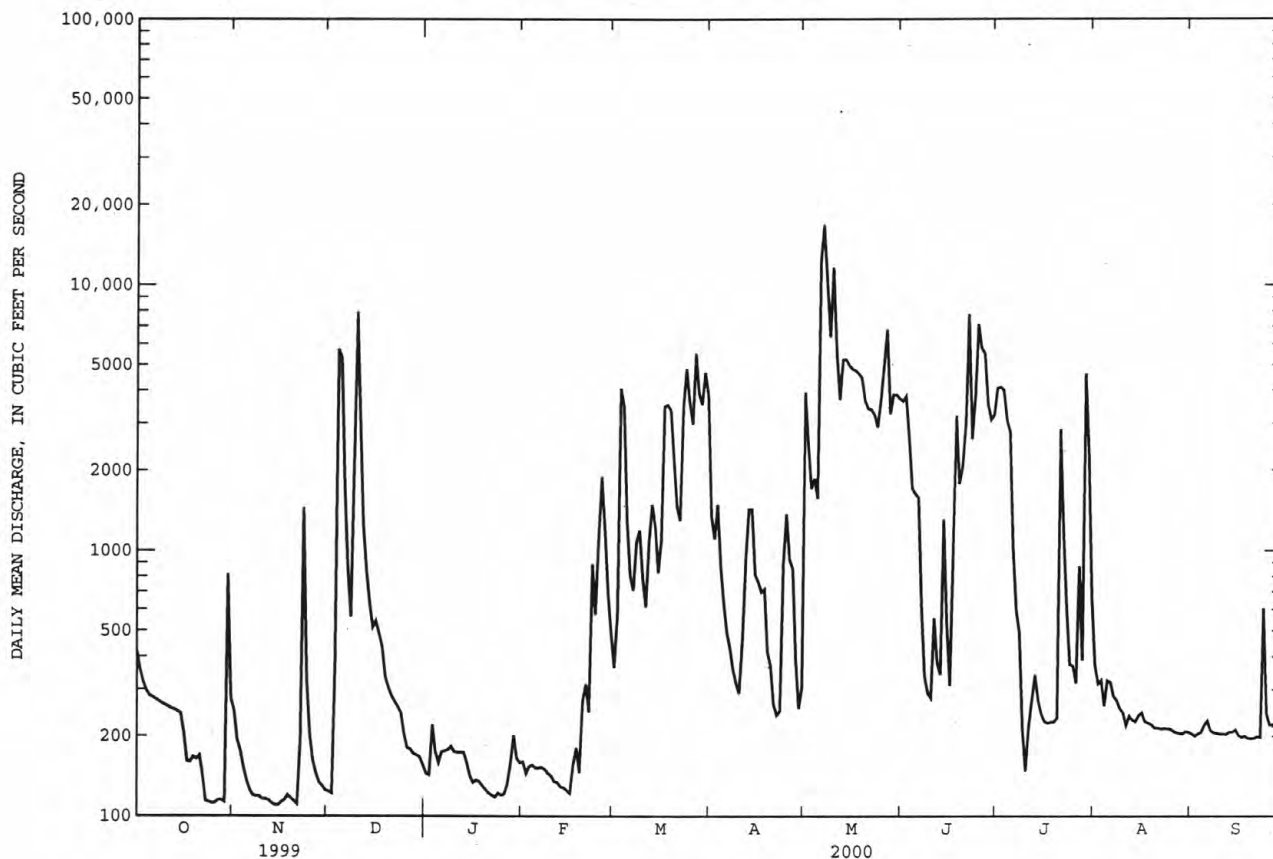
MEAN	521	835	785	745	896	1918	2017	2602	2032	1036	436	465
MAX	2329	2603	1854	2881	2213	6393	3646	5724	5658	3195	1596	917
(WY)	1999	1995	1993	1998	1999	1990	1994	1995	1995	1995	1997	1996
MIN	168	109	152	143	109	149	288	228	298	214	208	221
(WY)	1993	1996	1990	1996	1996	1996	1996	1996	1998	1991	1991	1992

ARKANSAS RIVER BASIN

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07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1990 - 2000	
ANNUAL TOTAL	689310		441332		1191	
ANNUAL MEAN	1889		1206		2127	1999
HIGHEST ANNUAL MEAN					278	1996
LOWEST ANNUAL MEAN					25900	May 11 1993
HIGHEST DAILY MEAN	23300	Apr 27	16800	May 7	62	Nov 6 1993
LOWEST DAILY MEAN	110	Nov 14	110	Nov 14, 15	73	Oct 22 1992
ANNUAL SEVEN-DAY MINIMUM	113	Nov 11	113	Nov 11	27400	May 11 1993
INSTANTANEOUS PEAK FLOW			18600	May 6	33.22	May 11 1993
INSTANTANEOUS PEAK STAGE			27.48	May 6	62	Nov 6 1993
INSTANTANEOUS LOW FLOW			110	Nov 14	863000	
ANNUAL RUNOFF (AC-FT)	1367000		875400		3390	
10 PERCENT EXCEEDS	5130		3790		307	
50 PERCENT EXCEEDS	419		275		144	
90 PERCENT EXCEEDS	161		129			



WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1988 to current year.

pH: August 1988 to current year.

WATER TEMPERATURE: August 1988 to current year.

DISSOLVED OXYGEN: August 1988 to current year

INSTRUMENTATION.--Water-quality monitor since August 1988.

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

EXTREMES FOR PERIOD OF DAILY RECORD. --

SPECIFIC CONDUCTANCE: Maximum, 1,420 microsiemens, Apr. 2, 1996; minimum, 48 microsiemens, June 1, 1996.

pH: Maximum, 9.4 units, July 17, 1989; minimum, 6.0 units, May 12, 1991.

WATER TEMPERATURE: Maximum, 32.0°C, Aug. 1, 1993, July 22, 1996, July 10, 11, 22, 23, 1998; minimum, 1.5°C, Dec. 23, 1989, Jan. 20, 1993, Feb. 4, 1996.

DISSOLVED OXYGEN: Maximum, 15.2 mg/l, Jan. 10, 1999; minimum, 1.9 mg/l, July 24, 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1150 microsiemens, Jan. 30; minimum, 98 microsiemens, May 7.

pH: Maximum, 8.1 units, Nov. 21, 23, Sept. 24; minimum, 6.7 units, May 7, 8.

WATER TEMPERATURE: Maximum, 31.6°C, July 16; minimum, 4.1°C, Jan. 28, 29

DISSOLVED OXYGEN: Maximum, 14.8 mg/L, Jan. 27: 4.2 mg/L, Sept. 2.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	7.7	7.6	7.6	7.8	7.6	7.7	7.9	7.8	7.8
2	---	---	---	7.7	7.6	7.7	7.8	7.5	7.6	8.0	7.8	7.8
3	---	---	---	7.7	7.7	7.7	7.9	7.5	7.7	8.0	7.8	7.8
4	---	---	---	7.8	7.7	7.7	7.8	7.4	7.7	8.0	7.8	7.8
5	---	---	---	7.8	7.7	7.7	7.7	7.3	7.5	7.8	7.8	7.8
6	---	---	---	7.8	7.7	7.7	7.8	7.5	7.7	7.8	7.7	7.7
7	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.7	7.8	7.7	7.7	7.7
8	7.9	7.8	7.9	7.8	7.7	7.8	7.8	7.8	7.8	7.7	7.7	7.7
9	7.9	7.8	7.9	7.8	7.7	7.8	8.0	7.8	7.9	7.7	7.7	7.7
10	7.9	7.8	7.8	7.8	7.7	7.8	7.9	7.5	7.6	7.7	7.7	7.7
11	7.9	7.8	7.8	7.8	7.7	7.7	7.8	7.7	7.7	7.8	7.7	7.7
12	7.9	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.8	7.8	7.8	7.8
13	7.8	7.8	7.8	7.8	7.7	7.7	7.8	7.8	7.8	7.8	7.7	7.8
14	7.8	7.8	7.8	7.7	7.6	7.7	7.9	7.8	7.9	7.8	7.8	7.8
15	7.8	7.8	7.8	7.7	7.6	7.7	7.9	7.9	7.9	7.8	7.8	7.8
16	7.9	7.8	7.8	7.7	7.7	7.7	7.9	7.9	7.9	7.8	7.7	7.7
17	7.9	7.8	7.8	7.7	7.4	7.6	7.9	7.9	7.9	7.7	7.6	7.7
18	7.9	7.8	7.8	7.6	7.6	7.6	7.9	7.8	7.8	7.7	7.6	7.7
19	7.9	7.8	7.8	---	---	---	7.8	7.8	7.8	7.8	7.7	7.7
20	7.9	7.8	7.8	---	---	---	7.8	7.8	7.8	7.9	7.8	7.9
21	7.9	7.8	7.8	8.1	7.6	7.7	7.8	7.8	7.8	8.0	7.9	7.9
22	7.8	7.8	7.8	7.9	7.6	7.7	7.8	7.8	7.8	7.9	7.9	7.9
23	7.8	7.8	7.8	8.1	7.6	7.7	7.8	7.8	7.8	7.9	7.9	7.9
24	7.8	7.7	7.8	7.7	7.6	7.6	7.8	7.8	7.8	8.0	7.8	7.9
25	7.9	7.8	7.8	7.7	7.7	7.7	7.8	7.8	7.8	7.9	7.8	7.9
26	7.8	7.8	7.8	7.9	7.7	7.7	7.9	7.8	7.8	7.9	7.8	7.9
27	7.8	7.7	7.8	7.8	7.7	7.7	7.9	7.8	7.8	7.8	7.8	7.8
28	7.8	7.7	7.8	---	---	---	7.9	7.8	7.8	7.9	7.8	7.9
29	7.8	7.7	7.8	---	---	---	7.9	7.8	7.8	8.0	7.9	7.9
30	7.9	7.7	7.8	7.9	7.5	7.7	7.9	7.8	7.8	7.9	7.8	7.8
31	7.7	7.7	7.7	---	---	---	7.9	7.8	7.8	7.8	7.8	7.8
MAX	---	---	---	---	---	---	8.0	7.9	7.9	8.0	7.9	7.9
MIN	---	---	---	---	---	---	7.7	7.3	7.5	7.7	7.6	7.7
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.5	7.5	7.8	7.3	7.5
2	7.8	7.7	7.8	7.9	7.7	7.8	7.5	7.5	7.5	7.4	7.3	7.4
3	7.7	7.7	7.7	7.9	7.4	7.8	7.6	7.5	7.6	7.5	7.4	7.4
4	7.8	7.7	7.7	7.6	7.4	7.5	7.7	7.6	7.7	7.6	7.3	7.5
5	7.8	7.7	7.8	7.6	7.6	7.6	7.7	7.6	7.6	7.6	7.5	7.6
6	7.8	7.7	7.8	7.6	7.5	7.5	7.7	7.6	7.7	7.8	6.8	7.6
7	7.8	7.7	7.8	7.5	7.5	7.5	7.7	7.6	7.6	6.8	6.7	6.8
8	7.8	7.8	7.8	7.7	7.5	7.5	7.7	7.6	7.7	6.9	6.7	6.8
9	7.9	7.8	7.8	7.6	7.4	7.5	7.7	7.6	7.7	7.3	6.9	7.1
10	7.9	7.8	7.8	7.5	7.4	7.4	7.8	7.6	7.7	7.2	7.0	7.1
11	7.8	7.8	7.8	7.5	7.3	7.4	7.7	7.6	7.7	7.2	7.0	7.1
12	7.8	7.8	7.8	7.4	7.3	7.4	7.8	7.5	7.7	7.4	7.2	7.4
13	7.8	7.8	7.8	7.5	7.4	7.5	7.7	7.5	7.6	7.4	7.3	7.3
14	7.8	7.8	7.8	7.5	7.4	7.5	7.8	7.7	7.8	7.3	7.3	7.3
15	7.8	7.8	7.8	7.4	7.4	7.4	7.8	7.7	7.7	7.4	7.3	7.3
16	7.8	7.7	7.8	7.5	7.4	7.4	7.8	7.6	7.7	7.4	7.4	7.4
17	7.7	7.6	7.7	7.5	7.4	7.4	7.8	7.6	7.7	7.4	7.4	7.4
18	7.8	7.6	7.7	7.5	7.4	7.4	7.8	7.6	7.7	7.4	7.4	7.4
19	7.7	7.6	7.7	7.4	7.4	7.4	7.7	7.6	7.6	7.4	7.4	7.4
20	7.8	7.7	7.7	7.5	7.4	7.5	7.7	7.5	7.6	7.4	7.4	7.4
21	7.8	7.7	7.8	7.5	7.4	7.5	7.7	7.5	7.6	7.4	7.4	7.4
22	8.0	7.8	7.8	7.6	7.5	7.5	7.8	7.7	7.7	7.5	7.4	7.4
23	8.0	7.7	7.9	7.5	7.3	7.4	7.8	7.6	7.7	7.4	7.4	7.4
24	7.9	7.7	7.8	7.5	7.2	7.4	7.9	7.6	7.7	7.4	7.4	7.4
25	8.0	7.8	7.9	7.5	7.5	7.5	7.7	7.6	7.6	7.6	7.1	7.4
26	7.9	7.8	7.8	7.5	7.5	7.5	7.6	7.5	7.6	7.5	6.9	7.2
27	7.9	7.8	7.9	7.5	7.3	7.4	7.6	7.6	7.6	7.3	6.9	7.1
28	7.9	7.8	7.8	7.5	7.4	7.4	7.6	7.5	7.6	7.3	7.1	7.2
29	7.8	7.8	7.8	7.5	7.5	7.5	7.6	7.5	7.5	7.4	7.3	7.3
30	---	---	---	7.5	7.5	7.5	7.6	7.5	7.5	7.4	7.3	7.3
31	---	---	---	7.6	7.5	7.5	---	---	---	7.4	7.3	7.4
MAX	8.0	7.8	7.9	7.9	7.8	7.8	7.9	7.7	7.8	7.8	7.5	7.6
MIN	7.7	7.6	7.7	7.4	7.2	7.4	7.5	7.5	7.5	6.8	6.7	6.8

ARKANSAS RIVER BASIN

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07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	7.4	7.4	7.4	7.5	7.4	7.4	7.6	7.6	7.6	7.5	7.4	7.4
2	7.4	7.3	7.3	7.4	7.4	7.4	7.7	7.6	7.6	7.5	7.4	7.5
3	7.3	7.3	7.3	7.4	7.4	7.4	7.7	7.6	7.6	7.5	7.4	7.5
4	7.4	7.3	7.3	7.5	7.4	7.5	7.7	7.6	7.6	7.6	7.3	7.4
5	7.4	7.4	7.4	7.5	7.5	7.5	7.8	7.6	7.7	7.4	7.3	7.4
6	7.4	7.4	7.4	7.6	7.5	7.5	7.8	7.6	7.7	7.4	7.2	7.2
7	7.5	7.4	7.4	7.8	7.6	7.6	7.8	7.7	7.8	7.2	7.1	7.1
8	7.6	7.4	7.5	7.7	7.6	7.7	7.8	7.6	7.6	7.2	7.1	7.2
9	7.8	7.5	7.6	7.7	7.6	7.6	7.7	7.6	7.6	7.3	7.2	7.3
10	7.8	7.7	7.7	7.7	7.6	7.7	7.6	7.5	7.6	7.4	7.3	7.4
11	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.6	7.6	7.5	7.4	7.5
12	7.7	7.6	7.7	7.7	7.6	7.6	7.7	7.6	7.7	7.5	7.4	7.5
13	7.8	7.6	7.7	7.8	7.6	7.7	7.7	7.6	7.7	7.5	7.4	7.5
14	7.8	7.6	7.7	7.8	7.6	7.7	7.8	7.6	7.7	7.5	7.4	7.4
15	7.6	7.5	7.6	7.7	7.6	7.7	7.7	7.6	7.7	7.5	7.4	7.5
16	7.6	7.6	7.6	7.7	7.6	7.7	7.7	7.6	7.6	7.6	7.5	7.5
17	7.8	7.6	7.7	7.7	7.6	7.6	7.7	7.6	7.7	7.6	7.6	7.6
18	7.8	7.4	7.6	7.7	7.6	7.6	7.7	7.5	7.6	7.6	7.5	7.6
19	7.8	7.6	7.7	7.7	7.6	7.6	7.6	7.5	7.6	7.6	7.5	7.5
20	7.8	7.6	7.6	7.7	7.6	7.6	7.6	7.6	7.6	7.5	7.4	7.4
21	7.7	7.6	7.7	7.9	7.5	7.6	7.7	7.6	7.6	7.5	7.4	7.4
22	7.6	7.2	7.4	7.6	7.5	7.5	7.6	7.5	7.6	7.6	7.4	7.6
23	7.5	7.4	7.4	7.7	7.5	7.6	7.6	7.5	7.6	7.6	7.6	7.6
24	7.6	7.2	7.5	7.7	7.6	7.6	7.6	7.5	7.6	8.1	7.6	7.8
25	7.4	7.2	7.3	7.8	7.7	7.7	7.6	7.5	7.5	7.7	7.6	7.7
26	7.6	7.2	7.4	7.8	7.7	7.8	7.5	7.4	7.5	7.9	7.6	7.6
27	7.4	7.2	7.3	7.9	7.7	7.8	7.5	7.4	7.5	7.7	7.6	7.6
28	7.6	7.4	7.5	7.7	7.6	7.7	7.5	7.5	7.5	7.7	7.6	7.7
29	7.5	7.5	7.5	7.7	7.2	7.6	7.5	7.4	7.5	7.7	7.6	7.7
30	7.5	7.5	7.5	7.5	7.3	7.4	7.6	7.5	7.5	7.7	7.6	7.7
31	---	---	---	7.6	7.5	7.5	7.5	7.4	7.5	---	---	---
MAX	7.8	7.7	7.7	7.9	7.7	7.8	7.8	7.7	7.8	8.1	7.6	7.8
MIN	7.3	7.2	7.3	7.4	7.2	7.4	7.5	7.4	7.5	7.2	7.1	7.1

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.6	18.1	18.8	17.8	17.0	17.4	---	---	---	9.7	8.6	9.1
2	20.2	18.6	19.3	17.0	14.8	16.1	15.6	10.7	12.9	10.5	6.7	9.5
3	20.2	18.8	19.4	15.1	14.0	14.7	13.3	11.6	12.5	10.3	7.1	9.5
4	19.9	18.4	18.9	15.2	14.0	14.7	13.0	11.2	11.8	9.2	7.4	8.5
5	19.2	18.2	18.6	16.3	14.4	15.5	11.2	9.7	10.7	7.8	7.0	7.5
6	19.4	18.5	19.0	17.5	15.7	16.8	9.7	8.7	9.1	8.0	7.0	7.5
7	19.5	18.8	19.1	18.2	16.7	17.5	9.0	8.1	8.6	7.9	6.9	7.5
8	20.6	19.3	19.9	18.2	17.0	17.7	9.7	8.3	8.8	8.5	7.2	8.1
9	20.9	20.6	20.7	18.1	17.1	17.7	11.4	9.3	10.2	9.0	7.8	8.6
10	21.4	20.8	21.0	18.1	17.1	17.7	9.3	8.3	8.7	9.1	8.0	8.6
11	21.8	21.4	21.6	17.9	17.0	17.5	8.4	8.1	8.3	9.0	8.0	8.5
12	22.0	21.5	21.7	17.9	16.7	17.4	8.9	8.3	8.6	9.4	8.0	8.8
13	21.9	21.4	21.7	18.3	17.1	17.8	9.0	8.1	8.6	9.4	8.0	9.0
14	21.6	21.0	21.2	18.5	17.5	18.0	8.7	7.8	8.3	8.4	7.4	8.1
15	21.7	21.2	21.5	17.9	16.9	17.3	8.5	7.5	7.9	9.1	7.4	8.3
16	21.8	20.9	21.6	16.9	15.8	16.5	7.8	6.7	7.1	10.5	8.6	9.7
17	20.9	18.4	20.0	16.9	15.9	16.5	7.7	6.8	7.2	10.9	9.8	10.4
18	18.4	17.5	18.2	---	---	---	7.7	6.9	7.2	10.7	9.8	10.3
19	18.1	17.0	17.5	---	---	---	8.1	6.9	7.3	10.7	9.6	10.2
20	17.8	16.7	17.2	---	---	---	8.1	6.6	7.3	9.9	8.6	9.4
21	17.9	16.7	17.2	---	---	---	7.3	6.1	6.5	8.6	7.9	8.3
22	17.8	16.7	17.3	---	---	---	6.6	6.0	6.3	9.4	7.9	8.7
23	17.3	15.9	16.6	17.7	15.2	15.9	6.6	5.9	6.3	9.8	8.7	9.2
24	16.5	15.2	15.9	15.2	13.7	14.3	6.7	6.0	6.4	8.9	7.6	8.2
25	16.4	14.8	15.7	13.8	12.2	13.1	6.7	6.0	6.4	7.7	6.9	7.3
26	16.9	15.3	16.2	---	---	---	7.2	6.1	6.8	7.2	6.5	6.9
27	17.6	16.1	17.0	---	---	---	7.3	6.0	6.7	6.7	5.6	6.3
28	18.2	16.8	17.6	---	---	---	7.2	6.2	6.7	6.3	5.3	5.8
29	18.8	17.4	18.2	---	---	---	8.2	6.4	7.6	6.4	4.1	5.1
30	18.7	16.2	17.4	---	---	---	9.1	6.3	8.4	6.2	4.1	5.4
31	17.2	16.2	16.6	---	---	---	9.3	8.2	8.8	6.6	4.8	5.7
MONTH	22.0	14.8	18.8	---	---	---	---	---	---	10.9	4.1	8.2

07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	6.3	4.9	5.9	14.5	13.2	13.8	13.3	12.7	13.0	20.1	18.4	18.8
2	6.0	4.8	5.4	14.5	10.9	13.4	14.7	13.1	13.6	19.8	18.5	19.0
3	7.4	5.2	6.4	10.9	9.1	10.2	14.1	13.1	13.7	19.9	18.3	19.2
4	7.8	6.4	7.1	9.9	8.9	9.4	15.0	12.8	13.8	19.5	17.9	18.6
5	7.1	6.1	6.6	11.5	9.7	10.5	16.6	13.6	14.9	19.4	18.6	18.9
6	7.8	5.9	6.9	13.7	11.1	12.2	18.1	15.1	16.4	19.4	18.5	19.0
7	8.6	6.6	7.7	15.2	13.0	13.9	18.5	17.3	17.9	20.5	19.4	19.7
8	9.1	7.4	8.3	16.3	14.5	15.3	18.1	16.0	16.9	23.1	20.5	21.7
9	9.7	7.9	8.9	15.3	14.6	15.0	17.6	15.9	16.7	23.0	19.6	21.4
10	11.1	9.1	10.2	14.6	12.9	13.9	17.3	16.4	16.7	20.2	19.1	19.5
11	10.7	9.5	10.3	12.9	11.3	11.9	17.6	16.8	17.2	22.4	19.9	21.2
12	9.5	8.8	9.2	11.9	10.3	11.0	17.3	16.1	16.5	22.9	19.6	20.9
13	10.1	8.6	9.4	12.6	10.7	11.6	16.1	15.0	15.5	19.6	18.3	18.8
14	10.2	9.2	9.6	13.6	11.9	12.6	16.6	15.0	15.6	18.4	17.8	18.1
15	10.8	9.0	10.0	14.9	12.8	13.7	16.7	15.4	16.0	17.9	17.3	17.6
16	11.2	10.2	10.7	14.4	12.6	13.7	17.2	15.9	16.5	17.9	17.3	17.6
17	10.9	10.3	10.6	12.7	10.5	11.5	17.1	15.2	16.1	18.4	17.8	18.1
18	10.7	9.3	10.0	10.5	10.0	10.3	18.5	15.6	16.8	19.2	18.2	18.6
19	10.2	9.3	9.7	10.1	9.4	9.6	19.7	17.6	18.4	19.0	18.2	18.6
20	10.4	9.1	9.7	10.5	9.0	9.7	19.8	18.5	19.1	19.0	18.1	18.6
21	10.4	9.5	9.8	11.7	10.3	11.0	19.1	18.2	18.8	19.5	18.1	18.8
22	12.0	10.4	11.1	13.0	11.6	12.2	19.4	18.8	19.1	20.5	18.6	19.5
23	13.8	12.0	13.2	13.1	12.2	12.6	19.4	19.0	19.1	20.8	19.4	20.1
24	15.3	12.9	13.8	13.8	12.8	13.3	20.5	18.5	19.2	20.4	19.5	20.0
25	15.6	14.3	14.8	14.1	13.4	13.8	19.9	18.4	19.2	22.3	20.0	21.0
26	14.8	13.8	14.5	13.7	13.0	13.3	19.5	18.3	18.9	23.2	21.8	22.5
27	13.9	12.9	13.4	14.4	12.8	13.8	19.1	17.1	18.0	23.7	22.0	22.8
28	14.1	12.6	13.3	14.3	13.7	14.0	19.3	17.2	18.1	23.8	22.1	23.2
29	14.5	12.8	13.6	13.7	11.8	12.4	19.5	18.7	19.1	22.1	20.7	21.5
30	---	---	---	13.3	11.6	12.3	20.1	19.5	19.8	22.2	21.1	21.7
31	---	---	---	12.7	11.7	12.3	---	---	---	22.3	21.4	21.9
MONTH	15.6	4.8	10.0	16.3	8.9	12.4	20.5	12.7	17.0	23.8	17.3	19.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.4	21.5	21.9	23.0	21.8	22.4	27.8	25.9	26.8	29.9	29.3	29.7

ARKANSAS RIVER BASIN

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07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	9.0	8.7	8.8	7.7	5.9	6.6	---	---	---	12.2	11.3	11.6
2	9.0	8.6	8.8	8.1	6.9	7.6	10.1	8.1	9.1	12.6	11.1	11.6
3	9.1	8.6	8.8	8.8	8.1	8.5	9.2	7.7	8.6	12.4	11.2	11.6
4	9.4	8.8	9.0	9.3	8.7	8.9	10.0	8.1	9.2	11.7	11.3	11.5
5	9.4	9.0	9.2	9.5	8.6	9.0	9.3	8.4	8.8	12.4	11.6	12.0
6	9.5	8.9	9.3	9.0	8.3	8.7	10.4	9.0	9.7	12.6	12.3	12.5
7	9.5	8.9	9.2	8.9	8.2	8.5	10.6	9.8	10.1	12.8	12.4	12.6
8	9.4	8.4	8.9	8.9	8.0	8.4	10.8	9.8	10.3	12.7	12.1	12.4
9	9.2	8.3	8.8	8.6	7.5	8.1	10.5	9.6	10.1	12.7	11.9	12.3
10	9.1	8.1	8.6	8.0	7.4	7.7	10.5	9.9	10.1	12.7	12.2	12.4
11	8.9	8.2	8.5	8.3	7.5	7.8	10.7	10.4	10.5	13.0	12.5	12.7
12	8.8	8.1	8.5	8.3	7.4	7.8	10.9	10.6	10.8	13.1	12.7	12.8
13	8.7	7.9	8.3	8.3	7.4	7.7	11.0	10.8	10.9	13.2	12.5	12.8
14	8.6	8.0	8.4	7.9	7.2	7.5	11.1	10.8	10.9	13.5	13.2	13.4
15	8.6	8.0	8.4	8.3	7.2	7.8	11.4	10.9	11.1	13.7	13.1	13.4
16	8.6	7.7	8.1	8.3	7.5	7.9	11.6	11.2	11.5	13.2	11.9	12.7
17	8.8	8.3	8.5	8.2	7.0	7.7	11.9	11.3	11.7	12.1	11.4	11.9
18	9.6	8.8	9.0	---	---	---	12.1	11.5	11.8	11.8	11.3	11.6
19	9.4	8.9	9.2	---	---	---	11.7	11.4	11.6	12.6	11.5	11.9
20	9.5	9.2	9.4	---	---	---	12.1	11.3	11.7	12.2	11.3	11.9
21	9.6	9.3	9.5	---	---	---	12.2	11.5	11.9	13.0	12.0	12.6
22	9.6	9.1	9.4	---	---	---	12.2	11.6	12.0	12.9	12.2	12.6
23	9.7	8.9	9.3	8.8	7.2	8.5	12.5	12.0	12.3	12.7	12.2	12.4
24	9.8	8.8	9.3	8.9	6.7	7.8	12.6	12.1	12.4	13.5	12.4	13.0
25	10.2	9.3	9.7	9.2	8.8	8.9	12.6	12.2	12.4	14.4	13.4	14.1
26	9.8	9.0	9.5	---	---	---	12.6	12.2	12.4	14.5	13.8	14.2
27	9.4	8.6	9.0	---	---	---	13.3	12.1	12.5	14.8	13.8	14.2
28	9.3	8.5	8.8	---	---	---	13.2	12.2	12.5	---	---	---
29	9.2	8.3	8.7	---	---	---	12.4	11.8	12.0	---	---	---
30	8.7	7.7	8.4	---	---	---	12.1	11.4	11.6	---	---	---
31	8.6	7.7	8.3	---	---	---	12.2	11.3	11.5	---	---	---
MONTH	10.2	7.7	8.9	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	10.0	9.6	9.8	10.9	10.0	10.3	8.3	7.7	8.0
2	---	---	---	10.2	9.2	9.5	10.3	9.7	10.0	8.5	8.2	8.3
3	---	---	---	10.9	10.1	10.5	10.3	9.9	10.1	9.4	8.2	8.7
4	---	---	---	11.1	10.9	11.0	10.3	9.9	10.1	9.4	8.6	9.1
5	---	---	---	11.1	10.7	10.9	10.1	9.6	9.9	9.0	8.2	8.5
6	---	---	---	10.7	10.2	10.4	9.7	9.1	9.4	9.0	7.5	8.5
7	---	---	---	10.2	9.4	9.8	9.2	8.4	8.8	7.5	6.4	7.2
8	---	---	---	9.4	9.2	9.3	9.5	8.7	9.0	6.4	5.2	5.6
9	---	---	---	9.5	9.3	9.4	9.9	8.9	9.4	8.9	6.0	7.8
10	---	---	---	9.8	9.4	9.5	10.0	9.0	9.5	8.9	7.7	8.3
11	11.3	10.3	10.8	10.7	9.7	10.1	9.8	8.7	9.2	8.8	7.6	8.1
12	10.9	10.4	10.6	11.1	10.2	10.6	9.5	8.8	9.2	10.6	8.8	9.9
13	11.0	10.3	10.7	11.0	10.4	10.6	10.3	9.1	9.6	10.9	10.6	10.8
14	11.0	10.3	10.6	10.5	9.9	10.3	10.3	9.9	10.1	10.9	10.6	10.8
15	11.1	10.0	10.7	9.9	9.7	9.8	10.1	9.7	9.9	10.6	10.1	10.4
16	10.7	10.0	10.2	9.9	9.2	9.5	10.1	9.2	9.5	10.1	9.8	10.0
17	12.4	10.7	11.7	10.4	9.7	9.9	10.4	9.6	9.9	9.9	9.6	9.8
18	11.9	11.2	11.6	10.7	10.4	10.6	10.3	9.7	10.0	9.7	9.6	9.7
19	11.8	11.1	11.4	11.1	10.6	10.9	9.9	8.9	9.2	9.7	9.4	9.5
20	13.4	11.5	12.3	11.2	11.0	11.1	9.3	7.7	8.5	9.4	9.2	9.3
21	13.1	12.2	12.6	11.1	10.8	10.9	9.3	8.1	8.7	9.4	9.0	9.2
22	12.9	11.7	12.3	10.8	10.4	10.6	9.6	8.7	9.0	9.1	8.7	9.0
23	12.6	10.7	11.1	10.5	9.9	10.3	9.2	8.1	8.6	8.8	8.5	8.7
24	10.9	9.7	10.3	10.0	9.6	9.8	9.5	8.1	8.6	8.7	8.4	8.6
25	10.6	9.7	10.2	10.4	10.0	10.1	8.2	8.0	8.1	9.9	8.5	9.4
26	10.3	9.5	9.9	10.5	10.1	10.3	8.6	8.1	8.3	9.1	8.1	8.8
27	10.5	10.1	10.3	10.4	9.3	9.8	9.2	8.6	9.0	8.3	7.8	8.1
28	10.5	10.2	10.3	10.3	9.6	9.8	9.1	8.5	8.7	9.0	8.0	8.5
29	10.2	9.9	10.1	11.0	10.3	10.7	8.7	7.9	8.2	8.9	8.4	8.6
30	---	---	---	11.1	10.4	10.8	8.5	7.3	7.9	9.0	8.4	8.7
31	---	---	---	11.0	10.8	10.9	---	---	---	9.0	8.5	8.8
MONTH	---	---	---	11.2	9.2	10.2	10.9	7.3	9.2	10.9	5.2	8.9



Flowing well at Sulphur

ARKANSAS RIVER BASIN

07178520 DOG CREEK SOUTH OF CLAREMORE, OK

LOCATION.--Lat 36°16'42", long 95°36'41", in NW 1/4 NW 1/4 sec.28, T.21 N., R.16 E., Rogers County, Hydrologic Unit 11070105, on right downstream abutment of county road bridge, 2.4 mi south of Claremore, 1.5 mi downstream from Cat Creek, and 3.1 mi upstream from Panther Creek.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--74.9 mi².

PERIOD OF RECORD.--August 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 548.52 ft above sea level from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	.56	.20	.49	2.5	24	63	543	15	66	22	3.7
2	1.4	.84	.30	.38	2.6	77	55	191	20	51	18	3.5
3	1.2	.30	14	16	2.8	788	59	76	50	39	13	3.3
4	1.1	.56	308	15	8.6	767	30	82	38	29	12	2.8
5	1.0	.58	47	2.4	6.1	214	24	50	70	22	14	7.2
6	1.0	.66	6.2	1.1	2.3	120	24	851	18	16	9.9	5.4
7	.83	.68	1.9	.75	2.0	84	31	949	8.5	14	9.9	4.4
8	.79	1.1	.95	1.1	1.6	93	47	200	4.7	13	10	4.0
9	.74	1.1	86	1.4	1.7	77	9.2	909	4.3	7.2	9.5	3.7
10	.36	1.1	133	1.1	6.8	63	7.8	743	10	6.4	7.8	3.7
11	.06	.98	102	.96	24	74	301	167	149	5.4	11	3.9
12	.48	.00	67	1.0	13	56	163	86	292	5.7	16	3.8
13	3.3	7.8	39	12	8.3	53	64	49	79	5.4	14	3.5
14	.56	2.0	22	6.5	8.3	44	45	25	301	6.4	13	4.1
15	.88	2.0	12	1.1	2.7	41	32	18	211	6.6	14	3.3
16	.72	1.7	9.0	.74	1.4	71	42	16	85	4.0	13	2.9
17	1.2	1.7	6.2	.85	4.7	74	34	15	289	4.9	11	2.6
18	1.9	1.9	24	.83	3.6	112	23	11	293	4.2	12	3.0
19	2.6	2.4	2.9	2.5	1.6	158	18	11	123	4.3	17	2.8
20	2.4	2.2	17	16	1.4	102	21	9.1	111	25	13	2.7
21	3.0	2.5	7.7	2.4	1.3	68	27	4.6	974	166	12	2.9
22	2.1	45	.59	.99	1.3	60	11	4.4	734	45	6.6	2.8
23	1.9	159	.21	.67	85	99	9.1	4.3	188	91	4.4	2.7
24	2.1	2.6	.72	3.4	16	222	43	2.1	737	44	2.6	19
25	2.7	.46	2.2	7.3	26	131	17	238	571	19	.98	6.3
26	2.6	.07	.31	4.5	51	160	8.9	334	617	9.9	8.1	4.9
27	4.0	.06	7.9	1.5	46	542	8.3	294	402	110	3.4	4.4
28	3.4	.06	11	2.4	31	202	11	123	194	32	3.6	4.3
29	1.6	.21	.96	3.1	19	129	8.7	63	116	618	3.8	4.1
30	52	.49	.43	2.2	---	112	19	39	81	94	3.9	3.3
31	2.9	---	.49	2.5	---	76	---	28	---	39	3.8	---
TOTAL	102.62	240.61	931.16	113.16	382.6	4893	1256.0	6135.5	6785.5	1603.4	313.28	129.0
MEAN	3.31	8.02	30.0	3.65	13.2	158	41.9	198	226	51.7	10.1	4.30
MAX	52	159	308	16	85	788	301	949	974	618	22	19
MIN	.06	.00	.20	.38	1.3	24	7.8	2.1	4.3	4.0	.98	2.6
AC-FT	204	477	1850	224	759	9710	2490	12170	13460	3180	621	256

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

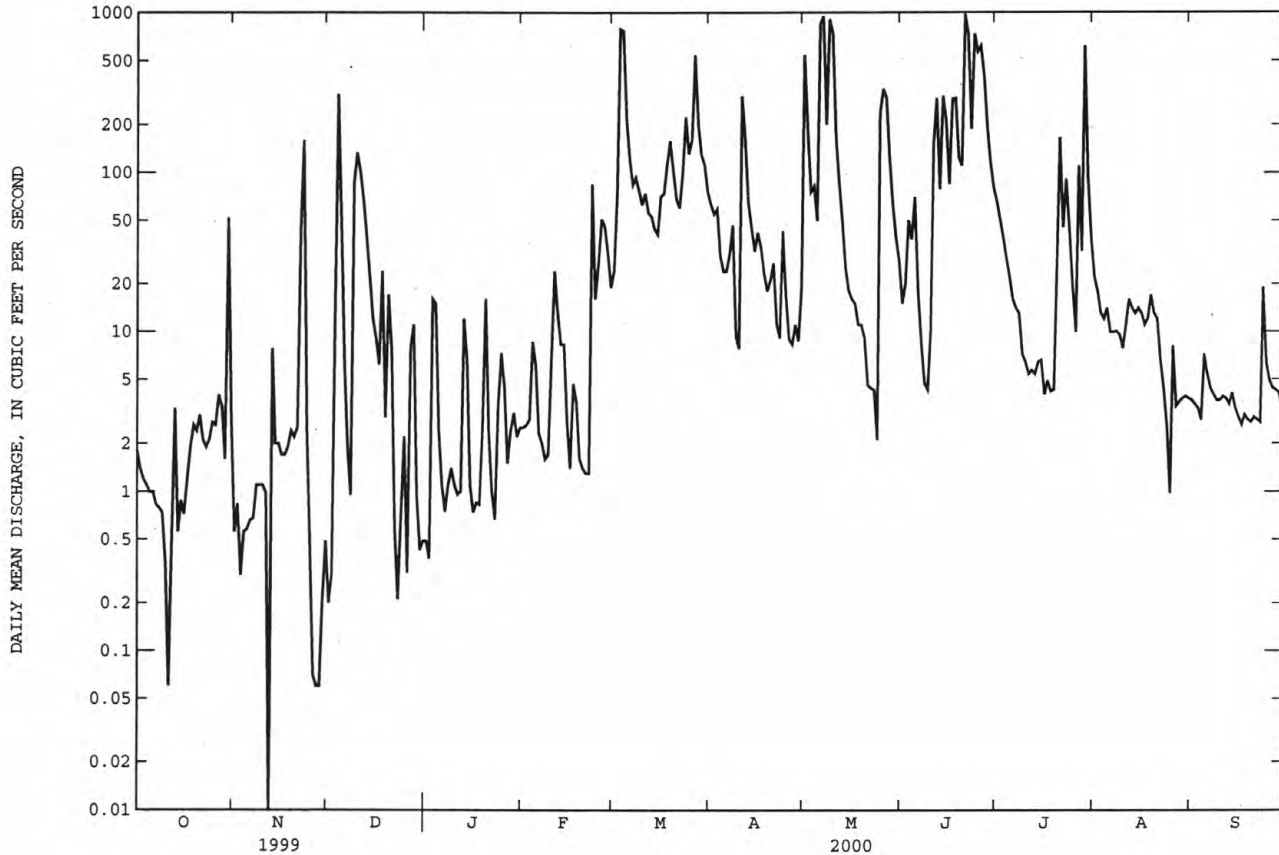
	1997	1998	1999	2000	1997	1998	1999	2000	1997	1998	1999	2000
MEAN	22.6	14.4	35.0	42.3	40.9	193	106	155	162	47.1	7.50	8.66
MAX	51.2	20.1	46.8	77.0	90.5	258	223	225	253	72.4	10.1	12.0
(WY)	1999	1999	1998	1999	1999	1998	1999	1999	1999	1999	2000	1998
MIN	3.31	8.02	28.2	3.65	13.2	158	41.9	40.7	6.24	17.2	6.18	4.30
(WY)	2000	2000	1999	2000	2000	2000	2000	1998	1998	1998	1998	2000

ARKANSAS RIVER BASIN

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07178520 DOG CREEK SOUTH OF CLAREMORE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1997 - 2000	
ANNUAL TOTAL	34218.79		22885.83		69.6	
ANNUAL MEAN	93.8		62.5		98.7	
HIGHEST ANNUAL MEAN					47.6	
LOWEST ANNUAL MEAN					1990	
HIGHEST DAILY MEAN	1990	Apr 26	974	Jun 21	1990	Apr 26 1999
LOWEST DAILY MEAN	.00	Nov 12	.00	Nov 12	.00	Nov 12 1999
ANNUAL SEVEN-DAY MINIMUM	.20	Nov 26	.20	Nov 26	.20	Nov 26 1999
INSTANTANEOUS PEAK FLOW			1750	May 6	2280	Jun 20 1999
INSTANTANEOUS PEAK STAGE			18.14	May 6	19.47	Jun 20 1999
ANNUAL RUNOFF (AC-FT)	67870		45390		50420	
10 PERCENT EXCEEDS	235		159		144	
50 PERCENT EXCEEDS	19		8.8		14	
90 PERCENT EXCEEDS	1.1		.85		2.4	



ARKANSAS RIVER BASIN

07178520 DOG CREEK SOUTH OF CLAREMORE, OK --Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 1997 to current year.

INSTRUMENTATION.--Water temperature recorder provides continuous readings.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 32.0°C, July 10, 1998; minimum, -0.5°C, Jan. 3, 4, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 30.9°C, July 16; minimum, 1.4°C, Jan. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	17.6	14.6	16.2	17.1	14.6	16.2	10.2	8.2	9.2	9.7	7.1	8.4
2	18.5	15.5	16.8	14.6	12.0	13.0	12.3	8.8	10.6	10.8	8.9	9.7
3	18.0	15.8	16.7	12.8	10.3	11.7	13.1	11.3	12.1	10.1	7.1	8.4
4	16.5	14.2	15.5	12.7	9.7	11.3	13.5	11.1	11.7	7.3	4.4	6.2
5	16.6	13.2	15.0	14.6	10.9	12.8	11.7	8.9	10.6	5.3	3.4	4.3
6	17.2	14.0	15.6	16.8	13.5	15.1	8.9	6.7	7.9	5.7	3.1	4.4
7	17.4	14.5	16.0	17.5	14.9	16.2	8.6	6.5	7.4	6.1	3.7	5.0
8	19.9	17.1	18.4	17.9	15.3	16.5	10.3	7.3	8.8	7.5	6.0	6.9
9	20.4	18.4	19.3	17.2	15.2	16.3	12.3	8.5	10.4	9.9	7.5	8.6
10	20.9	17.9	19.4	17.5	15.1	16.3	8.5	7.4	7.8	9.0	6.8	7.9
11	21.6	14.6	18.5	16.5	14.0	15.4	8.6	7.8	8.2	8.2	6.4	7.4
12	20.6	18.0	19.3	16.3	13.8	15.2	8.8	8.6	8.7	9.7	6.5	7.9
13	20.6	18.2	19.3	16.8	14.2	15.5	8.7	7.7	8.2	8.9	6.1	7.5
14	20.4	17.5	19.0	17.2	14.8	16.1	7.8	6.9	7.3	6.9	5.3	6.0
15	21.3	18.9	20.0	16.1	14.0	15.1	7.7	5.7	7.0	7.9	4.7	6.2
16	20.6	18.5	19.7	15.1	12.3	13.8	6.7	5.4	5.9	9.5	7.2	8.2
17	18.5	15.2	16.5	15.1	12.4	13.8	7.5	5.3	6.3	11.5	9.5	10.5
18	15.4	14.3	14.9	16.1	13.2	14.7	7.0	6.1	6.5	10.9	9.6	10.2
19	14.4	12.2	13.5	15.8	13.7	14.9	7.6	5.8	6.7	10.9	8.9	10.1
20	13.9	11.0	12.6	13.7	11.4	12.7	7.1	4.5	5.9	8.9	5.0	6.6
21	14.5	11.7	13.2	14.2	11.4	12.8	5.2	3.5	4.3	5.9	3.7	4.8
22	14.6	12.2	13.5	17.0	13.6	14.8	5.3	2.7	3.9	7.2	5.1	6.0
23	13.9	11.8	12.7	16.9	13.2	15.1	5.3	3.2	4.2	7.4	5.7	6.4
24	12.5	10.3	11.6	13.2	10.7	12.0	6.0	4.4	5.0	6.6	4.0	5.3
25	13.2	10.4	11.8	10.8	9.0	10.0	6.0	4.5	5.2	4.3	2.5	3.5
26	13.8	10.9	12.5	10.6	8.2	9.3	5.9	3.8	4.8	3.8	2.7	3.0
27	15.2	12.2	13.7	11.3	8.7	9.9	6.4	4.4	5.0	2.9	1.4	2.1
28	16.3	13.6	14.9	11.8	9.4	10.5	5.6	3.0	4.2	3.5	1.6	2.4
29	17.4	15.6	16.5	11.3	9.6	10.4	6.9	3.6	5.2	4.7	2.9	3.6
30	17.4	15.8	16.4	10.5	8.6	9.5	8.5	6.4	7.4	5.2	2.9	3.8
31	16.8	15.4	16.0	---	---	---	9.2	6.8	8.0	5.8	2.9	4.2
MONTH	21.6	10.3	16.0	17.9	8.2	13.6	13.5	2.7	7.2	11.5	1.4	6.3

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	4.5	3.5	4.0	14.2	12.1	12.8	15.3	13.7	14.3	19.3	17.4	18.4
2	5.3	2.5	3.7	12.9	9.1	11.6	15.4	13.2	14.0	20.0	18.2	18.9
3	7.0	3.2	4.8	10.7	8.4	9.6	15.4	13.5	14.3	20.3	18.1	18.9
4	6.9	4.5	5.5	12.1	10.2	10.9	14.3	11.9	13.2	21.1	18.3	19.6
5	6.2	3.1	4.5	12.2	9.4	10.5	16.5	12.9	14.8	21.2	19.4	20.1
6	7.0	3.3	5.0	13.3	9.2	11.0	18.4	16.1	17.2	20.3	18.5	19.5
7	8.4	4.8	6.5	14.6	11.1	12.6	18.8	16.7	18.0	21.4	19.9	20.6
8	9.1	5.7	7.3	14.6	12.7	13.7	16.7	13.0	14.1	23.5	20.6	21.7
9	10.3	6.8	8.4	13.7	11.0	12.3	16.3	12.7	14.1	22.9	18.6	20.9
10	12.4	9.4	10.6	13.0	10.4	11.4	15.0	13.7	14.3	22.0	20.6	21.2
11	10.0	7.7	8.9	10.4	8.5	9.5	16.1	14.3	15.1	22.9	20.7	21.6
12	7.7	6.3	7.0	11.5	8.9	9.9	15.3	13.8	14.2	22.9	21.9	22.3
13	8.6	6.3	7.3	13.0	11.2	11.8	16.7	13.4	14.6	22.6	20.2	21.1
14	8.8	6.2	7.2	13.8	12.2	12.9	16.7	15.3	16.0	21.3	19.2	20.0
15	10.6	5.9	7.9	15.2	12.6	13.9	16.8	15.8	16.3	20.5	18.7	19.4
16	9.5	7.1	8.4	15.2	10.6	12.6	16.7	15.6	16.2	19.6	18.3	18.8
17	9.3	8.8	9.1	10.6	8.3	9.5	16.4	14.6	15.7	21.2	19.6	20.5
18	9.2	7.3	8.6	10.5	8.8	9.4	19.8	16.0	17.6	22.4	21.2	21.6
19	9.9	6.8	8.0	10.5	9.8	10.0	21.1	19.8	20.6	21.4	19.8	20.7
20	10.0	5.7	7.8	12.7	8.6	10.3	20.8	17.8	19.2	20.6	19.4	19.9
21	10.6	8.7	9.4	12.7	10.9	11.8	17.8	15.8	16.8	22.5	19.4	20.6
22	14.2	10.0	12.0	13.1	12.0	12.5	18.4	16.1	17.0	23.5	20.4	22.0
23	13.8	12.5	13.3	15.5	12.6	13.5	18.0	16.5	17.2	25.7	22.6	24.0
24	15.4	12.6	14.0	15.5	11.9	13.7	17.7	16.4	17.0	27.1	24.4	25.4
25	15.8	14.4	14.9	16.7	12.5	14.4	19.2	17.1	17.9	25.8	20.9	23.7
26	14.6	12.6	13.6	16.5	14.5	15.1	19.4	17.4	18.2	25.5	22.2	23.9
27	12.6	10.2	11.3	15.9	13.6	14.7	20.4	17.3	18.4	25.4	23.0	24.1
28	12.6	10.4	11.6	15.8	13.5	14.6	20.9	18.0	19.0	26.2	23.8	24.8
29	14.4	12.0	13.0	15.1	13.1	13.8	20.2	17.5	18.6	26.2	24.2	25.2
30	---	---	---	14.5	12.6	13.5	20.0	18.0	19.1	26.2	24.6	25.5
31	---	---	---	15.3	12.6	13.8	---	---	---	27.0	25.6	26.2
MONTH	15.8	2.5	8.7	16.7	8.3	12.2	21.1	11.9	16.4	27.1	17.4	21.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	28.3	26.0	26.8	26.8	25.0	25.6	27.1	25.5	26.3	28.9	25.3	27.0
2	26.2	24.6	25.4	26.9	26.0	26.4	27.8	25.8	26.6	28.9	25.4	27.1
3	24.6	22.9	24.1	27.5	26.5	27.1	28.1	26.2	27.0	29.1	25.5	27.2
4	24.4	23.4	23.9	28.1	26.8	27.4	28.9	26.5	27.5	27.8	25.9	26.9
5	24.7	22.7	23.4	28.4	27.0	27.5	28.8	27.2	27.9	27.5	25.1	26.2
6	23.7	21.3	22.5	29.3	26.9	27.8	29.9	26.8	28.0	26.2	23.6	25.0
7	24.0	20.5	21.8	29.1	27.1	27.9	30.2	27.4	28.4	26.4	23.3	24.8
8	24.9	19.9	22.1	28.9	27.0	27.7	30.1	27.3	28.4	26.0	23.2	24.6
9	23.4	21.3	22.4	30.4	26.6	28.0	30.2	27.3	28.4	26.1	23.6	24.8
10	23.5	22.1	22.7	30.5	26.4	28.1	30.7	27.5	28.7	27.3	24.2	25.6
11	24.6	22.3	23.0	30.0	26.2	28.0	30.4	27.5	28.7	27.8	24.9	26.3
12	25.9	23.8	24.5	29.9	26.7	28.1	29.1	27.8	28.4	26.9	25.1	26.2
13	26.1	24.1	25.0	30.5	26.5	28.2	29.4	27.0	28.0	27.0	24.0	25.6
14	26.2	21.4	24.2	29.7	25.8	27.5	29.3	26.5	27.7	26.8	23.7	25.3
15	26.1	23.4	24.6	30.2	25.8	27.8	29.0	26.5	27.5	25.2	22.3	23.6
16	25.8	23.0	24.0	30.9	26.5	28.5	30.1	27.2	28.3	22.9	19.9	21.6
17	23.0	20.7	22.1	29.3	27.0	27.8	30.7	27.5	28.7	22.0	18.9	20.7
18	23.4	22.3	22.8	27.6	26.2	26.9	28.5	26.6	27.3	21.7	18.5	20.2
19	23.7	22.5	23.1	29.3	25.6	27.4	27.6	25.5	26.5	22.0	18.7	20.4
20	24.7	22.5	23.3	28.1	25.1	26.3	29.2	26.1	27.2	21.5	19.8	20.6
21	24.7	21.9	22.8	25.5	22.2	24.2	29.1	25.8	27.1	20.2	17.5	18.9
22	24.2	22.7	23.4	25.7	24.7	25.2	29.2	25.7	27.2	22.6	19.2	20.7
23	25.3	23.0	23.9	27.8	25.3	26.7	29.0	26.0	27.5	23.5	21.3	22.2
24	25.1	22.5	23.7	27.7	26.1	26.8	29.4	26.2	27.7	21.8	17.2	19.5
25	26.5	24.7	25.7	26.4	24.6	25.7	29.1	25.7	27.5	17.2	15.3	16.2
26	26.6	23.6	25.2	27.1	23.5	25.0	28.8	25.9	27.3	17.1	13.8	15.4
27	27.7	25.6	26.5	25.4	22.5	24.4	29.4	25.4	27.2	17.3	13.8	15.5
28	27.5	24.7	25.8	25.4	24.9	25.1	29.2	25.7	27.3	18.2	14.7	16.4
29	26.2	24.2	25.1	27.5	21.7	24.5	28.9	25.3	27.1	18.9	15.8	17.3
30	26.6	24.3	25.4	27.2	25.5	26.3	28.5	25.2	26.9	19.1	16.3	17.7
31	---	---	---	27.1	25.7	26.4	28.4	25.2	26.8	---	---	---
MONTH	28.3	19.9	24.0	30.9	21.7	26.8	30.7	25.2	27.6	29.1	13.8	22.3
YEAR	30.9	1.4	16.9									

ARKANSAS RIVER BASIN

07185000 NEOSHO RIVER NEAR COMMERCE, OK

LOCATION.--Lat 36°55'43", long 94°57'26", in SW 1/4 SE 1/4 sec.5, T.28 N., R.22 E., Ottawa County, Hydrologic Unit 11070206, on downstream side of right pier of county road bridge, 1.3 mi upstream from Mud Creek, 2.2 mi downstream from Four Mile Creek, 4.5 mi west of Commerce, and at mile 153.4.

DRAINAGE AREA.--5,876 mi².

PERIOD OF RECORD.--June 1939 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 748.97 ft above sea level (U.S. Army Corps of Engineers' datum). Since February 1989, supplementary water-stage recorder 1000 ft to the left at same datum used when flow exceeds 21 ft GH.

REMARKS.--No estimated daily discharge. Records good. Flow regulated to some extent since 1963 by John Redmond Reservoir in Kansas, 190 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 9	2200	29,400	18.27	Jun 27	2400	27,200	17.55
Jun 21	1600	25,700	17.04				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7170	39	201	619	492	2970	4970	905	347	2590	300	96
2	3770	34	162	608	484	5070	3810	750	1460	3400	272	98
3	2490	33	170	620	494	7960	3170	586	2580	1970	246	100
4	1850	35	5940	618	502	8370	2910	545	1670	1110	224	97
5	1400	43	11900	588	489	6770	2710	1110	1910	763	208	88
6	1290	42	8810	569	484	5820	2550	5000	1590	579	195	81
7	1180	42	7210	444	472	5010	2050	6290	1180	456	184	78
8	922	43	3430	329	399	4150	1490	2270	908	367	172	83
9	492	39	2680	295	358	2630	1230	20200	569	317	163	95
10	280	35	5560	281	361	2440	1150	27300	396	277	159	104
11	192	33	7110	274	326	2580	1180	13100	357	255	156	108
12	148	32	5480	262	295	3000	1210	2870	333	241	152	114
13	122	31	3780	259	293	2720	1060	1400	244	218	146	116
14	103	30	3390	239	268	2380	824	820	2280	201	140	112
15	84	29	3300	230	215	2200	727	553	9800	357	135	110
16	71	26	3590	234	164	3400	708	577	10000	394	132	115
17	61	25	3560	304	135	12200	682	944	16700	348	128	121
18	49	23	3430	502	188	10900	675	949	15100	275	122	115
19	44	23	3240	526	1770	7740	671	888	7150	212	117	102
20	40	24	2210	520	3610	12800	787	714	5290	338	110	95
21	37	24	1440	510	3090	10500	1170	580	21600	1340	109	93
22	34	26	1300	512	1970	5410	1220	466	23000	8070	118	98
23	28	99	1260	508	1510	3830	1200	347	10200	15100	116	115
24	23	185	1230	501	1300	4540	1160	294	4590	8480	113	179
25	20	2930	1200	505	1340	7800	1170	306	3460	3290	112	223
26	19	2510	1190	491	2720	6450	1180	591	13700	1530	108	173
27	20	1060	1170	489	5680	4070	1160	1450	25700	893	104	138
28	19	550	1150	501	5260	3160	988	1120	22100	621	102	111
29	18	351	1110	501	3100	3620	708	698	8980	491	101	95
30	25	258	976	504	---	7690	626	478	3990	387	101	83
31	37	---	711	496	---	6820	---	382	---	330	98	---
TOTAL	22038	8654	97890	13839	37769	175000	45146	94483	217184	55200	4643	3336
MEAN	711	288	3158	446	1302	5645	1505	3048	7239	1781	150	111
MAX	7170	2930	11900	620	5680	12800	4970	27300	25700	15100	300	223
MIN	18	23	162	230	135	2200	626	294	244	201	98	78
AC-FT	43710	17170	194200	27450	74910	347100	89550	187400	430800	109500	9210	6620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	MEAN	3366	3417	2308	1944	2555	4430	5693	6106	6700	4977	1717	2710
MAX	33400	22280	17280	10090	13980	21630	23270	29560	27950	53350	11680	16930	
(WY)	1987	1999	1993	1973	1985	1973	1945	1961	1995	1951	1993	1951	
MIN	.000	1.60	6.33	8.60	24.9	11.9	62.6	395	290	21.1	.000	1.52	
(WY)	1957	1940	1940	1957	1954	1956	1981	1956	1980	1954	1954	1953	

ARKANSAS RIVER BASIN

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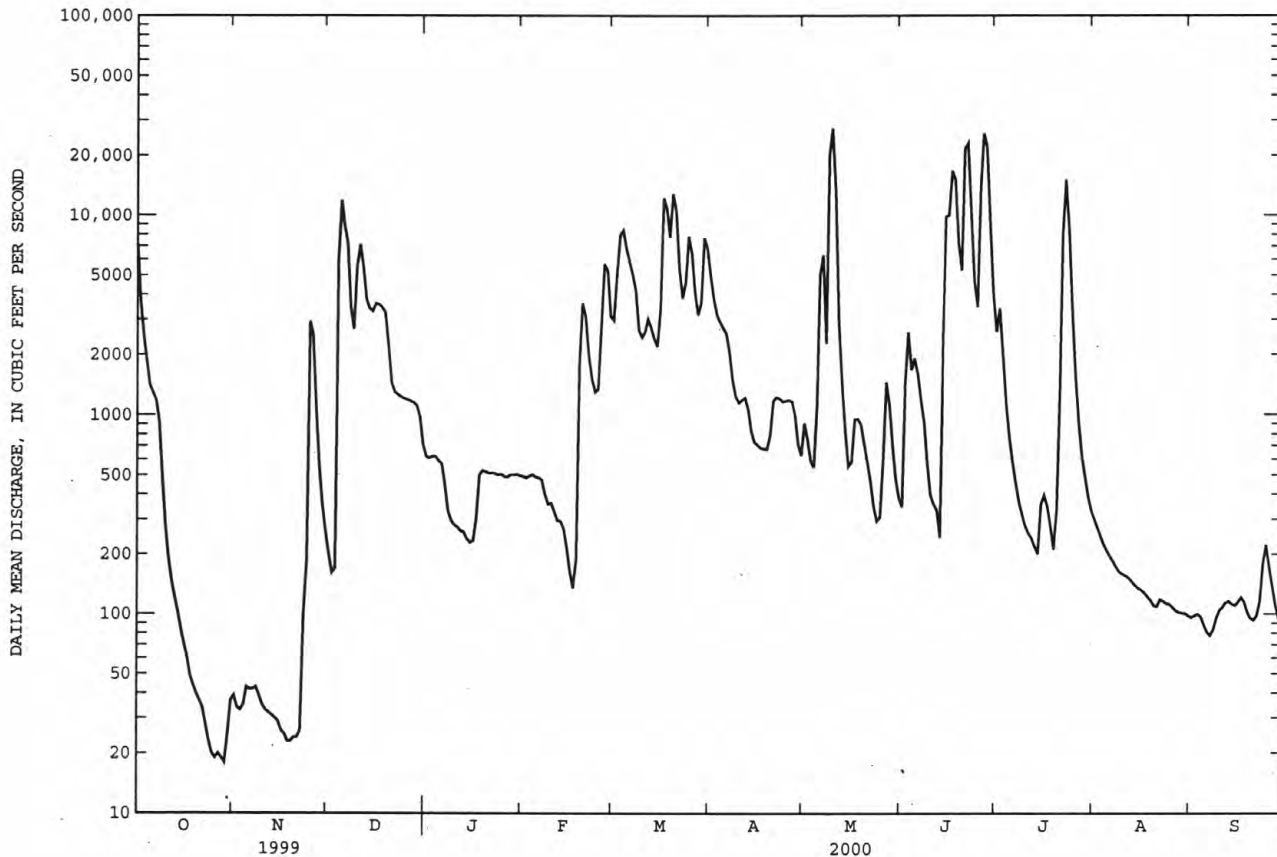
07185000 NEOSHO RIVER NEAR COMMERCE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	2037991		775182		3828	
ANNUAL MEAN	5584		2118		11140	
HIGHEST ANNUAL MEAN					246	
LOWEST ANNUAL MEAN					251000	
HIGHEST DAILY MEAN	37900	Apr 27	27300	May 10		1993
LOWEST DAILY MEAN	18	Oct 29	18	Oct 29		1953
ANNUAL SEVEN-DAY MINIMUM	21	Oct 24	21	Oct 24		Jul 15 1951
INSTANTANEOUS PEAK FLOW			29400	May 9		Aug 21 1953
INSTANTANEOUS PEAK STAGE			18.27	May 9		Sep 27 1953
ANNUAL RUNOFF (AC-FT)	4042000		1538000			Jul 15 1951
10 PERCENT EXCEEDS	16200		6040			Jul 16 1951
50 PERCENT EXCEEDS	1940		523			
90 PERCENT EXCEEDS	45		57			

^aIn 1953-54 and 1956.

^bComputed by flood-routing method from hydrograph defined at Miami, mile 144.2, by several discharge measurements, gage height record, and by comparison with computed inflow into Lake O' the Cherokees.

^cFrom floodmark.



ARKANSAS RIVER BASIN

07185080 NEOSHO RIVER AT MIAMI, OK

LOCATION.--Lat 36°51'53", long 94°52'43", in NW 1/4 SE 1/4 sec.31, T.28 N., R.23 E., Ottawa County, Hydrologic Unit 11070206, near left downstream wingwall of State Highway 125 bridge, on southwest side of Miami, 1.5 mi upstream from Tar Creek, 2.8 mi downstream from Coal Creek and at mile 143.7.

DRAINAGE AREA.--6,001 mi².

PERIOD OF RECORD.--October 1994 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft above sea level (U.S. Army Corps of Engineers' datum).

REMARKS.--Records fair. At high flow, drawdown on stage may be as great as .20 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 766.33 ft, June 12, 1995; minimum gage height, 740.67 ft, Sept. 11, 1998.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 16, 1951, reached a stage of 778.53 ft at site on old U.S. Highway 66 at Miami bridge currently Highway 169, .5 mi upstream from present site, and at same datum.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 754.62 ft, May 10; minimum gage height, 740.68 ft, Sept. 15.

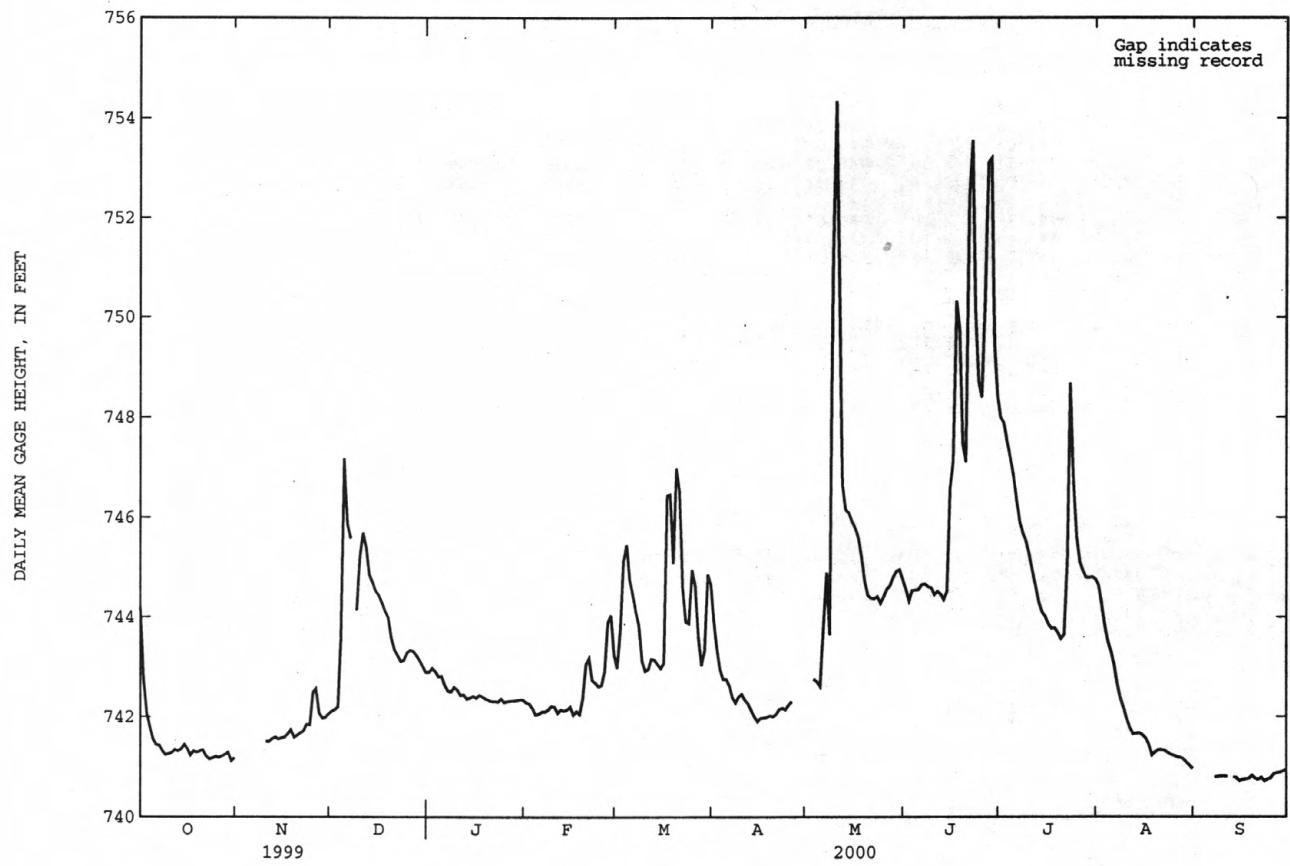
GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	745.07	743.42	744.20	---	---	---	742.22	742.05	742.11	743.07	742.78	742.89
2	743.42	742.24	742.76	---	---	---	742.43	741.88	742.14	743.19	742.85	742.97
3	742.24	741.89	742.06	---	---	---	742.57	741.82	742.20	743.14	742.75	742.91
4	741.94	741.66	741.79	---	---	---	747.18	742.12	743.57	742.87	742.73	742.80
5	741.66	741.42	741.56	---	---	---	747.89	745.87	747.17	742.99	742.61	742.81
6	741.51	741.38	741.44	---	---	---	746.22	745.50	745.87	742.75	742.52	742.63
7	741.54	741.33	741.42	---	---	---	746.19	744.84	745.58	742.61	742.40	742.52
8	741.45	741.23	741.31	---	---	---	---	---	---	742.53	742.43	742.50
9	741.32	741.20	741.24	---	---	---	744.65	744.02	744.14	742.81	742.45	742.59
10	741.30	741.19	741.26	741.63	741.42	741.51	744.35	745.23	745.22	742.71	742.38	742.54
11	741.32	741.25	741.28	741.56	741.47	741.51	745.98	745.23	745.69	742.49	742.32	742.43
12	741.41	741.29	741.34	741.63	741.49	741.56	745.90	745.01	745.40	742.56	742.25	742.44
13	741.37	741.19	741.31	741.70	741.47	741.59	745.01	744.73	744.85	742.55	742.20	742.36
14	741.43	741.25	741.35	741.63	741.47	741.55	744.78	744.64	744.70	742.49	742.20	742.38
15	741.53	741.34	741.44	741.64	741.50	741.58	744.68	744.44	744.52	742.54	742.30	742.41
16	741.53	740.97	741.35	741.65	741.56	741.59	744.47	744.38	744.44	742.45	742.32	742.38
17	741.41	741.00	741.23	741.76	741.57	741.66	744.46	744.15	744.29	742.49	742.39	742.43
18	741.38	741.23	741.31	742.06	741.60	741.74	744.19	744.06	744.12	742.46	742.34	742.40
19	741.35	741.20	741.29	741.79	741.42	741.59	744.08	743.74	743.99	742.51	741.99	742.36
20	741.43	741.22	741.31	741.69	741.56	741.63	743.76	743.37	743.58	742.51	741.99	742.33
21	741.44	741.25	741.33	741.83	741.54	741.68	743.45	743.22	743.34	742.38	742.21	742.31
22	741.32	741.05	741.21	741.95	741.54	741.71	743.33	743.15	743.23	742.39	742.24	742.31
23	741.27	741.06	741.15	742.36	741.40	741.85	743.18	742.98	743.11	742.49	742.14	742.30
24	741.22	741.06	741.17	741.91	741.76	741.84	743.23	742.98	743.13	742.50	742.19	742.36
25	741.36	741.07	741.20	743.04	741.78	742.49	743.36	743.20	743.28	742.43	742.05	742.29
26	741.24	741.08	741.18	742.97	742.23	742.56	743.42	743.25	743.33	742.40	742.25	742.31
27	741.32	741.11	741.21	742.23	741.92	742.07	743.47	743.12	743.31	742.40	742.23	742.32
28	741.39	741.13	741.24	742.03	741.93	741.97	743.41	743.07	743.23	742.40	742.23	742.32
29	741.49	741.18	741.29	742.06	741.93	741.99	743.22	743.05	743.13	742.38	742.28	742.33
30	741.33	741.00	741.12	742.13	741.98	742.06	743.13	742.81	743.01	742.42	742.28	742.34
31	741.39	741.00	741.17	---	---	---	743.00	742.81	742.89	742.43	742.23	742.34
MONTH	745.07	740.97	741.47	743.04	741.40	741.80	747.89	741.82	743.95	743.19	741.99	742.47

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	742.36	742.19	742.28	743.20	742.87	742.98	744.19	743.58	743.88	---	---	---
2	742.33	742.16	742.26	744.21	743.20	743.72	743.58	743.11	743.33	---	---	---
3	742.29	742.03	742.17	746.05	744.17	745.13	743.11	742.79	742.94	742.83	742.67	742.75
4	742.20	741.91	742.04	746.00	744.88	745.45	742.86	742.69	742.75	742.78	742.61	742.70
5	742.16	742.00	742.06	744.88	744.61	744.74	742.85	742.68	742.75	742.66	742.56	742.61
6	742.22	741.99	742.10	744.62	744.23	744.44	742.75	742.51	742.62	745.69	742.56	743.78
7	742.18	742.05	742.10	744.23	744.01	744.10	742.58	742.10	742.38	745.71	743.96	744.89
8	742.22	742.07	742.14	744.07	743.40	743.83	742.40	742.13	742.28	743.96	743.28	743.64
9	742.41	742.13	742.21	743.40	742.94	743.12	742.52	742.33	742.40	754.51	743.76	751.10
10	742.45	742.08	742.20	743.02	742.84	742.92	742.64	742.29	742.45	754.62	753.68	754.34
11	742.24	742.00	742.08	743.02	742.89	742.95	742.47	742.14	742.33	753.68	747.40	750.57
12	742.25	742.03	742.14	743.22	743.02	743.16	742.42	742.15	742.26	747.40	746.21	746.65
13	742.23	741.98	742.12	743.27	743.00	743.14	742.26	742.07	742.13	746.28	746.03	746.15
14	742.26	742.02	742.14	743.16	742.98	743.05	742.10	741.89	742.00	746.17	745.97	746.09
15	742.36	742.04	742.20	743.07	742.80	742.97	741.99	741.83	741.91	746.09	745.73	745.92
16	742.13	741.94	742.04	743.97	742.73	743.07	742.14	741.81	741.97	745.91	745.54	745.79
17	742.26	742.01	742.11	747.45	743.97	746.44	742.09	741.88	741.98	745.74	745.39	745.59
18	742.28	741.88	742.05	747.39	745.41	746.46	742.11	741.91	741.99	745.44	744.87	745.21
19	742.54	742.03	742.36	745.50	744.87	745.08	742.17	741.91	742.02	744.96	744.53	744.72
20	743.45	742.52	743.05	747.63	745.50	746.99	742.35	741.70	742.00	744.53	744.34	744.43
21	743.41	742.91	743.17	747.50	745.36	746.54	742.19	741.91	742.05	744.47	744.32	744.38
22	742.91	742.52	742.73	745.36	744.07	744.59	742.24	742.06	742.15	744.58	744.25	744.37
23	742.91	742.47	742.68	744.07	743.63	743.90	742.30	742.04	742.17	744.50	744.32	744.41
24	742.71	742.50	742.61	744.32	743.65	743.87	742.30	742.03	742.14	744.43	743.68	744.28
25	742.80	742.47	742.63	745.20	744.32	744.95	742.33	742.15	742.23	744.79	743.71	744.41
26	743.25	742.61	742.91	745.11	744.00	744.63	742.37	742.15	742.30	744.83	744.41	744.56
27	744.58	743.25	743.89	744.00	743.27	743.60	---	---	---	744.77	744.50	744.63
28	744.58	743.40	744.04	743.27	742.83	743.03	---	---	---	744.88	744.71	744.80
29	743.40	742.92	743.24	744.19	742.81	743.33	---	---	---	745.01	744.86	744.92
30	---	---	---	745.13	744.19	744.86	---	---	---	745.09	744.79	744.95
31	---	---	---	745.06	744.19	744.65	---	---	---	744.86	744.60	744.76
MONTH	744.58	741.88	742.47	747.63	742.73	744.25	744.19	741.70	742.36	754.62	742.56	745.43
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	744.67	744.42	744.56	748.13	747.89	747.99	744.75	744.47	744.63	---	---	---
2	744.47	744.18	744.33	747.95	747.70	747.88	744.47	744.01	744.24	---	---	---
3	744.59	744.43	744.53	747.70	747.31	747.52	744.01	743.61	743.81	---	---	---
4	744.59	744.45	744.54	747.31	746.98	747.20	743.65	743.33	743.50	---	---	---
5	744.67	744.39	744.55	747.04	746.56	746.85	743.40	743.10	743.29	---	---	---
6	744.70	744.59	744.65	746.56	746.11	746.35	743.16	742.78	743.02	---	---	---
7	744.77	744.54	744.66	746.11	745.68	745.91	742.80	742.42	742.63	740.88	740.74	740.79
8	744.70	744.52	744.61	745.81	745.50	745.68	742.52	742.17	742.36	740.87	740.73	740.80
9	744.65	744.45	744.58	745.63	745.32	745.51	742.31	742.02	742.17	740.92	740.72	740.81
10	744.55	744.33	744.45	745.38	744.97	745.24	742.09	741.82	741.95	740.92	740.71	740.81
11	744.70	744.35	744.51	745.04	744.67	744.92	741.93	741.56	741.77	740.82	740.73	740.80
12	744.54	744.24	744.46	744.74	744.47	744.61	741.74	741.56	741.65	---	---	---
13	744.50	744.12	744.35	744.64	744.10	744.30	741.71	741.62	741.66	740.85	740.71	740.79
14	745.60	744.06	744.51	744.16	743.96	744.10	741.71	741.63	741.67	740.89	740.70	740.78
15	746.91	745.60	746.57	744.11	743.83	744.01	741.73	741.47	741.63	740.89	740.68	740.71
16	749.38	745.60	747.13	743.92	743.75	743.86	741.68	741.44	741.57	740.78	740.69	740.74
17	750.71	749.38	750.33	743.89	743.46	743.77	741.60	741.21	741.44	740.82	740.70	740.75
18	750.68	748.42	749.73	743.83	743.66	743.78	741.37	741.07	741.23	740.82	740.71	740.76
19	748.42	746.85	747.48	743.82	743.44	743.68	741.38	741.19	741.29	740.98	740.75	740.82
20	747.52	746.79	747.10	744.11	743.20	743.56	741.44	741.17	741.33	740.87	740.71	740.76
21	753.99	747.50	752.40	743.99	743.49	743.64	741.43	741.18	741.33	740.85	740.70	740.74
22	753.98	752.39	753.55	748.70	743.99	745.12	741.42	741.22	741.32	740.94	740.70	740.78
23	752.39	748.86	750.08	749.58	747.40	748.68	741.38	741.10	741.28	740.73	740.69	740.71
24	748.86	748.58	748.71	747.40	745.84	746.72	741.32	741.18	741.24	740.85	740.69	740.75
25	748.58	748.27	748.40	745.84	745.29	745.58	741.30	741.13	741.22	740.90	740.69	740.77
26	752.36	748.27	750.34	745.29	744.93	745.10	741.32	741.08	741.19	740.93	740.80	740.85
27	753.66	752.36	753.10	745.26	744.73	744.92	741.31	741.07	741.18	740.91	740.84	740.87
28	753.73	751.30	753.19	744.90	744.62	744.79	741.24	741.05	741.15	740.92	740.84	740.88
29	751.30	748.73	749.45	745.04	744.60	744.79	741.15	741.00	741.08	741.00	740.85	740.91
30	748.73	748.13	748.41	744.85	744.75	744.80	741.07	740.94	741.02	741.05	740.86	740.94
31	---	---	---	744.89	744.61	744.76	741.00	740.94	740.96	---	---	---
MONTH	753.99	744.06	747.31	749.58	743.20	745.34	744.75	740.94	741.93	741.05	740.68	740.80
YEAR	754.62	740.68	743.39									

ARKANSAS RIVER BASIN
07185080 NEOSHO RIVER AT MIAMI, OK--Continued



ARKANSAS RIVER BASIN

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07185090 TAR CREEK NEAR COMMERCE, OK.

LOCATION.--Lat 36°56'06", long 94°51'11", in SW 1/4, SE 1/4, sec 6, T.29 N., R.22 E., Ottawa County, Hydrologic Unit 11070206, at U.S. Highway 69 bridge, 1.0 mi east of Commerce, Ok.

PERIOD OF RECORD.--March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
MAR												
15...	1602	1028	1028	5.99	24	750	8.7	6.8	1160	18.0	1.00	
15...	1603	1028	1028	5.99	24	750	8.6	6.8	1170	18.0	3.00	
15...	1604	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	5.00	
15...	1605	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	7.00	
15...	1606	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	9.00	
15...	1607	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	11.0	
15...	1608	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	13.0	
15...	1609	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	15.0	
15...	1610	1028	1028	5.99	24	750	8.5	6.8	1170	18.0	17.0	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
MAR												
15...	1620	80020	1028	5.99	24	750	92	8.5	6.8	1170	23.0	18.0
APR												
12...	1020	80020	1028	5.88	14	763	73	7.8	6.9	1310	11.5	12.5
MAY												
16...	1330	80020	1028	5.71	16	743	76	6.9	6.8	1750	30.0	18.5
JUN												
22...	0855	80020	1028	8.99	341	750	50	4.4	6.9	804	24.0	20.5
JUL												
12...	0855	80020	1028	5.55	4.0	749	65	5.3	6.7	2200	28.0	24.0
AUG												
08...	0900	80020	1028	5.50	3.8	744	69	5.7	6.8	2170	31.5	23.5
DATE	ALKA- LITY 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)	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, AMMONIA DIS- SOLVED (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)
MAR												
15...	*55	*68	*0	--	--	--	--	--	--	--	--	--
APR												
12...	78	95	0	--	.53	.048	--	.61	.06	--	.078	--
MAY												
16...	89	109	0	934	.38	.152	.056	.45	.20	.248	.067	.036
JUN												
22...	63	77	0	--	--	--	--	--	--	--	--	--
JUL												
12...	68	83	0	1310	.31	.063	--	--	.08	--	<.050	--
AUG												
08...	69	84	0	1310	.17	.074	--	--	.10	--	<.050	--

*Unfiltered sample.

ARKANSAS RIVER BASIN

07185090 TAR CREEK NEAR COMMERCE, OK.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	PHOS- PHORUS TOTAL	SOLIDS, RESIDUE AT 180 DEG. C	E. COLI WATER WHOLE TOTAL	COLI- FORM, FECAL, 0.7 UM-MF	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER	ALUM- INUM, TOTAL RECOV- ERABLE	CADMIUM WATER UNFLTRD TOTAL	CHRO- MIUM, TOTAL RECOV- ERABLE
DATE	(MG/L (AS N) (00613)	(MG/L (AS N) (00605)	(MG/L (AS P) (00666)	(MG/L (AS P) (00671)	(MG/L (AS P) (00665)	(MG/L) (70300)	(COL / 100 ML) (31633)	(COLS./ 100 ML) (31625)	(COLS. 100 ML) (31673)	(UG/L AS AL) (01105)	(UG/L AS CD) (01027)	(UG/L AS CR) (01034)
MAR 15...	--	--	--	--	--	--	45	31	58	--	5.5	--
APR 12...	<.010	.48	<.050	<.010	.074	--	460	1100	500	299	5.6	<1
MAY 16...	.011	.23	<.050	<.010	E.042	--	<1	K37	330	--	5.5	--
JUN 22...	--	--	--	--	--	--	K470	730	1800	378	6.4	<1
JUL 12...	<.010	.25	<.050	<.010	<.050	--	K2	K29	82	--	8.8	--
AUG 08...	<.010	.10	<.050	<.010	<.050	2090	K13	75	60	--	8.3	--
	COPPER, TOTAL RECOV- ERABLE	IRON, TOTAL RECOV- ERABLE	LEAD, TOTAL RECOV- ERABLE	MANGA- NESE, TOTAL RECOV- ERABLE	NICKEL, TOTAL RECOV- ERABLE	SELE- NIUM, TOTAL	ZINC, TOTAL RECOV- ERABLE	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U	ACETO- CHLOR, WATER FLTRD REC	ALA- CHLOR, WATER, DISS, REC,	ALPHA BHC DIS- SOLVED	ATRA- ZINE, WATER, DISS, REC
DATE	(UG/L AS CU) (01042)	(UG/L AS FE) (01045)	(UG/L AS PB) (01051)	(UG/L AS MN) (01055)	(UG/L AS NI) (01067)	(UG/L AS SE) (01147)	(UG/L AS ZN) (01092)	GF, REC (UG/L) (82660)	(UG/L) (49260)	(UG/L) (46342)	(UG/L) (34253)	(UG/L) (39632)
MAR 15...	--	4800	34	--	--	--	--	--	--	--	--	--
APR 12...	6	--	18	732	72	<1	5180	<.003	<.002	.012	<.002	.060
MAY 16...	--	13000	8	--	--	--	--	--	--	--	--	--
JUN 22...	6	9810	34	380	71	<1	3300	<.003	<.002	.060	<.002	.253
JUL 12...	--	4370	<1	--	--	--	--	--	--	--	--	--
AUG 08...	--	3220	<1	--	--	--	--	--	--	--	--	--
	BEN- FLUR- ALIN WAT FLD 0.7 U	BUTYL- ATE, WATER, DISS, REC	CAR- BARYL WATER FLTRD 0.7 U	CARBO- FURAN WATER FLTRD 0.7 U	CHLOR- PYRIFOS DIS- SOLVED	CYANA- ZINE, WATER, DISS, REC	DCEPA WATER FLTRD 0.7 U	DEETHYL ATRA- ZINE, WATER, DISS, REC	DIAZ- INON D10 SRG WAT FLT 0.7 U	DI- AZINON, DIS- SOLVED	DI- ELDRIN DIS- SOLVED	DISUL- FOTON WATER FLTRD 0.7 U
DATE	GF, REC (UG/L) (82673)	(UG/L) (04028)	GF, REC (UG/L) (82680)	GF, REC (UG/L) (82674)	(UG/L) (38933)	(UG/L) (04041)	GF, REC (UG/L) (82682)	(UG/L) (04040)	GF, REC PERCENT (91063)	(UG/L) (39572)	(UG/L) (39381)	GF, REC (UG/L) (82677)
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.002	<.002	<.003	<.003	<.004	<.004	<.002	E.006	110	.008	<.001	<.017
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	<.002	<.002	<.003	E.049	.040	<.004	<.002	E.062	105	E.003	<.008	<.017
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
	EPTC WATER FLTRD 0.7 U	ETHAL- FLUR- ALIN WAT FLT 0.7 U	ETHO- PROP WATER FLTRD 0.7 U	FONOPOS WATER DISS REC	HCH ALPHA D6 SRG WAT FLT 0.7 U	LINDANE DIS- SOLVED	LIN- URON WATER FLTRD 0.7 U	MALA- THION, DIS- SOLVED	METHYL AZIN- PHOS WAT FLT 0.7 U	METHYL PARA- THION WAT FLT 0.7 U	METO- LACHLOR WATER DISSOLV	METRI- BUZIN SENSOR WATER DISSOLV
DATE	GF, REC (UG/L) (82668)	GF, REC (UG/L) (82663)	GF, REC (UG/L) (82672)	(UG/L) (04095)	GF, REC PERCENT (91065)	(UG/L) (39341)	GF, REC (UG/L) (82666)	(UG/L) (39532)	GF, REC (UG/L) (82686)	GF, REC (UG/L) (82667)	(UG/L) (39415)	(UG/L) (82630)
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.002	<.004	<.003	<.003	87	<.004	<.002	<.005	<.001	<.006	.089	<.004
MAY 16...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 22...	<.002	<.004	<.003	<.003	73	<.004	<.002	<.005	<.001	<.006	.136	.008
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--

07185090 TAR CREEK NEAR COMMERCE, OK.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

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07185095 TAR CREEK AT 22ND STREET BRIDGE AT MIAMI, OK.

LOCATION.--Lat 36°54'00", long 94°52'05", in NW 1/4, NE 1/4, sec 19, T.28 N., R.23 E., Ottawa County, Hydrologic Unit 11070206, at 22nd Street bridge in Miami, Ok, 0.5 mi east of intersection of Main and 22nd Street.

DRAINAGE AREA.--44.7 mi².

PERIOD OF RECORD.--June 1988 to May 1989, September 1989 to December 1992, March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
MAR												
15...	0919	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	3.00	
15...	0920	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	6.00	
15...	0921	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	9.00	
15...	0922	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	12.0	
15...	0923	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	15.0	
15...	0924	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	18.0	
15...	0925	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	21.0	
15...	0926	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	23.0	
15...	0927	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	26.0	
15...	0928	1028	1028	4.53	39	752	8.7	7.0	1020	14.0	29.0	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	
MAR												
15...	0950	80020	1028	4.53	39	752	86	8.7	7.0	1020	18.5	
APR												
12...	0815	80020	1028	4.33	25	765	75	7.6	7.4	1300	7.5	
MAY												
17...	1315	80020	1028	3.75	16	739	81	7.3	6.9	1700	25.0	
JUN												
21...	0730	80020	1028	12.17	3050	747	61	5.3	7.1	411	21.5	
JUL												
12...	0740	80020	1028	3.46	5.7	749	73	5.7	7.3	2030	27.0	
AUG												
08...	0805	80020	1028	3.46	4.9	744	69	5.3	7.2	2030	29.0	
DATE	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)	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)
MAR												
15...	*56	*68	*0	--	--	--	--	--	--	--	--	
APR												
12...	80	97	0	--	.89	.146	.263	1.2	.19	1.16	.273	
MAY												
17...	79	97	0	894	.36	.155	.094	.47	.20	.416	.107	
JUN												
21...	35	43	0	--	--	--	--	--	--	--	--	
JUL												
12...	75	92	0	1160	.28	.031	--	--	.04	--	<.050	
AUG												
08...	80	98	0	1170	.40	.041	--	--	.05	--	<.050	

*Unfiltered sample.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
	MAR 15...	--	--	--	--	--	--	260	140	170	--	4.2
APR 12...	.010	.75	--	<.050	<.010	.101	--	K2600	K3800	1300	166	5.4
MAY 17...	.013	.21	--	<.050	<.010	<.050	--	K25	140	190	--	4.3
JUN 21...	--	--	--	--	--	--	--	15000	20000	44000	1370	4.1
JUL 12...	<.010	.25	.092	E.042	.030	<.050	--	50	370	95	--	2.6
AUG 08...	<.010	.36	.037	<.050	.012	E.033	1910	K25	220	1800	--	2.1
DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALPHA BHC DIS- SOLVED (UG/L) (34253)
	MAR 15...	--	--	3570	26	--	--	--	--	--	--	--
APR 12...	<1	6	2000	13	623	75	<1	3780	<.003	<.020	.013	<.002
MAY 17...	--	--	2240	2	--	--	--	--	--	--	--	--
JUN 21...	1	5	6170	30	229	34	<1	1660	<.003	<.002	.014	<.002
JUL 12...	--	--	730	3	--	--	--	--	--	--	--	--
AUG 08...	--	--	850	3	--	--	--	--	--	--	--	--
DATE	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DIAZ- INON D10 SRG WAT FLT 0.7 U GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)
	MAR 15...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	.039	<.002	<.002	E.010	<.003	<.004	<.004	<.002	E.004	115	.060	<.001
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	.227	<.002	<.002	E.025	<.003	<.004	<.004	<.002	E.054	116	.017	<.001
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER FLTRD DISS REC (UG/L) (04095)	HCH ALPHA D6 SRG WAT FLT 0.7 U GF, REC PERCENT (91065)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)
	MAR 15...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.017	<.002	<.004	<.003	<.003	107	<.004	<.002	<.005	<.001	<.006	.160
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<.017	<.002	<.004	<.003	<.003	107	<.004	<.002	<.005	<.010	<.006	.742
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	METRI- BUZIN SENSOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P, P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
	MAR 15...	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	.018	<.003	<.007
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.004	<.013	.009	<.010	<.007	<.013	<.002	<.001	<.002	<.03	<.07	<.04
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<.004	<.013	.011	.016	<.007	<.013	<.002	<.001	<.002	<.03	<.07	<.04
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 14BRFL- SURROG VOC UNFLTRD REC (99834)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	BENZENE WATER TOTAL (UG/L) (34030)	BROMO- FORM TOTAL (UG/L) (32104)	CARBON TETRA- CHLO- RIDE TOTAL (UG/L) (32102)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L) (32105)
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.1	<.07	<.03	<.05	89	<.05	<.05	<.10	<.10	<.09	<.03	<.2
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<.1	<.07	<.03	<.05	124	<.05	<.05	<.04	<.10	<.09	<.03	<.2
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
DATE	CHLORO- FORM TOTAL (UG/L) (32106)	CIS-1,2 -DI- CHLORO- WATER TOTAL (UG/L) (77093)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	ETHANE 12DICL SURROG UNFLTRD REC (UG/L) (99832)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	ETHER TERT- BUTYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL UNFLTRD RECOVER (UG/L) (50005)	ETHYL- BENZENE TOTAL (UG/L) (34371)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	
MAR 15...	--	--	--	--	--	--	--	--	--	--	--	--
APR 12...	<.05	<.04	<.05	<.1	<.1	111	<.2	<.05	<.1	<.03	<.03	
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 21...	<.05	<.04	<.05	<.1	<.1	106	<.2	<.05	<.1	<.03	<.03	
JUL 12...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

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07187995 SPRING RIVER ABOVE DEVILS HOLLOW NEAR QUAPAW, OK.

LOCATION.--Lat 36°57'38", long 94°43'15", in SW 1/4, SW 1/4, sec 28, T.29 N., R.25 E., Ottawa County, Hydrologic Unit 11070206, at Blue Hole Boat Ramp, 1.7 mi upstream of Beaver Creek and 3.7 mi east of Quapaw, Ok.

PERIOD OF RECORD.--March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
MAR 15...	1330	80020	1028	7.63	1870	750	104	10.8	8.0	404	23.0	13.0
APR 12...	1300	80020	1028	6.53	780	762	99	9.7	8.1	393	16.0	16.5
MAY 16...	1435	80020	1028	7.40	1590	743	92	8.4	7.9	348	27.0	18.5
JUN 20...	1420	80020	1028	9.64	5150	746	93	8.0	7.5	255	29.5	21.5
JUL 12...	1025	80020	1028	6.74	996	750	84	6.3	8.1	357	29.5	29.0
AUG 07...	1055	80020	1028	6.29	625	746	97	7.3	8.4	355	29.5	29.0
DATE	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)	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, AMMONIA DIS- SOLVED (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)
MAR 15...	*89	*109	*0	--	--	--	--	--	--	--	--	--
APR 12...	131	160	0	--	.43	<.020	--	1.7	--	--	1.27	--
MAY 16...	109	133	0	38.4	.74	.038	1.60	2.3	.05	7.06	1.61	.043
JUN 20...	72	88	0	--	--	--	--	--	--	--	--	--
JUL 12...	139	170	0	27.4	.40	<.020	--	2.0	--	--	1.58	--
AUG 07...	126	154	0	29.6	.51	<.020	--	1.6	--	--	1.07	--
DATE	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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL) (01105)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)
MAR 15...	--	--	--	--	--	--	--	350	400	200	--	1.3
APR 12...	<.010	--	.285	.109	.093	.138	--	K5	K24	K8	132	<1.0
MAY 16...	.013	.70	.251	.104	.082	.152	--	22	170	95	--	<1.0
JUN 20...	--	--	--	--	--	--	--	K2100	4500	8300	786	2.0
JUL 12...	<.010	--	.288	.127	.094	.139	--	K18	35	81	--	<1.0
AUG 07...	<.010	--	.258	.100	.084	.141	215	K11	K16	K9	--	<1.0

*Unfiltered sample.

07187995 SPRING RIVER ABOVE DEVILS HOLLOW NEAR QUAPAW, OK.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07188000 SPRING RIVER NEAR QUAPAW, OK

LOCATION.--Lat 36°56'04", long 94°44'46", in NE 1/4 SW 1/4 sec.5, T.28 N., R.24 E., Ottawa County, Hydrologic Unit 11070207, near downstream right abutment of county road bridge, 0.1 mi upstream from Rock Creek, 3.0 mi southeast of Quapaw, and at mile 13.9. Records include flow of Rock Creek.

DRAINAGE AREA.--2,510 mi², includes that of Rock Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 746.25 ft above sea level. Nonrecording gage on right bank at same datum used May 20 to Nov. 16, 1943.

REMARKS.--No estimated daily discharge. Records good. Occasional releases from floodgates at old Riverton Hydroelectric plant, 15 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 18,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 9	1400	31,100	19.67	Jun 21	1730	27,000	18.35

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	424	381	296	670	403	1400	1680	880	801	3530	1130	229
2	386	332	291	650	398	1270	1470	849	732	6090	990	226
3	366	306	390	703	397	1490	1300	766	678	4030	885	220
4	358	295	5770	746	383	1870	1190	711	642	2660	801	216
5	333	290	11500	726	384	1830	1100	657	624	1950	730	204
6	329	292	5830	696	378	1690	1050	1180	591	1630	671	193
7	325	291	3410	661	373	1550	976	2260	565	1440	623	190
8	323	289	1920	653	361	1460	907	1200	527	1310	581	195
9	328	282	2460	660	361	1350	845	21600	496	1200	553	198
10	328	276	7360	654	363	1250	799	19000	475	1110	521	201
11	326	274	5950	647	351	1300	806	6770	518	1050	490	197
12	343	270	3800	622	340	1470	773	4090	879	987	459	261
13	322	271	2590	605	341	2190	726	2810	761	932	435	287
14	302	272	2070	574	340	2270	699	2180	1930	867	410	320
15	297	259	1770	561	333	1900	671	1800	4240	820	388	285
16	292	258	1570	554	331	1560	652	1610	5640	795	372	246
17	275	255	1430	541	351	1580	630	1490	12900	764	360	229
18	273	251	1330	536	796	1460	611	1360	9140	738	340	222
19	279	255	1250	512	1700	1650	595	1240	5370	711	336	213
20	279	251	1170	491	1420	2280	621	1140	5660	851	333	197
21	281	246	1090	483	1180	1830	584	1070	23400	1100	318	193
22	279	267	1030	478	1030	1450	546	1010	18900	3240	301	193
23	273	518	982	467	1060	1270	545	962	8660	16200	291	272
24	272	788	931	451	1010	1280	625	925	5620	7410	287	333
25	271	602	884	437	1030	1310	646	1250	3960	3980	283	326
26	273	478	838	436	2080	1260	572	1240	4940	2030	272	316
27	274	418	797	433	2910	1350	526	1960	4420	1250	261	290
28	276	370	768	444	2240	1310	501	1680	3130	1740	252	272
29	276	331	744	428	1610	1240	478	1270	3510	1820	245	253
30	308	308	722	418	---	1760	463	1040	3640	1410	240	243
31	389	---	698	411	---	1910	---	906	---	1340	234	---
TOTAL	9660	9976	71641	17348	24254	48790	23587	86906	133349	74985	14392	7220
MEAN	312	333	2311	560	836	1574	786	2803	4445	2419	464	241
MAX	424	788	11500	746	2910	2280	1680	21600	23400	16200	1130	333
MIN	271	246	291	411	331	1240	463	657	475	711	234	190
AC-FT	19160	19790	142100	34410	48110	96770	46780	172400	264500	148700	28550	14320
CFSM	.12	.13	.92	.22	.33	.63	.31	1.12	1.77	.96	.18	.10
IN.	.14	.15	1.06	.26	.36	.72	.35	1.29	1.98	1.11	.21	.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
MEAN	1685	2330	1749	1561	2085	2959	3425	3639	3003	1796	791	1419
MAX	14880	14810	10720	6495	13300	12050	15100	26940	12780	10140	8622	18390
(WY)	1987	1986	1993	1973	1985	1973	1945	1943	1995	1976	1950	1993
MIN	75.8	111	116	116	129	123	169	481	233	34.3	29.3	76.0
(WY)	1957	1954	1964	1964	1954	1954	1954	1964	1954	1954	1954	1953

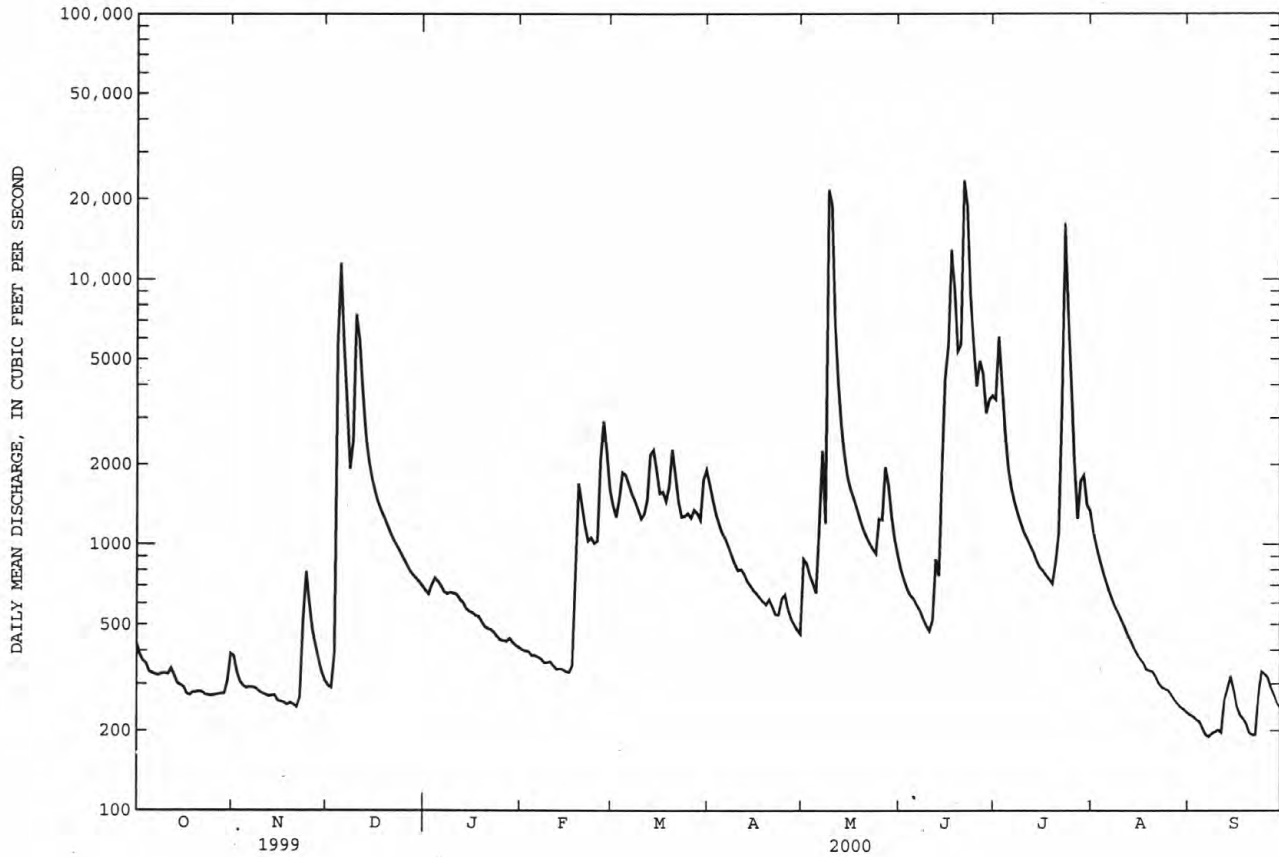
ARKANSAS RIVER BASIN

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07188000 SPRING RIVER NEAR QUAPAW, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1940 - 2000
ANNUAL TOTAL	1208134	522108	2201
ANNUAL MEAN	3310	1427	6623
HIGHEST ANNUAL MEAN			191
LOWEST ANNUAL MEAN			193
HIGHEST DAILY MEAN	53400	23400	210000
LOWEST DAILY MEAN	246	190	5.8
ANNUAL SEVEN-DAY MINIMUM	254	197	7.3
INSTANTANEOUS PEAK FLOW		31100	230000
INSTANTANEOUS PEAK STAGE		19.67	^a 46.60
ANNUAL RUNOFF (AC-FT)	2396000	1036000	1594000
ANNUAL RUNOFF (CFSM)	1.32	.57	.88
ANNUAL RUNOFF (INCHES)	17.91	7.74	11.91
10 PERCENT EXCEEDS	6690	2700	4400
50 PERCENT EXCEEDS	1480	658	850
90 PERCENT EXCEEDS	300	271	211

^aFrom floodmark.



ARKANSAS RIVER BASIN

07188000 SPRING RIVER NEAR QUAPAW, OK.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948-58, 1960-63, 1976-80, 1986, June 1988 to May 1989, March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
MAR												
16...	0915	1028	1028	7.34	1560	753	9.5	7.6	392	12.5	240	
16...	0916	1028	1028	7.34	1560	753	9.5	7.7	392	12.5	220	
16...	0917	1028	1028	7.34	1560	753	9.5	7.7	392	12.5	200	
16...	0918	1028	1028	7.34	1560	753	9.5	7.7	391	12.5	180	
16...	0919	1028	1028	7.34	1560	753	9.6	7.7	391	12.5	160	
16...	0920	1028	1028	7.34	1560	753	9.6	7.7	391	12.5	140	
16...	0921	1028	1028	7.34	1560	753	9.6	7.7	391	12.5	120	
16...	0922	1028	1028	7.34	1560	753	9.6	7.7	391	12.5	100	
16...	0923	1028	1028	7.34	1560	753	9.5	7.7	390	12.5	80.0	
16...	0924	1028	1028	7.34	1560	753	9.5	7.7	390	12.5	60.0	
16...	0925	1028	1028	7.34	1560	753	9.5	7.7	390	12.5	40.0	
16...	0926	1028	1028	7.34	1560	753	9.5	7.7	388	12.5	20.0	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE OF (MM HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
MAR												
16...	0935	80020	1028	7.34	1560	753	91	9.6	7.7	391	5.0	12.5
APR												
11...	0910	80020	1028	6.58	817	755	73	7.1	8.2	400	11.5	16.0
MAY												
16...	1050	80020	1028	7.39	1620	745	93	8.6	8.0	336	24.5	17.5
JUN												
21...	1305	80020	1028	18.24	26600	749	93	8.1	7.2	160	23.0	21.0
JUL												
11...	1025	80020	1028	6.81	1050	748	91	6.9	8.2	352	32.5	28.5
AUG												
07...	1220	80020	1028	6.29	625	744	83	6.2	8.4	354	31.0	29.0
DATE		ALKA- LITY 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)	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, 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)
MAR												
16...	*97	*118	*0	--	--	--	--	--	--	--	--	--
APR												
11...	136	166	0	--	.54	.031	--	1.8	.04	--	1.27	--
MAY												
16...	113	138	0	35.5	.50	.048	1.61	2.1	.06	7.13	1.63	.053
JUN												
21...	44	53	0	--	--	--	--	--	--	--	--	--
JUL												
11...	128	156	0	25.1	.44	<.020	--	1.9	--	--	1.49	--
AUG												
07...	124	142	5	29.8	3.2	<.020	--	4.1	--	--	.974	--

*Unfiltered sample.

ARKANSAS RIVER BASIN

07188000 SPRING RIVER NEAR QUAPAW, OK.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07188005 BEAVER CREEK NEAR QUAPAW, OK

LOCATION.--Lat 36°56'02", long 94°45'14", in NE 1/4, SE 1/4, sec 6, T.28 N., R.24 E., Ottawa County, Hydrologic Unit 11070206, at truss bridge in Quapaw Tribal Pow Wow Grounds, 0.5 mi above mouth and 2.6 mi southeast of Quapaw, Ok.

PERIOD OF RECORD.--March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
MAR												
14...	1240	1028	1028	8.80	4.4	754	11.6	7.8	542	15.5	17.0	
14...	1241	1028	1028	8.80	4.4	754	11.7	7.9	543	15.5	15.0	
14...	1242	1028	1028	8.80	4.4	754	11.8	7.9	543	15.5	13.0	
14...	1243	1028	1028	8.80	4.4	754	11.8	7.9	543	15.5	11.0	
14...	1244	1028	1028	8.80	4.4	754	11.8	7.9	544	15.5	9.00	
14...	1245	1028	1028	8.80	4.4	754	11.8	7.9	544	15.5	7.00	
14...	1246	1028	1028	8.80	4.4	754	11.9	8.0	544	15.5	5.00	
14...	1247	1028	1028	8.80	4.4	754	11.9	8.0	544	15.5	3.00	
14...	1248	1028	1028	8.80	4.4	754	12.0	8.0	544	15.5	1.00	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
MAR												
14...	1305	80020	1028	8.80	4.4	754	120	11.8	7.9	544	22.0	15.5
APR												
11...	1410	80020	1028	8.85	8.2	755	98	9.5	8.2	523	18.5	16.5
MAY												
17...	1055	80020	1028	8.75	3.8	742	97	9.0	7.8	612	23.5	17.5
JUN												
20...	1225	80020	1028	9.04	22	738	92	8.0	7.5	327	28.5	21.0
JUL												
11...	1420	80020	1028	8.71	4.0	748	110	8.9	8.0	684	30.0	24.5
AUG												
08...	1105	80020	1028	8.64	1.1	744	95	7.7	8.1	713	34.5	24.5
DATE	ALKA- LITY 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)	SULFATE DIS- SOLVED TOTAL (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, NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L (71846)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)
MAR												
14...	*143	*174	*0	--	--	--	--	--	--	--	--	--
APR												
11...	153	187	0	--	.66	.065	.274	.95	.08	1.21	.290	.053
MAY												
17...	167	204	0	135	.18	.035	--	.47	.05	--	.290	--
JUN												
20...	101	123	0	--	--	--	--	--	--	--	--	--
JUL												
11...	186	227	0	164	.20	<.020	--	.26	--	--	.057	--
AUG												
08...	186	227	0	177	.16	<.020	--	--	--	--	<.050	--

*Unfiltered sample.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	METRI- BUZIN SENCOR WATER	MOL- INATE WATER FLTRD 0.7 U	NAPROP- AMIDE WATER FLTRD 0.7 U	P, P' DDE	PARA- THION, DIS-	PEB- ULATE WATER FILTRD 0.7 U	PENDI- METH- ALIN WAT FLT 0.7 U	PER- METHRIN CIS WAT FLT 0.7 U	PHORATE WATER FLTRD 0.7 U	PRO- METON, WATER, DISS, REC	PRON- AMIDE WATER FLTRD 0.7 U	PROPA- CHLOR, WATER, DISS, REC
DATE	DISSOLV (UG/L) (82630)	GF, REC (UG/L) (82671)	GF, REC (UG/L) (82684)	DISSOLV (UG/L) (34653)	SOLVED (UG/L) (39542)	GF, REC (UG/L) (82669)	GF, REC (UG/L) (82683)	GF, REC (UG/L) (82687)	GF, REC (UG/L) (82664)	REC (UG/L) (04037)	GF, REC (UG/L) (82676)	REC (UG/L) (04024)
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	<.004	<.004	<.003	<.006	<.004	<.004	<.004	<.005	<.002	<.018	<.003	<.007
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
	PRO- PANIL WATER FLTRD 0.7 U	PRO- PARGITE WATER FLTRD 0.7 U	SI- MAZINE, WATER, DISS, REC	TEBU- THIURON WATER FLTRD 0.7 U	TER- BACIL WATER FLTRD 0.7 U	TER- BUFOS WATER FLTRD 0.7 U	THIO- BENCARB WATER FLTRD 0.7 U	TRIAL- LATE WATER FLTRD 0.7 U	TRI- FLUR- ALIN WAT FLT 0.7 U	1,1,1- TRI- CHLORO- ETHANE TOTAL	1,1-DI- CHLORO- ETHANE TOTAL	1,1-DI- CHLORO- ETHYL- ENE TOTAL
DATE	GF, REC (UG/L) (82679)	GF, REC (UG/L) (82685)	(UG/L) (04035)	GF, REC (UG/L) (82670)	GF, REC (UG/L) (82665)	GF, REC (UG/L) (82675)	GF, REC (UG/L) (82681)	GF, REC (UG/L) (82678)	GF, REC (UG/L) (82661)	(UG/L) (34506)	(UG/L) (34496)	(UG/L) (34501)
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	<.03	<.07	<.04
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	<.004	<.013	<.005	<.010	<.007	<.013	<.002	<.001	<.002	<.03	<.07	<.04
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
	1,2-DI- CHLORO- ETHANE TOTAL	1,2-DI- CHLORO- PROPANE TOTAL	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC	BENZENE 14BRFL- SURROG VOC UNFLTRD REC	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC	BENZENE O-DI- CHLORO- WATER UNFLTRD REC	BENZENE RECOVER TOTAL	BROMO- FORM TOTAL	CARBON TETRA- CHLO- RIDE TOTAL	CHLORO- BENZENE TOTAL	CHLORO- DI- BROMO- METHANE TOTAL
DATE	(UG/L) (32103)	(UG/L) (34541)	(UG/L) (34546)	(UG/L) (34566)	PERCENT (99834)	(UG/L) (34571)	(UG/L) (34536)	(UG/L) (34030)	(UG/L) (32104)	(UG/L) (32102)	(UG/L) (34301)	(UG/L) (32105)
MAR 14...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	<.1	<.07	<.03	<.05	91	<.05	<.05	<.10	<.10	<.09	<.03	<.2
MAY 17...	--	--	--	--	--	--	--	--	--	--	--	--
JUN 20...	<.1	<.07	<.03	<.05	119	<.05	<.05	<.04	<.10	<.09	<.03	<.2
JUL 11...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 08...	--	--	--	--	--	--	--	--	--	--	--	--
	CHLORO- FORM TOTAL	CIS-1,2 -DI- CHLORO- ETHENE WATER TOTAL	BROMO- DI- CHLORO- METHANE TOTAL	DI- CHLORO- DI- FLUORO- METHANE TOTAL	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER	ETHANE 12DICL SURROG VOC UNFLTRD RECOVER	ETHER ETHYL WATER UNFLTRD RECOVER	ETHER TERT- BUTYL ETHYL UNFLTRD RECOVER	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER	ETHYL- BENZENE TOTAL	FREON- 113 WATER UNFLTRD REC	
DATE	(UG/L) (32106)	(UG/L) (77093)	(UG/L) (32101)	(UG/L) (34668)	(UG/L) (81577)	PERCENT (99832)	(UG/L) (81576)	(UG/L) (50004)	(UG/L) (50005)	(UG/L) (34371)	(UG/L) (77652)	

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07188007 BEAVER CREEK ABOVE SPRING RIVER NEAR QUAPAW, OK

LOCATION.--Lat 36°56'02", long 94°45'14", in NE 1/4, SE 1/4, sec 6, T.28 N., R.24 E., Ottawa County, Hydrologic Unit 11070206, at county road bridge, 0.3 mi above mouth and 2.7 mi east of Quapaw, Ok.

PERIOD OF RECORD.--March 2000 to September 2000.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)		
MAR													
14...	1605	1028	1028	6.67	4.6	754	11.0	8.0	519	15.5	2.00		
14...	1606	1028	1028	6.67	4.6	754	10.8	8.0	520	15.5	4.00		
14...	1607	1028	1028	6.67	4.6	754	10.8	8.0	520	15.5	6.00		
14...	1608	1028	1028	6.67	4.6	754	10.8	8.0	520	15.5	8.00		
14...	1609	1028	1028	6.67	4.6	754	10.7	8.0	520	15.5	10.0		
14...	1610	1028	1028	6.67	4.6	754	10.7	8.1	520	15.5	12.0		
14...	1611	1028	1028	6.67	4.6	754	10.6	8.0	520	15.5	14.0		
14...	1612	1028	1028	6.67	4.6	754	10.5	8.0	519	15.5	16.0		
14...	1613	1028	1028	6.67	4.6	754	10.8	8.0	513	15.5	18.0		
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	
MAR													
14...	1620	80020	1028	6.67	4.6	754	109	10.7	8.0	520	22.5	15.5	
APR													
13...	0810	80020	1028	6.57	3.3	758	79	8.6	8.0	590	7.5	11.5	
MAY													
17...	0820	80020	1028	6.88	5.4	742	93	8.8	7.9	593	23.0	17.0	
JUN													
20...	1110	80020	1028	7.22	26	738	93	8.1	8.0	302	27.0	20.5	
JUL													
11...	1110	80020	1028	6.62	3.8	748	113	9.2	8.0	616	29.0	24.5	
AUG													
07...	1355	80020	1028	6.55	1.9	745	96	7.7	8.2	644	31.5	25.0	
DATE		ALKA- LITY 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)	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, AMMONIA DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	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)
MAR													
14...	*136	*166	*0	--	--	--	--	--	--	--	--	--	
APR													
13...	167	204	0	--	.35	.029	.59	.04	.240	<.010	.32	.101	
MAY													
17...	174	212	0	128	.15	.027	.49	.03	.339	<.010	.12	--	
JUN													
20...	101	123	0	--	--	--	--	--	--	--	--	--	
JUL													
11...	176	215	0	135	.21	<.020	.49	--	.283	<.010	--	.031	
AUG													
07...	176	215	0	149	.14	<.020	.36	--	.215	<.010	--	--	

*Unfiltered sample.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07188007 BEAVER CREEK ABOVE SPRING RIVER NEAR OUAPAW, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07189000 ELK RIVER NEAR TIFF CITY, MO

LOCATION.--Lat 36°37'53", long 94°35'12", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.22, T.22 N., R.34 W., McDonald County, Hydrologic Unit 11070208, near right abutment of bridge on State Highway 43, 0.8 mi downstream from Blackfoot Branch, 2.8 mi upstream from Buffalo Creek, 3.0 mi southeast of Tiff City, and at mile 15.8.

DRAINAGE AREA.--872 mi².

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 927: 1940. WSP 1117: Drainage area.

GAGE.--Water stage recorder. Datum of gage is 750.61 ft above sea level (levels by U.S. Army Corps of Engineers). Sept. 6, 1960 to Aug. 25, 1961, at site 100 ft downstream.

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 9,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 18	0530	26,800	19.15	Jun 22	0100	20,600	17.17

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	135	136	209	169	392	692	439	422	1960	906	112
2	121	144	134	201	167	359	615	653	385	2150	692	109
3	117	142	159	217	166	403	547	669	355	1960	564	106
4	113	135	265	252	165	1020	495	636	324	1810	481	102
5	112	129	591	298	164	1350	449	669	304	1590	423	96
6	110	123	599	291	163	1070	419	653	285	1400	378	94
7	109	118	475	275	161	862	394	994	267	1260	339	90
8	109	114	387	261	161	735	372	1250	252	1140	314	89
9	108	111	457	256	159	641	350	1790	237	1020	292	88
10	107	108	1410	252	158	568	331	3040	223	904	275	87
11	108	108	1570	242	e158	526	344	2300	224	785	260	87
12	108	108	1060	234	158	488	360	1610	229	735	246	111
13	106	108	864	228	155	458	374	1180	236	654	231	127
14	104	105	735	217	155	435	371	925	258	592	219	132
15	102	104	624	209	156	414	364	761	304	539	208	122
16	99	104	539	208	154	397	357	649	333	495	199	110
17	99	103	478	202	161	384	344	578	3270	458	190	103
18	100	103	426	198	178	373	328	519	17000	435	183	98
19	101	102	388	195	215	379	317	473	4910	407	180	96
20	101	104	357	191	231	387	316	427	3050	410	174	91
21	101	101	332	188	234	395	302	392	8280	461	166	89
22	101	104	313	185	229	390	289	360	12800	479	161	89
23	101	167	297	183	234	381	279	334	5120	466	156	120
24	100	226	280	180	231	374	371	309	3400	421	151	164
25	99	226	263	178	261	365	365	711	2750	382	146	220
26	101	194	252	175	318	359	337	990	2330	350	142	219
27	101	171	240	174	373	361	316	837	2160	335	135	192
28	101	156	236	179	446	363	294	713	1920	321	126	170
29	100	146	228	176	432	374	279	608	2130	765	122	154
30	107	142	210	173	---	504	263	532	2150	1350	118	142
31	124	---	213	171	---	749	---	471	---	1220	114	---
TOTAL	3294	3941	14518	6598	6112	16256	11234	26472	75908	27254	8291	3609
MEAN	106	131	468	213	211	524	374	854	2530	879	267	120
MAX	124	226	1570	298	446	1350	692	3040	17000	2150	906	220
MIN	99	101	134	171	154	359	263	309	223	321	114	87
AC-FT	6530	7820	28800	13090	12120	32240	22280	52510	150600	54060	16450	7160
CFSM	.12	.15	.54	.24	.24	.60	.43	.98	2.90	1.01	.31	.14
IN.	.14	.17	.62	.28	.26	.69	.48	1.13	3.24	1.16	.35	.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)

	424	735	776	693	865	1351	1615	1512	994	494	264	297
MEAN	424	735	776	693	865	1351	1615	1512	994	494	264	297
MAX	2938	4094	3651	2509	2971	5020	6119	8964	4245	2565	2418	2164
(WY)	1942	1975	1993	1985	1951	1945	1945	1943	1995	1976	1950	1993
MIN	25.7	49.8	58.5	55.9	70.7	75.7	145	227	78.6	14.3	12.0	30.9
(WY)	1957	1964	1964	1964	1954	1956	1956	1964	1954	1954	1954	1953

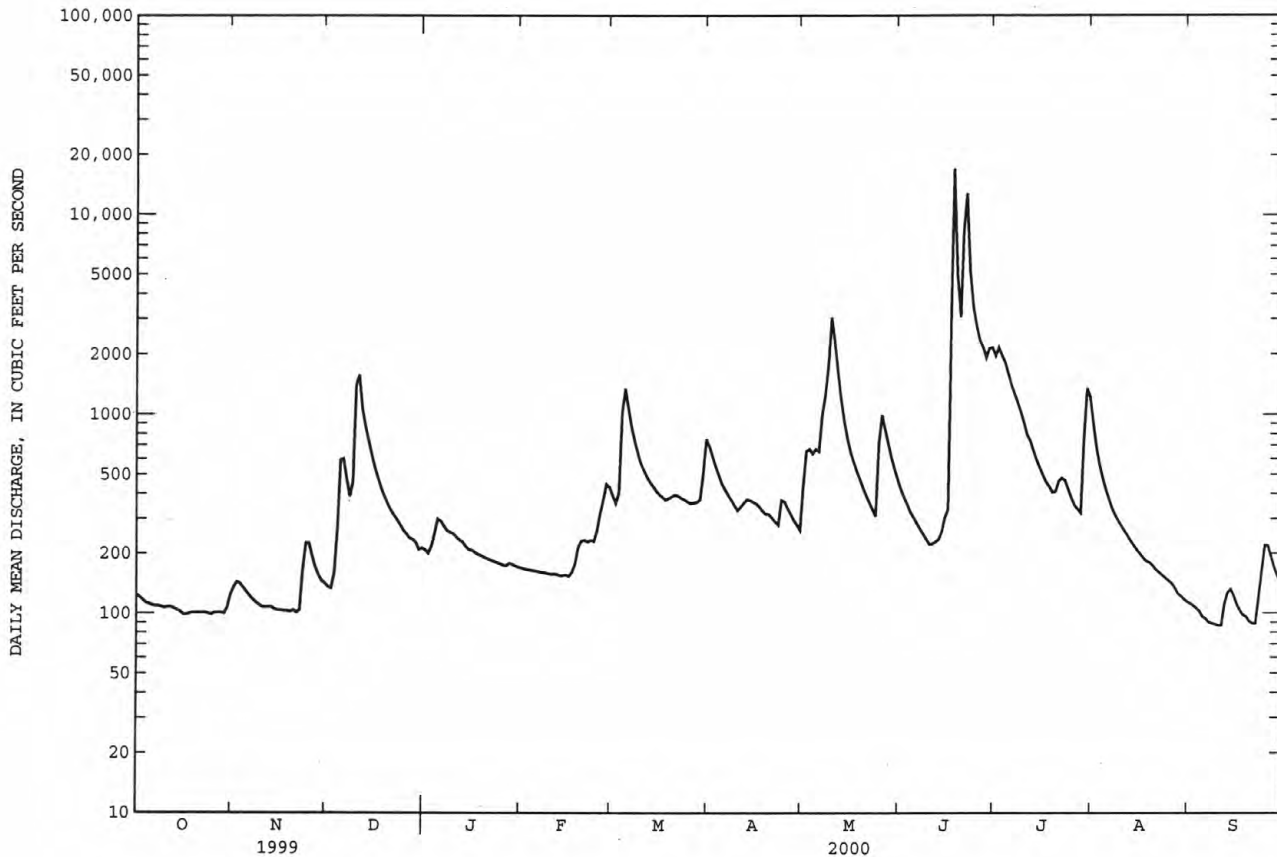
e Estimated

ARKANSAS RIVER BASIN

149

07189000 ELK RIVER NEAR TIFF CITY, MO--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	356531		203487		834	
ANNUAL MEAN	977		556		1881	
HIGHEST ANNUAL MEAN					135	
LOWEST ANNUAL MEAN					68600	
HIGHEST DAILY MEAN	12900	May 5	17000	Jun 18	5.1	Apr 19 1941
LOWEST DAILY MEAN	99	Oct 16	87	Sep 10	5.6	Sep 5 1954
ANNUAL SEVEN-DAY MINIMUM	100	Oct 16	90	Sep 5	137000	Sep 2 1954
INSTANTANEOUS PEAK FLOW			26800	Jun 18	28.40	Apr 19 1941
INSTANTANEOUS PEAK STAGE			19.15	Jun 18	604200	Apr 19 1941
ANNUAL RUNOFF (AC-FT)	707200		403600		.96	
ANNUAL RUNOFF (CFSM)	1.12		.64		13.00	
ANNUAL RUNOFF (INCHES)	15.21		8.68		1760	
10 PERCENT EXCEEDS	2350		1020		343	
50 PERCENT EXCEEDS	410		264		87	
90 PERCENT EXCEEDS	109		104			



ARKANSAS RIVER BASIN

07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO

LOCATION.--Lat 36°32'52", long 94°37'04", in SE 1/4 NE 1/4 sec.22, T.24 N., R.25 E., Delaware County, Hydrologic Unit 11070206, on right bank of downstream side of bridge on Stateline Highway 5, 2.5 mi northwest of Southwest City, Mo, 4.7 mi upstream from Honey Springs, and at mile 4.7.

DRAINAGE AREA.--7.9 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water stage recorder. Datum of gage is 922.86 ft above sea level.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

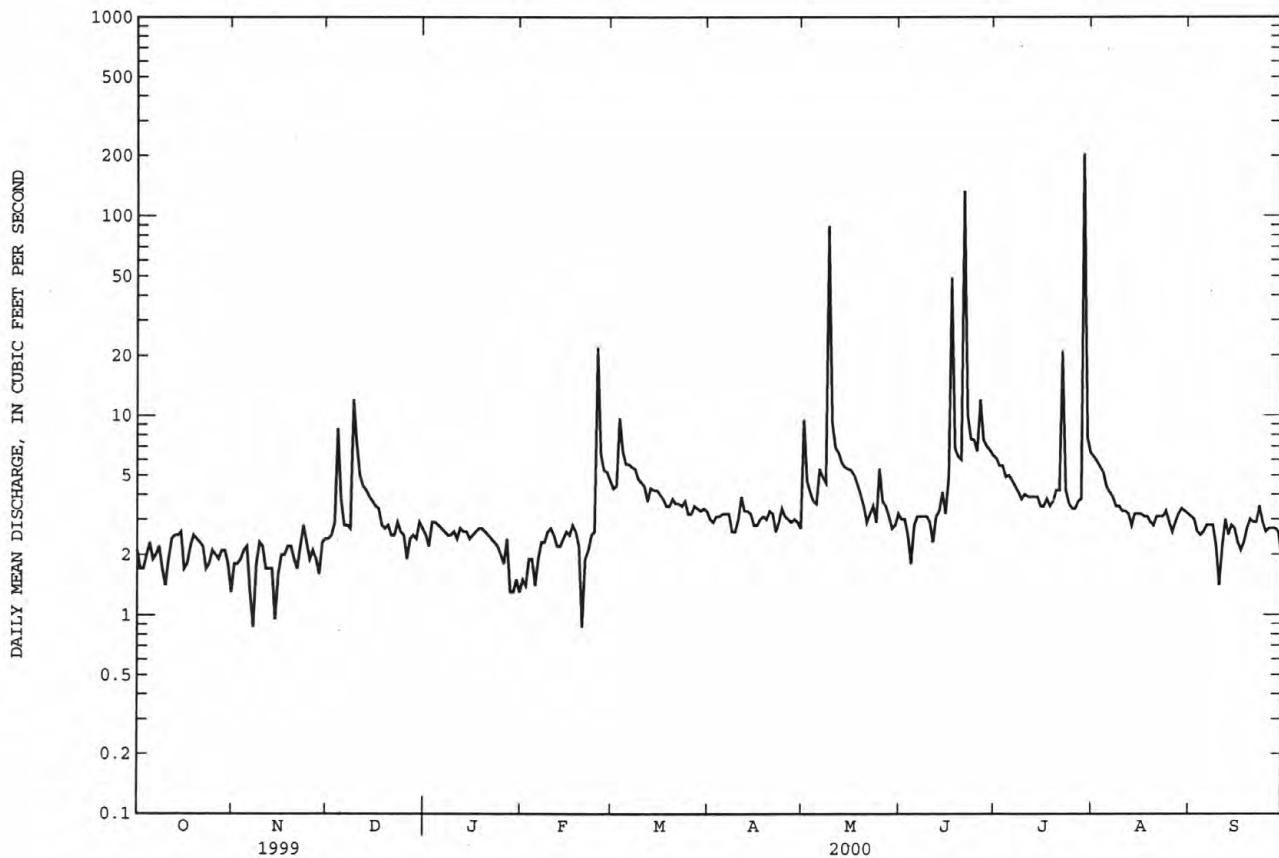
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.8	2.4	2.5	1.5	4.3	3.0	9.5	3.0	6.1	6.2	3.1
2	1.7	1.8	2.5	2.2	1.4	4.4	2.9	4.7	3.0	5.6	5.9	3.0
3	1.7	1.9	2.9	2.9	1.9	9.7	3.1	4.1	2.5	5.6	5.5	2.6
4	2.0	2.1	8.6	2.9	1.9	6.6	3.1	3.7	1.8	4.9	5.2	2.5
5	2.3	2.2	3.8	2.8	1.4	5.7	3.2	3.6	2.8	5.0	4.4	2.6
6	1.9	1.3	2.8	2.7	1.9	5.7	3.2	5.4	3.1	4.7	4.1	2.8
7	2.0	.87	2.8	2.6	2.3	5.5	3.2	4.9	3.1	4.4	3.9	2.8
8	2.2	1.8	2.7	2.5	2.3	5.4	2.6	4.6	3.1	4.1	3.5	2.8
9	1.7	2.3	12	2.5	2.6	4.8	2.6	89	3.1	3.8	3.5	2.2
10	1.4	2.2	7.2	2.6	2.7	4.6	3.0	9.2	2.9	4.0	3.3	1.4
11	1.9	1.7	5.0	2.4	2.5	4.4	3.9	6.9	2.3	3.9	3.3	2.2
12	2.4	1.7	4.4	2.7	2.2	3.7	3.3	6.5	3.1	3.9	3.2	3.0
13	2.5	1.7	4.2	2.6	2.2	4.3	3.3	5.8	3.3	3.9	2.8	2.5
14	2.5	.95	3.9	2.6	2.4	4.2	3.2	5.5	4.1	3.9	3.2	2.8
15	2.6	1.6	3.7	2.4	2.6	4.2	2.8	5.4	3.2	3.5	3.2	2.7
16	1.7	2.0	3.5	2.5	2.5	4.0	2.8	5.3	4.9	3.5	3.2	2.3
17	1.8	2.0	3.4	2.6	2.8	3.8	3.0	5.0	49	3.8	3.1	2.1
18	2.2	2.2	2.8	2.7	2.6	3.5	3.1	4.5	6.8	3.5	3.1	2.3
19	2.5	2.2	2.7	2.7	2.2	3.5	3.0	4.0	6.2	3.7	2.9	2.7
20	2.4	1.9	2.8	2.6	.87	3.8	3.3	3.5	6.0	4.2	2.8	3.0
21	2.3	1.7	2.5	2.5	1.9	3.6	3.2	2.9	133	4.2	3.1	2.9
22	2.2	2.2	2.5	2.4	2.1	3.6	2.6	3.2	10	21	3.1	2.9
23	1.7	2.8	2.9	2.3	2.5	3.5	2.9	3.5	7.6	4.2	3.1	3.5
24	1.8	2.3	2.6	2.2	2.6	3.7	3.4	2.9	7.5	3.6	3.3	2.9
25	2.1	1.9	2.5	2.0	22	3.2	3.1	5.4	6.6	3.4	2.9	2.6
26	2.0	2.1	1.9	1.8	6.4	3.2	3.0	3.7	12	3.4	2.6	2.7
27	1.9	1.9	2.4	2.4	5.3	3.5	2.9	3.5	7.5	3.7	2.9	2.7
28	2.1	1.6	2.5	1.3	5.2	3.4	3.0	3.1	7.0	3.8	3.2	2.7
29	2.1	2.3	2.4	1.3	4.7	3.3	2.9	2.7	6.7	204	3.4	2.6
30	1.8	2.4	2.9	1.5	---	3.4	2.7	2.8	6.3	7.7	3.3	2.0
31	1.3	---	2.7	1.3	---	3.3	---	3.2	---	6.5	3.2	---
TOTAL	62.8	57.42	111.9	73.0	95.47	133.8	91.3	228.0	321.5	351.5	110.4	78.9
MEAN	2.03	1.91	3.61	2.35	3.29	4.32	3.04	7.35	10.7	11.3	3.56	2.63
MAX	2.6	2.8	12	2.9	22	9.7	3.9	89	133	204	6.2	3.5
MIN	1.3	.87	1.9	1.3	.87	3.2	2.6	2.7	1.8	3.4	2.6	1.4
AC-FT	125	114	222	145	189	265	181	452	638	697	219	156

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	7.26	3.03	4.39	7.24	5.23	9.46	6.32	7.41	11.4	7.86	2.62	2.43
MAX	16.6	3.66	6.17	15.5	8.73	14.5	11.2	11.8	21.7	11.3	3.56	2.63
(WY)	1999	1998	1998	1998	1999	1999	1999	1999	1999	2000	2000	2000
MIN	2.03	1.91	3.41	2.35	3.29	4.32	3.04	3.08	1.93	1.54	1.67	2.12
(WY)	2000	2000	1999	2000	2000	2000	2000	1998	1998	1998	1998	1999

07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	2876.11		1715.99		6.24	
ANNUAL MEAN	7.88		4.69		9.25	
HIGHEST ANNUAL MEAN					4.69	
LOWEST ANNUAL MEAN					291	
HIGHEST DAILY MEAN	263	Jun 30	204	Jul 29	Oct 5 1998	
LOWEST DAILY MEAN	.79	Aug 29	.87	Nov 7	Aug 29 1999	
ANNUAL SEVEN-DAY MINIMUM	1.6	Aug 23	1.5	Jan 28	Jan 28 2000	
INSTANTANEOUS PEAK FLOW			546	Jun 21	1360	
INSTANTANEOUS PEAK STAGE			8.05	Jun 21	12.08	
ANNUAL RUNOFF (AC-FT)	5700		3400		4520	
10 PERCENT EXCEEDS	10		5.6		7.7	
50 PERCENT EXCEEDS	3.9		2.9		3.4	
90 PERCENT EXCEEDS	1.9		1.9		1.7	



07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	BARO-	OXYGEN,	PH	SPE-	TEMPER-	SAMPLE	
		ANA-	COL-		CHARGE,	METRIC		WATER				LOC-
		LYZING	LECTING		INST.	PRES-		WHOLE				ATION,
		SAMPLE	SAMPLE		CUBIC	SURE		FIELD				CROSS
		(CODE	(CODE	HEIGHT	FEET	(MM	DIS-	(STAND-	DUCT-	ATURE	SECTION	
		NUMBER)	NUMBER)	(FEET)	PER	OF	SOLVED	ARD	ANCE	WATER	(FT FM	
		(00028)	(00027)	(00065)	SECOND	HG)	(MG/L)	UNITS)	(US/CM)	(DEG C)	L BANK)	
AUG												
14...	1528	1028	1028	5.00	3.2	753	11.0	7.7	1580	29.3	2.00	
14...	1529	1028	1028	5.00	3.2	753	11.0	7.7	1580	29.4	4.00	
14...	1530	1028	1028	5.00	3.2	753	11.0	7.7	1580	29.4	6.00	
14...	1531	1028	1028	5.00	3.2	753	11.0	7.7	1580	29.4	8.00	
14...	1532	1028	1028	5.00	3.2	753	11.0	7.7	1580	29.4	10.0	
14...	1533	1028	1028	5.00	3.2	753	10.9	7.7	1580	29.4	12.0	

DATE	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
OCT 22...	80020	1028	4.97	2.3	755	117	11.2	7.8	1910	22.0
NOV 03...	80020	1028	5.00	2.2	752	92	8.9	7.5	1910	17.5
DEC 02...	80020	1028	5.02	2.6	743	91	9.4	7.7	1940	19.0
JAN 19...	80020	1028	5.00	2.8	747	139	13.9	7.9	1800	11.2
FEB 17...	80020	1028	5.03	3.1	745	98	10.3	7.2	1680	8.4
MAR 22...	80020	1028	5.03	3.5	755	80	8.1	7.4	1420	12.5
APR 11...	80020	1028	5.07	4.1	757	137	13.0	7.8	1420	19.0
MAY 09...	80020	1028	5.79	35	749	80	7.2	6.9	288	19.5
JUN 27...	80020	1028	5.22	7.2	755	126	11.0	7.0	732	27.0
JUL 18...	80020	1028	5.03	3.6	750	76	6.3	7.4	1640	26.0
AUG 14...	80020	1028	5.00	3.2	753	147	11.0	7.7	1580	34.0
SEP 13...	80020	1028	4.97	2.7	753	163	12.3	8.3	1760	31.5

[illegible]

07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)
OCT 22...	172	0	--	--	--	--	1.9	.561	15.1	18
NOV 03...	206	0	--	--	--	--	2.1	.753	1.97	4.3
DEC 02...	189	0	--	--	--	--	2.3	.706	5.72	8.3
JAN 19...	174	0	--	--	--	--	2.4	.234	2.81	5.4
FEB 17...	117	0	--	--	--	--	4.3	3.23	11.0	15
MAR 22...	170	0	248	<.1	5.7	123	2.1	.090	5.18	7.4
APR 11...	139	0	--	--	--	--	1.6	.205	3.84	5.5
MAY 09...	62	0	--	--	--	--	2.0	.165	1.60	3.7
JUN 27...	108	0	--	--	--	--	.83	.090	3.99	4.9
JUL 18...	124	0	--	--	--	--	1.0	.039	16.8	18
AUG 14...	141	0	--	--	--	--	1.1	.049	2.21	3.3
SEP 13...	101	0	--	--	--	--	1.2	.067	5.37	6.7
DATE	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, 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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
OCT 22...	.72	66.7	15.8	2.52	.768	1.4	.310	.126	.101	.141
NOV 03...	.97	8.71	2.16	.631	.192	1.3	.196	.106	.064	.145
DEC 02...	.91	25.3	6.03	1.01	.307	1.6	1.03	.376	.336	---
JAN 19...	.30	12.4	2.93	.381	.116	2.2	.328	.178	.107	.339
FEB 17...	4.16	48.5	11.2	.651	.198	1.0	.034	<.050	.011	<.050
MAR 22...	.12	22.9	5.24	.184	.056	2.1	.040	<.050	.013	.286
APR 11...	.26	17.0	3.89	.184	.056	1.4	.089	.052	.029	.126
MAY 09...	.21	7.08	1.63	.092	.028	1.9	2.65	.976	.863	1.12
JUN 27...	.12	17.7	4.03	.141	.043	.74	.389	.155	.127	.185
JUL 18...	.05	74.2	16.8	.230	.070	1.0	.254	.103	.083	.117
AUG 14...	.06	9.80	2.26	.164	.050	1.0	.460	.196	.150	.218
SEP 13...	.09	23.8	5.44	.227	.069	1.2	.454	.186	.148	.183

ARKANSAS RIVER BASIN

07189540 CAVE SPRINGS BRANCH NEAR SOUTH WEST CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 KF AGAR UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 22...	--	--	--	--	220	150	340	--	--
NOV 03...	--	--	--	--	64	82	260	--	--
DEC 02...	--	--	--	--	370	K560	270	--	--
JAN 19...	--	--	--	--	250	210	120	--	--
FEB 17...	--	--	--	--	1100	860	1000	--	--
MAR 22...	1.07	7.45	788	764	110	K190	110	E10	64
APR 11...	--	--	--	--	1600	1600	1400	--	--
MAY 09...	--	--	--	--	27000	18000	49000	--	--
JUN 27...	--	--	--	--	530	470	1300	--	--
JUL 18...	--	--	--	--	530	500	700	--	--
AUG 14...	--	--	--	--	350	300	310	--	--
SEP 13...	--	--	--	--	420	240	350	--	--



07191222 Beaty Creek near Jay, OK

ARKANSAS RIVER BASIN

07189542 HONEY CREEK NEAR SOUTHWEST CITY, MO

LOCATION.--Lat 36°32'56", long 94°41'01", in SE 1/4 NE 1/4 sec.24, T.24 N., R.24 E., Delaware County, Hydrologic Unit 11070206, on downstream abutment of county road bridge, 0.4 mi downstream from Cave Springs Creek, 2.3 mi southeast of Dodge, Ok, and 5.1 mi above Grand Lake and at mile 5.1.

DRAINAGE AREA.--48.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to current year.

GAGE.--Water stage recorder. Datum of gage is 789 ft above sea level from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	16	11	12	11	31	19	44	19	43	37	8.2
2	13	17	9.4	11	11	28	19	45	19	39	31	8.1
3	13	17	14	14	12	41	19	41	19	37	27	7.4
4	12	18	28	13	12	49	18	35	17	33	24	7.6
5	12	18	38	13	12	50	18	31	17	30	21	7.7
6	12	18	31	13	12	46	18	40	17	27	20	7.7
7	11	17	25	13	12	41	18	48	16	25	18	7.8
8	12	16	20	12	12	38	17	45	16	23	17	7.8
9	12	18	41	12	13	33	16	188	16	22	16	7.3
10	11	18	55	12	13	29	17	150	16	21	15	6.9
11	11	16	45	12	12	29	21	117	17	20	15	6.1
12	11	15	37	12	12	27	19	97	16	19	14	12
13	12	15	31	12	12	26	19	77	16	19	14	9.2
14	13	15	26	12	12	25	19	60	20	18	13	9.0
15	13	13	23	12	13	25	18	51	18	17	13	8.5
16	13	14	20	12	13	24	18	45	23	16	13	8.3
17	12	16	19	12	14	22	17	41	93	16	12	8.0
18	12	17	17	12	14	25	13	36	84	16	12	7.5
19	13	17	15	12	14	27	15	32	74	15	12	7.6
20	14	15	15	12	13	26	18	29	64	17	11	8.2
21	14	15	14	13	12	25	17	26	226	18	11	8.5
22	13	16	14	12	13	23	16	25	136	37	11	8.4
23	13	21	14	12	15	23	17	24	111	33	10	16
24	13	18	13	12	15	23	19	23	95	21	9.6	16
25	13	16	13	12	46	21	17	34	77	18	9.4	13
26	13	15	12	11	54	21	16	29	78	16	8.7	12
27	14	15	12	12	48	20	16	27	63	17	8.6	11
28	14	14	12	11	40	20	15	25	56	16	8.7	10
29	14	13	13	10	35	20	16	22	51	219	8.1	9.9
30	18	13	13	11	---	20	16	20	46	65	8.2	9.1
31	17	---	12	11	---	20	---	20	---	46	8.1	---
TOTAL	403	482	662.4	372	527	878	521	1527	1536	979	456.4	274.8
MEAN	13.0	16.1	21.4	12.0	18.2	28.3	17.4	49.3	51.2	31.6	14.7	9.16
MAX	18	21	55	14	54	50	21	188	226	219	37	16
MIN	11	13	9.4	10	11	20	13	20	16	15	8.1	6.1
AC-FT	799	956	1310	738	1050	1740	1030	3030	3050	1940	905	545

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

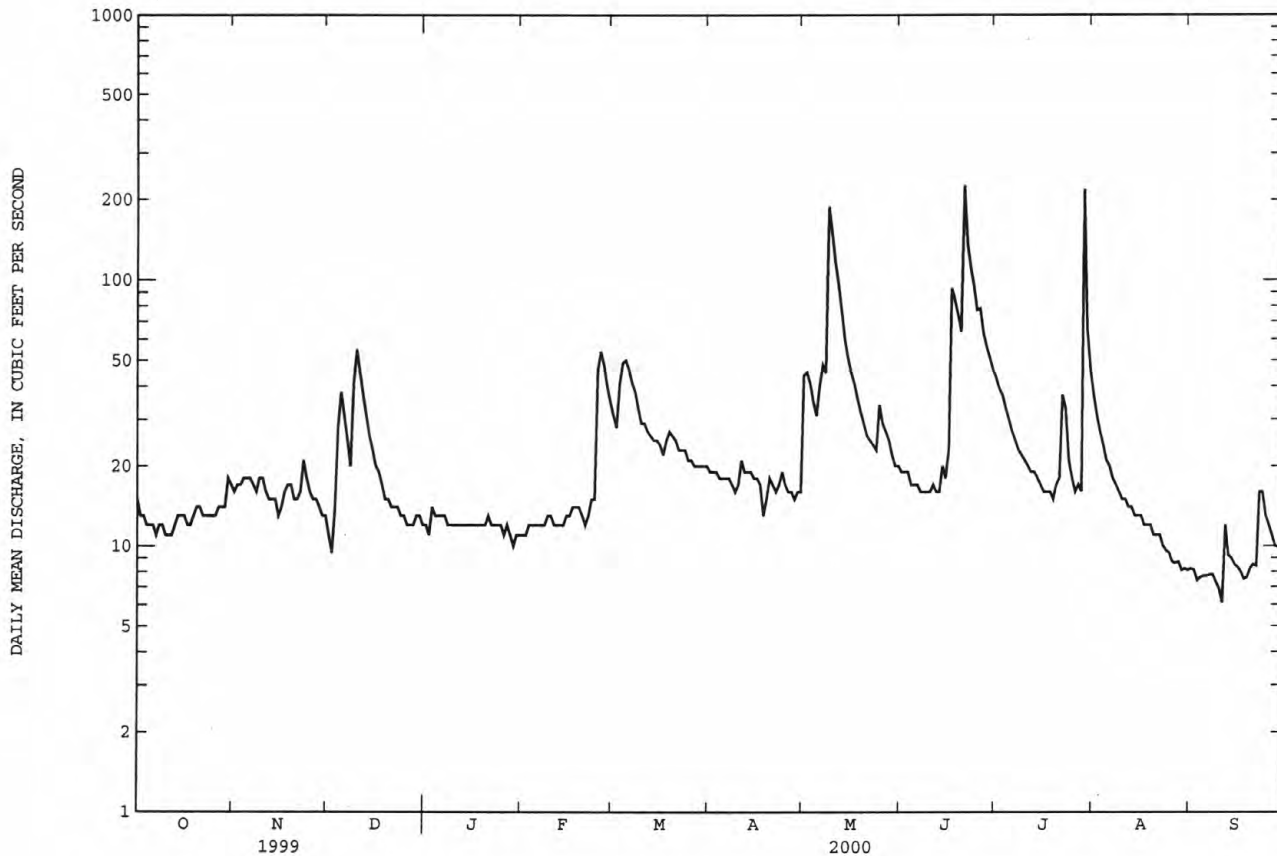
	1998	1999	2000	1998	1999	2000	1998	1999	2000	1998	1999	2000
MEAN	34.2	19.2	31.1	55.6	35.2	73.2	44.1	56.7	62.6	50.7	13.7	11.6
MAX	75.9	28.7	41.8	128	57.6	105	78.4	98.1	124	111	17.7	14.5
(WY)	1999	1999	1998	1998	1999	1999	1999	1999	1999	1999	1999	1999
MIN	13.0	12.9	21.4	12.0	18.2	28.3	17.4	22.9	12.6	9.76	8.77	9.16
(WY)	2000	1998	2000	2000	2000	2000	2000	1998	1998	1998	1998	2000

ARKANSAS RIVER BASIN

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07189542 HONEY CREEK NEAR SOUTHWEST CITY, MO--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	20782.4		8618.6		40.8	
ANNUAL MEAN	56.9		23.5		64.1	
HIGHEST ANNUAL MEAN					23.5	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	1320	Jun 30	226	Jun 21	1320	Jun 30 1999
LOWEST DAILY MEAN	9.4	Dec 2	6.1	Sep 11	3.6	Sep 5 1998
ANNUAL SEVEN-DAY MINIMUM	11	Oct 6	7.3	Sep 5	3.7	Sep 4 1998
INSTANTANEOUS PEAK FLOW			507	Jun 21	6140	Jun 30 1999
INSTANTANEOUS PEAK STAGE			6.87	Jun 21	12.98	Jun 30 1999
INSTANTANEOUS LOW FLOW			5.4	Sep 11	5.4	Sep 11 2000
ANNUAL RUNOFF (AC-FT)	41220		17090		29540	
10 PERCENT EXCEEDS	126		44		78	
50 PERCENT EXCEEDS	28		16		23	
90 PERCENT EXCEEDS	13		11		10	



ARKANSAS RIVER BASIN

07189542 HONEY CREEK NEAR SOUTHWEST CITY, MO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
AUG											
14...	1421	1028	1028	4.63	14	753	8.1	7.3	531	26.0	5.00
14...	1422	1028	1028	4.63	14	753	8.1	7.3	531	26.1	10.0
14...	1423	1028	1028	4.63	14	753	8.1	7.3	531	26.0	15.0
14...	1424	1028	1028	4.63	14	753	8.1	7.3	531	26.1	20.0
14...	1425	1028	1028	4.63	14	753	8.1	7.3	531	26.0	25.0
14...	1426	1028	1028	4.63	14	753	8.1	7.3	531	26.0	30.0
14...	1427	1028	1028	4.63	14	753	8.1	7.3	531	26.0	35.0
14...	1428	1028	1028	4.63	14	753	8.1	7.4	531	26.1	40.0
14...	1429	1028	1028	4.63	14	753	8.0	7.4	531	26.2	45.0
OCT											
22...		80020	1028	4.69	13	755	96	9.6	7.8	575	22.0
NOV											
03...		80020	1028	4.79	17	755	96	9.7	7.4	493	19.0
DEC											
02...		80020	1028	4.71	9.3	747	95	10.0	7.9	580	19.5
JAN											
19...		80020	1028	4.70	12	747	131	14.1	7.8	545	15.5
FEB											
17...		80020	1028	4.70	16	748	105	11.8	7.8	602	9.2
MAR											
21...		80020	1028	4.81	24	750	115	11.6	8.4	450	26.0
APR											
11...		80020	1028	4.78	24	757	108	10.8	8.0	544	17.0
MAY											
09...		80020	1028	6.04	244	745	83	7.7	7.0	236	23.0
JUN											
27...		80020	1028	5.12	63	755	114	10.2	7.5	344	26.5
JUL											
18...		80020	1028	4.67	16	750	69	5.8	7.6	509	26.5
AUG											
14...		80020	1028	4.63	14	753	101	8.1	7.3	531	31.4
SEP											
13...		80020	1028	4.61	9.3	753	102	8.4	7.7	557	31.0

ARKANSAS RIVER BASIN

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07189542 HONEY CREEK NEAR SOUTHWEST CITY, MO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LITY 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)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00600)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 22...	14.8	120	146	0	.20	<.020	3.4	--	3.18
NOV 03...	14.2	109	133	0	.12	<.020	2.6	--	2.46
DEC 02...	12.2	134	163	0	.40	<.020	3.1	--	2.69
JAN 19...	11.0	109	133	0	.16	<.020	2.7	--	2.54
FEB 17...	9.3	106	129	0	.18	<.020	2.5	--	2.37
MAR 21...	14.0	120	146	0	.25	<.020	3.0	--	2.71
APR 11...	15.0	116	141	0	.21	<.020	2.4	--	2.15
MAY 09...	18.0	73	89	0	.93	.037	2.6	.05	1.65
JUN 27...	20.4	101	123	0	.26	<.020	3.2	--	2.98
JUL 18...	23.3	116	142	0	.21	<.020	3.5	--	3.26
AUG 14...	26.0	125	152	0	.20	<.020	2.7	--	2.47
SEP 13...	24.6	111	135	0	.15	<.020	2.2	--	2.06
DATE	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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 22...	<.010	--	.310	.102	.101	.084	56	75	140
NOV 03...	<.010	--	.270	.090	.088	.111	38	73	83
DEC 02...	<.010	--	---	---	---	.100	26	68	85
JAN 19...	<.010	--	.230	.085	.075	.075	84	78	68
FEB 17...	<.010	--	.153	.062	.050	.065	130	200	100
MAR 21...	<.010	--	.254	.078	.083	.065	K8	23	25
APR 11...	<.010	--	.218	.084	.071	.084	450	270	190
MAY 09...	<.010	.90	1.09	.415	.355	.489	19000	10000	35000
JUN 27...	<.010	--	.261	.101	.085	.107	270	310	410
JUL 18...	<.010	--	.288	.113	.094	.104	240	110	360
AUG 14...	<.010	--	.276	.118	.090	.106	310	K320	240
SEP 13...	<.010	--	.291	.110	.095	.110	140	250	180

ARKANSAS RIVER BASIN

07190000 LAKE O' THE CHEROKEES AT LANGLEY, OK

LOCATION.--Lat 36°28'07", long 95°02'28", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.23 N., R.21 E., Mayes County, Hydrologic Unit 11070206, on upstream side of pier at intake structure near right end of Pensacola Dam on Neosho River at Langley, 9.9 mi upstream from Big Cabin Creek, and at mile 77.0.

DRAINAGE AREA.--10,298 mi².

PERIOD OF RECORD.--March 1940 to current year. Prior to October 1940, published as Grand Lake at Langley.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1.10 ft above sea level (U.S. Army Corps of Engineers' benchmark). Prior to Nov. 14, 1941, nonrecording gage at same site and datum.

REMARKS.--No estimated record. Reservoir is formed by multiple-arch concrete dam, with tops of taintor-type spillway gates at gage height 755.0 ft. Storage began Mr. 21, 1940; power-pool was first filled Apr. 19, 1941. Capacity between gage heights 682.0 ft, sill of powerhouse penstock, and 745.0 ft, maximum power pool is 1,492,000 acre-ft. Capacity between gage heights 745.0 ft and 755.0 ft is 525,200 acre-ft, and is reserved for flood control. Dead storage below gage height 682.0 ft is 180,200 acre-ft. Figures given herein represent total contents. Reservoir is utilized for power development and flood control. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,213,000 acre-ft, May 25, 1957, gage height, 755.27 ft; minimum since power-pool was first filled, 642,900 acre-ft, Sept. 28, 1954, gage height, 713.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,840,000 acre-ft, June 27, gage height, 748.48 ft; minimum, 1,474,000 acre-ft, Sept. 22, gage height, 740.53.

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

730	1,086,000	745	1,672,000
735	1,257,000	750	1,917,000
740	1,452,000	755	2,198,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1513000	1513000	1531000	1568000	1544000	1555000	1553000	1560000	1638000	1796000	1643000	1481000
2	1511000	1507000	1536000	1574000	1537000	1554000	1548000	1563000	1634000	1788000	1622000	1481000
3	1511000	1507000	1541000	1570000	1538000	1562000	1541000	1563000	1639000	1772000	1604000	1480000
4	1506000	1508000	1559000	1566000	1535000	1569000	1538000	1556000	1643000	1760000	1590000	1482000
5	1500000	1510000	1601000	1560000	1533000	1570000	1535000	1552000	1646000	1739000	1579000	1481000
6	1498000	1510000	1614000	1556000	1536000	1570000	1536000	1568000	1649000	1718000	1566000	1480000
7	1497000	1511000	1618000	1552000	1537000	1566000	1538000	1586000	1646000	1699000	1551000	1479000
8	1497000	1511000	1614000	1555000	1537000	1566000	1540000	1584000	1645000	1689000	1539000	1479000
9	1499000	1510000	1618000	1554000	1536000	1562000	1544000	1694000	1638000	1681000	1533000	1478000
10	1500000	1513000	1631000	1552000	1542000	1561000	1543000	1758000	1639000	1666000	1525000	1478000
11	1501000	1513000	1641000	1549000	1540000	1557000	1544000	1742000	1641000	1651000	1518000	1477000
12	1502000	1514000	1643000	1550000	1537000	1560000	1535000	1720000	1634000	1644000	1516000	1482000
13	1504000	1515000	1637000	1550000	1538000	1561000	1530000	1718000	1624000	1624000	1517000	1481000
14	1502000	1516000	1627000	1544000	1539000	1561000	1520000	1713000	1634000	1624000	1518000	1481000
15	1502000	1516000	1626000	1546000	1539000	1559000	1526000	1704000	1657000	1612000	1514000	1479000
16	1507000	1517000	1616000	1551000	1534000	1559000	1529000	1693000	1672000	1612000	1510000	1479000
17	1504000	1516000	1614000	1551000	1533000	1564000	1527000	1679000	1707000	1610000	1502000	1479000
18	1502000	1517000	1608000	1548000	1536000	1574000	1524000	1662000	1726000	1611000	1502000	1478000
19	1502000	1518000	1602000	1550000	1543000	1575000	1522000	1642000	1719000	1602000	1501000	1476000
20	1501000	1518000	1593000	1546000	1553000	1586000	1528000	1635000	1726000	1604000	1502000	1478000
21	1502000	1519000	1586000	1544000	1554000	1592000	1531000	1634000	1796000	1599000	1502000	1477000
22	1502000	1527000	1582000	1545000	1543000	1587000	1533000	1634000	1831000	1601000	1500000	1476000
23	1502000	1526000	1577000	1548000	1550000	1576000	1540000	1634000	1825000	1655000	1497000	1480000
24	1502000	1531000	1583000	1548000	1548000	1569000	1540000	1632000	1823000	1676000	1497000	1483000
25	1502000	1529000	1587000	1547000	1550000	1567000	1543000	1640000	1817000	1677000	1496000	1483000
26	1502000	1528000	1592000	1547000	1552000	1565000	1545000	1641000	1831000	1664000	1494000	1484000
27	1502000	1531000	1585000	1548000	1552000	1553000	1545000	1650000	1838000	1660000	1494000	1485000
28	1503000	1534000	1580000	1546000	1555000	1548000	1548000	1658000	1833000	1656000	1492000	1486000
29	1503000	1534000	1577000	1546000	1555000	1551000	1549000	1660000	1822000	1659000	1490000	1486000
30	1507000	1533000	1573000	1548000	---	1556000	1553000	1655000	1811000	1660000	1487000	1486000
31	1509000	---	1567000	1545000	---	1556000	---	1645000	---	1654000	1484000	---
MAX	1513000	1534000	1643000	1574000	1555000	1592000	1553000	1758000	1838000	1796000	1643000	1486000
MIN	1497000	1507000	1531000	1544000	1533000	1548000	1520000	1552000	1624000	1599000	1484000	1476000
(+)	741.35	741.92	742.69	742.18	742.42	742.43	742.37	744.42	747.89	744.60	740.76	740.80
(++)	+4000	+24000	+34000	-22000	+10000	+1000	-3000	+92000	+166000	-157000	-170000	+2000
CAL YR 1999	MAX 2067000	MIN 1489000	(++)	0								
WTR YR 2000	MAX 1838000	MIN 1476000	(++)	-19000								

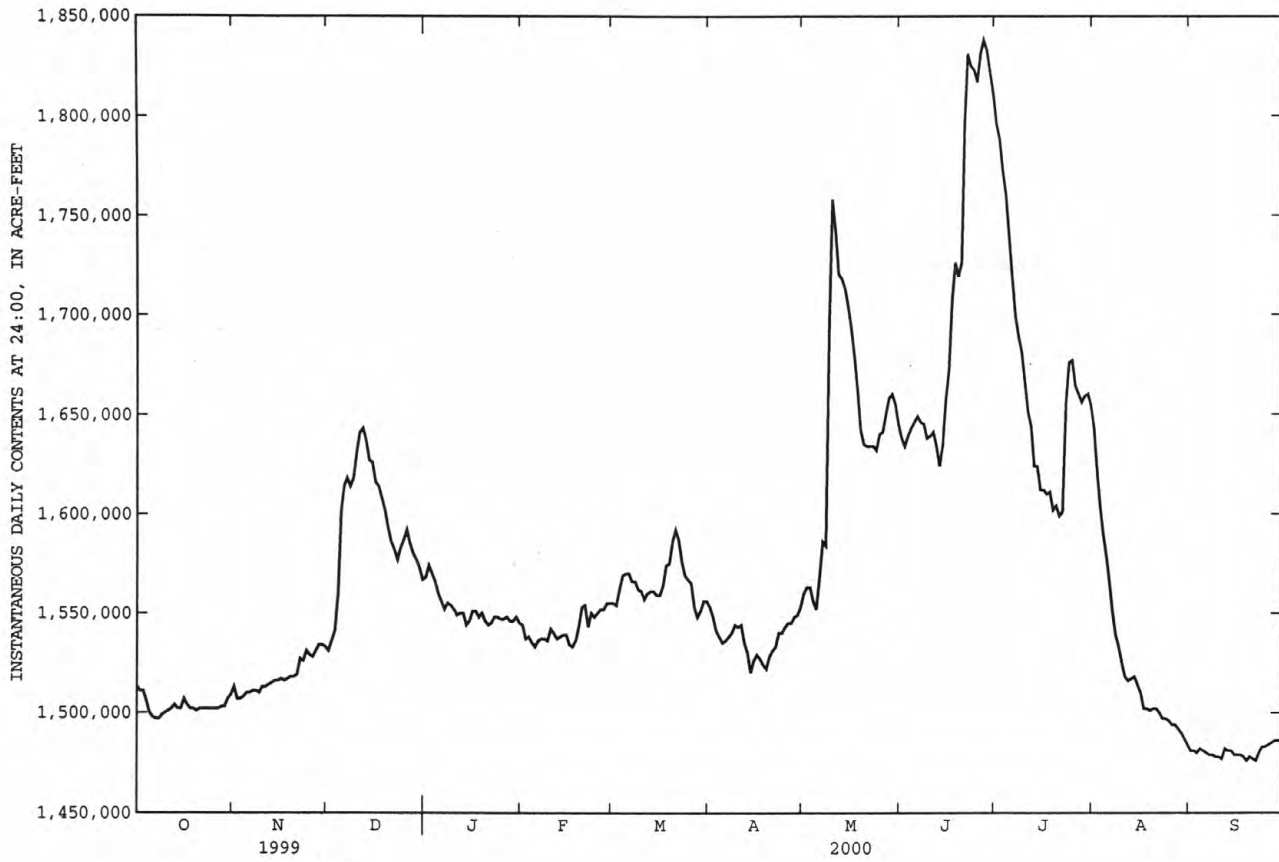
(+) ELEVATION, IN FEET, AT END OF MONTH

(++) CHANGE IN CONTENTS, IN ACRE-FEET

ARKANSAS RIVER BASIN

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07190000 LAKE O' THE CHEROKEES AT LANGLEY, OK--Continued



ARKANSAS RIVER BASIN

07190500 NEOSHO RIVER NEAR LANGLEY, OK

LOCATION.--Lat 36°26'20", long 95°02'54", in SW $\frac{1}{4}$, SE $\frac{1}{4}$ sec.27, T.23 N., R.21 E., Mayes County, Hydrologic Unit 11070209, in concrete stilling well on left bank, 0.5 mi upstream from bridge on State Highway 82, 1.5 mi south of Langley, 3.6 mi downstream from Pensacola Dam, 6.3 mi upstream from Big Cabin Creek, and at mile 73.4.

DRAINAGE AREA.--10,335 mi².

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 607.65 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Feb. 16, 1940, nonrecording gage at site 0.1 mi upstream at same datum. Feb. 10, 1954 to Sept. 30, 1963, water-stage recorder at site 0.5 mi downstream at same datum. Auxiliary water-stage recorders at sites 2.0 and 3.0 mi upstream at same datum.

REMARKS.--Records fair. Low flow values of 25 ft³/s consist of estimated base flow (since July 1964). Flow regulated since 1940 by Lake O' The Cherokees (station 0719000).

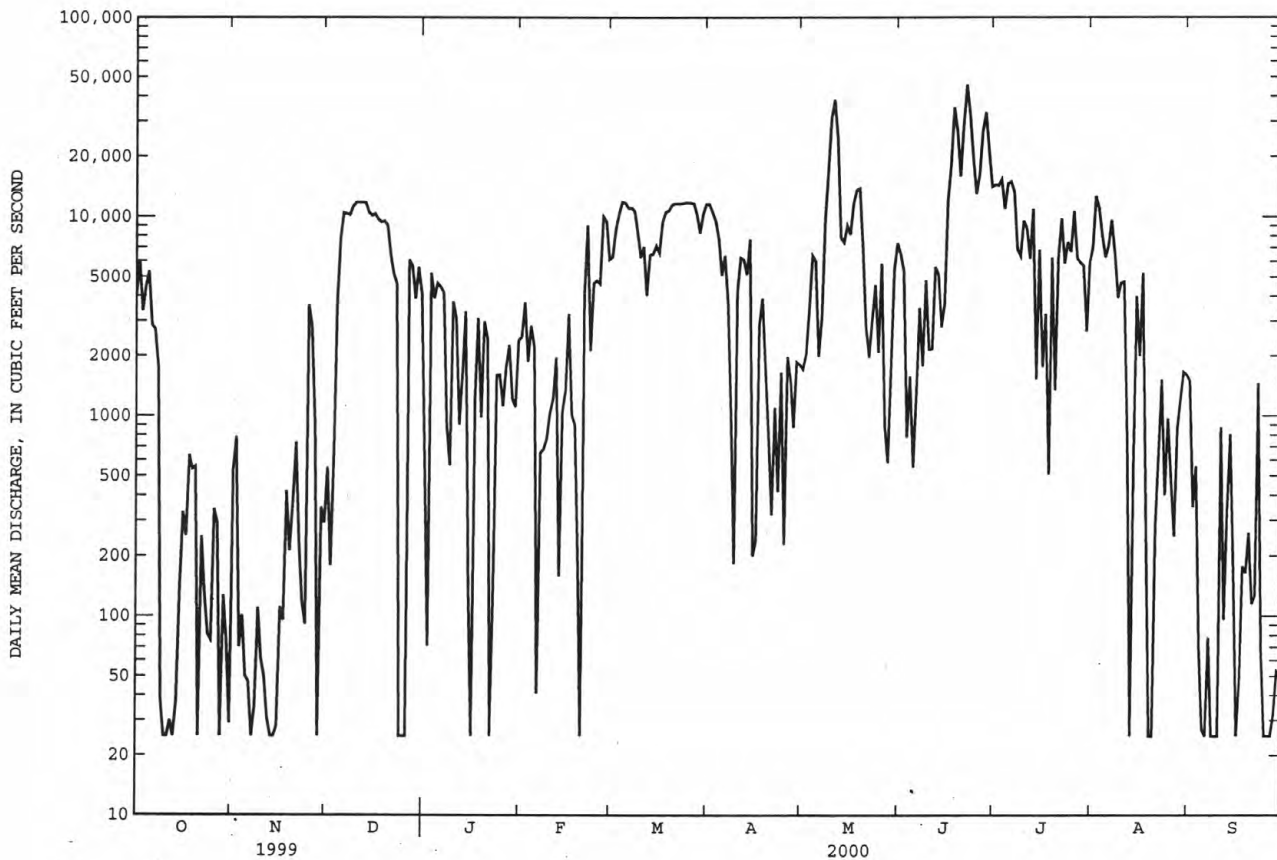
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4070	540	550	541	2490	6290	11500	1720	6500	14400	7000	1500
2	6050	783	179	71	3720	8660	10500	2040	5340	14300	12600	351
3	3370	70	638	5200	1870	10300	9500	3450	784	15300	11000	558
4	4470	101	3730	3910	2830	11800	7750	6370	1580	10900	8000	68
5	5310	50	7800	4630	2230	11700	5080	6000	553	14600	6260	27
6	2850	47	10400	4440	41	11000	6390	1990	1290	14900	7170	25
7	2720	25	10300	4160	654	11000	3680	3090	3490	13300	9600	78
8	1770	35	10200	876	681	10600	989	9700	1780	6860	6550	25
9	39	110	11200	568	766	8220	184	16900	4790	6370	3940	25
10	25	61	11700	3750	1030	6250	4210	31100	2160	9510	4660	25
11	25	50	11700	3080	1210	7060	6220	38300	2170	8750	4720	875
12	30	31	11700	904	1960	4030	6100	24500	5590	6170	754	96
13	25	25	11700	1640	159	6420	5140	7810	5130	10900	25	336
14	37	25	10500	3340	1050	6490	7700	7430	2800	1530	e600	811
15	139	28	10100	135	1340	7130	201	8980	3640	6820	e4000	172
16	331	111	10300	25	3270	6590	238	8150	12000	1760	e2000	25
17	251	95	9670	1250	1010	9420	2870	11600	18000	3270	e5220	47
18	636	421	9360	3100	898	10500	3910	13500	35100	510	289	177
19	543	212	9450	985	194	10700	1720	13800	26900	6220	25	164
20	558	370	9010	2980	25	11400	782	6900	15900	1350	25	260
21	25	739	6440	2440	4070	11600	321	2810	29000	6320	281	115
22	250	232	5180	25	9030	11600	1100	1970	45500	9760	636	126
23	129	117	4610	144	2120	11600	419	3040	32200	5860	1520	1460
24	81	91	25	1600	4640	11700	1650	4550	19600	7440	402	66
25	76	3600	25	1610	4770	11700	229	2080	13000	6680	974	25
26	343	2830	25	1120	4610	11700	1980	5820	16100	10600	479	25
27	292	906	6070	1750	9980	11600	1540	886	26600	6190	250	25
28	25	25	5650	2270	9450	10200	875	583	33100	5890	863	32
29	127	349	3890	1210	6120	8290	1860	1770	21300	5690	1210	53
30	75	292	5570	1110	---	10300	1810	5420	14100	2660	1660	51
31	29	---	4120	2400	---	11500	---	7360	---	5920	1610	---
TOTAL	34701	12371	211792	61264	82218	297350	106448	259619	405997	240730	104323	7623
MEAN	1119	412	6832	1976	2835	9592	3548	8375	13530	7765	3365	254
MAX	6050	3600	11700	5200	9980	11800	11500	38300	45500	15300	12600	1500
MIN	25	25	25	25	25	4030	184	583	553	510	25	25
AC-FT	68830	24540	420100	121500	163100	589800	211100	515000	805300	477500	206900	15120
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2000, BY WATER YEAR (WY)												
MEAN	6239	7040	5850	4965	5989	8719	11380	12000	11210	9094	4435	5049
MAX	51120	38870	35580	21440	23460	33250	50780	77710	43540	67920	20910	30350
(WY)	1987	1986	1993	1993	1949	1973	1945	1943	1995	1951	1950	1993
MIN	37.5	63.0	40.9	144	243	321	38.1	71.4	33.1	26.5	25.6	77.1
(WY)	1981	1957	1981	1954	1981	1967	1971	1940	1940	1940	1940	1953

e Estimated

07190500 NEOSHO RIVER NEAR LANGLEY, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1940 - 2000	
ANNUAL TOTAL	4002936		1824436		7666	
ANNUAL MEAN	10970		4985		21710	
HIGHEST ANNUAL MEAN					210	
LOWEST ANNUAL MEAN					287000	
HIGHEST DAILY MEAN	74200	Apr 28	45500	Jun 22	May 20 1943	
LOWEST DAILY MEAN	25	Sep 18	25	at times	Mar 25 1940	
ANNUAL SEVEN-DAY MINIMUM	46	Oct 9	39	Sep 4	Apr 11 1971	
INSTANTANEOUS PEAK FLOW			48500	Jun 22	May 20 1943	
INSTANTANEOUS PEAK STAGE			22.80	Jun 22	May 20 1943	
ANNUAL RUNOFF (AC-FT)	7940000		3619000		5554000	
10 PERCENT EXCEEDS	24500		11700		17000	
50 PERCENT EXCEEDS	8230		2800		3960	
90 PERCENT EXCEEDS	79		45		115	

^aCaused by closure of Pensacola Dam.^bFrom computation of overflow from Lake O' the Cherokees.^cFrom floodmark.

LOCATION.--Lat 36°34'06", long 95°09'07", in NE 1/4, NE 1/4 sec.15, T.24 N., R.20 E., Craig County, Hydrologic Unit 11070209, near downstream side of right bank end of county road bridge, 4.9 mi northeast of Big Cabin, 0.9 mi downstream from White Oak Creek, 6.8 mi upstream from Mustang Creek, and at mile 13.0.

PERIOD OF RECORD.--October 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 622.00 ft above sea level (U.S. Army Corps of Engineers bench mark). Prior to Sept. 30, 1972, water-stage recorder at site 4.5 mi downstream at same datum.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood of May 18, 1943, reached a stage of 34.96 ft at former site; discharge, 63,000 ft³/s, by slope-area measurement of peak flow.

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 10	0030	31,100	42.50	Jun 22	0400	11,300	30.72
Jun 18	0230	14,300	33.47	Jun 26	2100	10,200	29.62

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.73	2.0	2.3	11	17	45	321	2150	54	201	50	2.2
2	.55	1.7	1.6	11	17	39	232	668	48	156	33	2.1
3	.43	1.8	1.8	13	18	2650	188	253	54	126	26	1.7
4	.33	1.9	871	18	18	3160	144	151	51	102	22	1.4
5	.33	1.8	2720	21	18	586	115	110	397	82	19	1.3
6	.36	1.8	347	20	18	320	94	3480	195	67	17	1.3
7	.42	1.8	127	18	16	214	78	5440	79	57	16	1.4
8	.49	1.7	60	18	16	181	67	650	50	50	14	1.5
9	.57	1.7	563	18	17	161	56	15600	37	45	12	1.5
10	.65	1.7	1790	18	16	123	51	23900	32	40	11	1.4
11	.70	2.0	499	20	15	124	589	2490	48	35	9.8	1.3
12	.75	2.1	202	23	14	628	334	459	110	33	9.7	1.5
13	.82	2.0	107	20	14	495	167	301	79	34	9.4	1.5
14	.93	2.0	64	18	13	304	109	212	856	27	8.7	1.5
15	1.0	1.8	45	17	13	193	82	167	840	24	8.3	1.5
16	.85	1.7	33	15	12	142	73	145	2050	23	8.0	1.5
17	.45	1.7	26	14	13	164	67	145	11200	22	7.5	1.4
18	.47	1.6	24	14	17	150	57	124	8710	21	6.9	1.4
19	.56	1.5	21	15	25	308	51	100	1080	21	6.7	1.3
20	.64	1.5	20	15	44	335	49	83	2220	22	6.5	1.1
21	.72	1.5	18	16	44	198	55	74	7650	25	6.2	1.1
22	.69	2.5	16	15	35	141	52	66	7900	116	5.7	1.2
23	.67	10	15	15	310	122	49	58	759	721	5.4	3.6
24	.67	5.5	14	15	228	240	1050	52	2120	198	5.0	4.1
25	.70	4.9	12	14	204	328	158	680	1770	82	4.6	2.9
26	.73	10	11	14	399	186	78	822	6020	51	4.2	1.8
27	.75	7.4	11	15	203	196	56	812	4490	38	3.9	1.0
28	.70	4.8	13	16	98	152	46	326	588	31	3.5	.83
29	.61	3.5	14	17	62	1210	38	169	377	406	3.2	.85
30	1.3	2.8	14	16	---	5100	35	98	271	340	2.8	.92
31	1.9	---	13	16	---	591	---	69	---	101	2.5	---
TOTAL	21.47	88.7	7675.7	506	1934	18786	4541	59854	60135	3297	348.5	48.10
MEAN	.69	2.96	248	16.3	66.7	606	151	1931	2004	106	11.2	1.60
MAX	1.9	10	2720	23	399	5100	1050	23900	11200	721	50	4.1
MIN	.33	1.5	1.6	11	12	39	35	52	32	21	2.5	.83
AC-FT	43	176	15220	1000	3840	37260	9010	118700	119300	6540	691	95
CFSM	.00	.01	.55	.04	.15	1.35	.34	4.29	4.45	.24	.02	.00
IN.	.00	.01	.63	.04	.16	1.55	.38	4.95	4.97	.27	.03	.00

MEAN	268	432	301	230	312	594	517	662	499	212	83.7	214
MAX	4250	2844	2552	1157	2940	2621	2285	3580	2817	1947	1757	1891
(WY)	1960	1986	1993	1973	1985	1990	1999	1961	1948	1958	1948	1961
MIN	.22	.89	1.52	1.29	1.50	1.37	30.0	20.3	2.47	.53	.41	.22
(WY)	1957	1956	1956	1954	1954	1956	1954	1963	1988	1954	1954	1954

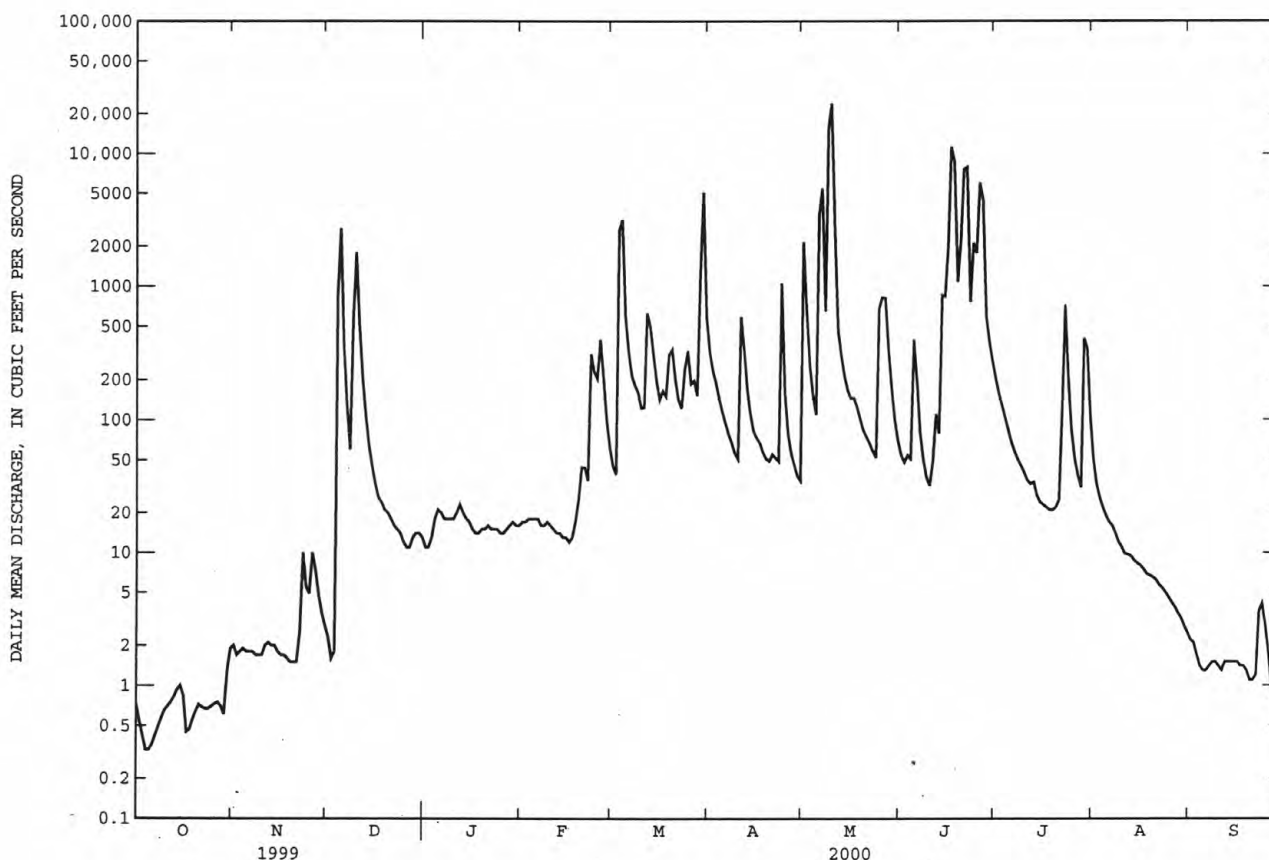
ARKANSAS RIVER BASIN

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07191000 BIG CABIN CREEK NEAR BIG CABIN, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1948 - 2000
ANNUAL TOTAL	280709.27	157235.47	360
ANNUAL MEAN	769	430	1044
HIGHEST ANNUAL MEAN			37.9
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	32200 May 5	23900 May 10	46300 Oct 3 1959
LOWEST DAILY MEAN	.23 Sep 7	.33 Oct 4	.10 Oct 4 1954
ANNUAL SEVEN-DAY MINIMUM	.42 Oct 2	.42 Oct 2	.11 Sep 11 1956
INSTANTANEOUS PEAK FLOW		31100 May 10	^a 52000 Oct 3 1959
INSTANTANEOUS PEAK STAGE		42.50 May 10	46.65 Feb 23 1985
INSTANTANEOUS LOW FLOW		.29 Oct 4	
ANNUAL RUNOFF (AC-FT)	556800	311900	260900
ANNUAL RUNOFF (CFSM)	1.71	.95	.80
ANNUAL RUNOFF (INCHES)	23.21	13.00	10.87
10 PERCENT EXCEEDS	1320	590	527
50 PERCENT EXCEEDS	47	21	33
90 PERCENT EXCEEDS	1.3	1.3	1.6

^aGage height, 34.55 ft at former site.



ARKANSAS RIVER BASIN

07191220 SPAVINAW CREEK NEAR SYCAMORE, OK

LOCATION.--Lat 36°20'07", long 94°38'27", in NE 1/4 NW 1/4 sec.4, T.21 N., R.25 E., Delaware County, Hydrologic Unit 11070209, on right bank 1.8 mi upstream from Cherokee Creek, 4.8 mi northeast of Row, 6.5 mi southeast of Sycamore, and at mile 35.0.

DRAINAGE AREA.--133 mi².

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

REVISED RECORDS.--WSP 2121: 1965 (M).

GAGE.--Water-stage recorder. Elevation of gage is 875 ft above sea level, from topographic map.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--According to local residents, a flood of approximately the same magnitude as the July 27, 1975 flood occurred in the early 18°80's.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 17	1630	3,430	9.61	Jun 21	1200	12,600	15.15

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	30	36	32	28	55	45	62	105	377	156	23
2	34	33	35	32	28	53	45	98	89	302	125	23
3	34	34	35	32	28	63	45	111	79	253	102	22
4	33	36	42	33	28	111	44	102	73	216	90	21
5	32	36	67	39	28	150	43	89	67	186	78	21
6	31	35	98	50	28	138	42	122	63	162	70	20
7	31	34	89	54	28	119	41	250	59	144	63	19
8	30	34	75	51	28	107	41	249	56	130	58	19
9	30	34	79	49	28	97	41	218	53	118	54	18
10	30	33	108	46	28	88	40	214	50	107	50	18
11	30	32	113	45	27	81	41	194	49	98	48	18
12	30	31	107	42	27	76	42	162	49	92	46	19
13	29	31	103	40	27	73	45	129	50	88	44	21
14	29	30	100	38	27	71	48	108	53	83	42	24
15	29	30	90	36	27	68	50	94	55	78	40	27
16	29	30	78	35	27	64	49	83	57	74	39	27
17	28	30	69	35	27	62	48	76	1810	70	37	27
18	28	30	61	34	27	60	48	69	1230	68	35	26
19	27	30	56	34	28	58	46	64	597	66	34	25
20	26	30	52	33	31	57	45	60	393	64	34	24
21	28	30	49	32	34	55	43	57	5220	70	33	23
22	27	30	46	31	35	54	41	54	1770	73	33	21
23	27	33	44	31	36	53	41	52	840	73	32	22
24	28	35	41	30	36	51	40	49	602	68	30	51
25	28	40	40	30	36	50	39	189	469	63	29	142
26	28	44	38	30	36	49	40	291	379	58	28	157
27	28	44	36	29	37	48	42	355	313	55	27	132
28	28	41	36	29	44	48	42	268	564	53	27	96
29	28	40	35	28	52	48	41	197	748	264	26	75
30	28	38	34	28	---	47	41	155	507	254	25	65
31	28	---	33	28	---	46	---	126	---	198	24	---
TOTAL	911	1018	1925	1116	901	2200	1299	4347	16449	4005	1559	1226
MEAN	29.4	33.9	62.1	36.0	31.1	71.0	43.3	140	548	129	50.3	40.9
MAX	35	44	113	54	52	150	50	355	5220	377	156	157
MIN	26	30	33	28	27	46	39	49	49	53	24	18
AC-FT	1810	2020	3820	2210	1790	4360	2580	8620	32630	7940	3090	2430
CFSM	.22	.26	.47	.27	.23	.53	.33	1.05	4.12	.97	.38	.31
IN.	.25	.28	.54	.31	.25	.62	.36	1.22	4.60	1.12	.44	.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2000, BY WATER YEAR (WY)

	MEAN	58.7	116	128	108	123	191	200	153	159	68.6	31.8	51.3
MAX	382	683	585	328	367	563	600	550	880	483	78.5	248	
(WY)	1987	1974	1993	1998	1997	1973	1973	1990	1974	1975	1975	1986	
MIN	4.84	8.56	10.5	9.34	12.4	12.7	21.7	19.0	14.5	10.1	6.27	5.75	
(WY)	1964	1964	1967	1981	1964	1967	1981	1967	1972	1966	1980	1963	

ARKANSAS RIVER BASIN

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07191220 SPAVINAW CREEK NEAR SYCAMORE, OK--Continued

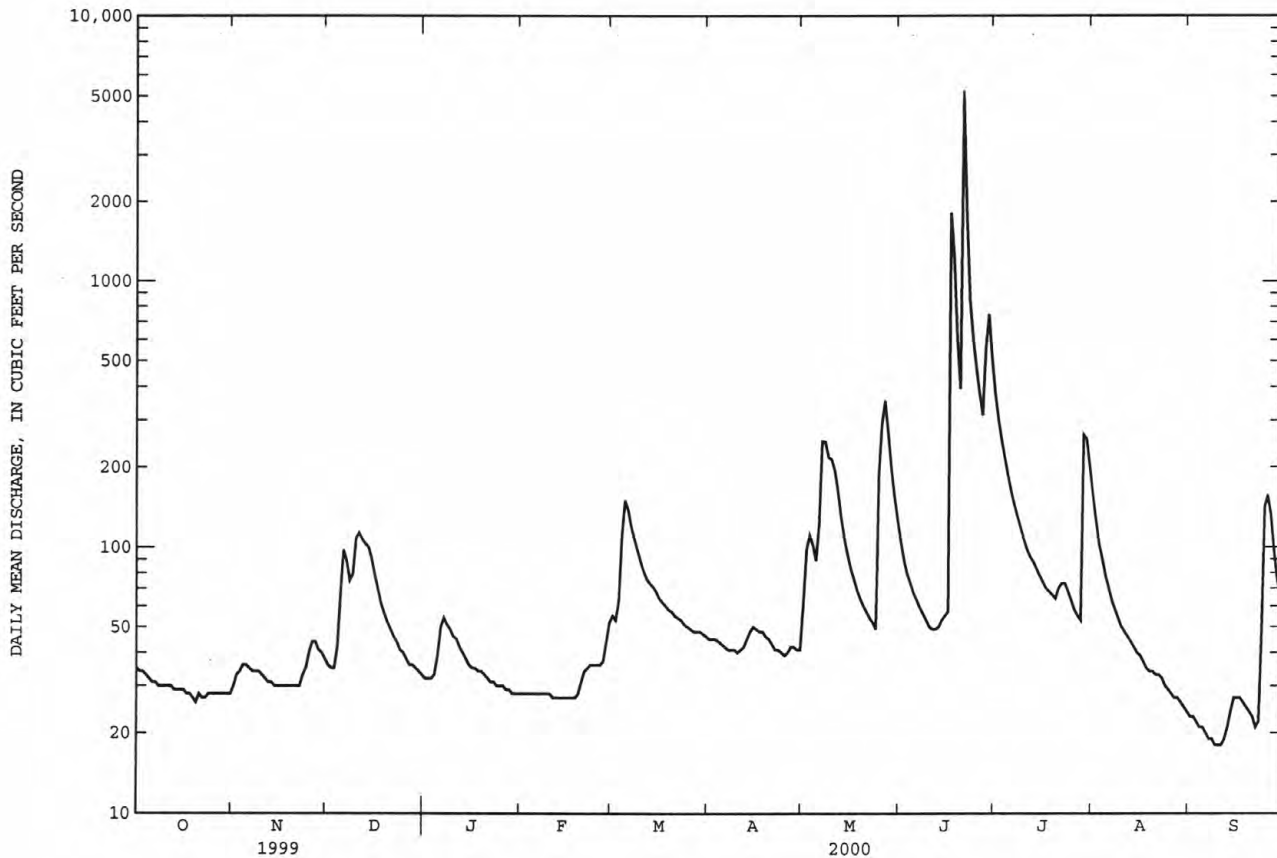
SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

WATER YEARS 1962 - 2000

ANNUAL TOTAL	60655		36956		116	
ANNUAL MEAN	166		101		265	1974
HIGHEST ANNUAL MEAN					18.0	1967
LOWEST ANNUAL MEAN					11700	Jul 27 1975
HIGHEST DAILY MEAN	5840	Jun 30	5220	Jun 21	1.3	Aug 9 1964
LOWEST DAILY MEAN	26	Oct 20	18	Sep 9-11	1.6	Aug 3 1964
ANNUAL SEVEN-DAY MINIMUM	27	Oct 17	19	Sep 6	39800	Jul 27 1975
INSTANTANEOUS PEAK FLOW			12600	Jun 21	22.07	Jul 27 1975
INSTANTANEOUS PEAK STAGE			15.15	Jun 21	83690	
ANNUAL RUNOFF (AC-FT)	120300		73300		.87	
ANNUAL RUNOFF (CFSM)	1.25		.76		11.80	
ANNUAL RUNOFF (INCHES)	16.97		10.34		235	
10 PERCENT EXCEEDS	334		155		55	
50 PERCENT EXCEEDS	78		44		14	
90 PERCENT EXCEEDS	31		27			



LOCATION.--Lat 36°21'19", long 94°46'34", in NW ¹/₄ SE ¹/₄ sec.30, T.22 N., R.24 E., Delaware County, Hydrologic Unit 11070209, on left bank of county road bridge, 0.8 mi upstream from Spavinaw Creek, 2.3 mi east of Lake Eucha Bridge on U.S. Highway 10 and 59. and at mile 0.5.

DRAINAGE AREA.--59.2 mi².

PERIOD OF RECORD.--July 30, 1998 to current year.

GAGE.--Water-stage recorder. Datum of gage is 783.52 ft above sea level from topographic map.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	13	8.2	15	12	43	24	93	26	121	59	4.6
2	7.8	13	7.9	15	12	37	23	110	23	102	43	4.3
3	7.6	12	12	17	12	67	22	72	21	88	33	4.3
4	7.4	11	236	20	12	108	21	52	20	73	26	4.1
5	7.4	9.9	167	20	13	97	20	40	19	62	22	4.2
6	7.3	9.4	89	19	13	80	19	65	18	53	19	4.0
7	7.1	9.1	55	17	12	65	18	129	16	47	17	3.8
8	7.2	8.6	40	17	12	57	17	100	15	42	16	3.7
9	7.1	8.3	87	17	12	50	17	140	14	37	14	3.8
10	7.1	8.3	163	16	12	43	16	192	14	34	13	3.7
11	7.0	8.1	125	16	12	42	20	144	15	31	12	3.8
12	6.9	8.3	95	16	12	39	36	106	16	28	12	4.6
13	6.7	8.0	73	15	12	36	37	77	15	26	11	8.7
14	6.5	7.9	57	15	12	34	32	58	19	24	10	10
15	6.3	7.9	46	14	11	33	29	46	23	23	9.7	8.6
16	6.3	7.7	38	14	11	31	26	40	24	21	9.2	7.1
17	6.3	7.6	33	14	12	29	24	35	403	20	8.8	6.2
18	6.5	7.3	30	14	14	28	22	31	271	19	8.4	5.5
19	6.5	7.2	27	14	15	28	21	28	163	19	8.4	5.1
20	6.5	7.2	24	14	15	26	20	25	129	19	8.2	4.7
21	6.7	7.1	22	13	14	25	19	23	263	24	7.7	4.7
22	6.8	8.2	21	13	14	24	18	21	248	28	7.3	4.5
23	6.8	24	20	13	16	23	17	19	171	26	6.9	7.9
24	6.9	32	19	13	16	25	17	18	147	22	6.6	16
25	6.9	26	18	12	44	26	16	69	137	19	6.4	17
26	7.1	18	17	12	134	27	16	76	121	17	6.1	16
27	7.2	14	17	12	96	30	15	60	109	16	5.9	14
28	7.2	12	16	13	70	31	14	62	156	16	5.6	11
29	7.2	10	16	13	54	31	13	58	194	421	5.3	8.8
30	8.9	9.2	16	13	---	29	13	41	145	171	5.1	7.5
31	10	---	15	12	---	26	---	30	---	90	4.8	---
TOTAL	221.4	340.3	1610.1	458	706	1270	622	2060	2955	1739	427.4	212.2
MEAN	7.14	11.3	51.9	14.8	24.3	41.0	20.7	66.5	98.5	56.1	13.8	7.07
MAX	10	32	236	20	134	108	37	192	403	421	59	17
MIN	6.3	7.1	7.9	12	11	23	13	18	14	16	4.8	3.7
AC-FT	439	675	3190	908	1400	2520	1230	4090	5860	3450	848	421

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

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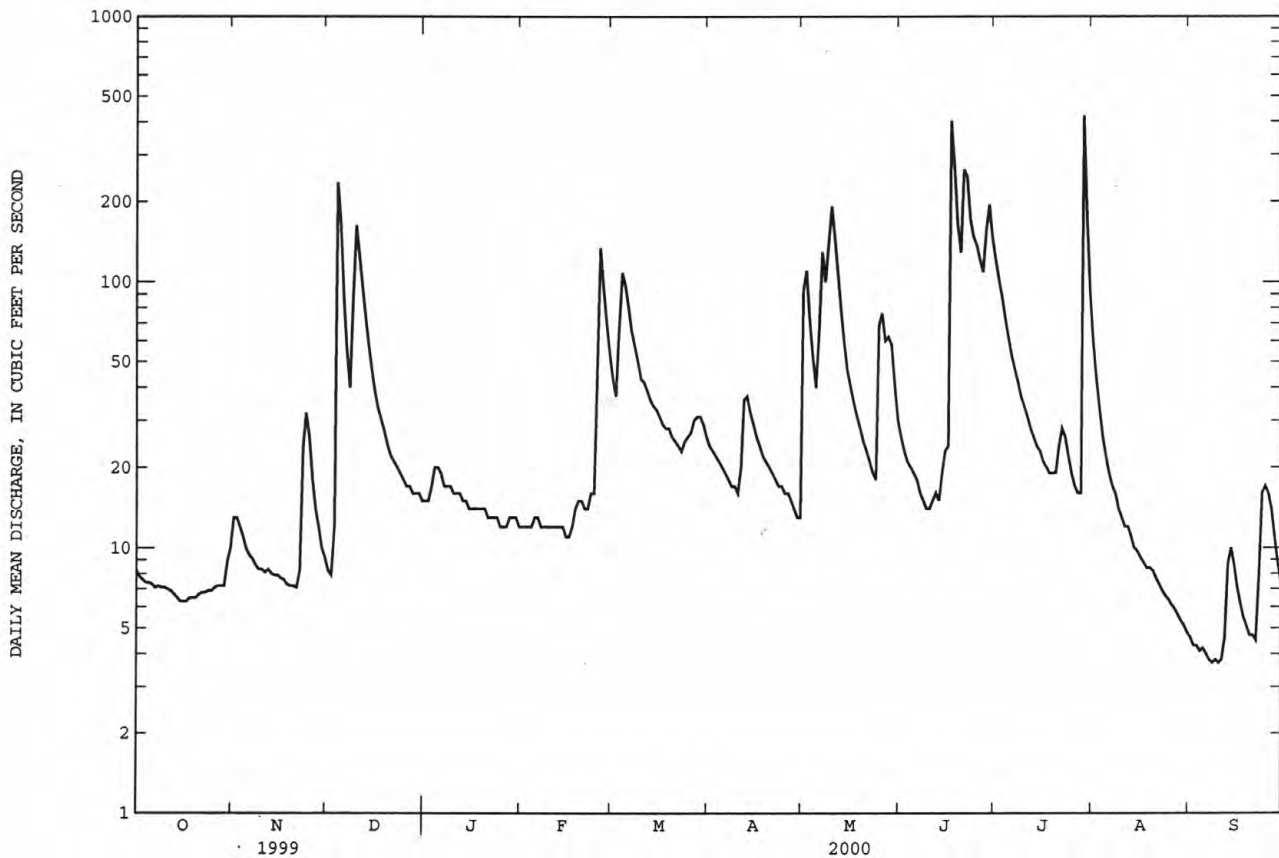
ARKANSAS RIVER BASIN

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07191222 BEATY CREEK NEAR JAY, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1998 - 2000	
ANNUAL TOTAL	29530.6		12621.4		62.6	
ANNUAL MEAN	80.9		34.5		90.8	
HIGHEST ANNUAL MEAN					34.5	
LOWEST ANNUAL MEAN					2970	
HIGHEST DAILY MEAN	2970	Jun 30	421	Jul 29	2970	Jun 30 1999
LOWEST DAILY MEAN	4.6	Sep 3	3.7	Sep 8	.12	Sep 11 1998
ANNUAL SEVEN-DAY MINIMUM	5.4	Aug 29	3.9	Sep 5	.19	Sep 6 1998
INSTANTANEOUS PEAK FLOW			1030	Jun 17	17400	Jun 30 1999
INSTANTANEOUS PEAK STAGE			8.05	Jun 17	^a 14.26	Jun 30 1999
ANNUAL RUNOFF (AC-FT)	58570		25030		45370	
10 PERCENT EXCEEDS	181		89		124	
50 PERCENT EXCEEDS	35		17		22	
90 PERCENT EXCEEDS	7.1		6.8		5.8	

^aFrom high-water mark.



ARKANSAS RIVER BASIN

07191297 BLACK HOLLOW NEAR SPAVINAW, OK

LOCATION.--Lat 36°22'37", long 95°00'25", in NE 1/4 NE 1/4 sec.24, T.22 N., R.21 E., Mayes County, Hydrologic Unit 11070209, on left bank, 0.1 mi upstream from Spavinaw Lake, 0.7 mi below Ground Hog Hollow, and 2.4 mi southeast of Spavinaw.

DRAINAGE AREA.--6.0 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 675.60 ft above sea level from elevation of Spavinaw Lake.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.57	.00	2.8	17	.95	.00
2	.00	.00	.00	.00	.00	.00	.56	.00	2.4	15	.88	.00
3	.00	.00	.00	.00	.00	.00	.50	.00	2.2	13	.90	.00
4	.00	.00	.00	.00	.00	.00	.49	.00	2.0	12	1.1	.00
5	.00	.00	.00	.00	.00	.03	.59	.00	1.7	11	1.4	.00
6	.00	.00	.00	.00	.00	.46	.60	.00	1.5	9.5	1.9	.00
7	.00	.00	.00	.00	.00	.85	.55	.00	1.3	8.6	2.4	.00
8	.00	.00	.00	.00	.00	1.1	.42	.23	1.1	7.7	2.8	.00
9	.00	.00	.00	.00	.00	.91	.39	2.4	1.1	7.0	2.9	.00
10	.00	.00	.00	.00	.00	1.1	.36	6.4	1.0	6.4	3.0	.00
11	.00	.00	.00	.00	.00	1.3	.36	16	.86	5.9	2.9	.00
12	.00	.00	.00	.00	.00	1.4	.27	25	.70	5.5	2.7	.00
13	.00	.00	.00	.00	.00	1.4	.24	20	.57	5.1	2.5	.00
14	.00	.00	.00	.00	.00	1.6	.19	17	.41	4.6	2.2	.00
15	.00	.00	.00	.00	.00	1.6	.12	15	.24	4.2	2.0	.00
16	.00	.00	.00	.00	.00	1.5	.05	13	.47	3.7	1.8	.00
17	.00	.00	.00	.00	.00	1.5	.00	11	5.2	3.2	1.6	.00
18	.00	.00	.00	.00	.00	1.6	.00	9.4	11	2.8	1.4	.00
19	.00	.00	.28	.00	.00	1.5	.00	7.5	9.4	2.5	1.2	.00
20	.00	.00	.50	.00	.00	1.4	.00	6.3	7.3	2.3	.91	.00
21	.00	.00	.61	.00	.00	1.2	.00	5.6	13	2.1	.58	.00
22	.00	.00	.75	.00	.00	1.2	.00	4.9	30	1.7	.37	.00
23	.00	.00	.84	.00	.00	1.2	.00	4.4	29	1.4	.16	.00
24	.00	.00	.81	.00	.00	1.1	.00	3.8	25	1.2	.00	.00
25	.00	.00	.72	.00	.00	.90	.00	4.5	22	.99	.00	.00
26	.00	.00	.64	.00	.00	.87	.00	4.5	22	.78	.00	.00
27	.00	.00	.54	.00	.00	.84	.00	4.3	21	.56	.00	.00
28	.00	.00	.41	.00	.00	.73	.00	4.2	21	.37	.00	.00
29	.00	.00	.25	.00	.00	.69	.00	4.0	20	.57	.00	.00
30	.00	.00	.08	.00	---	.73	.00	3.6	19	.64	.00	.00
31	.00	---	.00	.00	---	.69	---	3.1	---	.89	.00	---
TOTAL	0.00	0.00	6.43	0.00	0.00	29.40	6.26	196.13	275.25	158.20	38.55	0.00
MEAN	.0000	.0000	.21	.0000	.0000	.95	.21	6.33	9.18	5.10	1.24	.0000
MAX	.00	.00	.84	.00	.00	1.6	.60	25	30	17	3.0	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.24	.37	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2000, BY WATER YEAR (WY)

	MEAN	5.91	.78	.59	.073	2.51	6.45	7.64	8.33	11.1	5.58	.41	.38
MAX	11.8	1.57	.97	.15	5.10	11.9	15.1	10.3	12.9	6.07	1.24	1.13	
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	2000	1998	
MIN	.0000	.0000	.21	.0000	.0000	.95	.21	6.33	9.18	5.10	.0000	.0000	
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1998	1999	

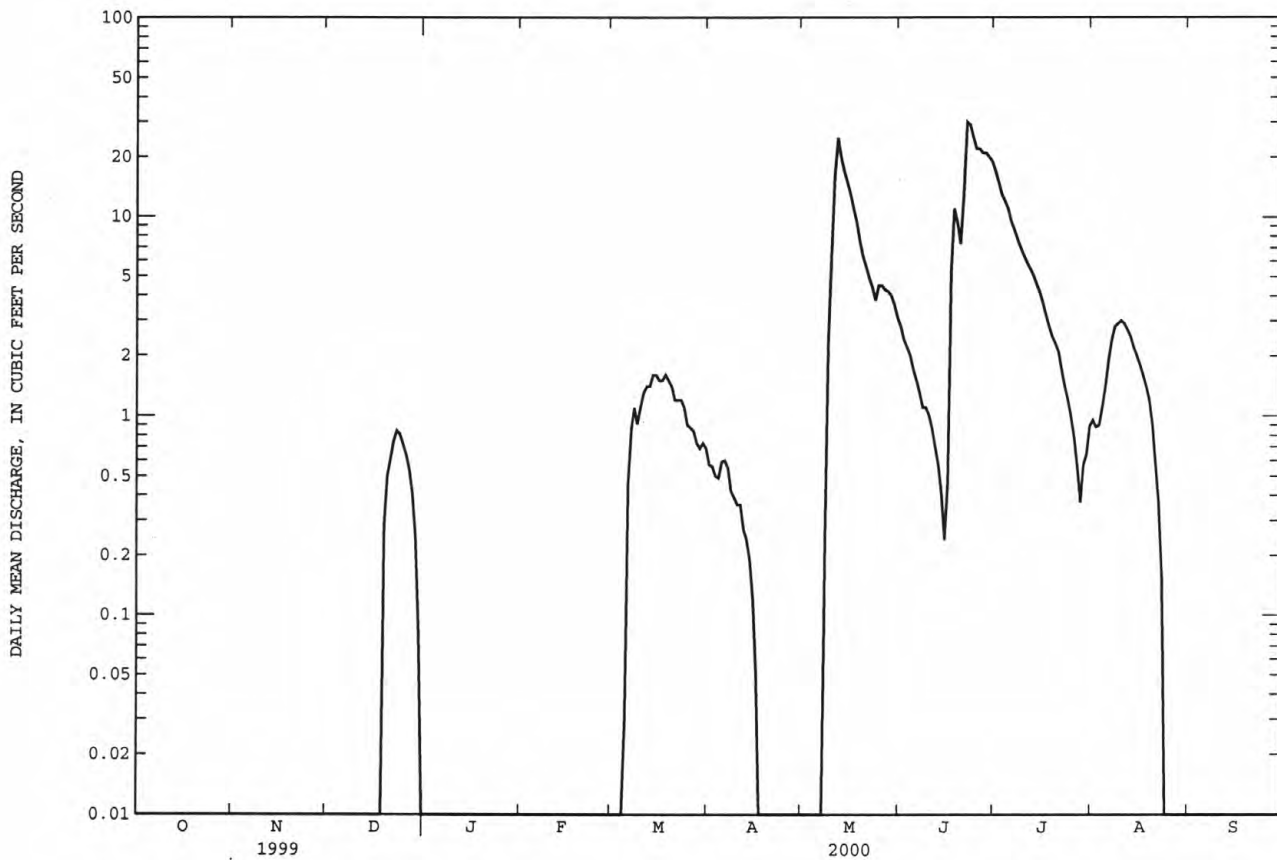
ARKANSAS RIVER BASIN

171

07191297 BLACK HOLLOW NEAR SPAVINAW, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1998 - 2000
ANNUAL TOTAL	1873.11	710.22	
ANNUAL MEAN	5.13	1.94	4.13
HIGHEST ANNUAL MEAN			6.33 1999
LOWEST ANNUAL MEAN			1.94 2000
HIGHEST DAILY MEAN	96 Apr 27	30 Jun 22	96 Apr 27 1999
LOWEST DAILY MEAN	.00 at times	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 18	.00 Oct 1	.00 Jul 22 1998
INSTANTANEOUS PEAK FLOW		32 Jun 22	^a 173 Oct 5 1998
INSTANTANEOUS PEAK STAGE		7.03 Jun 22	8.56 Oct 5 1998
10 PERCENT EXCEEDS	13	5.5	11
50 PERCENT EXCEEDS	.47	.00	.62
90 PERCENT EXCEEDS	.00	.00	.00

^aFrom step-backwater computation.



ARKANSAS RIVER BASIN

07191300 SPAVINAW LAKE AT SPAVINAW, OK

LOCATION.--Lat 36°22'59", long 95°02'52", in SW 1/4 SE 1/4 sec.15, T.22 N., R.21 E., Mayes County, Hydrologic Unit 11070209, right of intake tower on face of dam on Spavinaw Creek at Spavinaw, and at mile 5.5.

DRAINAGE AREA.--386 mi² (U.S. Army Corps of Engineers).

PERIOD OF RECORD.--October 1991 to current year.

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

REMARKS.--Reservoir is formed by earth dam with uncontrolled concrete spillway. Much of Tulsa municipal-water supply is drawn from lake. Levels are maintained in Spavinaw Lake by releases from Lake Eucha. Storage began 1924; conservation pool first filled November 1924. Capacity 41,200 acre-ft at elevation 682 ft. Dead storage, 15,300 acre-ft at elevation 662 ft. Figures given herein represent total contents. Reservoir is used for water supply, recreation, and fish and wildlife. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 39,400 acre-ft, Dec. 14, 1992, elevation 683.30 ft; minimum, 25,900 acre-ft, Nov. 23, 1991, elevation, 677.15 ft.

EXTREMES FOR OUTSIDE PERIOD OF RECORD.--Flood of April 1942 reached a stage of 689.13 ft, contents unknown.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 35,250 acre-ft, June 22, elevation 682.30 ft; minimum, 29,440 acre-ft, Jan. 13, elevation 679.31 ft.

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

676	24,300	679	28,960
677	25,400	680	30,590
678	27,690	685	46,500

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30220	30250	30590	30700	29740	30000	30760	30770	30910	31390	30920	30490
2	30180	30180	30670	30710	29880	30110	30770	30780	30910	31230	30870	30510
3	30110	30150	30670	30720	29890	30470	30750	30780	30880	31110	30830	30520
4	30100	30110	30730	30650	29910	30840	30740	30780	30830	31060	30790	30520
5	30100	30080	30970	30540	29930	30890	30700	30780	30810	31000	30760	30490
6	30130	30060	30960	30400	29940	30890	30660	31270	30860	30970	30740	30450
7	30150	30030	30800	30250	29960	30830	30570	31270	30830	30940	30720	30490
8	30160	30000	30780	30110	29960	30900	30450	31140	30770	30910	30700	30520
9	30220	29940	31200	29960	29960	30890	30320	31600	30710	30890	30670	30570
10	30230	29910	31090	29810	29960	30870	30280	31230	30760	30860	30660	30610
11	30230	29880	31070	29650	29910	30880	30510	31080	30730	30840	30650	30610
12	30200	29840	31050	29490	29910	30880	30640	31040	30710	30810	30620	30620
13	30180	29790	30890	29440	29890	30880	30750	30830	30690	30780	30570	30610
14	30150	29760	30860	29460	29890	30840	30780	30800	30740	30780	30520	30490
15	30110	29710	30890	29460	29880	30830	30780	30860	30710	30760	30670	30370
16	30080	29690	30830	29470	29820	30800	30780	30870	30890	30750	30800	30320
17	29980	29810	30790	29490	29890	30750	30760	30860	31920	30740	30830	30270
18	29940	29880	30760	29490	29840	30740	30740	30820	32430	30720	30700	30250
19	29910	29940	30760	29490	29820	30730	30720	30800	31770	30720	30690	30250
20	29880	30030	30730	29490	29790	30770	30720	30800	31410	30760	30670	30320
21	29840	30110	30710	29490	29760	30790	30720	e30780	35000	30810	30700	30350
22	29790	30420	30690	29490	29760	30810	30720	30780	32790	30810	30740	30370
23	29760	30490	30670	29490	29840	30820	30710	30770	31940	30780	30740	30440
24	29720	30560	30650	29470	29840	30830	30700	30750	31650	30770	30720	30570
25	29690	30620	30650	29460	30010	30840	30710	30920	31440	30750	30670	30540
26	29810	30650	30650	29470	30010	30890	30710	31040	31370	30730	30660	30510
27	29960	30670	30630	29550	30030	30800	30710	31060	31230	30750	30650	30470
28	30080	30650	30660	29550	30030	30730	30710	31070	31920	30750	30620	30440
29	30080	30620	30700	29570	30000	30710	30690	31040	32130	31160	30590	30450
30	30220	30610	30700	29570	---	30730	30770	30980	31670	31100	30520	30520
31	30220	---	30710	29550	---	30750	---	30930	---	30990	30450	---
MAX	30230	30670	31200	30720	30030	30900	30780	31600	35000	31390	30920	30620
MIN	29690	29690	30590	29440	29740	30000	30280	30750	30690	30720	30450	30250
(+)	679.78	680.02	680.11	679.38	679.65	680.15	680.17	680.32	680.79	680.38	679.92	679.96
(++)	-30	+390	+100	-1160	+450	+750	+20	+160	+740	-680	-540	+70
CAL YR 1999	MAX 38580	MIN 29690	(++) -20									
WTR YR 2000	MAX 35000	MIN 29440	(++) +270									

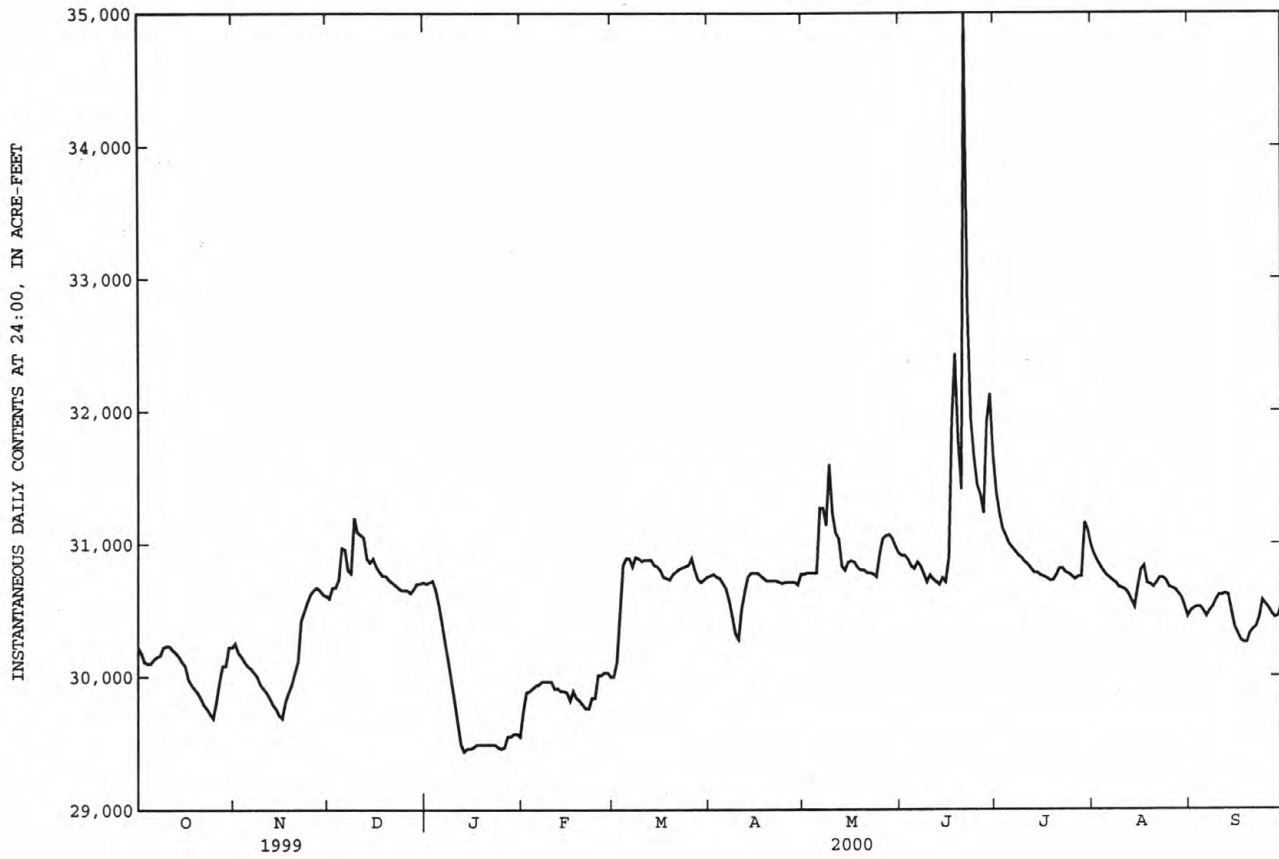
(+) ELEVATION, IN FEET, AT END OF MONTH
(++) CHANGE IN CONTENTS, IN ACRE-FEET

e Estimated

ARKANSAS RIVER BASIN

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07191300 SPAVINAW LAKE AT SPAVINAW, OK--Continued



ARKANSAS RIVER BASIN

07191400 LAKE HUDSON NEAR LOCUST GROVE, OK

LOCATION.--Lat 36°13'48", long 95°10'55", in SE 1/4 NW 1/4 sec.9, T.20 N., R. 20 E., Mayes County, Hydrologic Unit 11070209, at left side of Robert S. Kerr dam on Neosho River, 2.0 mi northwest of Locust Grove, 3.5 mi downstream from Saline Creek, and at mile 47.3.

DRAINAGE AREA.--11,534 mi².

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

GAGE.--Remote-controlled indicator and nonrecording gage. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earth dam and concrete spillway controlled by seventeen 22-foot taintor gates. Storage began Nov. 12, 1963; power pool first filled June 12, 1964. Capacity, 444,500 acre-ft at elevation 636.0 ft, top of taintor gages, 200,300 acre-ft at elevation 619.0 ft, power pool, and 48,630 acre-ft at elevation 599.0 ft, top of spillway crest. Figures given herein represent total contents. Reservoir was designed for flood control and power development. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 443,600 acre-ft, Oct. 4, 1986 and June 15, 1995, elevation, 635.95 ft; minimum since power pool first filled, 153,200 acre-ft, Mar. 24, 1988, elevation, 614.31 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 296,200 acre-ft, June 25, elevation, 626.80 ft; minimum, 188,000 acre-ft, Nov. 20, elevation, 617.85 ft.

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

615	159,600	630	342,600
620	211,300	635	426,100
625	272,000	640	525,100

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 2400 HOURS

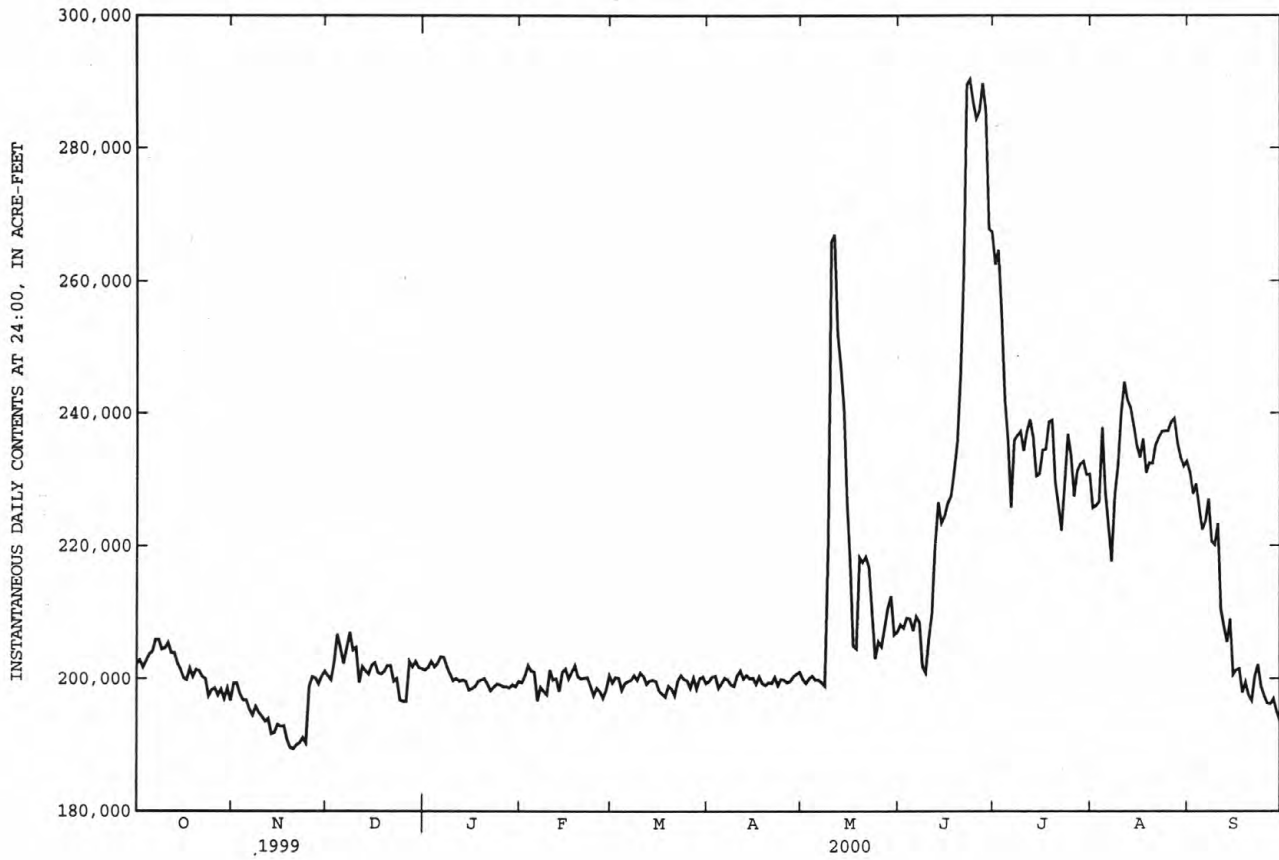
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	202300	199300	200400	201300	199400	199400	199600	199900	208100	262400	225700	231100
2	202800	199300	199800	201700	200400	200200	200300	199300	207600	264600	226000	227800
3	201700	197700	202500	202600	202000	200100	200400	200000	209100	254800	226600	229300
4	202700	196800	206700	201800	201200	198300	198600	200400	209000	242200	237800	225600
5	203700	196800	204600	202300	201000	199300	199300	199800	207200	235900	228000	222400
6	204100	195400	202300	203300	196700	199600	200100	199800	209300	225700	222900	223600
7	205900	194500	204600	203200	198700	199800	199800	199400	208500	235900	217600	227000
8	205900	195800	207000	201800	198100	200500	199100	198900	201800	236600	227600	220600
9	204400	194900	204300	200700	197600	199800	198900	200900	200900	237200	232100	220100
10	204600	194300	204700	199700	201300	200900	200500	265900	206000	234300	239900	223300
11	205400	193600	199400	200000	199800	200400	201200	266900	209700	237200	244700	210400
12	203900	194000	201800	199600	200000	199200	200000	252000	220000	239000	242000	207800
13	203900	191700	201200	199800	198100	199700	200500	247000	226500	236300	240800	205500
14	202300	191900	200700	199600	201000	199800	200000	240600	223400	230500	238100	209000
15	201400	193100	202000	198300	201500	199600	200100	226600	224400	230800	235100	200600
16	200100	192800	202400	198500	200000	198200	199200	217500	226400	234400	233300	201300
17	199800	192900	200900	198800	201000	197700	200300	204900	227400	234500	236100	201500
18	201600	190800	200700	199600	202000	197300	199300	204500	231100	238700	231000	197900
19	200300	189600	201100	199800	200300	198900	199000	218200	235500	238900	232500	199400
20	201400	189400	202000	200000	200000	198500	199400	217500	245500	229600	232400	197500
21	201200	190000	202000	199200	200100	197500	199300	218300	260600	226100	235200	196700
22	200300	190300	199600	198200	200200	199700	200200	216700	289500	222300	236300	200400
23	200000	191100	200000	198700	198900	200500	199000	209900	290300	229400	237200	202100
24	197400	190300	196800	199200	197500	199900	199900	203000	286900	236800	237300	198800
25	198300	198800	196600	199100	198600	199700	199800	205500	284400	233500	237300	197400
26	198600	200300	196600	198800	198100	198600	199400	204800	285500	227400	238700	196300
27	197500	200100	202600	198800	197100	200100	199600	207700	289700	231300	239200	196200
28	198400	199200	201800	198600	198300	198500	200300	210600	285600	232300	235500	197000
29	197000	200400	202600	199100	200500	200000	200700	212400	267700	232700	233300	195100
30	198600	201100	201700	198800	---	200300	201000	206600	267300	230700	232000	193600
31	196700	---	201500	199600	---	199300	---	207000	---	230800	232700	---
TOTAL	6242200	5846200	6250900	6200500	5789400	6181300	5994800	6681400	7144900	7312800	7244900	6255300
MEAN	201400	194900	201600	200000	199600	199400	199800	215500	238200	235900	233700	208500
MAX	205900	201100	207000	203300	202000	200900	201200	266900	290300	264600	244700	231100
MIN	196700	189400	196600	198200	196700	197300	198600	198900	200900	222300	217600	193600
(+)	618.66	619.07	619.11	618.93	619.02	618.91	619.06	619.61	624.64	621.69	621.85	618.37
(++)	-4600	+4400	+400	-1900	+900	-1200	+1700	+6000	+60300	-36500	+1900	-39100
CAL YR 1999	TOTAL 81967000	MEAN 224600	MAX 395600	MIN 189400	(++) +1,400							
WTR YR 2000	TOTAL 77144600	MEAN 210800	MAX 290300	MIN 189400	(++) -7,700							

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

ARKANSAS RIVER BASIN

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07191400 LAKE HUDSON NEAR LOCUST GROVE, OK--Continued



ARKANSAS RIVER BASIN

07191500 NEOSHO RIVER NEAR CHOUTEAU, OK

LOCATION.--Lat 36°13'46", long 95°10'57", in SE 1/4 NW 1/4 sec.9, T.20 N., R.20 E., Mayes County, Hydrologic Unit 11070209, in Robert S. Kerr Dam about 100 ft from left end of dam, 2.2 mi northwest of Locust Grove, 10.0 mi northeast of Chouteau, and at mile 47.2.

DRAINAGE AREA.--11,534 mi².

PERIOD OF RECORD.--October 1937 to September 1950, October 1963 to current year.

REVISED RECORDS.--WSP 1117: Drainage area. WDR OK-86-1: 1979.

GAGE.--Water-stage recorder. Datum of gage is 554.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Apr. 3, 1941, nonrecording gage at bridge on State Highway 33, 8.2 mi downstream, at datum 17.63 ft lower. Apr. 3, 1941 to Sept. 30, 1950, and Oct. 1963 to Apr. 6, 1964, at site 2.5 mi downstream, at datum 2.17 ft lower. Supplemental water-stage recorder Oct. 4, 1963, to July 10, 1973, at site 8.2 mi downstream.

REMARKS.--Records fair. Some regulation since 1940 by Lake O' The Cherokees (station 07190000), and completely regulated since 1963 by Lake Hudson (station 07191400).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	309	305	751	1990	5390	8530	3500	4810	19300	8160	1930
2	4490	313	304	325	1640	5760	7050	2750	4990	18100	11900	617
3	2750	309	306	3750	1150	11500	7430	3160	368	18000	7280	362
4	2850	307	1320	3300	3090	13700	5880	4380	1540	15800	3330	361
5	3280	307	9410	2680	2250	8840	3410	4620	1150	18400	7130	357
6	2310	306	9740	2870	341	9500	4490	5040	696	17800	7880	476
7	1980	304	7100	3530	330	9000	3170	9160	2570	7820	6970	371
8	749	304	7920	680	330	8530	664	10300	4430	5560	374	366
9	330	304	12400	365	329	7170	299	17400	3930	4580	1570	366
10	311	302	10800	3430	329	3790	2320	29700	444	10400	1360	366
11	311	303	11100	2480	1460	5250	5280	37900	338	6320	1230	6120
12	313	303	11100	1100	1600	4260	4800	33000	336	5710	2050	632
13	312	302	11100	1610	395	5010	4330	10500	658	9010	422	888
14	310	301	11200	2560	328	5610	5670	9530	4320	6340	1950	350
15	309	300	10900	425	693	5270	561	15500	3680	4670	2760	638
16	307	309	7960	336	2610	6340	303	10100	10100	957	2940	344
17	306	310	5140	1170	409	7340	1600	15800	29000	1180	2310	343
18	308	308	3890	2060	473	7980	3190	11100	40600	385	468	342
19	310	312	3770	499	374	8220	1130	4620	27000	4590	367	342
20	310	309	3660	1900	316	8890	835	5560	15400	3080	367	342
21	310	308	4690	2090	2690	9700	358	3330	29800	7430	367	340
22	312	306	4860	405	6050	8260	760	1960	47600	11900	368	341
23	313	317	3730	338	3950	8270	1060	5920	39500	1740	610	340
24	311	305	391	799	4240	9250	1500	6320	30800	3840	895	343
25	308	304	323	1170	4040	8700	370	3010	25200	6650	397	341
26	307	663	321	742	4620	10900	1630	6740	29800	12100	371	336
27	307	422	2120	1200	8100	7980	1440	671	32100	3810	369	336
28	308	309	4900	1960	7080	8470	483	345	39300	4320	2170	333
29	304	306	1700	1470	3620	6250	1310	1050	37400	6770	1950	330
30	312	306	4650	408	---	12300	1610	6750	29800	4870	1580	330
31	305	---	2660	1860	---	10000	---	6830	---	5840	1180	---
TOTAL	27163	9668	169770	48263	64827	247430	81463	286546	497660	247272	81075	19283
MEAN	876	322	5476	1557	2235	7982	2715	9243	16590	7977	2615	643
MAX	4490	663	12400	3750	8100	13700	8530	37900	47600	19300	11900	6120
MIN	304	300	304	325	316	3790	299	345	336	385	367	330
AC-FT	53880	19180	336700	95730	128600	490800	161600	568400	987100	490500	160800	38250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2000, BY WATER YEAR (WY)

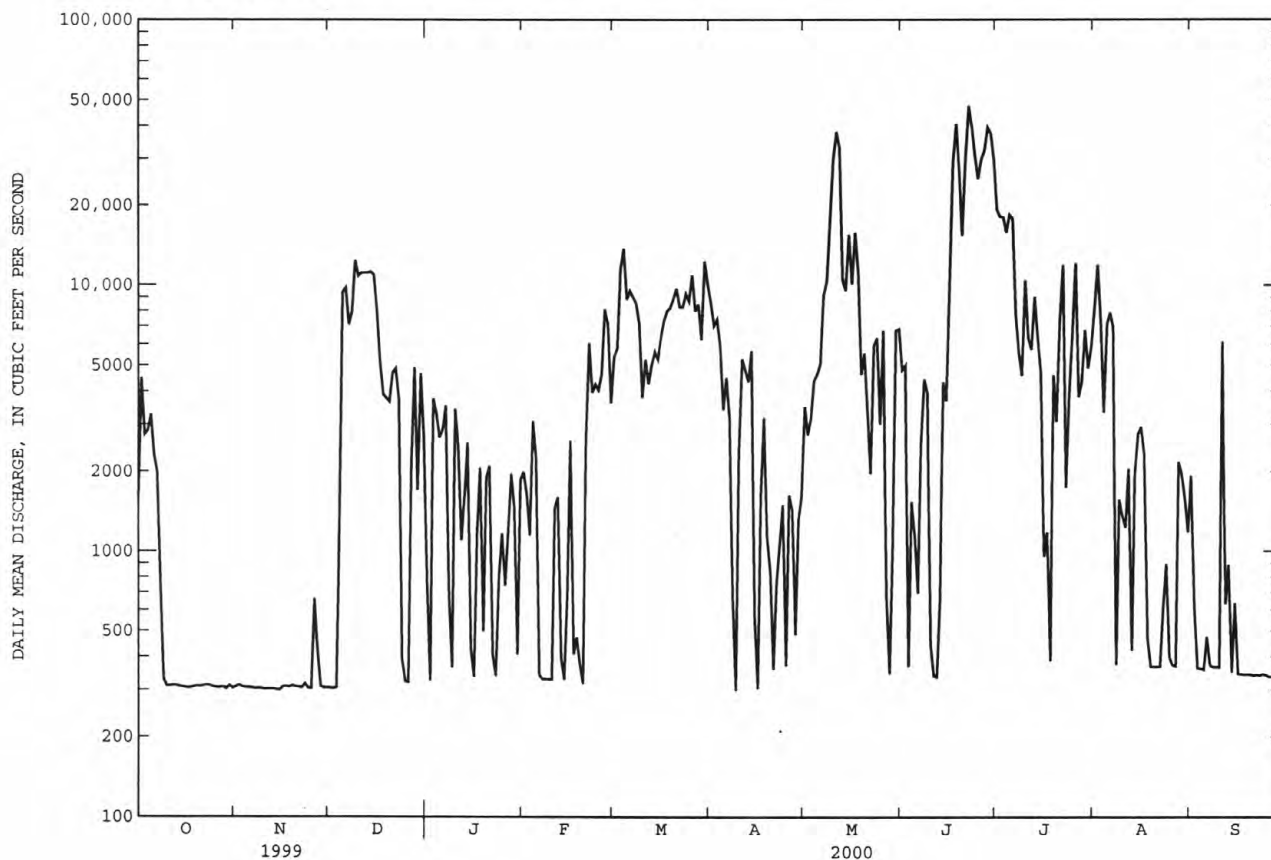
MEAN	6194	9269	8429	6875	7469	12270	13790	12260	13360	8927	4498	4564
MAX	59840	40780	40400	23350	23640	39260	46000	40650	48020	28710	15140	28460
(WY)	1987	1986	1993	1973	1985	1973	1973	1995	1995	1976	1993	1993
MIN	169	83.3	87.5	189	79.4	75.8	160	122	735	1067	603	591
(WY)	1964	1964	1964	1981	1964	1964	1971	1964	1972	1991	1991	1983

ARKANSAS RIVER BASIN

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07191500 NEOSHO RIVER NEAR CHOUTEAU, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1964 - 2000	
ANNUAL TOTAL	4517117		1780420		^a 8990	
ANNUAL MEAN	12380		4865		22240	
HIGHEST ANNUAL MEAN					1924	
LOWEST ANNUAL MEAN					154000	
HIGHEST DAILY MEAN	82500	Apr 28	47600	Jun 22	^b 12	Jun 11 1995
LOWEST DAILY MEAN	297	Sep 19	299	Apr 9	^b 45	Nov 13 1963
ANNUAL SEVEN-DAY MINIMUM	302	Nov 9	302	Nov 9	^c 164000	Feb 21 1964
INSTANTANEOUS PEAK FLOW			52600	Jun 22	^d 36.29	Jun 11 1995
INSTANTANEOUS PEAK STAGE			20.42	Jun 22	6513000	
ANNUAL RUNOFF (AC-FT)	8960000		3531000		22400	
10 PERCENT EXCEEDS	33400		11100		4880	
50 PERCENT EXCEEDS	6410		2020		182	
90 PERCENT EXCEEDS	309		309			

^aSince regulation by Lake Hudson.^bMinimum daily for period of record, caused by closure of Robert S. Kerr Dam.^cMaximum discharge for period of record, 400,000 ft³/s, May 20, 1943, gage height 45.00 ft, site and datum then in use, rating curve extended above 140,000 ft³/s on basis of slope-area measurement of peak flow.^dOccurred during backwater.

ARKANSAS RIVER BASIN

07194830 ILLINOIS RIVER NEAR PEDRO, AR

LOCATION.--Lat 36°10'32", long 94°23'30", in NE 1/4 SE 1/4, sec. 4, T.17 N., R.32 W., Benton County, Hydrologic Unit 11110103, at county road bridge, 0.9 mi northeast of Pedro, Ar.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
DEC												
01...	1644	1028	1028	3.93	40	758	12.9	7.5	331	9.6	4.00	
01...	1645	1028	1028	3.93	40	758	13.6	7.6	331	9.6	7.00	
01...	1646	1028	1028	3.93	40	758	13.8	7.6	331	9.6	10.0	
01...	1647	1028	1028	3.93	40	758	13.8	7.6	331	9.6	13.0	
01...	1648	1028	1028	3.93	40	758	13.8	7.7	331	9.5	16.0	
01...	1649	1028	1028	3.93	40	758	13.9	7.8	331	9.3	19.0	
01...	1650	1028	1028	3.93	40	758	13.8	7.8	331	9.2	22.0	
01...	1651	1028	1028	3.93	40	758	13.6	7.8	331	9.2	25.0	
01...	1652	1028	1028	3.93	40	758	13.7	7.8	331	9.2	28.0	
01...	1653	1028	1028	3.93	40	758	13.7	7.8	331	9.2	31.0	
JUL												
19...	0919	1028	1028	4.51	113	746	6.0	7.5	302	25.0	10.0	
19...	0920	1028	1028	4.51	113	746	5.9	7.5	303	25.2	20.0	
19...	0921	1028	1028	4.51	113	746	5.9	7.6	303	25.3	30.0	
19...	0922	1028	1028	4.51	113	746	5.9	7.7	302	25.4	40.0	
19...	0923	1028	1028	4.51	113	746	5.9	7.7	303	25.4	50.0	
19...	0924	1028	1028	4.51	113	746	5.8	7.7	302	25.4	60.0	
DATE		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (000095)	TEMPER- ATURE AIR (DEG C) (000020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT												
21...	80020	1028		4.02	31	752	86	9.1	7.7	322	14.0	12.2
DEC												
01...	80020	1028		3.93	40	758	121	13.8	7.7	331	13.8	9.4
FEB												
16...	80020	1028		4.09	43	753	116	12.6	7.6	328	11.1	10.8
APR												
18...	80020	1028		4.36	121	748	91	8.9	7.6	258	15.0	15.5
JUL												
19...	80020	1028		4.51	113	746	74	5.9	7.6	302	23.5	25.4
AUG												
17...	80020	1028		4.13	52	750	92	7.3	7.4	337	30.4	26.5
DATE		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)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	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)
OCT												
21...	113	138	0	.14	<.020	1.5	--	1.36	<.010	--	.061	
DEC												
01...	110	134	0	.18	.025	1.6	.03	1.38	<.010	.16	--	
FEB												
16...	98	119	0	.22	<.020	1.8	--	1.58	<.010	--	--	
APR												
18...	91	111	0	E.10	<.020	--	--	1.28	<.010	--	.074	
JUL												
19...	106	129	0	.21	<.020	2.8	--	2.61	<.010	--	.098	
AUG												
17...	114	139	0	.22	<.020	2.0	--	1.74	<.010	--	.092	

ARKANSAS RIVER BASIN

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07194830 ILLINOIS RIVER NEAR PEDRO, AR--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHOS- DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 21...	E.041	.020	<.050	.7	19	29	35	19	1.6	96
DEC 01...	<.050	<.010	<.050	.8	23	17	28	16	1.7	100
FEB 16...	.017	<.010	<.050	1.3	20	K18	36	22	2.6	94
APR 18...	E.036	.024	.293	2.5	74	73	100	29	9.5	92
JUL 19...	.054	.032	.055	2.5	60	66	120	32	9.8	94
AUG 17...	.052	.030	E.049	.7	43	78	83	31	4.3	97

ARKANSAS RIVER BASIN

07195400 ILLINOIS RIVER AT SILOAM SPRINGS, AR

LOCATION.--Lat 36°08'41", long 94°29'41", in SW 1/4 SW 1/4, sec. 15, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 16, 8.2 mi downstream from Osage Creek, and, 4.6 mi southeast of Siloam Springs, Ar.

DRAINAGE AREA.--509 mi².

PERIOD OF RECORD.--October 1983 to September 1994, July 1996 to current year.

REMARKS.--Samples collected periodically. Specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field. Samples collected by Arkansas Department of Environmental Quality, Little Rock, Arkansas, from 1983 to 1994, were published by the U.S. Geological Survey, Arkansas District, in Water Resources Data, Arkansas.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
DEC												
02...	1505	1028	1028	5.23	142	747	15.4	8.5	352	11.5	54.0	
02...	1506	1028	1028	5.23	142	747	14.3	8.2	356	11.0	50.0	
02...	1507	1028	1028	5.23	142	747	13.9	8.1	356	10.9	46.0	
02...	1508	1028	1028	5.23	142	747	13.9	8.1	356	10.9	42.0	
02...	1509	1028	1028	5.23	142	747	13.9	8.1	357	10.9	38.0	
02...	1510	1028	1028	5.23	142	747	13.9	8.1	357	10.9	34.0	
02...	1511	1028	1028	5.23	142	747	13.9	8.1	357	10.9	30.0	
02...	1512	1028	1028	5.23	142	747	13.8	8.1	357	10.9	26.0	
02...	1513	1028	1028	5.23	142	747	13.8	8.1	357	10.9	22.0	
02...	1514	1028	1028	5.23	142	747	13.8	8.1	357	10.9	18.0	
02...	1515	1028	1028	5.23	142	747	13.8	8.1	357	10.9	14.0	
02...	1516	1028	1028	5.23	142	747	13.8	8.1	357	10.9	10.0	
02...	1517	1028	1028	5.23	142	747	13.8	8.1	357	10.9	6.00	
02...	1518	1028	1028	5.23	142	747	13.7	8.1	357	10.9	2.00	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT												
22...	0820	80020	1028	5.20	137	754	90	9.3	7.8	372	9.9	13.3
DEC												
02...	1525	80020	1028	5.23	142	747	128	13.9	8.1	357	18.0	10.9
FEB												
17...	0715	80020	1028	5.26	160	750	85	9.5	7.5	371	11.0	9.5
APR												
12...	0755	80020	1028	7.02	830	756	78	8.0	7.5	233	9.5	13.6
JUL												
17...	1520	80020	1028	5.91	315	745	84	6.7	7.8	308	24.8	25.5
AUG												
17...	0830	80020	1028	5.22	160	750	89	7.1	7.6	363	24.2	26.0
DATE	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)	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, AMMONIA DIS- SOLVED 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)
OCT												
22...	119	145	0	.18	<.020	--	2.7	--	--	2.51	--	<.010
DEC												
02...	111	135	0	.17	<.020	--	2.6	--	--	2.45	--	<.010
FEB												
17...	111	136	0	.26	<.020	--	2.4	--	--	2.18	--	<.010
APR												
12...	70	85	0	1.4	.118	1.47	2.8	.15	6.51	1.49	.066	.020
JUL												
17...	106	130	0	.18	<.020	--	3.2	--	--	3.02	--	<.010
AUG												
17...	117	143	0	.21	<.020	--	2.6	--	--	2.35	--	<.010

ARKANSAS RIVER BASIN

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07195400 ILLINOIS RIVER AT SILOAM SPRINGS, AR--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 22...	--	1.10	.324	.358	.295	.8	21	26	38	24	8.9	95
DEC 02...	--	1.20	.433	.391	.455	1.3	36	48	46	28	11	97
FEB 17...	--	.751	.248	.245	.293	1.5	68	51	37	26	11	94
APR 12...	1.2	.819	.299	.267	.507	50	15000	12000	15000	155	347	96
JUL 17...	--	.629	.217	.205	.241	3.0	88	94	140	46	39	77
AUG 17...	--	.819	.305	.267	.296	2.2	42	62	180	27	12	95

07195500 ILLINOIS RIVER NEAR WATTS, OK

LOCATION.--Lat 36°07'48", long 94°34'19", in NW ¹/₄ NE ¹/₄ sec.18, T.19 N., R.26 E., Adair County, Hydrologic Unit 11110103, near right bank on downstream side of pier of bridge on U.S. Highway 59, 1.5 mi north of Watts, 4.5 mi downstream from Cincinnati Creek, and at mile 106.2.

DRAINAGE AREA.--635 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1955 to current year.

GAGE.--Water-stage recorder. Datum of gage is 893.78 ft above sea level.

REMARKS.--Records good. Since July 2, 1957, small diversion for municipal water supply for the city of Siloam Springs, Ark., upstream from station. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 18	0430	16,100	16.97	Jun 29	0600	27,700	21.42
Jun 22	0130	30,700	22.01				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e165	282	158	188	194	247	314	263	434	2790	365	137
2	e163	270	163	184	196	245	301	506	369	2130	330	135
3	e160	222	178	403	196	835	285	374	335	2550	308	131
4	e158	197	293	1030	199	1390	273	678	317	1750	292	127
5	156	185	596	545	210	919	259	479	293	1410	277	124
6	160	180	409	433	207	688	247	641	332	1180	265	125
7	160	178	300	371	200	561	238	2110	264	1020	239	126
8	158	166	257	336	202	507	230	1150	238	887	234	129
9	157	164	258	319	203	517	216	784	222	772	230	129
10	160	166	533	297	198	453	206	802	254	680	222	131
11	163	162	463	281	192	420	363	616	513	617	217	127
12	159	160	837	267	192	415	1120	492	544	566	213	141
13	152	162	1210	252	190	388	589	416	424	530	205	233
14	146	159	624	237	182	360	444	353	450	494	191	182
15	144	155	467	230	182	336	377	305	1540	464	189	153
16	143	156	385	221	181	318	337	288	879	435	191	139
17	140	158	340	216	227	304	316	280	4130	407	187	137
18	135	162	305	215	1140	297	291	270	8740	398	185	128
19	140	159	280	213	644	297	277	249	2750	383	185	125
20	147	157	255	209	459	290	269	239	2000	400	180	125
21	147	155	244	202	383	277	260	220	18200	493	167	125
22	147	154	233	199	341	265	247	209	17400	447	165	125
23	147	194	226	195	319	264	234	199	4300	414	161	147
24	146	238	216	188	294	275	230	191	3300	375	157	586
25	146	203	208	184	281	300	226	219	3670	347	157	777
26	147	181	201	185	282	292	216	386	2480	323	153	359
27	149	168	194	191	301	302	205	1640	2130	312	147	273
28	149	161	194	204	276	342	196	3500	8200	322	139	232
29	147	154	195	199	259	313	194	1250	17600	360	138	205
30	163	154	193	197	---	359	187	760	4250	861	139	191
31	232	---	193	189	---	342	---	539	---	444	140	---
TOTAL	4786	5362	10608	8580	8330	13118	9147	20408	106558	24561	6368	5804
MEAN	154	179	342	277	287	423	305	658	3552	792	205	193
MAX	232	282	1210	1030	1140	1390	1120	3500	18200	2790	365	777
MIN	135	154	158	184	181	245	187	191	222	312	138	124
AC-FT	9490	10640	21040	17020	16520	26020	18140	40480	211400	48720	12630	11510
CFSM	.24	.28	.54	.44	.45	.67	.48	1.04	5.59	1.25	.32	.30

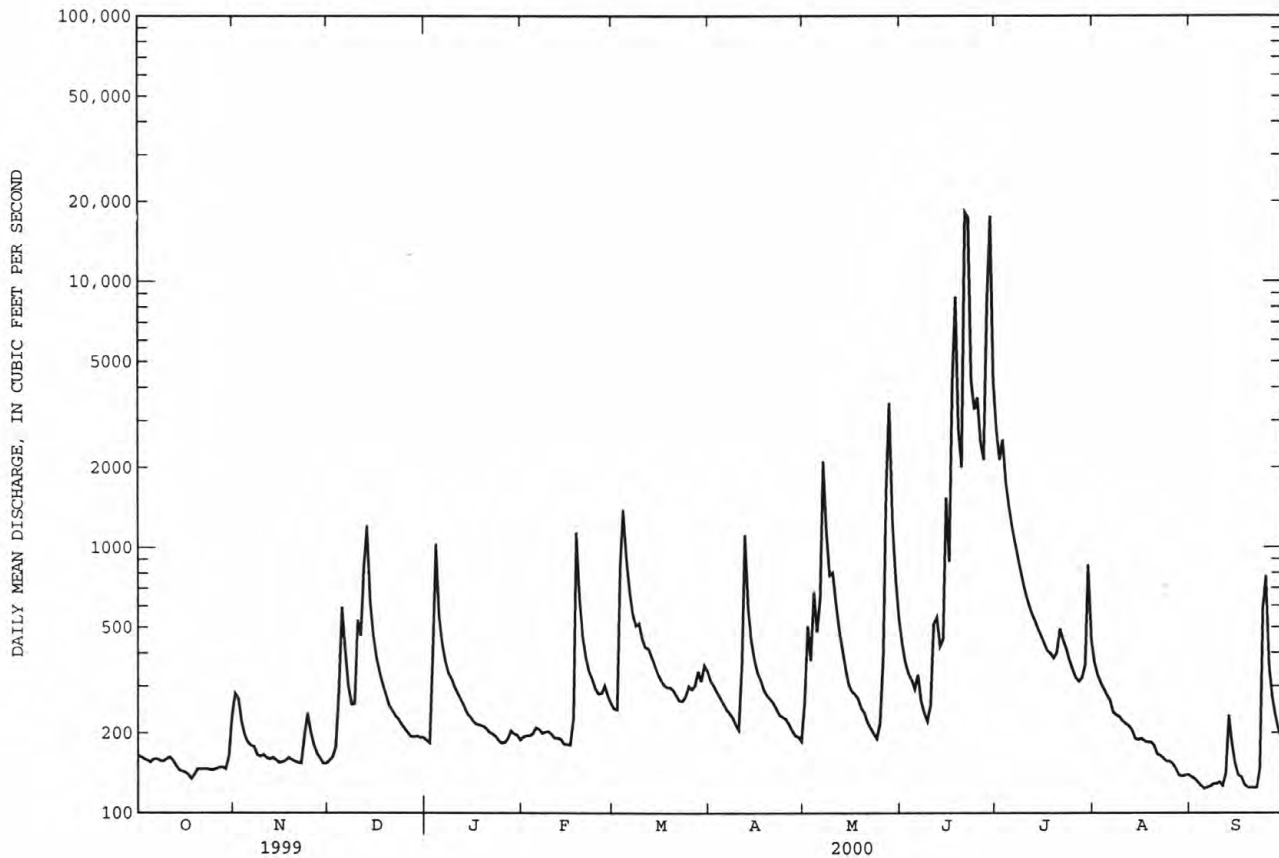
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	367	677	677	583	685	996	1031	1015	726	368	236	293
MAX	2734	3087	2786	2307	1818	2934	3347	4286	3552	1807	1172	1393
(WY)	1987	1974	1988	1998	1975	1973	1957	1961	2000	1958	1961	1986
MIN	20.9	65.6	60.4	61.4	75.1	114	176	144	113	50.7	33.2	14.9
(WY)	1957	1964	1956	1956	1964	1956	1963	1977	1963	1964	1956	1956

e Estimated

07195500 ILLINOIS RIVER NEAR WATTS, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	289162		223630		637	
ANNUAL MEAN	792		611		1247	
HIGHEST ANNUAL MEAN					151	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	10900	Jul 1	18200	Jun 21	34500	Oct 1 1986
LOWEST DAILY MEAN	135	Oct 18	124	Sep 5	10	Sep 19 1956
ANNUAL SEVEN-DAY MINIMUM	142	Oct 14	127	Sep 3	11	Sep 22 1956
INSTANTANEOUS PEAK FLOW			30700	Jun 22	^a 68000	Jul 25 1960
INSTANTANEOUS PEAK STAGE			22.01	Jun 22	25.96	Jul 25 1960
ANNUAL RUNOFF (AC-FT)	573600		443600		461500	
ANNUAL RUNOFF (CFSM)	1.25		.96		1.00	
ANNUAL RUNOFF (INCHES)	16.94		13.10		13.63	
10 PERCENT EXCEEDS	1860		844		1280	
50 PERCENT EXCEEDS	368		247		294	
90 PERCENT EXCEEDS	160		147		99	

^aFrom rating curve extended above 51,000 ft³/s.

ARKANSAS RIVER BASIN

07195500 ILLINOIS RIVER NEAR WATTS, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1989 to July 1995, July 1996 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (000028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (000027)	GAGE HEIGHT (FEET) (000065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (000061)	BARO- METRIC PRES- SURE (MM OF HG) (000025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUN											
18...	0930	1028	1028	13.77	10600	750	7.4	7.1	150	19.3	12
18...	0931	1028	1028	13.77	10600	750	7.5	7.1	148	19.3	32
18...	0932	1028	1028	13.77	10600	750	7.5	7.1	148	19.3	52
18...	0933	1028	1028	13.77	10600	750	7.5	7.0	148	19.3	72
18...	0934	1028	1028	13.77	10600	750	7.5	7.0	150	19.3	92
18...	0935	1028	1028	13.77	10600	750	7.5	7.0	150	19.3	112
18...	0936	1028	1028	13.77	10600	750	7.5	7.0	148	19.3	132
18...	0937	1028	1028	13.77	10600	750	7.5	7.0	150	19.3	152
18...	0938	1028	1028	13.77	10600	750	7.4	7.0	150	19.3	172
18...	0939	1028	1028	13.77	10600	750	7.4	7.0	150	19.3	192
18...	0940	1028	1028	13.77	10600	750	7.4	7.0	150	19.3	212
22...	0740	1028	1028	20.22	24100	750	7.1	7.0	116	19.4	80
22...	0742	1028	1028	20.22	24100	750	7.2	7.0	117	19.3	130
22...	0743	1028	1028	20.22	24100	750	7.2	7.0	117	19.3	180
22...	0746	1028	1028	20.22	24100	750	7.1	7.0	117	19.3	230
22...	0748	1028	1028	20.22	24100	750	7.1	7.0	117	19.4	280
22...	0750	1028	1028	20.22	24100	750	7.1	7.0	117	19.3	330
22...	0753	1028	1028	20.22	24100	750	7.1	7.0	117	19.4	380
OCT											
21...	1115	80020	1028	2.00	148	753	105	10.3	8.0	358	15.5
DEC											
01...	1420	80020	1028	2.00	158	758	112	12.5	7.7	340	15.2
10...	1610	80020	1028	3.75	729	754	109	12.1	7.7	313	9.3
FEB											
18...	0835	80020	1028	5.14	1560	745	59	6.5	7.9	337	8.0
APR											
12...	0920	80020	1028	4.70	1270	756	97	10.0	7.7	273	9.0
MAY											
07...	1052	80020	1028	6.23	2410	746	100	9.2	7.3	210	25.5
JUN											
18...	0950	80020	1028	13.77	10600	750	83	7.5	7.0	150	24.0
22...	0745	80020	1028	20.22	24100	750	78	7.1	7.0	117	17.0
JUL											
18...	1345	80020	1028	3.10	398	750	91	7.3	7.8	302	32.0
AUG											
15...	1445	80020	1028	2.34	191	753	104	7.9	7.8	342	35.0
SEP											
26...	1530	80020	1028	2.86	341	755	87	8.3	7.7	273	20.1

ARKANSAS RIVER BASIN

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07195500 ILLINOIS RIVER NEAR WATTS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)
OCT 21...	120	5	46.3	1.92	4.2	.7	18.6	24	118	144	0	19.4
DEC 01...	130	23	49.9	2.00	4.0	.7	17.5	22	110	134	0	18.1
10...	--	--	--	--	--	--	--	--	122	149	0	--
FEB 18...	120	10	44.6	2.16	4.2	.7	16.9	23	110	134	0	17.2
APR 12...	110	17	41.5	2.34	3.8	.4	9.3	15	96	117	0	10.2
MAY 07...	--	--	--	--	--	--	--	--	75	91	0	--
JUN 18...	--	--	--	--	--	--	--	--	58	71	0	--
22...	--	--	--	--	--	--	--	--	42	52	0	--
JUL 18...	120	17	45.0	2.09	3.8	.4	9.6	14	104	127	0	10.8
AUG 15...	120	--	45.6	1.97	4.5	.6	15.2	21	122	149	0	15.2
SEP 26...	--	--	--	--	--	--	--	--	92	113	0	--

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, TOTAL (MG/L AS N) (00605)
OCT 21...	12.7	.16	<.020	--	2.2	--	--	2.05	--	<.010	--
DEC 01...	13.7	.21	<.020	--	2.2	--	--	1.96	--	<.010	--
10...	--	.23	<.020	--	2.8	--	--	2.52	--	<.010	--
FEB 18...	18.7	.36	.054	2.27	2.6	.07	10.0	2.28	.033	.010	.30
APR 12...	14.7	.83	.082	1.56	2.4	.11	6.91	1.58	.062	.019	.75
MAY 07...	--	1.2	.062	1.10	2.3	.08	4.85	1.11	.056	.017	1.1
JUN 18...	--	1.1	.039	1.37	2.4	.05	6.08	1.38	.039	.012	1.0
22...	--	1.2	.024	1.21	2.5	.03	5.37	1.22	.033	.010	1.2
JUL 18...	10.0	.24	<.020	--	3.2	--	--	3.00	--	<.010	--
AUG 15...	13.1	.20	<.020	--	2.3	--	--	2.09	--	<.010	--
SEP 26...	--	.33	.023	--	2.1	.03	--	1.81	--	<.010	.31

DATE	PHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	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- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)
OCT 21...	.788	.235	.257	.248	11	.27	80.7	202	184	3.2	4.00
DEC 01...	.665	E.031	.217	.247	3	.26	82.8	194	180	2.4	<1.00
10...	.733	.245	.239	.284	--	--	--	--	--	6.3	--
FEB 18...	.754	.288	.246	.288	50	.26	809	192	181	22	9.00
APR 12...	.396	.166	.129	.273	68	.21	542	158	147	30	8.00
MAY 07...	.819	.312	.267	.589	--	--	--	--	--	56	--
JUN 18...	.926	.341	.302	.574	--	--	--	--	--	65	--
22...	1.07	.400	.348	.652	--	--	--	--	--	91	--
JUL 18...	.518	.181	.169	.196	11	.24	189	176	158	3.5	1.00
AUG 15...	.656	.250	.214	.258	21	.27	101	195	179	5.4	2.00
SEP 26...	.711	.241	.232	.300	--	--	--	--	--	25	--

ARKANSAS RIVER BASIN

07195500 ILLINOIS RIVER NEAR WATTS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER (31673)	CHLORO- HPYLL A PHYTO- PLANK- ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
OCT 21...	25	36	38	<1.00	<1.00	<1.00	<1.00	34	32	13	100
DEC 01...	K15	K12	K3	<1.00	<1.00	<1.00	<1.00	32	26	11	98
10...	K860	K1200	1300	--	--	--	--	--	45	89	97
FEB 18...	2500	2100	12000	4.00	10.0	<1.00	<1.00	11	87	366	96
APR 12...	12000	9000	12000	4.00	10.0	<1.00	<1.00	6	95	326	100
MAY 07...	46000	16000	40000	--	--	--	--	--	236	1540	97
JUN 18...	18000	17000	32000	--	--	--	--	--	201	5750	78
22...	16000	12000	45000	--	--	--	--	--	204	13300	91
JUL 18...	93	90	160	1.00	2.00	<1.00	<1.00	16	52	56	93
AUG 15...	48	37	200	<1.00	2.00	<1.00	<1.00	16	39	20	98
SEP 26...	370	360	460	--	--	--	--	--	58	53	94

ARKANSAS RIVER BASIN

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07195610 ILLINOIS RIVER ABOVE FLINT CREEK NEAR FLINT, OK

LOCATION.--Lat 36°10'26", long 94°43'14", in NE 1/4 NW 1/4, sec. 35, T.20 N., R.24 E., Delaware County, Hydrologic Unit 11110103, at Fiddlers Bend, 100 ft upstream from Flint Creek, and 1.4 mi southwest of Flint, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL										
25...	1133	1028	1028	411	753	9.0	7.9	292	24.1	4.0
25...	1134	1028	1028	411	753	8.4	7.7	293	23.8	14.0
25...	1135	1028	1028	411	753	8.2	7.7	293	23.8	24.0
25...	1136	1028	1028	411	753	8.0	7.6	293	23.7	34.0
25...	1137	1028	1028	411	753	8.0	7.6	293	23.7	44.0
25...	1138	1028	1028	411	753	8.0	7.6	293	23.7	54.0
25...	1139	1028	1028	411	753	7.9	7.6	293	23.7	64.0
25...	1140	1028	1028	411	753	7.8	7.6	293	23.7	74.0
25...	1141	1028	1028	411	753	7.2	7.6	289	23.8	84.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
JUL										
25...	1150	80020	1028	411	753	96	8.0	7.6	293	22.5
AUG										
29...	1300	80020	1028	158	752	110	8.4	7.6	335	35.5
SEP										
20...	1110	80020	1028	145	745	96	8.1	7.9	350	25.8
DATE	TIME	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (00010)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	
JUL										
25...	23.7	105	128	0	.19	<.020	2.6	2.43	<.010	.442
AUG										
29...	28.5	109	133	0	.14	<.020	1.6	1.49	<.010	.466
SEP										
20...	22.8	110	134	0	.15	<.020	1.4	1.24	<.010	.506
DATE	TIME	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHORUS TOTAL (MG/L AS P) (00671)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM (70331)
JUL										
25...	.173	.144	.179	1.4	25	34	78	30	33	96
AUG										
29...	.169	.152	.172	2.2	K15	20	150	36	15	98
SEP										
20...	.192	.165	.184	.8	20	33	K14	24	9.4	98

LOCATION.--Lat 36°12'58", long 94°36'15", in NE 1/4 NE 1/4 sec.14, T.20 N., R.25 E., Delaware County, Oklahoma, Hydrologic Unit 11110103, on left bank 800 ft downstream from county bridge, 2.5 mi from Arkansas-Oklahoma State line, northwest of West Siloam Springs, Oklahoma.

WATER-DISCHARGE RECORDS

REMARKS.--No estimated daily discharges. Records good. Flow is partially regulated by Lake Siloam Springs, 4.5 mi upstream, and sewage discharge into Flint Creek from city of Gentry.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	25	14	12	14	26	19	27	17	247	43	11
2	14	21	12	12	14	28	19	23	15	207	37	10
3	15	17	20	65	14	73	18	20	15	180	35	11
4	15	16	43	62	15	87	17	22	17	153	33	10
5	14	15	66	46	15	76	17	20	14	137	31	11
6	14	15	36	36	14	65	16	44	12	125	29	8.7
7	13	15	27	30	14	56	16	66	11	114	28	8.1
8	13	15	21	27	14	55	15	52	10	106	26	7.6
9	12	14	34	25	14	47	16	57	9.7	99	25	8.7
10	12	12	41	22	14	42	16	62	11	93	24	8.3
11	12	11	34	21	14	42	21	52	19	86	23	8.2
12	12	11	55	19	14	38	21	43	22	81	23	20
13	11	11	51	18	14	35	20	34	16	77	22	17
14	11	11	43	16	14	31	19	27	24	73	21	12
15	12	11	35	16	14	28	19	24	26	70	20	12
16	12	11	30	15	15	27	20	23	24	67	20	12
17	14	11	27	15	25	26	18	23	1110	65	19	11
18	14	11	24	15	30	25	17	18	395	62	18	9.2
19	14	11	23	14	27	25	15	16	178	54	19	8.4
20	13	11	21	13	25	24	15	14	112	62	18	7.5
21	12	11	19	13	23	22	14	13	3160	64	17	7.6
22	13	11	18	13	25	22	14	12	624	58	16	7.8
23	13	36	17	13	24	21	14	11	372	54	15	18
24	13	25	17	13	19	22	16	11	311	50	15	71
25	13	19	14	13	27	21	15	31	257	48	14	40
26	13	17	20	14	32	21	13	34	244	46	14	28
27	13	15	15	15	31	21	12	52	223	45	13	22
28	12	14	16	16	30	19	11	45	1880	44	12	19
29	12	15	19	15	28	20	11	35	629	56	12	17
30	17	16	13	14	---	20	10	25	340	53	11	15
31	21	---	12	14	---	19	---	23	---	47	11	---
TOTAL	415	454	837	652	573	1084	484	959	10097.7	2723	664	457.1
MEAN	13.4	15.1	27.0	21.0	19.8	35.0	16.1	30.9	337	87.8	21.4	15.2
MAX	21	36	66	65	32	87	21	66	3160	247	43	71
MIN	11	11	12	12	14	19	10	11	9.7	44	11	7.5
AC-FT	823	901	1660	1290	1140	2150	960	1900	20030	5400	1320	907

MEAN	30.2	53.3	66.5	50.5	54.1	75.2	66.4	67.6	69.7	29.3	16.9	21.8
MAX	199	148	219	123	120	176	143	251	337	130	35.6	132
(WY)	1987	1994	1993	1985	1989	1985	1985	1990	2000	1999	1986	1986
MIN	3.48	3.86	6.62	3.88	4.37	7.04	7.43	20.9	9.72	2.79	.77	1.80
(WY)	1981	1981	1980	1980	1981	1981	1981	1981	1981	1980	1980	1980

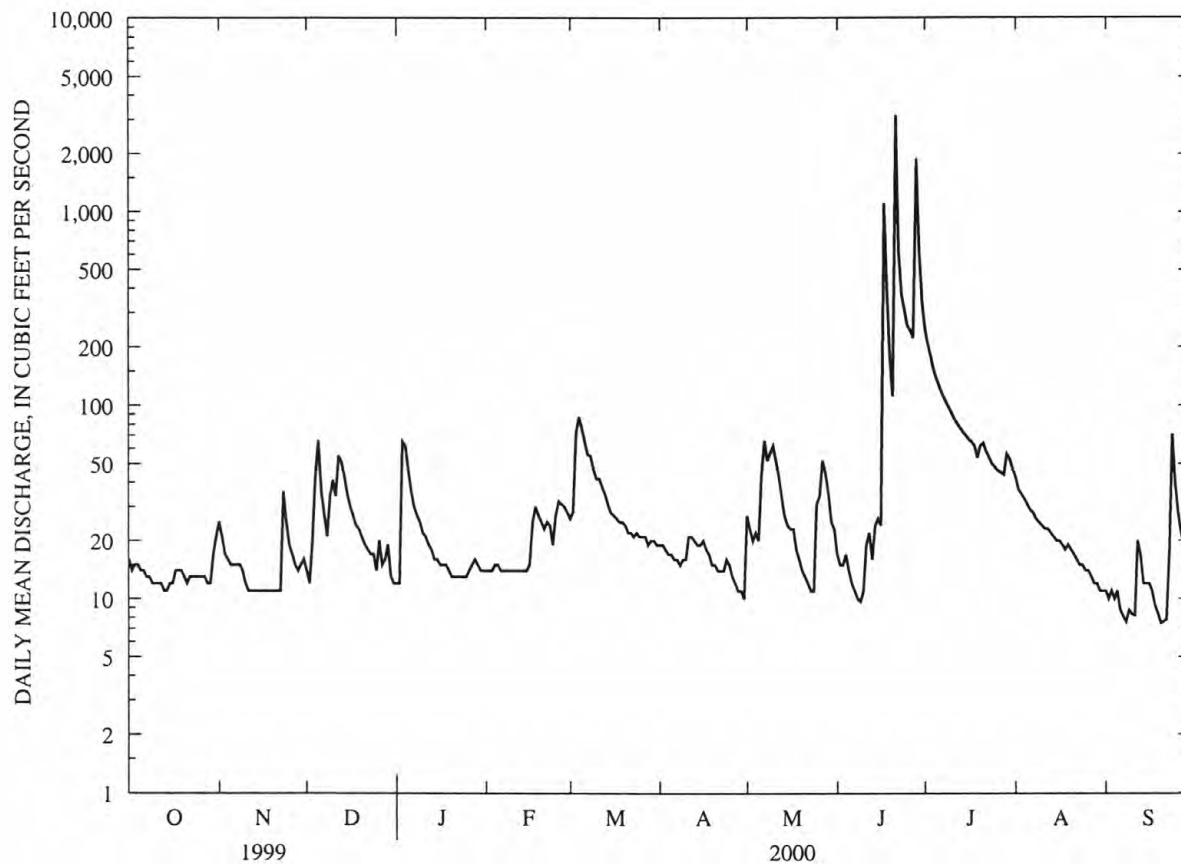
ARKANSAS RIVER BASIN

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07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	23190		19399.8		50.1	
ANNUAL MEAN	63.5		53.0		97.9	
HIGHEST ANNUAL MEAN					10.7	
LOWEST ANNUAL MEAN					3160	
HIGHEST DAILY MEAN	1910	Jun 30	3160	Jun 21	3160	Jun 21 2000
LOWEST DAILY MEAN	11	Oct 13	7.5	Sep 20	.40	Aug 7 1980
ANNUAL SEVEN-DAY MINIMUM	11	Nov 11	8.7	Sep 5	.56	Aug 5 1980
INSTANTANEOUS PEAK FLOW			^a 8750	Jun 21	^a 8750	Jun 21 2000
INSTANTANEOUS PEAK STAGE			13.58	Jun 21	13.58	Jun 21 2000
ANNUAL RUNOFF (AC-FT)	46000		38480		36270	
10 PERCENT EXCEEDS	127		65		105	
50 PERCENT EXCEEDS	36		19		27	
90 PERCENT EXCEEDS	14		11		7.0	

^aFrom rating curve extended above 3,900 ft³/s.



ARKANSAS RIVER BASIN

07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 1979, October 1983 to current year.

REMARKS.--Samples collected periodically. Specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field. Samples collected by Arkansas Department of Environmental Quality, Little Rock, Arkansas, from 1983 to 1994, were published by the U.S. Geological Survey, Arkansas District, in Water Resources Data, Arkansas.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
02...	1200	1028	1028	3.89	12	748	10.9	7.6	286	12.8	19.0
02...	1201	1028	1028	3.89	12	748	11.1	7.5	286	12.8	17.0
02...	1202	1028	1028	3.89	12	748	11.2	7.5	286	12.7	15.0
02...	1203	1028	1028	3.89	12	748	11.2	7.5	286	12.6	13.0
02...	1204	1028	1028	3.89	12	748	11.2	7.5	285	12.6	11.0
02...	1205	1028	1028	3.89	12	748	11.2	7.6	285	12.6	9.00
02...	1206	1028	1028	3.89	12	748	11.2	7.5	285	12.6	7.00
02...	1207	1028	1028	3.89	12	748	11.2	7.5	285	12.6	5.00
02...	1208	1028	1028	3.89	12	748	11.2	7.5	285	12.6	3.00
02...	1209	1028	1028	3.89	12	748	11.1	7.5	285	12.6	1.00
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
OCT											
21...	1440	80020	1028	3.89	12	750	104	9.9	7.6	290	24.5
DEC											
02...	1220	80020	1028	3.89	12	748	107	11.2	7.5	285	17.0
FEB											
17...	0945	80020	1028	3.97	20	750	83	9.4	7.3	285	11.0
APR											
17...	1410	80020	1028	3.98	24	752	127	12.1	7.8	271	17.5
JUL											
19...	1210	80020	1028	3.80	48	747	81	6.4	7.5	283	32.5
AUG											
15...	0945	80020	1028	3.38	20	753	79	6.4	7.2	292	26.8
DATE	TEMPER- ATURE WATER (DEG C) (00010)	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)	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- LITY WAT DIS TOT IT FIELD CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)
OCT											
21...	17.0	100	13	38.2	2.14	3.3	.6	13.2	21	91	111
DEC											
02...	12.6	120	26	43.3	2.29	2.9	.5	12.2	18	91	111
FEB											
17...	9.3	110	29	42.2	2.08	2.4	.4	10.1	16	86	104
APR											
17...	17.0	110	22	40.2	2.11	2.7	.5	10.9	17	87	106
JUL											
19...	25.9	100	16	37.5	2.23	3.7	.5	12.1	20	87	106
AUG											
15...	25.0	99	6	36.1	2.14	3.7	.6	13.7	22	92	113

ARKANSAS RIVER BASIN

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07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	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, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
OCT 21...	0	10.5	21.6	E.10	<.020	--	1.14	<.010	.052	E.036
DEC 02...	0	10.8	20.6	E.10	<.020	--	1.36	<.010	.055	<.050
FEB 17...	0	9.6	17.5	E.10	<.020	--	2.06	<.010	--	.084
APR 17...	0	9.5	19.1	.14	<.020	1.6	1.42	<.010	.049	<.050
JUL 19...	0	9.1	23.5	.21	<.020	1.9	1.70	<.010	.080	E.042
AUG 15...	0	9.8	25.4	.13	<.020	1.1	.993	<.010	.077	E.035
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- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
OCT 21...	.017	<.050	2	.23	5.25	169	149	.8	2.00	51
DEC 02...	.018	<.050	<1	.22	5.12	165	153	.5	<1.00	63
FEB 17...	<.010	<.050	2	.23	9.07	168	144	.7	2.00	92
APR 17...	.016	<.050	4	.21	10.1	153	143	.6	1.00	K23
JUL 19...	.026	E.039	<10	.23	21.5	166	148	1.1	1.00	66
AUG 15...	.025	E.037	<10	.23	8.96	166	151	.3	<1.00	76
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 21...	29	67	<1.00	<1.00	<1.00	<1.00	<2	19	.59	97
DEC 02...	31	93	<1.00	<1.00	<1.00	<1.00	E2	21	.65	95
FEB 17...	84	98	<1.00	2.00	<1.00	<1.00	2	20	1.1	96
APR 17...	K14	K37	<1.00	<1.00	<1.00	<1.00	2	28	1.9	100
JUL 19...	62	96	<1.00	1.00	<1.00	<1.00	4	24	3.1	97
AUG 15...	76	130	<1.00	<1.00	<1.00	<1.00	4	30	1.6	97

ARKANSAS RIVER BASIN

07195865 SAGER CREEK NEAR WEST SILOAM SPRINGS, OK

LOCATION.--Lat 36°12'06", long 94°36'18", in NE 1/4 NE 1/4 sec.23, T.20 N., R.25 E., Delaware County, Hydrologic Unit 11110103, on right bank 1.4 mi upstream from Flint Creek, 2.4 mi northeast of West Siloam Springs.

DRAINAGE AREA.--18.9 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 961.90 ft above sea level from topographic map.

REMARKS.--Records poor. Low flow sustained in part by sewage effluent from Siloam Springs, Ar. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	12	5.6	6.9	8.8	13	11	28	42	57	16	9.2
2	5.6	10	5.5	6.9	8.6	18	11	15	41	102	15	7.9
3	5.1	7.7	14	89	8.8	63	12	13	61	64	15	6.7
4	6.2	6.9	60	27	9.1	28	12	12	54	44	14	6.5
5	6.5	6.4	27	19	7.8	21	12	12	45	40	12	8.0
6	6.5	5.3	16	16	7.5	20	11	48	43	36	11	8.7
7	6.6	4.2	14	14	9.0	18	11	22	42	33	14	9.1
8	6.6	4.8	13	12	9.2	21	9.3	16	41	29	13	8.9
9	5.2	4.9	27	11	8.4	19	8.8	25	40	26	13	7.6
10	4.8	5.1	24	11	7.2	17	11	20	41	26	13	6.9
11	5.9	5.0	17	11	7.1	16	14	16	62	25	13	8.1
12	6.3	4.7	41	10	6.8	15	13	14	61	23	12	22
13	6.4	4.3	24	10	6.6	15	12	12	48	22	10	12
14	6.3	3.8	19	9.7	6.9	15	11	10	68	22	11	10
15	6.4	4.5	16	8.4	7.0	15	11	11	61	19	11	9.1
16	5.9	4.9	14	7.9	7.1	14	9.3	11	66	18	11	7.3
17	5.2	4.8	13	9.0	9.5	14	11	21	1130	19	11	6.6
18	6.3	4.8	11	9.1	7.9	12	13	12	121	18	11	8.4
19	6.8	4.9	10	9.0	6.9	12	11	11	46	17	9.7	8.2
20	6.7	4.3	11	8.8	6.7	13	11	9.5	29	23	8.5	7.6
21	6.7	3.9	11	8.6	6.7	13	10	8.7	1680	26	9.8	8.1
22	6.4	4.7	11	7.3	6.6	13	8.7	9.8	176	20	10	7.7
23	5.9	29	10	7.0	6.6	13	8.6	9.7	85	17	10	23
24	4.9	10	8.5	8.1	6.4	14	12	9.6	115	18	9.9	112
25	5.8	6.0	7.7	8.5	19	12	11	20	69	17	9.6	15
26	6.2	5.8	7.6	8.7	20	12	10	14	76	17	8.4	10
27	6.4	5.2	9.3	8.8	15	16	9.8	112	56	16	7.2	8.6
28	6.4	5.1	9.5	7.4	15	14	9.5	60	1260	16	8.7	8.0
29	6.3	5.2	9.4	7.3	14	13	8.3	48	208	25	9.3	7.4
30	7.7	5.7	9.2	7.3	---	13	8.0	46	86	18	9.0	6.1
31	8.4	---	7.6	8.8	---	12	---	43	---	17	9.2	---
TOTAL	193.5	193.9	482.9	393.5	266.2	524	321.3	719.3	5953	870	345.3	384.7
MEAN	6.24	6.46	15.6	12.7	9.18	16.9	10.7	23.2	198	28.1	11.1	12.8
MAX	8.4	29	60	89	20	63	14	112	1680	102	16	112
MIN	4.8	3.8	5.5	6.9	6.4	12	8.0	8.7	29	16	7.2	6.1
AC-FT	384	385	958	781	528	1040	637	1430	11810	1730	685	763

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000
MEAN	8.46	21.9	18.5	22.4	28.6
MAX	10.3	54.7	24.7	53.6	53.2
(WY)	1997	1997	1998	1998	1999
MIN	6.24	6.46	11.4	11.4	9.18
(WY)	2000	2000	1999	1999	2000

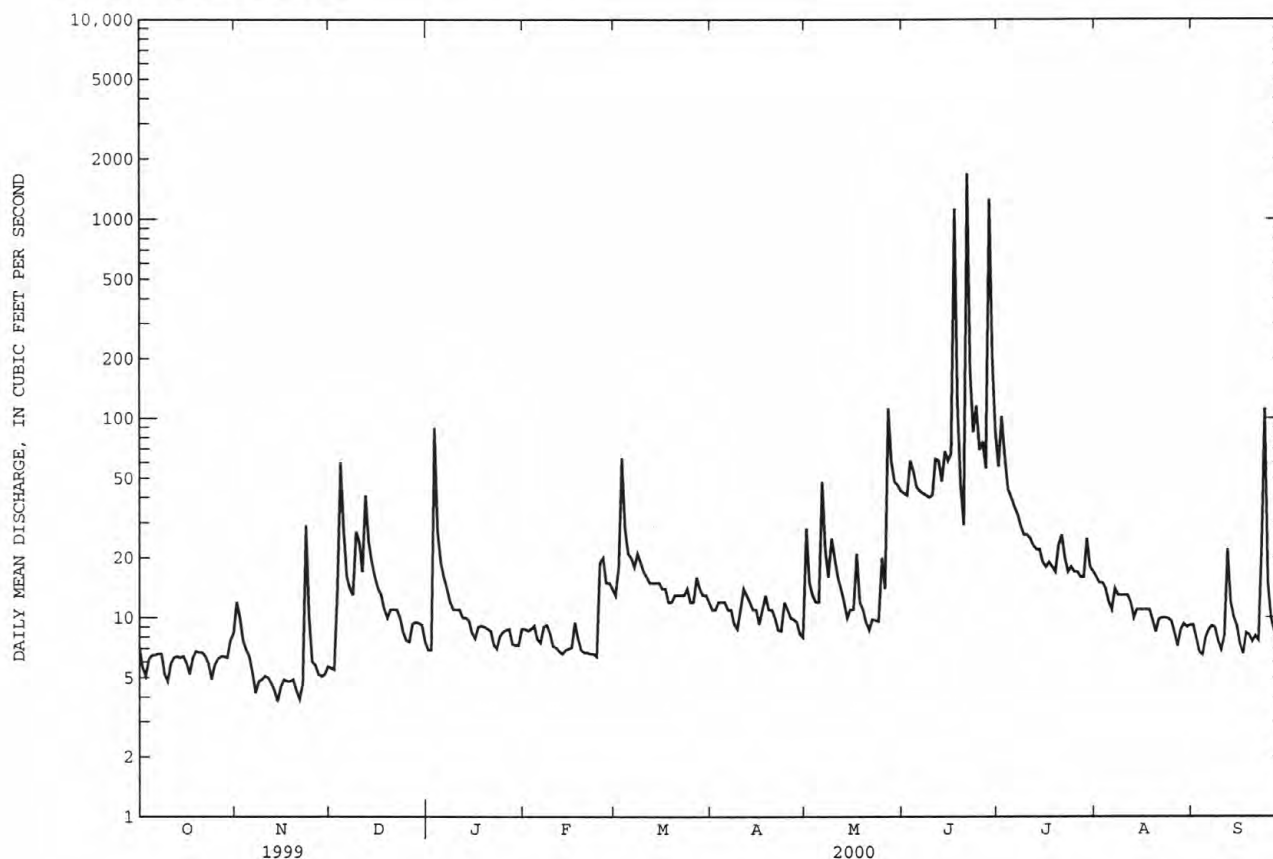
ARKANSAS RIVER BASIN

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07195865 SAGER CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1996 - 2000	
ANNUAL TOTAL	8939.7		10647.6			
ANNUAL MEAN	24.5		29.1		23.6	
HIGHEST ANNUAL MEAN					29.1	
LOWEST ANNUAL MEAN					19.2	
HIGHEST DAILY MEAN	419 Jun 30		1680 Jun 21		1680 Jun 21 2000	
LOWEST DAILY MEAN	3.8 Nov 14		3.8 Nov 14		^a 2.0 Aug 3 1997	
ANNUAL SEVEN-DAY MINIMUM	4.5 Nov 12		4.5 Nov 12		2.8 Jul 31 1997	
INSTANTANEOUS PEAK FLOW			4130 Jun 21		4130 Jun 21 2000	
INSTANTANEOUS PEAK STAGE			12.76 Jun 21		12.76 Jun 21 2000	
INSTANTANEOUS LOW FLOW			3.6 Feb 24			
ANNUAL RUNOFF (AC-FT)	17730		21120		17110	
10 PERCENT EXCEEDS	54		43		42	
50 PERCENT EXCEEDS	12		11		12	
90 PERCENT EXCEEDS	5.8		6.2		5.4	

^aAlso occurred Aug. 10, 1997.



ARKANSAS RIVER BASIN

07195865 SAGER CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1991 to July 1995, July 1996 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
02...	0920	1028	1028	4.50	4.9	749	10.8	7.7	599	11.6	4.00
02...	0921	1028	1028	4.50	4.9	749	10.8	7.6	600	11.6	8.00
02...	0922	1028	1028	4.50	4.9	749	10.8	7.6	599	11.6	12.0
02...	0923	1028	1028	4.50	4.9	749	10.8	7.6	600	11.6	16.0
02...	0924	1028	1028	4.50	4.9	749	10.8	7.7	600	11.6	20.0
02...	0925	1028	1028	4.50	4.9	749	10.8	7.6	600	11.6	24.0
02...	0926	1028	1028	4.50	4.9	749	10.7	7.7	600	11.6	28.0
02...	0927	1028	1028	4.50	4.9	749	10.8	7.6	600	11.6	32.0
02...	0928	1028	1028	4.50	4.9	749	10.8	7.6	600	11.6	36.0
02...	0929	1028	1028	4.50	4.9	749	10.9	7.6	600	11.6	40.0
02...	0930	1028	1028	4.50	4.9	749	11.2	7.6	600	11.7	44.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
OCT											
21...	1610	80020	1028	5.00	7.3	752	104	9.9	7.9	589	25.0
DEC											
02...	0940	80020	1028	4.50	4.9	749	101	10.8	7.6	600	16.5
FEB											
16...	1245	80020	1028	4.35	7.3	755	118	12.8	8.2	552	10.5
APR											
17...	1540	80020	1028	4.46	11	750	135	12.2	8.2	494	19.5
JUL											
17...	1630	80020	1028	4.63	19	748	91	7.4	7.7	388	29.0
AUG											
15...	1300	80020	1028	4.47	12	753	108	8.6	7.6	509	34.0
DATE	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CAO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CAO3 (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 CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)
OCT											
21...	17.0	130	62	46.6	3.37	20.0	2	40.3	36	68	83
DEC											
02...	11.6	160	77	58.9	3.56	14.8	2	45.4	35	85	103
FEB											
16...	11.1	140	66	52.2	3.05	11.1	1	41.2	36	77	94
APR											
17...	19.3	140	54	48.7	3.32	13.4	1	31.8	31	81	99
JUL											
17...	24.7	120	31	44.6	2.27	8.5	.8	20.3	25	90	110
AUG											
15...	26.2	130	27	46.7	2.58	13.5	1	35.0	34	100	122

ARKANSAS RIVER BASIN

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07195865 SAGER CREEK NEAR WEST SILOAM SPRINGS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	CAR- BONATE WATER DIS IT FIELD	CHLO- RIDE, DIS- SOLVED	SULFATE DIS- SOLVED	NITRO- GEN, AM- MONIA + ORGANIC TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	PHOS- PHATE, ORTHO, DIS- SOLVED
DATE	MG/L AS CO3 (00452)	(MG/L AS CL) (00940)	(MG/L AS SO4) (00945)	(MG/L AS N) (00625)	(MG/L AS N) (00608)	(MG/L AS N) (00600)	(MG/L AS NH4) (71846)	(MG/L AS N) (00631)	(MG/L AS N) (00613)	(MG/L AS N) (00605)	(MG/L AS PO4) (00660)
OCT 21...	0	74.4	20.3	.36	<.020	16	--	15.9	<.010	--	3.99
DEC 02...	0	73.7	27.6	.39	<.020	13	--	12.8	<.010	--	3.35
FEB 16...	0	65.6	21.5	.48	<.020	11	--	10.1	<.010	--	2.46
APR 17...	0	53.5	20.2	.46	.021	11	.03	10.8	<.010	.44	2.84
JUL 17...	0	32.3	10.7	.30	<.020	6.5	--	6.23	<.010	--	2.62
AUG 15...	0	61.4	11.5	.25	<.020	8.4	--	8.12	<.010	--	3.22
	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	PHOS- PHORUS TOTAL	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	TUR- BID- ITY	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M.	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
DATE	(MG/L AS P) (00666)	(MG/L AS P) (00671)	(MG/L AS P) (00665)	(MG/L) (00530)	(70303)	(70302)	(70300)	(70301)	(00076)	(UG/L) (32218)	(31633)
OCT 21...	1.55	1.30	1.81	<1	.46	6.66	338	320	.4	<1.00	33
DEC 02...	1.16	1.09	1.22	<1	.47	4.59	347	334	.3	2.00	250
FEB 16...	.900	.802	.900	<1	.43	6.21	315	288	.5	1.00	43
APR 17...	.985	.926	.999	5	.38	8.29	279	270	.4	1.00	39
JUL 17...	.858	.855	.855	<10	.32	12.1	235	203	.9	1.00	52
AUG 15...	1.19	1.05	1.15	<10	.39	9.36	289	270	.3	2.00	25
	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON, UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON, UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
OCT 21...	30	340	<1.00	<1.00	<1.00	<1.00	<2	41	.81	100	
DEC 02...	K220	440	<1.00	<1.00	<1.00	<1.00	<2	42	.56	100	
FEB 16...	54	57	<1.00	1.00	<1.00	<1.00	<2	45	.89	96	
APR 17...	36	52	<1.00	1.00	<1.00	<1.00	<2	48	1.4	96	
JUL 17...	35	100	<1.00	<1.00	<1.00	<1.00	<2	34	1.7	91	
AUG 15...	26	170	<1.00	<1.00	<1.00	<1.00	<2	37	1.2	100	

ARKANSAS RIVER BASIN

07196000 FLINT CREEK NEAR KANSAS, OK

LOCATION.--Lat 36°11'11", long 94°42'24", in SW 1/4 NW 1/4 sec.25, T.20 N., R.24 E., Delaware County, Hydrologic Unit 11110103, upstream from bridge on U.S. Highway 412, at left bank 6.0 mi southeast of Kansas, 6.0 mi downstream from Sager Creek, and at mile 2.2.

DRAINAGE AREA.--110 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1955 to September 1976, April 1979 to September 1990, October 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 854.59 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Small diversion above station for irrigation. U.S. Army Corps of Engineers' satellite telemeter at station.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 17	1300	6,400	9.84	Jun 28	1600	12,400	11.76
Jun 21	0830	19,000	13.62				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	52	34	32	35	67	55	74	73	470	94	30
2	31	60	32	32	35	68	54	80	64	396	85	29
3	29	47	46	122	35	152	53	76	60	346	77	29
4	29	40	93	130	37	186	52	72	83	262	73	27
5	29	37	148	103	36	163	49	70	62	229	69	26
6	29	34	102	90	35	141	46	117	53	208	63	27
7	28	32	81	79	35	124	44	173	44	191	60	26
8	28	31	71	73	36	117	40	140	37	177	57	26
9	29	32	85	66	36	106	36	140	34	164	55	26
10	27	31	113	62	36	97	36	162	33	153	54	26
11	26	30	104	59	36	93	50	141	57	145	52	25
12	27	29	125	57	35	85	57	122	100	138	51	38
13	27	29	127	54	34	79	55	103	79	132	49	53
14	27	28	111	51	34	77	53	85	85	126	46	41
15	26	27	98	44	34	72	51	75	113	122	46	35
16	27	28	84	38	34	69	51	69	97	118	44	33
17	27	28	75	37	46	66	47	73	2730	113	43	31
18	27	28	67	38	78	63	48	68	1090	112	41	29
19	29	28	61	37	75	61	46	58	501	105	42	28
20	29	28	59	35	70	59	43	51	334	112	40	27
21	29	27	55	33	65	59	39	42	7820	125	38	26
22	28	28	53	32	63	58	36	38	1570	118	38	26
23	28	73	49	31	63	58	34	36	661	110	37	37
24	28	67	44	31	59	59	38	36	529	103	36	171
25	27	55	38	32	57	56	38	62	428	101	35	127
26	28	44	37	32	83	55	36	86	379	97	35	94
27	29	38	40	34	75	61	35	164	328	94	30	73
28	29	34	37	35	70	60	33	161	3910	88	30	62
29	28	33	42	33	69	59	31	119	1570	105	30	53
30	34	33	38	33	---	60	28	98	668	107	30	48
31	45	---	34	34	---	57	---	83	---	96	32	---
TOTAL	897	1111	2183	1599	1436	2587	1314	2874	23592	4963	1512	1329
MEAN	28.9	37.0	70.4	51.6	49.5	83.5	43.8	92.7	786	160	48.8	44.3
MAX	45	73	148	130	83	186	57	173	7820	470	94	171
MIN	26	27	32	31	34	55	28	36	33	88	30	25
AC-FT	1780	2200	4330	3170	2850	5130	2610	5700	46790	9840	3000	2640
CFSM	.26	.34	.64	.47	.45	.76	.40	.84	7.15	1.46	.44	.40
IN.	.30	.38	.74	.54	.49	.87	.44	.97	7.98	1.68	.51	.45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2000, BY WATER YEAR (WY)

MEAN	74.3	135	131	110	120	180	183	187	159	64.5	45.2	60.9
MAX	415	850	624	385	331	593	577	783	1066	262	369	416
(WY)	1987	1974	1985	1969	1968	1973	1973	1961	1974	1958	1961	1986
MIN	.73	9.87	11.4	10.3	16.4	11.5	13.0	37.5	25.1	11.7	4.84	1.27
(WY)	1957	1956	1956	1956	1956	1956	1956	1964	1972	1980	1956	1956

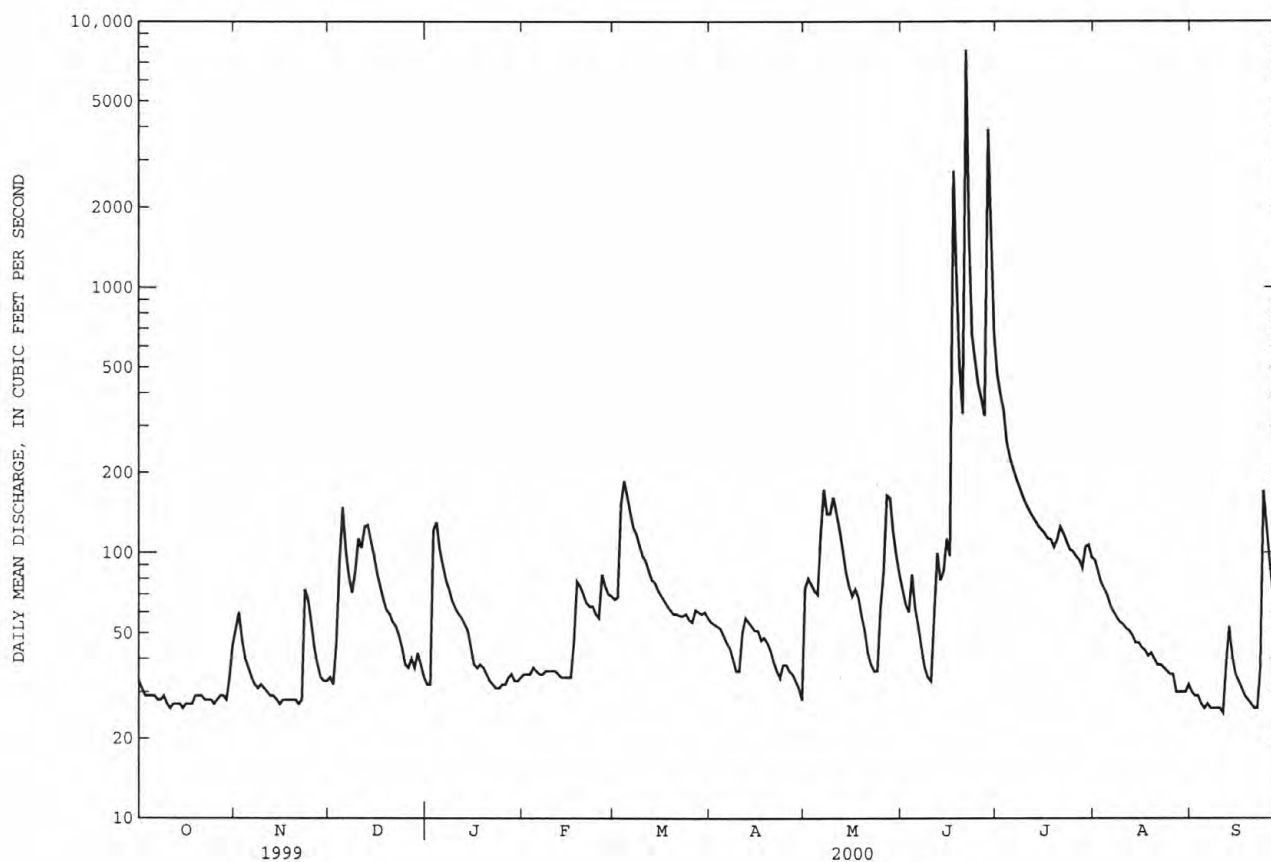
ARKANSAS RIVER BASIN

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07196000 FLINT CREEK NEAR KANSAS, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1956 - 2000	
ANNUAL TOTAL	50139		45397		121	
ANNUAL MEAN	137		124		296	
HIGHEST ANNUAL MEAN					22.3	
LOWEST ANNUAL MEAN					14500	
HIGHEST DAILY MEAN	2100	Jun 30	7820	Jun 21		Nov 24 1973
LOWEST DAILY MEAN	26	Oct 11	25	Sep 11	.60	Oct 11 1956
ANNUAL SEVEN-DAY MINIMUM	27	Oct 10	26	Sep 5	.66	Oct 7 1956
INSTANTANEOUS PEAK FLOW			19000	Jun 21	^a 44400	Jun 8 1974
INSTANTANEOUS PEAK STAGE			13.62	Jun 21	19.42	Jun 8 1974
ANNUAL RUNOFF (AC-FT)	99450		90040		87740	
ANNUAL RUNOFF (CFSM)	1.25		1.13		1.10	
ANNUAL RUNOFF (INCHES)	16.96		15.35		14.96	
10 PERCENT EXCEEDS	253		140		242	
50 PERCENT EXCEEDS	81		52		56	
90 PERCENT EXCEEDS	29		28		18	

^aBased on indirect measurement.



ARKANSAS RIVER BASIN

07196000 FLINT CREEK NEAR KANSAS, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955-61, 1963, 1975-80, July 1991 to July 1995, July 1996 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
02...	1015	1028	1028	6.16	32	749	9.9	7.9	317	12.1	4.00
02...	1017	1028	1028	6.16	32	749	9.7	7.9	316	12.1	7.00
02...	1019	1028	1028	6.16	32	749	9.8	7.9	317	12.0	10.0
02...	1020	1028	1028	6.16	32	749	9.9	7.9	317	12.0	13.0
02...	1022	1028	1028	6.16	32	749	9.9	7.9	317	12.0	16.0
02...	1024	1028	1028	6.16	32	749	9.7	7.9	317	12.0	19.0
02...	1026	1028	1028	6.16	32	749	9.8	7.9	317	12.0	22.0
02...	1028	1028	1028	6.16	32	749	9.7	7.9	317	12.0	25.0
02...	1030	1028	1028	6.16	32	749	9.5	7.9	317	12.0	28.0
JUN											
17...	1136	1028	1028	9.37	5150	745	9.9	7.0	111	18.0	180
17...	1137	1028	1028	9.37	5150	745	9.9	7.0	111	18.0	160
17...	1138	1028	1028	9.37	5150	745	10.0	7.0	111	18.0	140
17...	1139	1028	1028	9.37	5150	745	9.9	7.1	111	18.0	120
17...	1140	1028	1028	9.37	5150	745	9.9	7.1	111	18.0	100
17...	1141	1028	1028	9.37	5150	745	9.8	7.1	110	18.0	80.0
17...	1142	1028	1028	9.37	5150	745	9.6	7.1	110	18.0	60.0
17...	1145	1028	1028	9.37	5150	745	9.9	7.1	111	18.0	40.0
17...	1148	1028	1028	9.37	5150	745	9.9	7.0	111	18.0	20.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
20...	1705	80020	1028	6.13	29	762	127	11.9	331	19.0	18.6
DEC											
02...	1000	80020	1028	6.16	32	749	94	9.9	317	16.0	12.0
10...	1315	80020	1028	6.52	115	756	107	11.4	292	10.6	12.1
FEB											
18...	0830	80020	1028	6.40	81	747	91	10.1	323	8.0	10.0
APR											
17...	1200	80020	1028	6.24	48	755	118	11.7	300	15.0	15.2
MAY											
07...	0922	80020	1028	6.68	170	746	102	9.5	261	23.0	17.6
JUN											
17...	1200	80020	1028	9.37	5150	745	107	9.9	111	24.0	18.0
21...	1700	80020	1028	9.49	5450	750	94	8.6	115	22.0	19.1
28...	1430	80020	1028	10.71	8970	749	110	9.7	94	23.5	20.8
JUL											
19...	1520	80020	1028	6.41	102	750	101	7.8	274	33.0	27.6
AUG											
15...	0730	80020	1028	6.19	47	754	90	7.4	307	23.0	24.5

ARKANSAS RIVER BASIN

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07196000 FLINT CREEK NEAR KANSAS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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 CACO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
OCT 20...	110	19	40.4	2.10	4.6	.6	15.3	22	91	111	0	22.5
DEC 02...	120	25	44.4	2.25	4.2	.6	14.6	20	95	116	0	20.8
10...	--	--	--	--	--	--	--	--	88	107	0	--
FEB 18...	120	32	42.6	2.12	4.1	.6	14.1	20	82	101	0	22.0
APR 17...	120	32	42.7	2.09	4.5	.5	12.3	18	84	102	0	17.7
MAY 07...	--	--	--	--	--	--	--	--	91	111	0	--
JUN 17...	--	--	--	--	--	--	--	--	34	41	0	--
21...	--	--	--	--	--	--	--	--	39	47	0	--
28...	--	--	--	--	--	--	--	--	31	38	0	--
JUL 19...	100	19	37.2	1.94	4.4	.5	10.7	18	82	100	0	11.4
AUG 15...	110	14	39.1	2.01	4.7	.5	12.6	20	92	112	0	17.0

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, NITRATE DIS- SOLVED (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)
OCT 20...	17.0	.10	<.020	--	3.5	--	--	3.35	--	<.010	--
DEC 02...	15.5	.16	<.020	--	3.8	--	--	3.60	--	<.010	--
10...	--	.30	.022	--	4.3	.03	--	3.98	--	<.010	.28
FEB 18...	13.8	.12	<.020	--	4.0	--	--	3.93	--	<.010	--
APR 17...	12.9	.12	<.020	--	3.3	--	--	3.21	--	<.010	--
MAY 07...	--	.53	<.020	--	3.1	--	--	2.53	--	<.010	--
JUN 17...	--	4.2	.068	.990	5.2	.09	4.38	1.00	.033	.010	4.2
21...	--	2.0	.033	1.60	3.6	.04	7.09	1.61	.033	.010	2.0
28...	--	3.0	.044	.948	3.9	.06	4.20	.959	.036	.011	2.9
JUL 19...	16.8	.28	<.020	--	2.5	--	--	2.21	--	<.010	--
AUG 15...	14.7	.15	<.020	--	2.4	--	--	2.27	--	<.010	--

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	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- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)
OCT 20...	.368	.115	.120	.103	<1	.25	14.6	186	172	.4	3.00
DEC 02...	.392	.129	.128	.116	<1	.25	15.8	183	175	.4	<1.00
10...	.491	.157	.160	.183	--	--	--	--	--	.8	--
FEB 18...	.368	.136	.120	.136	1	.24	37.8	173	166	.5	2.00
APR 17...	.389	.129	.127	.141	4	.23	21.9	169	157	.3	<1.00
MAY 07...	.457	.181	.149	.193	--	--	--	--	--	2.2	--
JUN 17...	1.09	.407	.354	1.66	--	--	--	--	--	240	--
21...	1.22	.444	.399	.895	--	--	--	--	--	170	--
28...	1.13	.410	.367	1.17	--	--	--	--	--	290	--
JUL 19...	.371	.126	.121	.147	<10	.22	44.1	160	142	1.2	2.00
AUG 15...	.377	.143	.123	.140	<10	.24	22.3	176	155	.3	2.00

ARKANSAS RIVER BASIN

07196000 FLINT CREEK NEAR KANSAS, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 20...	22	20	47	<1.00	<1.00	<1.00	<1.00	<2	20	1.6	99
DEC 02...	K210	81	39	<1.00	<1.00	<1.00	<1.00	2	23	2.0	91
10...	50	58	310	--	--	--	--	--	23	7.1	93
FEB 18...	160	120	430	<1.00	2.00	<1.00	<1.00	E1	21	4.6	93
APR 17...	K13	K6	K27	<1.00	1.00	<1.00	<1.00	E1	27	3.5	100
MAY 07...	780	550	1400	--	--	--	--	--	29	13	100
JUN 17...	23000	20000	84000	--	--	--	--	--	1390	19400	92
21...	25000	18000	K120000	--	--	--	--	--	501	7370	88
28...	42000	40000	90000	--	--	--	--	--	998	24200	90
JUL 19...	40	46	110	3.00	5.00	<1.00	<1.00	2	29	8.0	93
AUG 15...	78	93	150	<1.00	<1.00	<1.00	<1.00	2	24	3.0	100

ARKANSAS RIVER BASIN

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07196040 ILLINOIS RIVER BELOW FLINT CREEK NEAR FLINT, OK

LOCATION.--Lat 36°10'25", long 94°43'22", in NW 1/4 NW 1/4, sec. 35, T.20 N., R.24 E., Delaware County, Hydrologic Unit 11110103, 0.2 mi below Flint Creek, 1.4 mi southwest of Flint, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL										
25...	1251	1028	1028	497	753	8.7	7.7	279	23.6	106
25...	1252	1028	1028	497	753	8.8	7.7	280	23.7	96.0
25...	1253	1028	1028	497	753	8.8	7.7	280	23.7	86.0
25...	1254	1028	1028	497	753	8.8	7.7	281	23.7	76.0
25...	1255	1028	1028	497	753	8.8	7.7	281	23.8	66.0
25...	1256	1028	1028	497	753	8.8	7.7	282	23.8	56.0
25...	1257	1028	1028	497	753	8.7	7.7	281	23.9	46.0
25...	1258	1028	1028	497	753	8.6	7.7	288	23.9	36.0
25...	1259	1028	1028	497	753	8.6	7.7	288	24.0	26.0
25...	1300	1028	1028	497	753	8.6	7.7	291	24.1	16.0
25...	1301	1028	1028	497	753	8.6	7.8	291	24.2	6.00
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
JUL										
25...	1310	80020	1028	497	753	104	8.7	7.7	284	27.5
AUG										
29...	1505	80020	1028	183	752	123	9.3	7.7	330	35.5
SEP										
20...	1315	80020	1028	173	747	113	9.4	8.0	343	22.7
DATE	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LITY 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)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, DIS- SOLVED TOTAL (MG/L AS N) (00600)	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
JUL										
25...	23.8	102	124	0	.19	<.020	2.5	2.35	<.010	.399
AUG										
29...	29.2	112	137	0	.14	<.020	1.6	1.48	<.010	.438
SEP										
20...	23.5	105	128	0	.15	<.020	1.5	1.38	<.010	.469
DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTH, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL										
25...	.178	.130	.168	1.6	46	38	65	27	36	96
AUG										
29...	.153	.143	.162	1.8	20	21	58	27	13	99
SEP										
20...	.171	.153	.176	.6	120	110	50	15	7.0	88

ARKANSAS RIVER BASIN

07196090 ILLINOIS RIVER AT CHEWEY, OK

LOCATION.--Lat 36°06'15", long 94°46'57", in SE $\frac{1}{4}$ SE $\frac{1}{4}$, sec. 19, T.19 N., R.24 E., Adair County, Hydrologic Unit 11110103, at Hampton Bridge, 0.85 mi west of Chewey, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	
DEC												
01...	1220	1028	1028	3.61	203	760	14.3	8.0	321	10.2	6.00	
01...	1221	1028	1028	3.61	203	760	14.0	8.0	322	10.2	12.0	
01...	1222	1028	1028	3.61	203	760	14.0	8.0	322	10.2	18.0	
01...	1223	1028	1028	3.61	203	760	14.0	7.9	322	10.2	24.0	
01...	1224	1028	1028	3.61	203	760	14.0	8.0	322	10.2	30.0	
01...	1225	1028	1028	3.61	203	760	14.0	8.0	322	10.2	36.0	
01...	1226	1028	1028	3.61	203	760	14.0	8.0	322	10.2	42.0	
01...	1227	1028	1028	3.61	203	760	14.0	8.0	322	10.2	48.0	
01...	1228	1028	1028	3.61	203	760	14.0	8.0	322	10.2	54.0	
01...	1229	1028	1028	3.61	203	760	13.9	7.9	322	10.2	60.0	
01...	1230	1028	1028	3.61	203	760	13.9	8.0	322	10.2	66.0	
MAY												
07...	1437	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	10.0	
07...	1438	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	30.0	
07...	1439	1028	1028	7.28	3340	745	8.2	7.3	236	19.6	50.0	
07...	1440	1028	1028	7.28	3340	745	8.2	7.3	236	19.5	70.0	
07...	1441	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	90.0	
07...	1442	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	110	
07...	1443	1028	1028	7.28	3340	745	8.2	7.4	235	19.6	130	
07...	1444	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	150	
07...	1445	1028	1028	7.28	3340	745	8.2	7.3	235	19.6	170	
07...	1446	1028	1028	7.28	3340	745	8.2	7.3	236	19.6	190	
JUN												
18...	1158	1028	1028	13.89	16800	750	7.3	6.9	130	19.0	340	
18...	1202	1028	1028	13.89	16800	750	7.7	7.0	130	19.1	300	
18...	1204	1028	1028	13.89	16800	750	7.4	7.0	129	19.1	260	
18...	1205	1028	1028	13.89	16800	750	7.5	7.0	129	19.1	220	
18...	1206	1028	1028	13.89	16800	750	7.4	7.0	130	19.1	180	
18...	1208	1028	1028	13.89	16800	750	7.4	7.0	130	19.1	140	
18...	1211	1028	1028	13.89	16800	750	7.2	7.0	130	19.1	100	
18...	1212	1028	1028	13.89	16800	750	7.2	7.0	130	19.0	60.0	
18...	1213	1028	1028	13.89	16800	750	7.2	7.0	130	19.0	20.0	
22...	1232	1028	1028	19.52	34700	750	7.5	6.9	108	19.8	35.0	
22...	1234	1028	1028	19.52	34700	750	7.5	6.9	109	19.8	85.0	
22...	1236	1028	1028	19.52	34700	750	7.5	6.9	108	19.8	185	
22...	1238	1028	1028	19.52	34700	750	7.5	6.9	108	19.8	285	
22...	1240	1028	1028	19.52	34700	750	7.5	6.9	108	19.8	385	
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT												
20...	1550	80020	1028	3.56	194	762	137	13.4	8.1	335	19.0	16.3
DEC												
01...	1235	80020	1028	3.61	203	760	125	14.0	8.0	322	13.5	10.2
11...	1140	80020	1028	5.04	886	753	99	11.2	7.8	291	8.5	9.4
FEB												
16...	1105	80020	1028	3.69	231	760	92	10.6	7.8	328	9.5	9.0
APR												
12...	1445	80020	1028	5.75	1400	757	86	8.7	7.7	273	15.0	14.1
MAY												
07...	1450	80020	1028	7.28	3340	745	92	8.2	7.3	235	26.0	19.6
JUN												
18...	1235	80020	1028	13.89	16800	750	81	7.4	7.0	130	25.0	19.0
22...	1215	80020	1028	19.52	34700	750	84	7.5	6.9	108	26.0	19.8
AUG												
16...	1310	80020	1028	5.43	251	755	106	8.1	7.8	312	36.0	28.6
SEP												
26...	1330	80020	1028	5.86	840	759	94	8.8	7.7	293	19.2	18.6

ARKANSAS RIVER BASIN

203

07196090 ILLINOIS RIVER AT CHEWEY, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	ALKA- LITY 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)	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)
OCT												
20...	110	134	0	.22	<.020	--	2.1	--	--	1.90	--	<.010
DEC												
01...	102	124	0	.13	<.020	--	2.1	--	--	1.98	--	<.010
11...	104	126	0	.22	<.020	--	2.8	--	--	2.58	--	<.010
FEB												
16...	97	118	0	.17	<.020	--	2.2	--	--	2.01	--	<.010
APR												
12...	88	107	0	.92	.094	1.81	2.8	.12	8.03	1.83	.053	.016
MAY												
07...	88	108	0	1.4	<.020	--	2.8	--	--	1.38	--	<.010
JUN												
18...	48	54	0	1.9	.044	1.10	3.1	.06	4.87	1.11	.036	.011
22...	40	48	0	2.2	.028	1.11	3.4	.04	4.90	1.12	.033	.010
AUG												
16...	105	128	0	.19	<.020	--	1.9	--	--	1.71	--	<.010
SEP												
26...	88	107	0	.26	.022	--	2.1	.03	--	1.88	--	<.010
DATE	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)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN (70331)
OCT												
20...	--	.451	.142	.147	.122	.5	K9	K5	K25	21	11	98
DEC												
01...	--	.435	.185	.142	.152	.8	K13	K15	K8	19	10	87
11...	--	.546	.189	.178	.208	1.8	280	360	410	30	72	98
FEB												
16...	--	.423	.169	.138	.171	.5	K3	K6	K16	26	16	95
APR												
12...	.83	.721	.274	.235	.367	15	K18000	K16000	13000	69	261	96
MAY												
07...	--	.598	.230	.195	.468	26	6400	4400	14000	429	3870	91
JUN												
18...	1.9	.779	.289	.254	.863	99	21000	14000	55000	513	23300	94
22...	2.2	.929	.347	.303	.963	220	15000	13000	43000	713	66800	72
AUG												
16...	--	.411	.160	.134	.157	1.3	38	28	K6	26	18	100
SEP												
26...	.23	.601	.198	.196	.230	7.9	110	85	180	37	84	97

ARKANSAS RIVER BASIN

07196190 ILLINOIS RIVER NEAR SCRAPER, OK

LOCATION.--Lat 36°05'40", long 94°49'47", in SW $\frac{1}{4}$ SW $\frac{1}{4}$, sec. 26, T.19 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10 at Round Hollow Public Access Area, 1.2 mi northeast of Scrapper, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL										
26...	0847	1028	1028	514	755	6.6	7.5	270	24.3	109
26...	0848	1028	1028	514	755	6.6	7.3	277	23.6	99.0
26...	0849	1028	1028	514	755	6.6	7.3	277	23.6	89.0
26...	0850	1028	1028	514	755	6.6	7.2	277	23.6	79.0
26...	0851	1028	1028	514	755	6.6	7.2	277	23.6	69.0
26...	0852	1028	1028	514	755	6.6	7.2	277	23.6	59.0
26...	0853	1028	1028	514	755	6.5	7.2	277	23.5	49.0
26...	0854	1028	1028	514	755	6.5	7.3	277	23.5	39.0
26...	0855	1028	1028	514	755	6.5	7.3	278	23.5	29.0
26...	0856	1028	1028	514	755	6.5	7.3	277	23.5	19.0
26...	0857	1028	1028	514	755	6.4	7.3	277	23.5	9.00
26...	0858	1028	1028	514	755	6.4	7.3	277	23.5	4.00

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
JUL									
26...	0905	80020	1028	514	755	78	6.6	7.2	26.5
AUG									
16...	0925	80020	1028	261	756	81	6.3	7.5	24.5
SEP									
14...	1020	80020	1028	308	753	83	6.7	7.6	25.7

DATE	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER FIELD MG/L AS CO3 (00452)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
JUL									
26...	23.5	97	118	0	.19	<.020	2.3	2.15	.448
AUG									
16...	27.6	100	122	0	.22	<.020	1.9	1.64	.380
SEP									
14...	25.6	100	122	0	.13	<.020	1.4	1.29	.396

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS. / 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. / 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL									
26...	.144	.146	.147	1.3	K19	26	K39	33	92
AUG									
16...	.156	.124	.148	.4	33	25	K26	28	99
SEP									
14...	.145	.129	.149	--	74	82	60	23	93

ARKANSAS RIVER BASIN

205

07196400 ILLINOIS RIVER AT NO HEAD HOLLOW NEAR TAHLEQUAH, OK

LOCATION.--Lat 35°58'02", long 94°54'39", in SW 1/4 NE 1/4, sec. 12, T.17 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10 at No Head Hollow Public Use Area, 5.7 mi northeast of Tahlequah, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL										
26...	1054	1028	1028	492	755	8.0	7.6	269	24.4	80.0
26...	1055	1028	1028	492	755	7.7	7.6	267	24.2	70.0
26...	1056	1028	1028	492	755	7.6	7.5	267	24.1	60.0
26...	1057	1028	1028	492	755	7.6	7.5	268	24.1	50.0
26...	1058	1028	1028	492	755	7.6	7.5	267	24.1	40.0
26...	1059	1028	1028	492	755	7.6	7.5	267	24.1	30.0
26...	1100	1028	1028	492	755	7.6	7.6	268	24.1	20.0
26...	1101	1028	1028	492	755	7.8	7.6	268	24.2	10.0
26...	1102	1028	1028	492	755	8.8	7.8	265	24.7	5.00
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
JUL										
26...	1110	80020	1028	492	755	91	7.6	7.5	267	27.0
AUG										
31...	0945	80020	1028	197	753	89	6.9	7.6	297	31.5
SEP										
19...	1500	80020	1028	160	748	122	9.9	8.2	310	32.0
DATE	TIME	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (00010)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	
JUL										
26...	24.1	97	119	0	.14	<.020	2.1	1.95	<.010	.294
AUG										
31...	27.6	104	127	0	.13	<.020	1.1	.973	<.010	.273
SEP										
19...	25.0	99	120	0	.13	<.020	1.1	.983	<.010	.307
DATE	TIME	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHORUS TOTAL (MG/L AS P) (00671)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 KF AGAR UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, 0.7 KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
JUL										
26...	.118	.096	.119	1.4	29	29	50	24	32	99
AUG										
31...	.093	.089	.109	1.4	24	29	33	26	14	98
SEP										
19...	.108	.100	.112	.6	K11	21	K8	29	13	96

07196490 ILLINOIS RIVER NEAR BRIGGS, OK

LOCATION.--Lat 35°56'34", long 94°54'57", in NE 1/4 NW 1/4, sec. 24, T.17 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10, 0.1 mi downstream from Echota Public Use Area, 4.6 mi northwest of Briggs, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY	AGENCY	DIS-	BARO-		PH			SAMPLE
		ANA- LYZING SAMPLE (CODE NUMBER) (00028)	COL- LECTING SAMPLE (CODE NUMBER) (00027)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	METRIC SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
25...	1633	1028	1028	579	755	10.7	8.1	260	26.3	91.0
25...	1634	1028	1028	579	755	10.5	8.1	261	26.2	81.0
25...	1635	1028	1028	579	755	10.4	8.1	260	26.2	71.0
25...	1636	1028	1028	579	755	10.4	8.1	260	26.2	61.0
25...	1637	1028	1028	579	755	10.4	8.1	260	26.2	51.0
25...	1638	1028	1028	579	755	10.4	8.1	260	26.2	41.0
25...	1639	1028	1028	579	755	10.4	8.1	260	26.2	31.0
25...	1640	1028	1028	579	755	10.4	8.1	260	26.2	21.0
25...	1641	1028	1028	579	755	10.2	8.1	260	26.2	11.0
25...	1642	1028	1028	579	755	10.1	8.1	260	26.2	6.00

DATE	TIME	AGENCY	AGENCY	DIS-	BARO-	OXYGEN,		PH		
		ANA- LYZING SAMPLE (CODE NUMBER) (00028)	COL- LECTING SAMPLE (CODE NUMBER) (00027)	CHARGE, INST. CUBIC FEET PER SECOND (00061)	METRIC SURE (MM OF HG) (00025)	DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
JUL 25...	1650	80020	1028	579	755	130	10.4	8.1	260	28.0
AUG 30...	0915	80020	1028	185	755	77	6.1	7.4	289	21.5
SEP 19...	1315	80020	1028	168	753	121	10.1	7.9	305	30.5

DATE	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINITY WAT DIS	BICAR- BONATE WATER	CAR- BONATE WATER	NITRO- GEN, AM- MONIA + ORGANIC	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, TOTAL (MG/L (00600)	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	PHOS- PHATE, ORTHO, DIS- SOLVED	
		TOT IT FIELD	DIS IT FIELD	DIS IT FIELD	TOTAL	TOTAL		NO2+NO3 DIS- SOLVED	DIS- SOLVED	DIS- SOLVED	
		MG/L AS	MG/L AS	MG/L AS	(MG/L AS N)	(MG/L AS N)		(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS PO4)
		CACO3 (39086)	HCO3 (00453)	CO3 (00452)	AS N) (00625)	AS N) (00608)		AS N) (00631)	AS N) (00613)	AS N) (00660)	
JUL 25...	26.2	104	127	0	.17	<.020	2.0	1.80	<.010	.276	
AUG 30...	27.1	103	125	0	.10	<.020	1.0	.900	<.010	.242	
SEP 19...	23.6	99	120	0	.14	<.020	.85	.704	<.010	.236	

DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUL 25...	.105	.090	.115	1.5	130	120	68	27	42	94
AUG 30...	.089	.079	.101	1.4	32	42	36	31	15	92
SEP 19...	.094	.077	.099	.5	180	200	44	28	13	98



LOCATION.--Lat 35°55'22", long 94°55'24", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.26, T.17 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, near center of channel on downstream side of pier of bridge, 0.2 mi downstream from U.S. Highway 62, 2.2 mi northeast of Tahlequah, 6.5 mi upstream from Baron Fork, and at mile 55.8.

WATER-DISCHARGE RECORDS

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

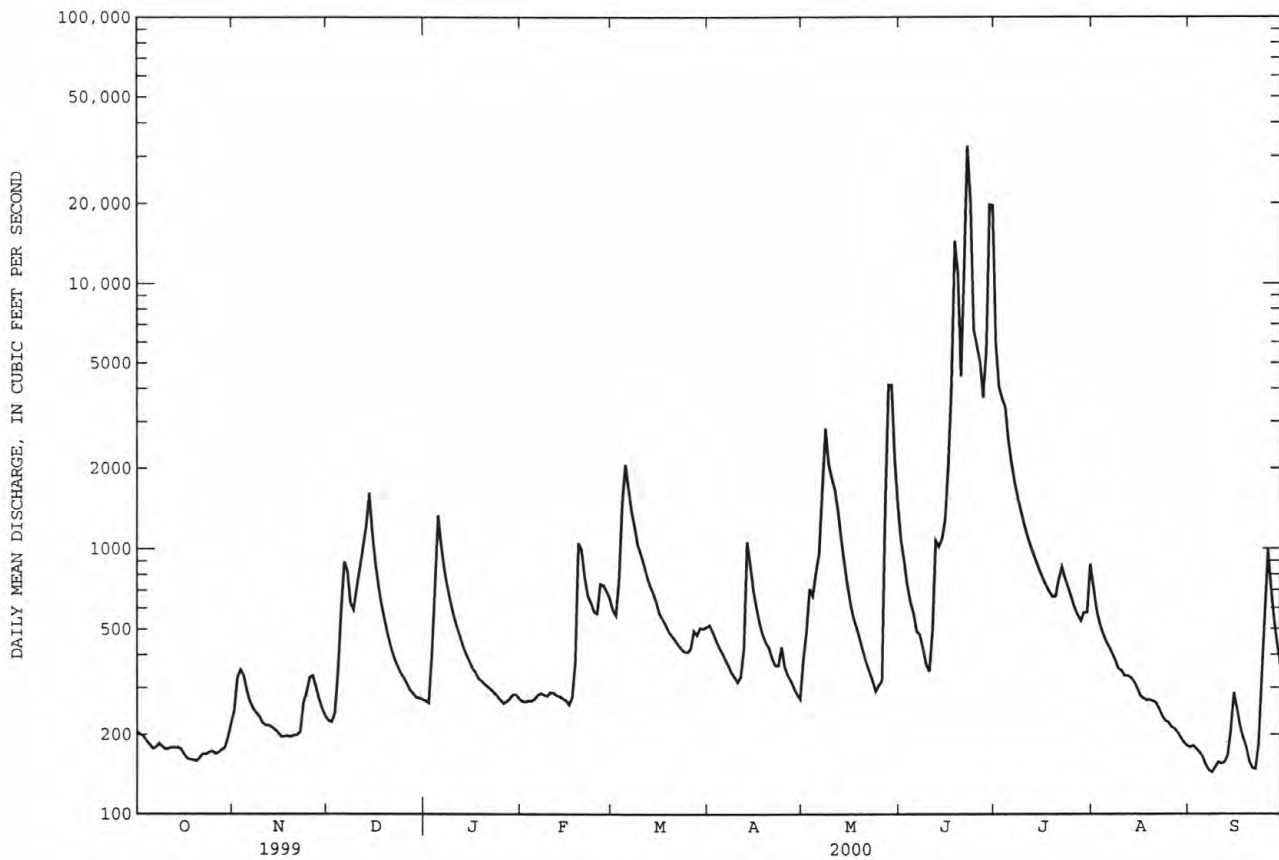
Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 19	0430	17,100	13.01	Jun 30	0500	29,400	16.62
Jun 22	2300	35,100	18.02				

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	205	246	225	268	267	590	518	382	1080	5950	718	179
2	200	328	223	263	266	564	489	487	904	4060	595	181
3	197	351	241	398	268	762	457	707	733	3660	528	176
4	189	334	349	716	268	1470	429	667	632	3400	485	171
5	183	293	591	1330	272	2070	408	812	573	2550	452	164
6	177	266	894	1030	282	1680	386	957	490	2090	429	153
7	179	251	830	836	286	1380	365	1650	476	1770	406	146
8	185	241	627	718	282	1200	342	2840	421	1550	382	144
9	180	234	593	630	279	1030	329	2080	368	1380	354	150
10	176	221	716	562	288	953	315	1840	346	1240	348	157
11	177	217	846	510	287	869	330	1670	487	1120	332	155
12	179	216	1010	470	281	785	426	1390	1070	1030	332	157
13	178	213	1210	431	278	728	1060	1100	1020	954	327	166
14	179	208	1620	402	273	682	874	888	1090	886	316	207
15	176	203	1140	379	269	630	699	734	1280	823	299	287
16	168	196	881	356	259	572	603	623	2040	773	280	250
17	162	197	721	343	275	546	527	549	4130	727	273	214
18	161	198	610	324	375	518	476	504	14500	690	269	193
19	160	196	536	318	1050	490	445	457	10900	661	270	179
20	159	199	472	309	992	471	425	412	4450	664	267	158
21	163	199	425	302	786	455	388	374	11600	768	263	149
22	169	205	389	295	668	437	365	345	32800	852	250	148
23	168	264	364	287	630	422	364	319	20400	774	235	184
24	171	288	342	279	582	412	429	291	6710	714	225	327
25	173	329	328	270	573	409	360	306	5830	656	222	571
26	169	333	311	262	739	422	334	319	5050	601	213	988
27	171	301	295	266	731	492	318	1430	3700	565	210	705
28	175	271	285	273	694	475	299	4130	5600	537	203	539
29	178	249	276	283	654	505	283	4120	19700	577	194	434
30	195	234	274	283	---	501	272	2160	19600	577	186	362
31	220	---	271	273	---	509	---	1470	---	874	181	---
TOTAL	5522	7481	17895	13666	13154	23029	13315	36013	177980	43473	10044	7994
MEAN	178	249	577	441	454	743	444	1162	5933	1402	324	266
MAX	220	351	1620	1330	1050	2070	1060	4130	32800	5950	718	988
MIN	159	196	223	262	259	409	272	291	346	537	181	144
AC-FT	10950	14840	35490	27110	26090	45680	26410	71430	353000	86230	19920	15860
CF5M	.19	.26	.60	.46	.47	.77	.46	1.				

MEAN	540	924	915	857	1106	1458	1577	1674	1085	505	351	365
MAX	5222	4659	4258	3355	4661	6695	6864	8397	5993	2491	3907	1913
(WY)	1987	1974	1993	1998	1938	1945	1945	1950	1974	1958	1948	1974
MIN	7.05	75.3	77.5	74.0	113	147	151	189	80.1	22.9	10.5	3.15
(WY)	1957	1964	1956	1956	1964	1940	1954	1936	1936	1954	1936	1954

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1936 - 2000	
ANNUAL TOTAL	417214		369566		945	
ANNUAL MEAN	1143		1010		1980	1974
HIGHEST ANNUAL MEAN					193	1954
LOWEST ANNUAL MEAN					90400	May 11 1950
HIGHEST DAILY MEAN	11800	Jul 2	32800	Jun 22	.10	Oct 10 1956
LOWEST DAILY MEAN	159	Oct 20	144	Sep 8	.14	Oct 8 1956
ANNUAL SEVEN-DAY MINIMUM	163	Oct 16	152	Sep 6	^a 150000	May 10 1950
INSTANTANEOUS PEAK FLOW			35100	Jun 22	27.94	May 10 1950
INSTANTANEOUS PEAK STAGE			18.02	Jun 22	684600	
ANNUAL RUNOFF (AC-FT)	827500		733000		.99	
ANNUAL RUNOFF (CFSM)	1.19		1.05		13.39	
ANNUAL RUNOFF (INCHES)	16.18		14.34		1940	
10 PERCENT EXCEEDS	2650		1440		421	
50 PERCENT EXCEEDS	593		387		118	
90 PERCENT EXCEEDS	199		179			

^aFrom rating curve extended above 77,000 ft³/s on basis of slope-area measurement of peak flow.

ARKANSAS RIVER BASIN

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-61, 1975-79, October 1989 to August 1995, July 1996 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE (00028)	AGENCY COL- LECTING SAMPLE (CODE (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUN											
18...	1602	1028	1028	12.20	14800	750	7.7	7.2	155	19.3	20
18...	1603	1028	1028	12.20	14800	750	8.0	7.1	155	19.4	40
18...	1607	1028	1028	12.20	14800	750	8.0	7.1	155	19.4	60
18...	1609	1028	1028	12.20	14800	750	7.9	7.2	155	19.4	80
18...	1611	1028	1028	12.20	14800	750	7.9	7.1	154	19.4	100
18...	1613	1028	1028	12.20	14800	750	7.8	7.2	154	19.4	120
18...	1615	1028	1028	12.20	14800	750	7.8	7.1	154	19.4	140
18...	1616	1028	1028	12.20	14800	750	7.8	7.1	154	19.4	160
18...	1618	1028	1028	12.20	14800	750	7.8	7.1	154	19.4	180
18...	1620	1028	1028	12.20	14800	750	7.8	7.1	154	19.4	200
18...	1622	1028	1028	12.20	14800	750	7.8	7.1	154	19.4	220
18...	1625	1028	1028	12.20	14800	750	7.7	7.1	154	19.4	240
22...	1602	1028	1028	17.77	33900	750	7.7	6.9	113	20.5	30
22...	1603	1028	1028	17.77	33900	750	7.6	6.9	114	20.2	130
22...	1605	1028	1028	17.77	33900	750	7.6	6.9	114	20.2	230
22...	1607	1028	1028	17.77	33900	750	7.6	6.9	115	20.3	330
22...	1609	1028	1028	17.77	33900	750	7.7	6.9	114	20.3	430
22...	1610	1028	1028	17.77	33900	750	7.6	6.9	116	20.3	530
22...	1611	1028	1028	17.77	33900	750	7.6	6.9	115	20.3	630
22...	1612	1028	1028	17.77	33900	750	7.3	6.9	115	20.4	730
OCT											
20...	1050	80020	1028	2.53	162	764	98	9.9	7.7	304	15.3
DEC											
01...	1400	80020	1028	2.65	223	760	115	12.3	8.1	299	17.5
11...	1400	80020	1028	3.96	856	754	96	10.6	8.0	261	10.5
FEB											
15...	1700	80020	1028	2.84	268	753	113	12.2	8.0	300	21.0
APR											
13...	0910	80020	1028	4.47	1150	760	84	8.6	7.8	278	15.0
MAY											
08...	0920	80020	1028	6.33	3010	748	80	7.2	7.3	224	24.0
JUN											
18...	1635	80020	1028	12.20	14800	750	86	7.8	7.2	154	25.0
22...	1630	80020	1028	17.77	33900	750	86	7.6	6.9	114	26.0
JUL											
20...	1200	80020	1028	4.14	677	756	64	5.1	7.7	253	25.0
AUG											
29...	1630	80020	1028	2.78	189	753	137	10.2	8.0	282	36.0
SEP											
26...	1045	80020	1028	4.46	1040	762	91	8.6	7.7	315	12.5

ARKANSAS RIVER BASIN

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07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)
OCT 20...	110	6	40.2	2.07	3.5	.6	13.2	20	103	126	0	15.7
DEC 01...	120	14	44.3	2.17	3.5	.6	14.3	20	105	128	0	17.2
11...	--	--	--	--	--	--	--	--	89	108	0	--
FEB 15...	110	28	42.0	2.08	3.1	.5	12.9	19	85	104	0	15.5
APR 13...	110	16	41.2	2.07	3.5	.5	11.0	17	95	116	0	12.2
MAY 08...	--	--	--	--	--	--	--	--	76	93	0	--
JUN 18...	--	--	--	--	--	--	--	--	57	70	0	--
22...	--	--	--	--	--	--	--	--	40	49	0	--
JUL 20...	100	16	36.9	1.97	3.5	.3	7.2	13	85	103	0	8.2
AUG 29...	110	9	39.7	2.10	4.1	.4	10.6	17	98	120	0	12.5
SEP 26...	--	--	--	--	--	--	--	--	96	117	0	--

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, TOTAL (MG/L AS N) (00605)
OCT 20...	11.8	E.10	<.020	--	--	--	--	1.36	--	<.010	--
DEC 01...	12.8	.19	<.020	--	1.6	--	--	1.39	--	<.010	--
11...	--	.15	<.020	--	2.2	--	--	2.04	--	<.010	--
FEB 15...	13.5	.13	<.020	--	1.9	--	--	1.80	--	<.010	--
APR 13...	12.2	.31	<.020	--	1.7	--	--	1.44	--	<.010	--
MAY 08...	--	.68	<.020	1.25	1.9	--	5.55	1.27	.043	.013	--
JUN 18...	--	1.4	.026	--	2.8	.03	--	1.44	--	<.010	1.4
22...	--	1.7	.021	1.36	3.1	.03	6.01	1.37	.033	.010	1.7
JUL 20...	9.1	.23	<.020	--	2.0	--	--	1.81	--	<.010	--
AUG 29...	11.0	.19	<.020	--	.95	--	--	.768	--	<.010	--
SEP 26...	--	.15	.022	--	1.9	.03	--	1.74	--	<.010	.13

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	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- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)
OCT 20...	.227	.078	.074	.056	1	.24	77.4	177	155	.7	2.00
DEC 01...	.187	.061	.061	E.042	<1	.23	102	169	163	.5	<1.00
11...	.319	.103	.104	.125	--	--	--	--	--	1.9	--
FEB 15...	.233	.113	.076	.091	2	.23	122	169	148	.6	1.00
APR 13...	.350	.138	.114	.149	12	.21	484	156	146	2.5	5.00
MAY 08...	.438	.178	.143	.275	--	--	--	--	--	8.9	--
JUN 18...	.653	.239	.213	.619	--	--	--	--	--	150	--
22...	.874	.331	.285	.801	--	--	--	--	--	230	--
JUL 20...	.270	.097	.088	.120	<10	.19	261	143	126	2.4	2.00
AUG 29...	.221	.084	.072	.094	<10	.22	83.2	163	143	1.9	3.00
SEP 26...	.383	.126	.125	.146	--	--	--	--	--	.8	--

ARKANSAS RIVER BASIN

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 20...	51	49	300	<1.00	<1.00	<1.00	<1.00	<2	17	7.4	100
DEC 01...	<1	K10	K2	<1.00	<1.00	<1.00	<1.00	E2	20	12	99
11...	88	80	93	--	--	--	--	--	30	69	97
FEB 15...	K3	K2	K4	<1.00	<1.00	<1.00	<1.00	2	28	20	89
APR 13...	1800	1100	670	3.00	6.00	<1.00	<1.00	E2	31	96	99
MAY 08...	1600	1700	1900	--	--	--	--	--	118	959	82
JUN 18...	19000	15000	50000	--	--	--	--	--	350	14000	94
22...	12000	10000	30000	--	--	--	--	--	441	40400	93
JUL 20...	360	300	490	3.00	5.00	<1.00	<1.00	4	25	46	88
AUG 29...	38	41	35	3.00	4.00	<1.00	<1.00	6	32	16	95
SEP 26...	210	220	320	--	--	--	--	--	40	112	89

ARKANSAS RIVER BASIN

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07196520 ILLINOIS RIVER NEAR PARK HILL, OK

LOCATION.--Lat 35°51'11", long 94°54'55", in NE 1/4 NE 1/4, sec. 24, T.16 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to unimproved road 0.2 mi upstream from Barron Fork, 2.3 mi southeast of Park Hill, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	DIS- CHARGE, INST. CUBIC FEET (PER SECOND) (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL										
26...	1550	1028	1028	597	756	9.6	7.9	257	26.9	10.0
26...	1551	1028	1028	597	756	9.6	8.0	258	27.1	20.0
26...	1552	1028	1028	597	756	9.7	8.0	258	27.1	30.0
26...	1553	1028	1028	597	756	9.6	8.0	258	27.1	40.0
26...	1554	1028	1028	597	756	9.8	8.0	258	27.1	50.0
26...	1555	1028	1028	597	756	9.8	8.1	259	27.1	60.0
26...	1556	1028	1028	597	756	9.8	8.1	258	27.1	70.0
26...	1557	1028	1028	597	756	9.8	8.1	257	27.1	80.0
26...	1558	1028	1028	597	756	9.8	8.1	258	27.1	90.0
26...	1559	1028	1028	597	756	9.8	8.1	257	27.1	100
26...	1600	1028	1028	597	756	9.9	8.1	257	27.2	110
26...	1601	1028	1028	597	756	9.9	8.1	259	27.2	120
26...	1602	1028	1028	597	756	9.8	8.1	258	27.2	130
26...	1603	1028	1028	597	756	9.8	8.1	258	27.2	140
26...	1604	1028	1028	597	756	9.9	8.1	257	27.2	150
26...	1605	1028	1028	597	756	10.0	8.3	255	28.1	160
AUG										
30...	1620	80020	1028	186	755	145	10.7	8.1	278	36.8
SEP										
19...	1110	80020	1028	180	753	110	9.4	7.8	299	24.4
JUL										
26...	27.1	104	127	0	.19	<.020	1.8	1.64	<.010	.230
AUG										
30...	30.8	93	113	0	.16	<.020	.84	.678	<.010	.227
SEP										
19...	22.2	96	117	0	.16	<.020	.74	.579	<.010	.209
JUL										
26...	.094	.075	.107	1.6	32	40	62	32	52	94
AUG										
30...	.089	.074	.096	2.9	K16	K18	K21	29	15	98
SEP										
19...	.091	.068	.080	.8	38	40	K16	23	11	92

ARKANSAS RIVER BASIN

07196973 PEACHEATER CREEK AT CHRISTIE, OK

LOCATION.--Lat 35°57'17", long 94°41'46", in SW 1/4 NE 1/4 sec.13, T.17 N., R.24 E., Adair County, Hydrologic Unit 11110103, on the left downstream wingwall of bridge on U.S. Highway 62, .4 mi upstream from Baron Fork, 9.1 mi west of Westville, and 19.3 mi east of Tahlequah.

DRAINAGE AREA.--25.0 mi².

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

REVISED RECORDS.--WRD OK-96-1: 1995 (m)

GAGE.--Water-stage recorder. Datum of gage is 801.72 ft above sea level.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1930 reached a stage of about 20.8 ft at present site and datum; information supplied by local resident.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jun 21	0800	2,750	12.46	Jun 28	1515	1,420	9.45

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.16	e1.0	e1.9	e2.3	e2.5	21	13	10	20	186	11	.35
2	e.14	e1.5	e1.8	e2.0	e2.4	24	12	9.6	18	138	10	.34
3	e.08	e1.3	e1.7	17	e2.5	39	12	11	15	111	9.5	.30
4	e.05	e1.0	5.0	18	e2.5	45	11	11	13	92	8.8	.22
5	.03	e.90	4.3	20	e2.7	45	10	12	12	77	8.1	.17
6	e.03	e.80	3.2	22	e2.9	38	9.3	21	10	65	7.6	.16
7	e.01	e.70	2.9	21	e3.2	32	8.5	35	9.1	57	7.3	.13
8	e.00	e.76	2.0	21	e3.2	27	7.5	43	8.1	51	6.9	.10
9	e.00	e.80	13	20	e3.3	24	6.7	33	7.5	43	6.4	.14
10	e.00	e.82	30	19	e3.3	21	6.1	26	7.4	39	6.1	.14
11	e.00	e1.0	26	17	e3.2	20	14	22	8.5	35	5.8	.05
12	e.00	e1.2	36	16	e3.1	17	28	19	8.3	31	5.2	.00
13	e.00	e1.1	34	14	e3.0	15	31	16	7.8	29	4.8	.00
14	e.00	e1.0	32	12	e3.0	14	31	13	9.4	27	4.4	.00
15	e.00	e.90	30	8.9	e2.9	12	28	11	9.1	26	4.0	.00
16	e.00	e.80	27	6.5	e2.9	11	25	9.2	8.9	24	3.8	.00
17	e.00	e.76	25	5.0	e5.8	10	22	e9.0	155	23	3.3	.00
18	e.00	e.72	22	3.9	12	9.6	19	e8.2	202	21	3.0	.00
19	e.00	e.66	20	2.9	e13	8.8	18	e7.6	89	20	3.0	.00
20	e.00	e.64	17	e2.8	e12	7.9	18	e7.0	55	21	2.8	.00
21	e.00	e1.0	14	e2.7	e10	7.1	15	e6.8	962	21	2.4	.00
22	e.00	e1.4	11	e2.6	e9.4	7.0	14	e6.6	342	20	1.8	.00
23	e.00	e2.0	e10	e2.6	e9.0	6.5	13	e6.6	156	18	1.6	.33
24	e.00	e2.5	e8.0	e2.5	e8.8	6.3	11	e6.4	102	16	1.7	4.4
25	.00	e3.0	e7.0	e2.5	11	5.8	10	e6.2	72	15	1.6	2.4
26	e.00	e2.5	e6.0	e2.4	15	6.3	9.2	e8.0	65	14	1.3	1.3
27	e.00	e2.3	e5.0	e2.4	16	7.1	8.6	62	54	14	1.1	.78
28	e.00	e2.2	e4.3	e2.5	18	7.7	7.9	61	632	13	.93	.54
29	e.00	e2.1	e3.7	e2.6	20	9.9	7.4	44	464	16	.79	.29
30	e.00	2.0	e3.0	e2.6	---	11	7.0	33	267	13	.64	.15
31	e.50	---	e2.8	e2.5	---	12	---	25	---	12	.48	---
TOTAL	1.00	39.36	409.6	279.2	206.6	528.0	433.2	599.2	3789.1	1288	136.14	12.29
MEAN	.032	1.31	13.2	9.01	7.12	17.0	14.4	19.3	126	41.5	4.39	.41
MAX	.50	3.0	36	22	20	45	31	62	962	186	11	4.4
MIN	.00	.64	1.7	2.0	2.4	5.8	6.1	6.2	7.4	12	.48	.00
AC-FT	2.0	78	812	554	410	1050	859	1190	7520	2550	270	24

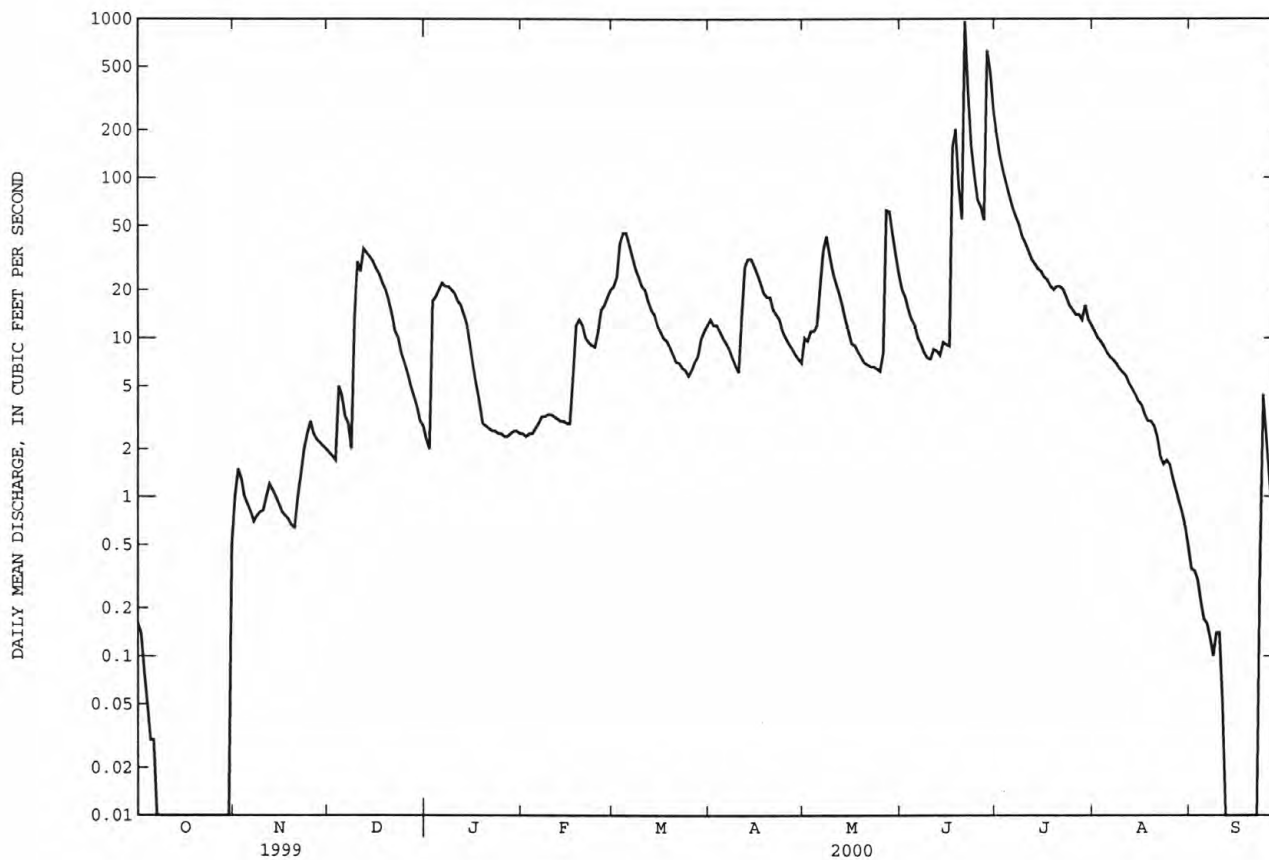
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2000, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	9.39	33.3	34.1	30.6	28.3	40.6	37.2	42.3
MAX	35.1	90.5	103	82.2	63.1	65.4	65.5	105
(WY)	1994	1997	1993	1998	1993	1994	1993	2000
MIN	.032	1.31	4.07	8.10	4.73	4.85	14.4	13.4
(WY)	2000	2000	1996	1997	1996	1996	2000	1997

e Estimated

07196973 PEACHEATER CREEK AT CHRISTIE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1993 - 2000
ANNUAL TOTAL	7876.58	7721.69	
ANNUAL MEAN	21.6	21.1	27.0
HIGHEST ANNUAL MEAN			48.2 1993
LOWEST ANNUAL MEAN			11.1 1996
HIGHEST DAILY MEAN	190 May 5	962 Jun 21	962 Jun 21 2000
LOWEST DAILY MEAN	.00 Sep 2	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 8	.00 at times	.00 Aug 8 1996
INSTANTANEOUS PEAK FLOW		2750 Jun 21	2750 Jun 21 2000
INSTANTANEOUS PEAK STAGE		^a 15.84 Jun 21	15.84 Jun 21 2000
ANNUAL RUNOFF (AC-FT)	15620	15320	19590
10 PERCENT EXCEEDS	57	33	62
50 PERCENT EXCEEDS	11	7.4	12
90 PERCENT EXCEEDS	.18	.03	1.0

^aBackwater from Baron Fork.

ARKANSAS RIVER BASIN

07197000 BARON FORK AT ELDON, OK

LOCATION.--Lat 35°55'16", long 94°50'18", in NE 1/4 SE 1/4 sec.27, T.17 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, on downstream left abutment of bridge on State Highway 51, 0.4 mi southeast of Eldon, 6.0 mi downstream from Tyner Creek, and at mile 8.8.

DRAINAGE AREA.--307 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to current year. Prior to October 1970 published as Barren Fork at Eldon.

REVISED RECORDS.--WDR OK-93-1: 1990 (M), WDR OK-99-1: 1987 (M).

GAGE.--Water-stage recorder. Datum of gage is 701.14 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Dec. 14, 1948, nonrecording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 15, 1945, reached a stage of 23.8 ft, from information provided by local resident.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 27	2230	9,230	13.54	Jun 21	1500	54,700	26.77
Jun 17	1930	10,700	14.30	Jun 28	2200	14,400	15.91

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	51	45	59	64	105	144	120	623	1340	124	47
2	37	53	44	60	63	108	139	200	528	1020	116	47
3	37	50	41	127	64	236	134	228	472	927	110	44
4	36	47	67	371	64	585	128	257	427	723	106	42
5	35	46	160	341	67	543	120	278	378	597	100	39
6	35	45	184	284	71	455	111	274	339	501	95	37
7	35	43	137	259	73	395	103	899	304	438	90	37
8	35	43	104	222	73	359	94	795	279	391	81	37
9	35	43	101	198	73	329	87	637	270	350	76	39
10	36	44	209	177	74	297	81	543	257	312	73	39
11	34	44	193	167	72	265	109	468	353	280	71	38
12	34	44	269	164	72	236	336	399	535	250	70	35
13	33	45	640	147	70	218	347	334	453	224	69	33
14	32	45	421	132	69	198	315	279	422	217	73	32
15	32	44	314	120	67	180	281	236	811	203	71	31
16	32	42	247	110	65	163	254	208	707	190	70	30
17	31	42	202	102	63	151	232	183	4230	177	67	29
18	31	39	169	94	96	143	220	161	3400	166	66	29
19	31	37	145	91	130	134	198	141	1790	155	66	28
20	30	36	123	86	139	126	180	127	1310	153	63	26
21	31	37	109	80	126	120	164	115	22300	164	61	26
22	31	39	98	77	117	114	155	107	7380	165	58	25
23	31	59	90	74	114	108	145	104	2810	157	55	34
24	31	66	83	71	107	104	153	94	2170	144	54	57
25	32	66	77	68	104	105	142	103	2060	143	53	57
26	33	65	73	65	107	118	129	112	1460	137	52	51
27	34	67	68	66	112	125	119	2900	1220	129	50	49
28	34	67	71	68	111	156	109	2760	4440	126	50	47
29	35	62	69	67	110	165	101	1230	4950	142	48	43
30	38	55	65	66	---	164	96	934	2020	145	48	42
31	43	---	61	65	---	153	---	755	---	135	48	---
TOTAL	1052	1466	4679	4078	2537	6658	4926	15981	68698	10201	2234	1150
MEAN	33.9	48.9	151	132	87.5	215	164	516	2290	329	72.1	38.3
MAX	43	67	640	371	139	585	347	2900	22300	1340	124	57
MIN	30	36	41	59	63	104	81	94	257	126	48	25
AC-FT	2090	2910	9280	8090	5030	13210	9770	31700	136300	20230	4430	2280
CFSM	.11	.16	.49	.43	.28	.70	.53	1.68	7.46	1.07	.23	.12
IN.	.13	.18	.57	.49	.31	.81	.60	1.94	8.32	1.24	.27	.14

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
MEAN	177	330	323	310	387	543	582	648	362	152	73.1	121
MAX	2077	1641	1692	1602	1441	1702	2105	2605	2290	903	437	927
(WY)	1987	1997	1988	1998	1951	1973	1957	1957	2000	1958	1992	1970
MIN	1.96	10.4	14.0	14.6	24.6	43.3	81.0	62.5	25.0	8.75	3.80	3.10
(WY)	1957	1964	1964	1964	1964	1967	1954	1977	1977	1954	1954	1956

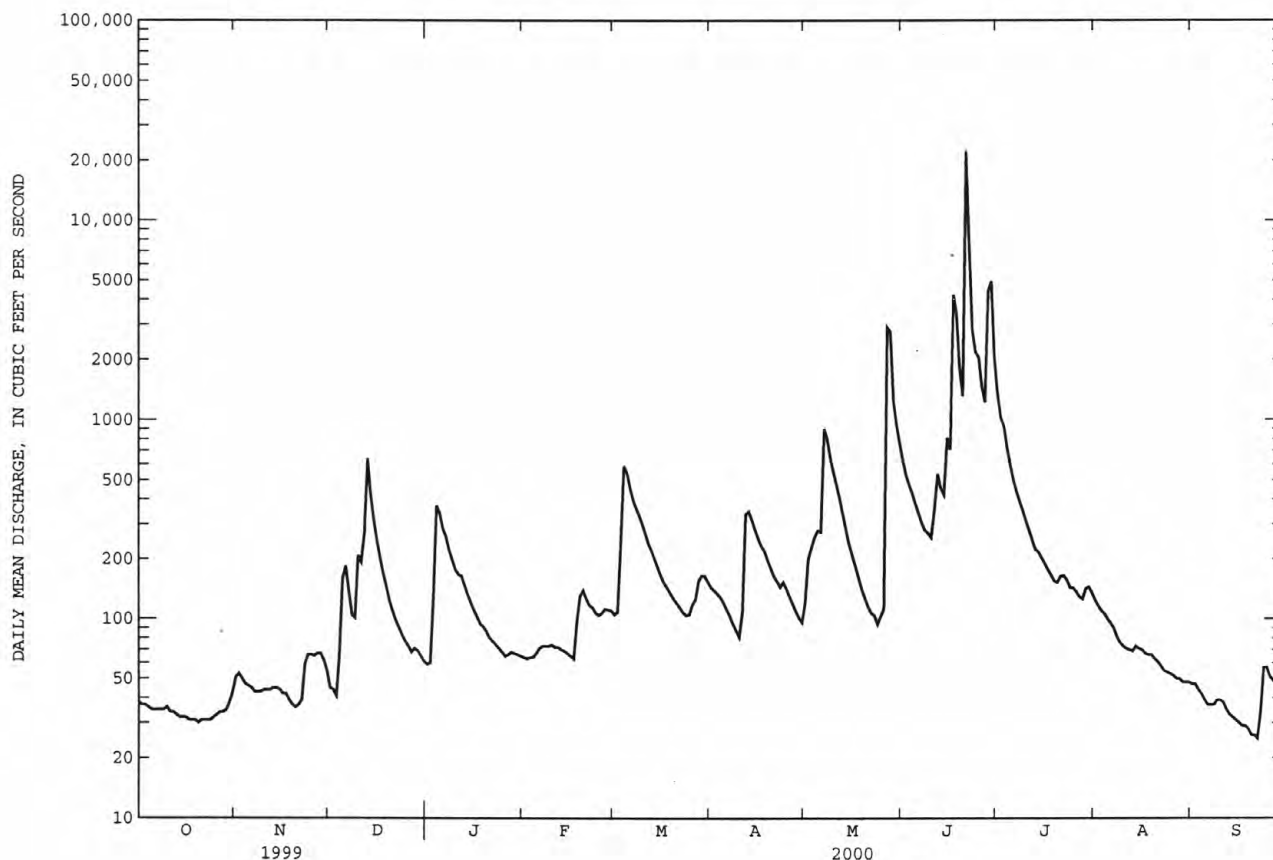
ARKANSAS RIVER BASIN

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07197000 BARON FORK AT ELDON, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	131701		123660		333	
ANNUAL MEAN	361		338		734	
HIGHEST ANNUAL MEAN					55.7	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	5660	May 5	22300	Jun 21	34300	Oct 1 1986
LOWEST DAILY MEAN	24	Sep 3	25	Sep 22	^a 1.8	Oct 7 1956
ANNUAL SEVEN-DAY MINIMUM	26	Aug 29	28	Sep 16	1.8	Oct 21 1956
INSTANTANEOUS PEAK FLOW			54700	Jun 21	54700	Jun 21 2000
INSTANTANEOUS PEAK STAGE			26.77	Jun 21	26.77	Jun 21 2000
ANNUAL RUNOFF (AC-FT)	261200		245300		241500	
ANNUAL RUNOFF (CFSM)	1.18		1.10		1.09	
ANNUAL RUNOFF (INCHES)	15.96		14.98		14.75	
10 PERCENT EXCEEDS	900		509		717	
50 PERCENT EXCEEDS	150		106		124	
90 PERCENT EXCEEDS	34		36		22	

^aAlso occurred Oct. 8, 21-28, 1956.



ARKANSAS RIVER BASIN

07197000 BARON FORK AT ELDON, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1948, 1958-60, July 1991 to July 1995, July 1996 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST- CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
02...	0805	1028	1028	4.40	44	752	8.3	7.6	196	13.2	44
02...	0806	1028	1028	4.40	44	752	8.4	7.6	195	13.3	39
02...	0807	1028	1028	4.40	44	752	8.4	7.6	195	13.3	34
02...	0808	1028	1028	4.40	44	752	8.5	7.6	195	13.3	29
02...	0809	1028	1028	4.40	44	752	8.4	7.6	195	13.3	24
02...	0810	1028	1028	4.40	44	752	8.4	7.6	195	13.3	19
02...	0812	1028	1028	4.40	44	752	8.4	7.6	195	13.3	14
02...	0813	1028	1028	4.40	44	752	8.4	7.6	195	13.3	9.0
02...	0815	1028	1028	4.40	44	752	8.5	7.6	195	13.3	4.0
JUN											
17...	1517	1028	1028	12.57	7520	750	9.5	7.0	122	18.9	15
17...	1520	1028	1028	12.57	7520	750	9.5	7.1	122	18.9	45
17...	1522	1028	1028	12.57	7520	750	9.5	7.1	122	18.9	75
17...	1523	1028	1028	12.57	7520	750	9.6	7.2	122	18.9	105
17...	1525	1028	1028	12.57	7520	750	9.6	7.2	122	18.9	135
17...	1526	1028	1028	12.57	7520	750	9.6	7.2	122	18.9	165
17...	1528	1028	1028	12.57	7520	750	9.6	7.2	122	19.0	195
17...	1529	1028	1028	12.57	7520	750	9.6	7.2	122	19.0	225
17...	1530	1028	1028	12.57	7520	750	9.5	7.2	121	19.0	255
17...	1531	1028	1028	12.57	7520	750	9.5	7.2	121	19.0	285
17...	1532	1028	1028	12.57	7520	750	9.4	7.1	120	18.8	315
17...	1533	1028	1028	12.57	7520	750	9.4	7.1	120	18.9	345
21...	1240	1028	1028	25.59	49100	755	8.1	6.4	80	19.3	40
21...	1242	1028	1028	25.59	49100	755	8.2	6.5	80	19.3	70
21...	1243	1028	1028	25.59	49100	755	8.2	6.5	80	19.3	120
21...	1245	1028	1028	25.59	49100	755	8.2	6.7	80	19.3	170
21...	1247	1028	1028	25.59	49100	755	8.2	6.7	80	19.2	220
21...	1249	1028	1028	25.59	49100	755	8.2	6.7	80	19.7	270
21...	1250	1028	1028	25.59	49100	755	8.2	6.8	80	19.1	320
21...	1252	1028	1028	25.59	49100	755	8.1	6.8	78	19.1	370
21...	1253	1028	1028	25.59	49100	755	8.1	6.8	78	19.1	420
21...	1254	1028	1028	25.59	49100	755	8.1	6.7	75	19.0	470
21...	1255	1028	1028	25.59	49100	755	8.1	6.7	78	19.1	520
OCT											
20...	0845	80020	1028	4.24	30	764	88	8.8	7.2	202	15.8
DEC											
02...	0750	80020	1028	4.40	44	752	81	8.4	7.6	195	13.3
10...	1115	80020	1028	5.15	225	761	107	11.4	7.2	192	12.1
FEB											
16...	0730	80020	1028	4.50	66	760	82	9.4	7.3	207	9.1
APR											
13...	1050	80020	1028	5.51	350	760	106	10.9	7.8	210	14.1
MAY											
07...	1645	80020	1028	6.78	985	750	103	9.3	7.4	199	19.4
JUN											
17...	1540	80020	1028	12.57	7520	750	105	9.6	7.2	122	19.0
21...	1345	80020	1028	25.59	49100	755	90	8.2	6.7	80	19.3
28...	1630	80020	1028	11.18	5350	749	105	9.3	7.1	115	20.6
JUL											
20...	0930	80020	1028	5.03	150	757	70	5.8	7.4	192	24.5
AUG											
30...	1100	80020	1028	4.55	50	753	90	7.3	7.3	202	25.5

ARKANSAS RIVER BASIN

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07197000 BARON FORK AT ELDON, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)
OCT 20...	87	6	32.0	1.65	2.0	.1	3.1	7	80	98	0	6.0
DEC 02...	93	13	34.2	1.77	1.8	.2	3.5	7	80	97	0	6.5
10...	--	--	--	--	--	--	--	--	74	91	0	--
FEB 16...	93	23	34.3	1.75	1.7	.1	3.2	7	70	85	0	6.5
APR 13...	98	21	36.2	1.80	1.9	.1	3.2	7	77	94	0	5.2
MAY 07...	--	--	--	--	--	--	--	--	82	100	0	--
JUN 17...	--	--	--	--	--	--	--	--	46	56	0	--
21...	--	--	--	--	--	--	--	--	29	36	0	--
28...	--	--	--	--	--	--	--	--	42	51	0	--
JUL 20...	83	14	30.8	1.58	2.3	.1	2.8	7	70	85	0	4.8
AUG 30...	90	12	33.2	1.65	2.4	.1	3.0	7	77	94	0	5.3

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, 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, NITRO- GEN, TOTAL (MG/L AS N) (00605)
OCT 20...	4.8	E.10	--	--	--	--	--	.720	--	<.010	--
DEC 02...	4.9	.13	.027	--	.87	.03	--	.743	--	<.010	.10
10...	--	.21	.020	--	1.5	.03	--	1.27	--	<.010	.19
FEB 16...	7.6	E.10	<.020	--	--	--	--	1.48	--	<.010	--
APR 13...	8.0	.12	<.020	--	1.5	--	--	1.40	--	<.010	--
MAY 07...	--	.31	<.020	--	1.4	--	--	1.08	--	<.010	--
JUN 17...	--	3.0	.069	1.07	4.0	.09	4.72	1.08	.036	.011	2.9
21...	--	4.4	.048	.771	5.2	.06	3.41	.781	.033	.010	4.4
28...	--	3.1	<.020	--	4.5	--	--	1.32	--	<.010	--
JUL 20...	5.3	.16	<.020	--	1.8	--	--	1.67	--	<.010	--
AUG 30...	5.0	.12	<.020	--	1.1	--	--	1.02	--	<.010	--

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	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- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)
OCT 20...	.049	E.030	.016	<.050	<1	.15	9.15	113	103	.5	2.00
DEC 02...	.132	E.039	.043	<.050	1	.14	12.3	--	104	.7	<1.00
10...	.071	<.050	.023	<.050	--	--	--	--	--	1.4	--
FEB 16...	.049	E.044	.016	<.050	<1	.16	20.5	115	103	.5	1.00
APR 13...	.040	<.050	.013	<.050	4	.16	111	117	109	.5	2.00
MAY 07...	.098	E.039	.032	.076	--	--	--	--	--	3.8	--
JUN 17...	.567	.210	.185	1.12	--	--	--	--	--	230	--
21...	.739	.270	.241	1.65	--	--	--	--	--	430	--
28...	.304	.116	.099	.979	--	--	--	--	--	310	--
JUL 20...	.067	<.050	.022	E.038	<10	.16	46.6	115	97	1.5	<1.00
AUG 30...	.046	<.050	.015	<.050	<10	.16	15.9	118	101	2.2	2.00

ARKANSAS RIVER BASIN

07197000 BARON FORK AT ELDON, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON, UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON, UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	'SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 20...	57	78	98	<1.00	<1.00	<1.00	<1.00	<2	13	1.1	91
DEC 02...	230	K440	140	<1.00	<1.00	<1.00	<1.00	4	17	2.0	94
10...	230	380	990	--	--	--	--	--	17	10	97
FEB 16...	28	30	33	<1.00	1.00	<1.00	<1.00	E2	20	3.6	87
APR 13...	270	200	K61	<1.00	1.00	<1.00	<1.00	<2	23	22	95
MAY 07...	2000	1400	2600	--	--	--	--	--	37	98	89
JUN 17...	29000	23000	70000	--	--	--	--	--	1080	21800	81
21...	50000	41000	K140000	--	--	--	--	--	1570	209000	92
28...	19000	23000	K140000	--	--	--	--	--	1760	25400	64
JUL 20...	250	230	600	2.00	2.00	<1.00	<1.00	8	18	7.3	100
AUG 30...	81	110	43	<1.00	<1.00	<1.00	<1.00	13	19	2.6	100

ARKANSAS RIVER BASIN

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07197080 BARON FORK AT WELLING, OK

LOCATION.--Lat 35°52'08", long 94°53'52", in NE 1/4 NE 1/4, sec. 18, T.16 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, at county road bridge 0.3 mi south of Welling, Ok.

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

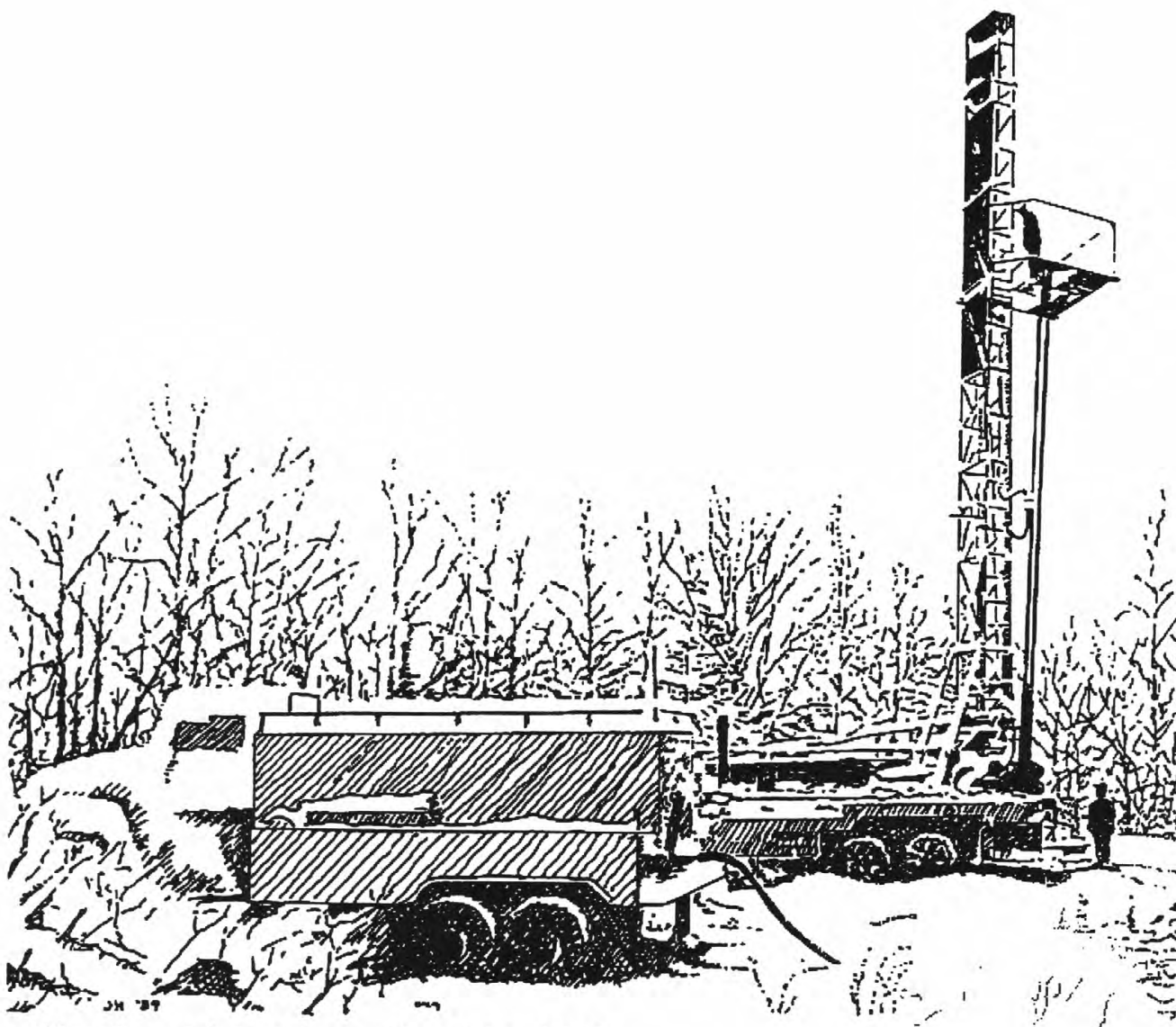
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
01...	1205	1028	1028	7.20	49	760	12.0	7.9	190	12.2	71
01...	1207	1028	1028	7.20	49	760	12.1	8.0	190	12.2	66
01...	1209	1028	1028	7.20	49	760	12.1	8.0	190	12.2	61
01...	1211	1028	1028	7.20	49	760	12.2	8.0	190	12.2	56
01...	1212	1028	1028	7.20	49	760	12.2	8.0	190	12.2	51
01...	1214	1028	1028	7.20	49	760	12.0	8.0	190	12.2	46
01...	1216	1028	1028	7.20	49	760	12.1	8.0	190	12.2	41
01...	1218	1028	1028	7.20	49	760	12.1	8.0	190	12.2	36
01...	1220	1028	1028	7.20	49	760	12.1	8.0	190	12.1	31
01...	1221	1028	1028	7.20	49	760	12.0	8.0	190	12.1	26
01...	1223	1028	1028	7.20	49	760	12.2	8.0	190	12.1	21
01...	1225	1028	1028	7.20	49	760	12.2	8.0	190	12.1	16
01...	1227	1028	1028	7.20	49	760	12.4	8.0	190	12.1	11
01...	1229	1028	1028	7.20	49	760	11.9	8.0	188	12.1	6.0
APR											
18...	1310	1028	1028	7.46	202	753	13.9	8.3	200	18.0	115
18...	1311	1028	1028	7.46	202	753	13.8	8.3	200	18.0	100
18...	1312	1028	1028	7.46	202	753	13.8	8.3	200	17.9	85
18...	1313	1028	1028	7.46	202	753	13.9	8.3	200	17.9	70
18...	1314	1028	1028	7.46	202	753	13.9	8.3	200	17.9	55
18...	1315	1028	1028	7.46	202	753	13.9	8.3	200	17.9	40
18...	1316	1028	1028	7.46	202	753	13.9	8.3	200	17.9	25
18...	1317	1028	1028	7.46	202	753	13.8	8.3	200	18.0	10
JUL											
26...	1449	1028	1028	7.57	167	756	9.1	7.5	189	25.6	91
26...	1450	1028	1028	7.57	167	756	8.9	7.4	188	25.6	81
26...	1451	1028	1028	7.57	167	756	9.0	7.4	187	25.6	71
26...	1452	1028	1028	7.57	167	756	9.0	7.4	187	25.6	61
26...	1453	1028	1028	7.57	167	756	9.0	7.4	187	25.6	51
26...	1454	1028	1028	7.57	167	756	9.0	7.4	187	25.6	41
26...	1455	1028	1028	7.57	167	756	9.0	7.5	187	25.7	31
26...	1456	1028	1028	7.57	167	756	8.9	7.5	187	25.8	21
26...	1457	1028	1028	7.57	167	756	8.8	7.5	187	25.9	11
26...	1458	1028	1028	7.57	167	756	8.8	7.5	187	26.0	6.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
OCT											
19...	1640	80020	1028	6.90	32	763	143	13.4	7.9	190	18.5
DEC											
01...	1155	80020	1028	7.20	49	760	113	12.1	8.0	190	15.5
FEB											
15...	1410	80020	1028	7.23	70	753	115	12.3	7.9	197	20.5
APR											
18...	1320	80020	1028	7.46	202	753	148	13.9	8.3	200	21.0
JUL											
26...	1505	80020	1028	7.57	167	756	111	9.0	7.4	187	30.0
AUG											
30...	1755	80020	1028	6.98	34	755	120	9.2	7.6	196	31.0

ARKANSAS RIVER BASIN

07197080 BARON FORK AT WELLING, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TEMPER- ATURE (DEG C) (00010)	ALKA- LITY 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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)
OCT 19...	18.7	77	94	0	E.10	<.020	--	.478	<.010	.049
DEC 01...	12.1	80	98	0	.28	<.020	.88	.598	<.010	.071
FEB 15...	11.9	68	83	0	<.10	<.020	--	1.37	<.010	.040
APR 18...	17.9	74	90	0	.16	<.020	1.3	1.14	<.010	.037
JUL 26...	25.6	76	92	0	E.10	<.020	--	1.36	<.010	.058
AUG 30...	28.1	77	94	0	E.10	<.020	--	.778	<.010	.055
DATE	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	TUR- BID- ITY (NTU) (00076)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCEI KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. & FINER THAN .062 MM (70331)
OCT 19...	E.034	.016	E.034	.5	21	23	47	15	1.3	98
DEC 01...	<.050	.023	<.050	.5	K3	K6	K13	15	2.0	91
FEB 15...	E.049	.013	<.050	.4	K11	K9	K6	16	3.0	87
APR 18...	<.050	.012	<.050	.4	K3	K2	K7	--	--	--
JUL 26...	E.039	.019	<.050	1.2	K11	29	K41	18	8.1	96
AUG 30...	<.050	.018	<.050	.6	46	44	45	19	1.7	100



Cleaning and plugging wells, winter 1984

ARKANSAS RIVER BASIN

07197360 CANEY CREEK NEAR BARBER, OK

LOCATION.--Lat 35°47'05", long 94°51'21", in SE 1/4 SW 1/4 sec.10, T.15 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, on left downstream bank of county road bridge, 0.9 mi below Negro Jake Hollow, 1.9 mi northeast of Barber, and 0.5 mi upstream from Tenkiller Ferry Lake.

DRAINAGE AREA.--89.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1997 to September 1998.

GAGE.--Water-stage recorder. Datum of gage is 632.09 ft above sea level from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	17	22	20	52	38	62	84	e700	e28	e16
2	12	17	16	22	20	59	38	46	77	e560	e27	e15
3	12	16	22	63	21	141	37	46	81	e450	e26	e15
4	12	16	99	45	21	163	36	51	75	e370	e25	e15
5	11	18	57	41	21	138	35	49	65	e320	e24	e14
6	11	18	38	47	22	119	34	166	57	e270	e24	e14
7	11	18	33	47	22	104	33	248	51	e210	e24	e13
8	11	17	35	46	22	97	31	179	46	e180	e23	e13
9	11	17	98	44	22	87	30	142	43	e155	e23	e12
10	12	16	83	41	22	80	30	116	42	e138	e23	e12
11	11	16	56	39	22	74	35	94	62	e120	e22	e11
12	11	16	135	37	22	67	34	80	56	e110	e22	e11
13	11	16	126	34	21	62	34	69	55	e96	e22	e10
14	11	16	94	32	21	57	34	61	94	e82	e22	e10
15	11	15	75	30	21	54	35	55	112	e70	e21	e9.5
16	11	15	65	29	20	51	37	50	95	e60	e21	e9.0
17	11	15	57	28	24	50	36	46	1890	e52	e21	e8.5
18	11	15	52	27	27	47	35	42	e1040	e48	e21	e8.0
19	11	15	48	26	28	45	34	39	500	e42	e20	e7.5
20	11	15	44	25	29	43	36	36	e313	e36	e20	e7.0
21	12	15	39	24	29	41	33	33	3550	e40	e20	e6.5
22	12	15	36	23	30	40	32	31	e1450	e35	e19	e6.0
23	11	34	33	23	36	39	34	29	e600	e34	e19	e20
24	12	21	31	22	36	38	34	28	e220	32	e19	e35
25	12	18	29	21	37	37	31	37	e250	e30	e18	e25
26	12	17	27	21	61	36	30	33	e230	e29	e18	e21
27	12	18	26	22	70	36	32	457	e190	e28	e17	e19
28	12	18	25	22	65	34	31	273	e2000	e33	e17	e18
29	12	18	25	21	59	37	30	168	e1200	e31	e16	e16
30	14	17	24	20	---	39	29	125	e900	e29	e16	e15
31	17	---	23	20	---	38	---	98	---	e28	e16	---
TOTAL	363	518	1568	964	871	2005	1008	2989	15428	4418	654	412.0
MEAN	11.7	17.3	50.6	31.1	30.0	64.7	33.6	96.4	514	143	21.1	13.7
MAX	17	34	135	63	70	163	38	457	3550	700	28	35
MIN	11	15	16	20	20	34	29	28	42	28	16	6.0
AC-FT	720	1030	3110	1910	1730	3980	2000	5930	30600	8760	1300	817

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	MEAN	56.9	39.4	83.1	204	58.7	192	116	108	210	66.7	17.5	16.0
MAX	129	50.9	106	537	83.1	316	202	172	514	143	21.1	17.7	
(WY)	1999	1999	1999	1998	1999	1998	1999	1999	2000	2000	2000	1999	
MIN	11.7	17.3	50.6	31.1	30.0	64.7	33.6	56.7	33.8	16.0	12.1	13.7	
(WY)	2000	2000	2000	2000	2000	2000	2000	1998	1998	1998	1998	2000	

e Estimated

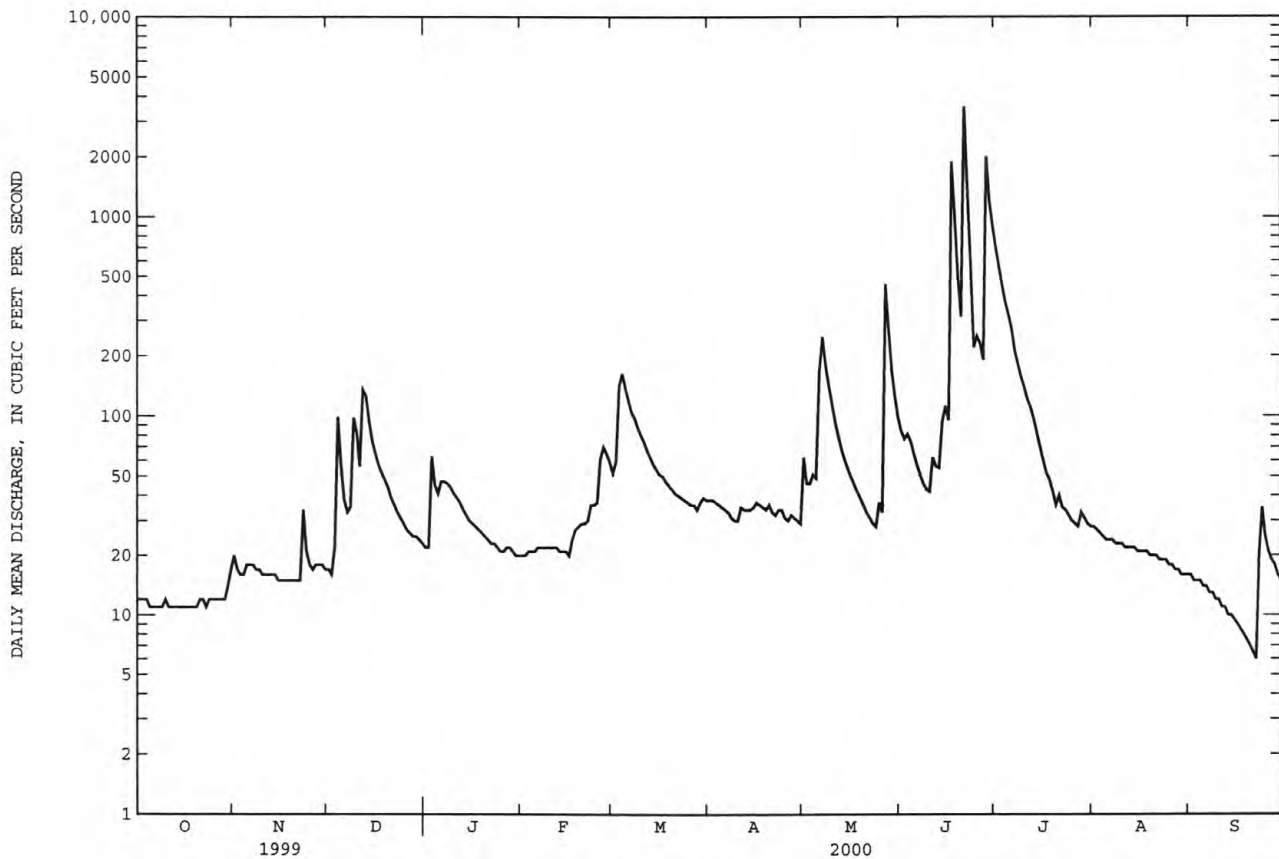
ARKANSAS RIVER BASIN

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07197360 CANEY CREEK NEAR BARBER, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR			FOR 2000 WATER YEAR			WATER YEARS 1997 - 2000		
ANNUAL TOTAL	28437			31198.0			97.7		
ANNUAL MEAN	77.9			85.2			112		
HIGHEST ANNUAL MEAN							85.2		
LOWEST ANNUAL MEAN							112		
HIGHEST DAILY MEAN	938	Mar	13	3550	Jun	21	3600	Jan	4 1998
LOWEST DAILY MEAN	11	Oct	5	6.0	Sep	22	3.5	Sep	10 1998
ANNUAL SEVEN-DAY MINIMUM	11	Oct	11	7.5	Sep	16	3.7	Sep	6 1998
INSTANTANEOUS PEAK FLOW				9720	Jun	21	9720	Jun	21 2000
INSTANTANEOUS PEAK STAGE				20.74	Jun	30	^a 20.74	Jun	30 2000
ANNUAL RUNOFF (AC-FT)	56400			61880			70750		
10 PERCENT EXCEEDS	182			125			180		
50 PERCENT EXCEEDS	44			30			41		
90 PERCENT EXCEEDS	13			12			14		

^aOccurred during backwater from Tenkiller Ferry Lake.



ARKANSAS RIVER BASIN

07197360 CANEY CREEK NEAR BARBER, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1997 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
DEC											
01...	1042	1028	1028	5.94	16	762	10.6	7.8	253	12.7	21.0
01...	1044	1028	1028	5.94	16	762	10.9	7.8	253	12.6	18.0
01...	1046	1028	1028	5.94	16	762	11.0	7.8	253	12.6	15.0
01...	1048	1028	1028	5.94	16	762	10.7	7.8	253	12.7	12.0
01...	1050	1028	1028	5.94	16	762	11.0	7.8	253	12.6	9.0
01...	1052	1028	1028	5.94	16	762	11.2	7.8	253	12.6	6.0
01...	1055	1028	1028	5.94	16	762	10.9	7.8	254	12.3	3.0

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
OCT									
19...	1420	80020	1028	5.90	11	763	125	11.6	247
NOV									
03...	1015	80020	1028	5.95	16	762	98	10.0	246
DEC									
01...	1035	80020	1028	5.94	16	762	103	11.0	253
JAN									
20...	1115	80020	1028	6.03	24	766	131	15.4	249
FEB									
15...	1200	80020	1028	5.99	21	754	136	12.5	254
MAR									
21...	1225	80020	1028	6.15	40	757	117	12.2	247
APR									
18...	1620	80020	1028	6.10	34	753	131	12.0	239
MAY									
10...	1115	80020	1028	6.57	118	754	105	9.9	251

DATE	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	ALKA- LINIT 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)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00600)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT										
19...	19.0	19.1	95	116	0	E.10	<.020	--	--	.704
NOV										
03...	5.5	14.8	91	111	0	E.10	<.020	--	--	.803
DEC										
01...	14.0	12.6	113	138	0	.15	.023	1.0	.03	.847
JAN										
20...	-.5	8.6	95	116	0	E.10	<.020	--	--	1.56
FEB										
15...	10.8	19.0	95	116	0	E.10	.024	--	.03	1.10
MAR										
21...	15.0	13.0	103	126	0	.16	.020	1.3	.03	1.19
APR										
18...	29.0	19.0	93	113	0	.15	.021	.77	.03	.621
MAY										
10...	20.0	17.7	107	131	0	.35	<.020	1.2	--	.868

ARKANSAS RIVER BASIN

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07197360 CANEY CREEK NEAR BARBER, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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 ORTHO, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 19...	<.010	--	.104	E.043	.034	<.050	120	88	140
NOV 03...	<.010	--	.071	E.041	.023	E.035	15	20	28
DEC 01...	<.010	.13	.126	<.050	.041	.054	K5	40	20
JAN 20...	<.010	--	.080	E.045	.026	E.042	K11	K18	K19
FEB 15...	<.010	--	.049	<.050	.016	<.050	K1	<1	K3
MAR 21...	<.010	.14	.074	<.050	.024	E.031	K7	K12	K8
APR 18...	<.010	.13	.074	<.050	.024	E.039	K6	K3	K17
MAY 10...	<.010	--	.098	E.038	.032	.051	55	58	110

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OK

LOCATION.--Lat 35°34'23", long 95°04'07", in NE 1/4 SW 1/4 sec.27, T.13 N., R.21 E., Sequoyah County, Hydrologic Unit 11110103, on right bank 4.2 mi downstream from Tenkiller Ferry Dam, 4.5 mi northeast of Gore, and at mile 8.5.

DRAINAGE AREA.--1,626 mi².

PERIOD OF RECORD.--March 1924 to April 1926, April 1939 to current year. Monthly discharge only for some periods, published in WSP 1311.

GAGE.--Water-stage recorder. Datum of gage is 468.00 ft above sea level. See WSP 1921 for history of changes prior to Feb. 19, 1952. Feb. 19, 1952 to Aug. 15, 1989, gage at same site and datum 5.00 ft higher.

REMARKS.--Records fair. Except for 16 mi² intervening area, flow completely regulated since July 1952 by Tenkiller Ferry Lake (station 07197500). U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	25	930	28	1910	32	40	929	2890	13200	1360	1620
2	28	873	669	20	1220	288	31	923	2950	13200	1010	1680
3	28	2670	27	343	865	249	686	1160	3010	13000	1310	1940
4	28	1250	194	614	1030	194	1330	931	2780	13000	1000	1740
5	28	28	23	1300	528	183	1650	1290	1070	12900	36	1750
6	28	180	355	968	347	1260	1780	67	1110	12700	29	1210
7	28	26	725	678	893	2420	1150	54	2650	12600	1490	1190
8	28	22	194	27	869	2480	800	1580	2990	12600	1670	822
9	28	22	287	23	537	1780	810	1270	1690	12500	1700	95
10	28	93	51	278	963	1880	1020	1720	43	12500	1820	36
11	813	96	21	784	858	1230	776	1890	172	12500	2050	2270
12	919	98	26	1030	34	971	968	1760	2040	10400	1200	1780
13	2450	24	408	363	27	1610	383	1730	1710	7540	1010	2380
14	1780	23	297	862	1050	1950	533	1720	2260	5920	1980	2000
15	2590	95	234	31	317	1330	43	1460	2500	4900	2210	1050
16	51	24	24	26	604	1740	31	1810	3030	4880	1690	33
17	28	186	20	344	599	1130	1350	1540	4160	4850	1990	26
18	1690	448	20	690	756	37	2600	1580	4170	4870	1150	623
19	1010	39	19	695	34	30	1190	1420	5190	4220	428	1130
20	1270	23	364	779	632	936	47	1590	6130	3830	31	716
21	1540	22	589	950	531	1050	812	1730	4870	3200	1180	540
22	559	22	262	31	303	704	110	1570	5210	1180	1740	29
23	32	125	701	26	140	1210	31	1480	12300	1070	2170	25
24	26	473	358	671	602	1010	539	1450	13800	1290	1760	26
25	1710	279	21	564	449	38	735	1520	13600	1210	1790	24
26	635	558	20	672	35	30	804	1580	12700	978	1130	48
27	1010	22	515	760	26	780	930	2050	12800	1020	674	43
28	385	21	93	930	384	641	642	1500	13600	986	1180	e49
29	31	237	161	30	279	708	38	1400	12900	38	1510	e336
30	27	1080	142	27	---	637	30	1990	13300	29	1200	e312
31	26	---	21	1340	---	1120	---	2820	---	1140	1530	---
TOTAL	18863	9084	7771	15884	16822	29658	21889	45514	167625	204251	41028	25523
MEAN	608	303	251	512	580	957	730	1468	5588	6589	1323	851
MAX	2590	2670	930	1340	1910	2480	2600	2820	13800	13200	2210	2380
MIN	26	21	19	20	26	30	30	54	43	29	29	24
AC-FT	37410	18020	15410	31510	33370	58830	43420	90280	332500	405100	81380	50620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2000, BY WATER YEAR (WY)

MEAN	803	1265	1706	1679	1659	2038	2666	2302	1878	1426	872	658
MAX	8165	4538	9652	6204	5740	5323	8340	10940	7177	8046	2358	2174
(WY)	1987	1992	1974	1998	1969	1994	1990	1990	1957	1957	1961	1993
MIN	74.4	56.0	55.5	27.7	57.1	60.9	70.0	105	141	84.9	81.4	80.7
(WY)	1981	1984	1981	1965	1981	1981	1980	1981	1963	1988	1963	1963

e Estimated

ARKANSAS RIVER BASIN

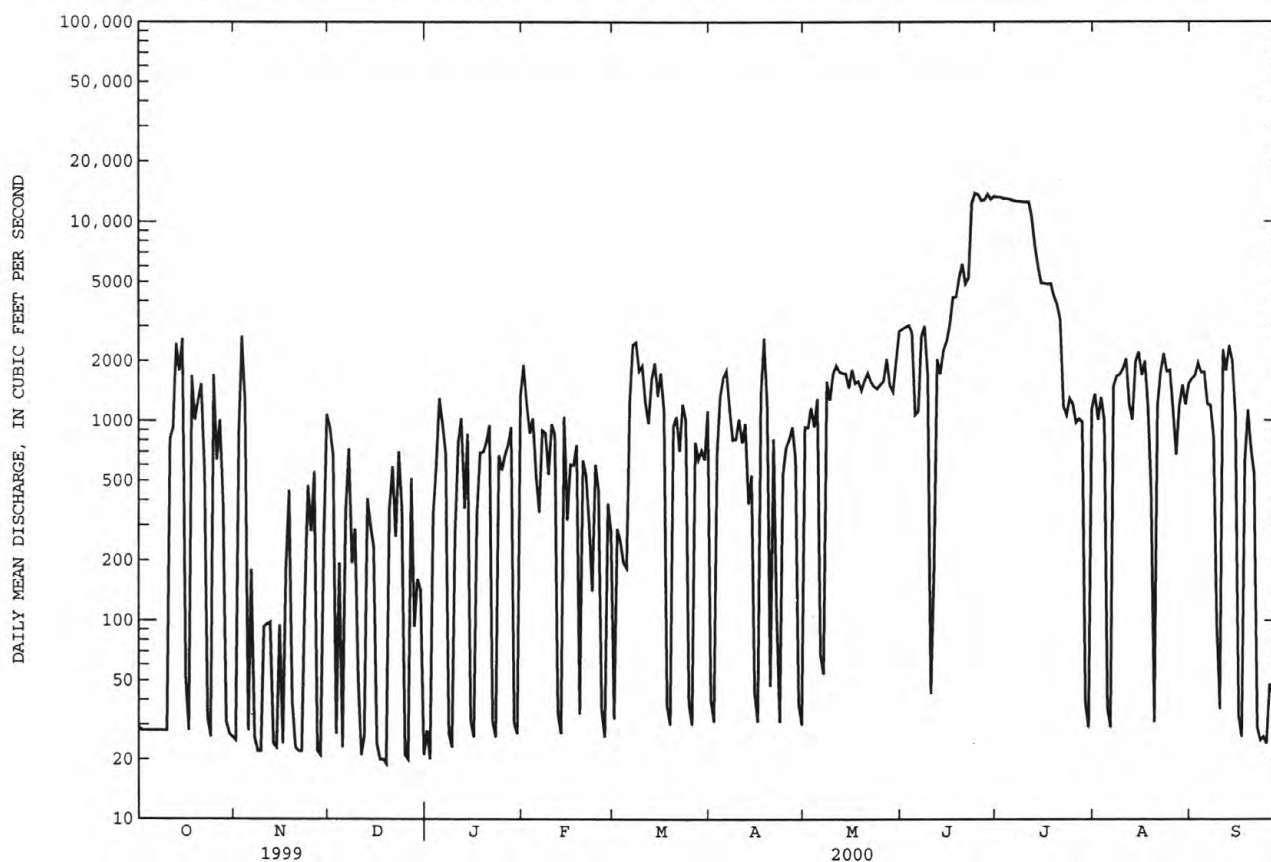
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07198000 ILLINOIS RIVER NEAR GORE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1954 - 2000	
ANNUAL TOTAL	705417		603912		1578	
ANNUAL MEAN	1933		1650		3199	
HIGHEST ANNUAL MEAN					280	
LOWEST ANNUAL MEAN					15800	
HIGHEST DAILY MEAN	10400	May 29	13800	Jun 24	2.1	May 6 1957
LOWEST DAILY MEAN	19	Dec 19	19	Dec 19	3.5	Sep 16 1959
ANNUAL SEVEN-DAY MINIMUM	28	Oct 2	28	Oct 2	^a 18100	Feb 2 1965
INSTANTANEOUS PEAK FLOW			14900	Jun 28	^b 18.70	Jun 9 1957
INSTANTANEOUS PEAK STAGE			17.67	Jun 28		
ANNUAL RUNOFF (AC-FT)	1399000		1198000		1143000	
10 PERCENT EXCEEDS	4890		3020		3750	
50 PERCENT EXCEEDS	1200		840		940	
90 PERCENT EXCEEDS	28		27		77	

^aMaximum discharge, 180,000 ft³/s, May 11, 1950, from rating curve extended above 42,000 ft³/s by velocity area.

^bMaximum gage height, 34.6 ft, May 11, 1950, from floodmark, present site and datum.



ARKANSAS RIVER BASIN

07228500 CANADIAN RIVER AT BRIDGEPORT, OK

LOCATION.--Lat 35°32'37", long 98°19'03", SE 1/4 NW 1/4 sec.1, T.12 N., R.11 W., Caddo County, Hydrologic Unit 11090202, on downstream side of pier near center of bridge on U.S. Highway 281, 3.3 mi east of Bridgeport, 1.6 mi downstream from Lump-mouth Creek, and at mile 263.3.

DRAINAGE AREA.--25,276 mi², of which 4,801 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1944 to September 1964; October 1969 to current year.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,360.00 ft above sea level (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1947, at site 3.8 mi upstream at datum 24.25 ft higher. Oct. 1, 1947 to Sept. 30, 1948, nonrecording gage and Oct. 1, 1948, to September 1964, Oct. 1, 1969, to Dec. 17, 1980, at site 4.0 mi upstream and at datum 24.25 ft higher.

REMARKS.--Records poor. Flow regulated since October 1964 by Lake Meredith (station 07227900) located in Texas. U.S. Geological Survey satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in May 1914 reached a stage of about 19.4 ft, a higher stage probably occurred during flood in October 1904.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	81	e66	81	203	183	1500	907	324	805	e38	e10
2	27	54	62	82	209	202	1000	603	e268	796	e33	e10
3	26	43	76	83	208	774	e860	e420	e269	566	e28	e10
4	25	38	411	84	223	727	e670	e270	e270	437	e25	e10
5	24	35	292	89	223	529	e540	e240	283	e350	e24	e10
6	24	36	256	90	223	381	492	e220	426	e260	e23	e9.9
7	23	e36	191	97	211	270	422	e210	381	e210	e22	e9.8
8	25	e35	166	101	208	396	378	e208	336	e190	e21	e9.7
9	27	e35	894	108	211	377	363	444	373	e170	20	e9.6
10	26	e34	386	110	204	313	352	e330	333	e155	e20	e9.5
11	26	e33	134	111	201	295	335	e280	301	e140	e20	11
12	26	e32	101	123	199	279	330	e250	256	e131	e19	e10
13	e27	e32	103	128	206	263	336	e220	251	e125	e18	e9.6
14	e26	e31	102	130	206	234	333	e200	304	e118	e17	e9.5
15	e27	e31	95	130	203	257	335	e185	875	e110	e16	e9.2
16	e27	e30	86	135	208	797	570	e176	628	e105	e15	e9.0
17	e26	e30	83	132	225	722	495	e163	835	e98	e14	e8.8
18	e27	e29	80	147	274	509	411	153	668	94	e13	e8.8
19	e26	e29	79	154	227	437	362	e149	596	82	e13	e8.7
20	27	e28	81	154	210	390	336	e143	448	74	e13	8.6
21	e26	e28	79	155	206	345	337	e138	380	82	e13	e8.6
22	e25	52	77	158	225	331	313	e132	396	117	e12	e8.6
23	e25	214	76	155	341	11200	309	e128	449	215	e12	e8.6
24	e24	e180	78	151	319	16200	290	e123	429	207	e12	e20
25	e24	e97	77	153	570	2980	279	e120	849	148	e12	e18
26	e23	e85	77	160	601	1630	279	495	900	113	e11	e16
27	e23	e80	76	176	346	e900	309	3120	771	95	e11	e15
28	e23	e77	77	187	273	e800	454	1050	1540	82	e11	e14
29	36	e74	80	188	214	e710	414	e575	1040	107	11	e14
30	262	72	80	186	---	e610	663	e400	716	112	e11	e14
31	139	---	80	192	---	e580	---	e333	---	e50	e11	---
TOTAL	1151	1691	4601	4130	7377	44621	14067	12385	15895	6344	539	328.5
MEAN	37.1	56.4	148	133	254	1439	469	400	530	205	17.4	10.9
MAX	262	214	894	192	601	16200	1500	3120	1540	805	38	20
MIN	23	28	62	81	199	183	279	120	251	50	11	8.6
AC-FT	2280	3350	9130	8190	14630	88510	27900	24570	31530	12580	1070	652

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2000, BY WATER YEAR (WY)

	203	238	196	232	255	502	429	767	543	125	145	195
MEAN	203	238	196	232	255	502	429	767	543	125	145	195
MAX	2412	1525	870	1162	578	1907	1795	4188	2342	500	1036	1386
(WY)	1987	1975	1998	1988	1998	1973	1997	1987	1995	1979	1974	1996
MIN	7.01	17.5	16.2	22.5	36.8	60.8	20.5	13.4	12.9	3.18	.14	1.14
(WY)	1979	1971	1979	1979	1981	1977	1971	1971	1970	1970	1970	1984

e Estimated

ARKANSAS RIVER BASIN

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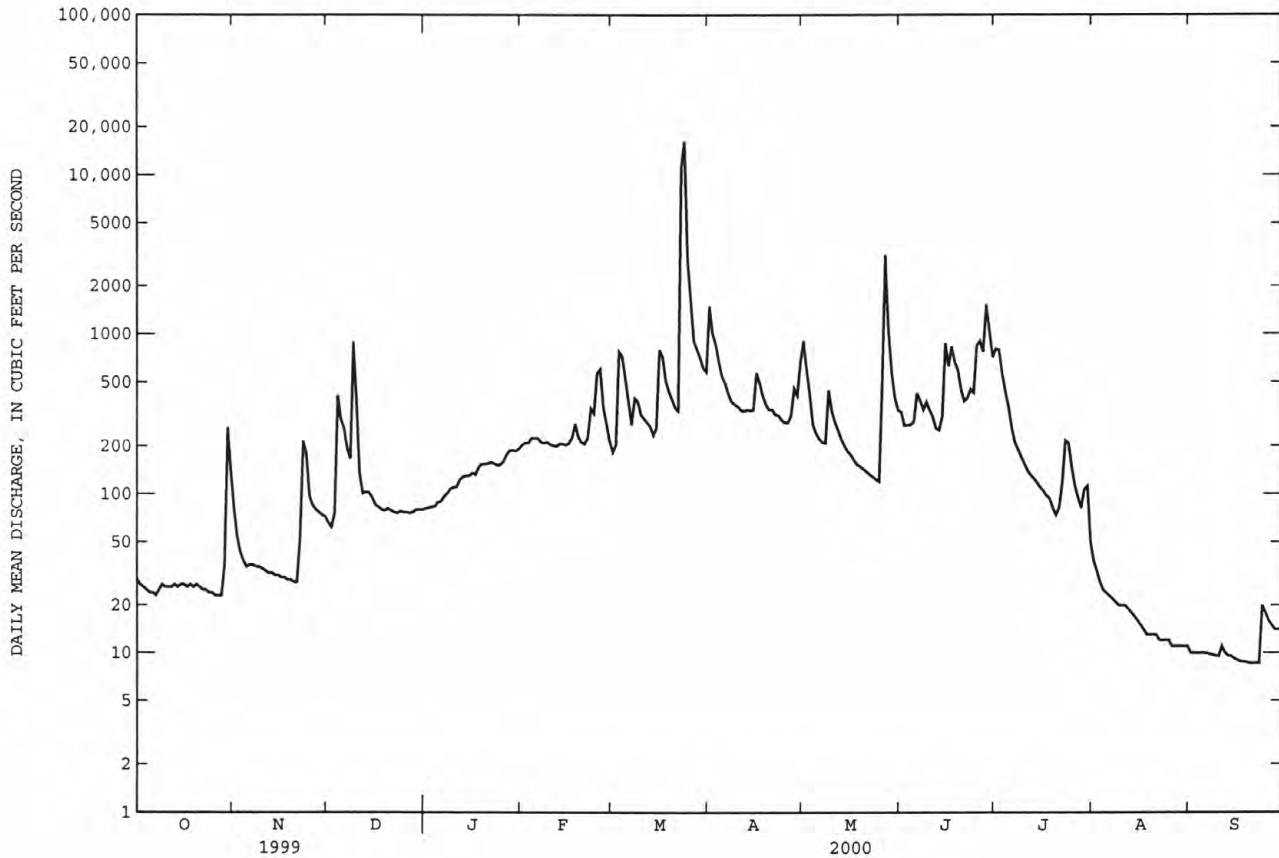
07228500 CANADIAN RIVER AT BRIDGEPORT, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1970 - 2000	
ANNUAL TOTAL	150048		113129.5		^a 319	
ANNUAL MEAN	411		309		1018	
HIGHEST ANNUAL MEAN					70.2	
LOWEST ANNUAL MEAN					1987	
HIGHEST DAILY MEAN	9170	Apr 25	16200	Mar 24	42100	May 29 1987
LOWEST DAILY MEAN	17	Aug 26	8.6	Sep 20-23	.00	at times
ANNUAL SEVEN-DAY MINIMUM	19	Aug 20	8.7	Sep 17	.00	Aug 3 1970
INSTANTANEOUS PEAK FLOW			33500	Mar 24	^b 86100	May 17 1982
INSTANTANEOUS PEAK STAGE			15.30	Mar 24	^c 17.55	May 17 1982
ANNUAL RUNOFF (AC-FT)	297600		224400		231400	
10 PERCENT EXCEEDS	998		585		550	
50 PERCENT EXCEEDS	275		142		120	
90 PERCENT EXCEEDS	26		13		12	

^aPrior to regulation, water years 1945-64, 469 ft³/s.

^bMaximum discharge for period of record, 150,000 ft³/s, June 23, 1948, from rating curve extended above 50,000 ft³/s.

^cMaximum gage height for period of record, 38.85 ft (present datum) June 23, 1948, from flood mark.



ARKANSAS RIVER BASIN

07229200 CANADIAN RIVER AT PURCELL, OK

LOCATION.--Lat 35°00'50", long 97°20'50", in NW 1/4 sec.7, T.6 N., R.1 W., Cleveland County, Hydrologic Uni 11090202, near left bank on downstream side of pier of U.S. Highway 77, 0.5 mi east of Purcell, 1.0 mi upstream from Walnut Creek., and at mile 184.9.

DRAINAGE AREA.--25,939 mi², of which 4,801 mi² probably is noncontributing.

PERIOD OF RECORD.--October 1959 to June 1961, October 1979 to September 1983, October 1985 to current year.

REVISED RECORDS.--OK-95-1: 1994 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,017.14 ft above sea level.

REMARKS.--Records fair. Flow regulated since October 1964 by Lake Meredith (station 07227900) located in Texas. U.S. Army Corps of Engineers' satellite telemeter located at site.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1904 reached a stage of 14.18 ft and flood in 1914 reached a stage of 12.98 ft, from information by the Atchison, Topeka, and Santa Fe Railway Co.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	772	299	324	357	353	841	12000	1130	2010	132	e15
2	63	544	322	309	302	399	2030	3550	1010	4570	139	e15
3	58	435	454	368	296	500	2230	1890	1260	3840	130	e13
4	55	339	777	367	324	981	1510	1250	1090	1700	122	e12
5	54	271	1280	354	318	937	1380	945	1020	e1300	104	11
6	54	224	1150	323	344	709	1080	804	1120	e900	88	e11
7	48	201	1050	305	350	586	973	652	930	e700	76	e11
8	48	192	861	349	331	614	894	515	917	e650	66	e11
9	57	187	2680	355	331	556	854	544	1090	e600	61	e11
10	62	179	3000	348	313	627	871	528	998	e450	55	e11
11	67	178	1230	326	302	455	907	496	1080	e380	51	e10
12	59	176	515	328	285	414	1080	399	1130	e410	47	e9.6
13	57	171	358	320	291	420	1150	346	1070	402	42	e9.6
14	53	167	285	321	292	508	1260	314	954	e396	39	e9.6
15	51	167	289	330	297	505	1480	294	875	e358	35	e9.6
16	45	175	250	310	295	412	1720	334	1660	e320	35	e9.6
17	40	183	250	313	353	1140	2070	328	3600	257	e33	e9.1
18	37	184	250	317	410	999	1830	302	4570	170	e32	e9.1
19	39	162	259	322	344	796	1690	275	2910	148	e29	e9.1
20	41	177	260	324	319	574	1700	272	3080	132	e26	9.0
21	36	181	257	316	370	438	1330	257	2690	154	e24	e8.8
22	37	194	262	309	358	565	1360	e246	2040	439	e22	e8.8
23	44	195	269	301	485	1070	1390	e235	1960	436	e22	e8.8
24	43	197	278	309	443	8730	1340	e228	1820	225	e20	515
25	44	270	285	312	551	10900	1260	e226	1900	195	e20	343
26	46	592	286	315	950	4250	1290	813	3410	281	e19	150
27	47	500	293	394	619	2070	1470	2390	3360	285	e19	74
28	48	408	304	393	405	1320	1450	3960	5150	243	e17	e48
29	49	340	321	370	375	1030	1440	2350	7170	232	e17	e41
30	463	314	324	384	---	704	2140	2150	3260	169	e16	e32
31	725	---	319	381	---	753	---	1780	---	146	e16	---
TOTAL	2645	8275	19017	10397	11010	44315	42020	40673	64254	22498	1554	1444.7
MEAN	85.3	276	613	335	380	1430	1401	1312	2142	726	50.1	48.2
MAX	725	772	3000	394	950	10900	2230	12000	7170	4570	139	515
MIN	36	162	250	301	285	353	841	226	875	132	16	8.8
AC-FT	5250	16410	37720	20620	21840	87900	83350	80670	127400	44620	3080	2870

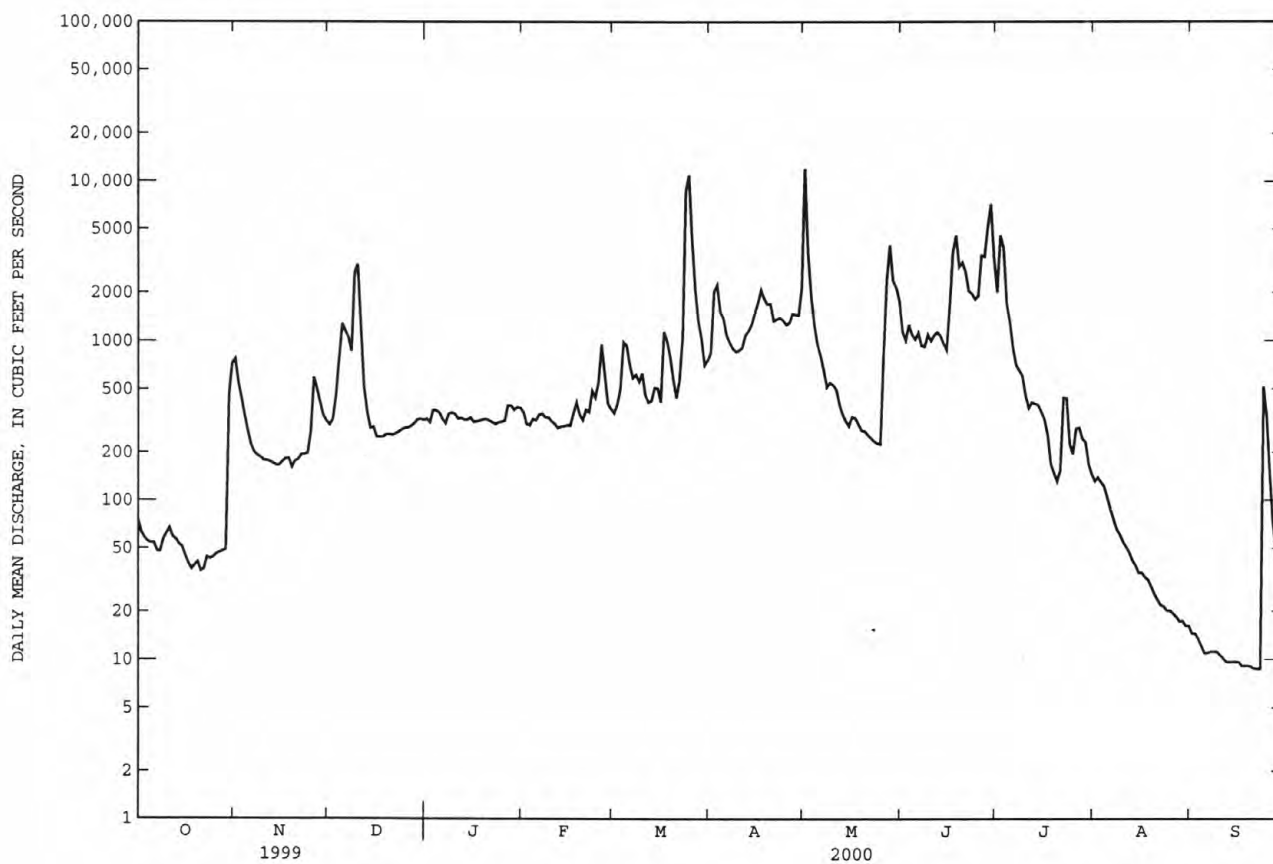
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	621	597	692	642	665	1074	1000	1983	1485	408	282	435									
MAX	7083	2648	2602	2055	1865	3533	3168	7717	5863	1216	1183	1563									
(WY)	1987	1987	1992	1987	1987	1998	1999	1993	1989	1987	1996	1996									
MIN	2.84	11.9	106	23.7	21.3	113	38.1	73.1	309	41.4	2.00	2.54									
(WY)	1981	1981	1983	1981	1981	1981	1981	1981	1988	1980	1980	1980									

e Estimated

07229200 CANADIAN RIVER AT PURCELL, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	381518		268102.7		824	
ANNUAL MEAN	1045		733		2287	
HIGHEST ANNUAL MEAN					117	
LOWEST ANNUAL MEAN					71000	
HIGHEST DAILY MEAN	16600	Apr 24	12000	May 1		May 29 1987
LOWEST DAILY MEAN	18	Aug 26	8.8	Sep 21-23		Aug 2 1980
ANNUAL SEVEN-DAY MINIMUM	22	Aug 20	9.0	Sep 17		Aug 6 1980
INSTANTANEOUS PEAK FLOW			20300	May 1		May 29 1987
INSTANTANEOUS PEAK STAGE			10.76	May 1		May 29 1987
ANNUAL RUNOFF (AC-FT)	756700		531800			
10 PERCENT EXCEEDS	2260		1740			
50 PERCENT EXCEEDS	482		325			
90 PERCENT EXCEEDS	48		31			

^aNo flow at times in 1980.^bFrom high-water mark.

ARKANSAS RIVER BASIN

07229445 STANLEY DRAPER LAKE OKLAHOMA CITY ,OK

LOCATION.--Lat 35°19'42", long 97°21'23", in SE 1/4 NE 1/4 sec.24, T.10 N., R.2 W., Cleveland County, Hydrologic Unit 11090203, in intake tower at end of walkway 100ft north of dam on East Elm Creek and at mile 2.5.

DRAINAGE AREA.--13.07 mi².

PERIOD OF RECORD.--October 1999 to September 2000.

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

REMARKS.--Reservoir is formed by a compacted earth dam constructed in 1962, 111 ft above streambed. Outlet works: circular intake tower with 5.5 ft sides and 3 ft by 5 ft intake gates with invert at elevations 1,118.5 ft, 1,133.5 ft, 1,163.5 ft, and 1,178.5 ft. Two 60 inch pipes convey water through a 10.5 ft by 17 ft horseshoe conduit and open ditch to the treatment plant or lower level pump station. Top of Dam 1,201.00 ft, 148,000 acre-ft; maximum pool 1,196.4 ft, 134,000 acre-ft; normal pool 1,191.00 ft, 114,000 acre-ft. Lake is used for municipal water supply for Oklahoma City. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 90,700 acre-ft, October 1, elevation 1,187.77 ft; minimum, 81,400 acre-ft, Sept. 30, elevation, 1,184.16 ft.

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

1150	22190	1180	70690
1160	34190	1190	96440
1170	50040	1200	127200

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 0800 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90700	89300	86900	87400	88000	88600	89500	90400	89200	90000	88700	84600
2	e90600	89200	86900	87400	88000	88600	89600	90300	89000	90100	88600	84400
3	e90600	89200	86900	87500	88000	88700	89600	90300	89300	90200	88500	84300
4	e90600	89100	87100	87500	88000	88700	89600	90300	89300	90200	88500	84200
5	90600	89100	87100	87500	88000	88700	89600	90300	89300	90200	88400	84000
6	e90500	89100	87000	87500	88000	88700	89600	90300	89200	90200	88300	83800
7	e90600	89000	87000	87600	88000	88800	89500	90300	89100	90100	88100	83700
8	e90600	89000	87000	87700	88000	88900	89500	90400	89000	90100	88000	83600
9	e90600	89000	87200	87700	88000	88900	89500	90400	88900	90000	87900	83500
10	e90400	89000	87400	87700	88000	88800	89400	90300	88900	89900	87800	83400
11	e90300	88900	87400	87800	88000	88900	89500	90200	88900	89800	87700	83200
12	e90200	88900	87500	87800	88000	88800	89500	90300	88900	89800	87600	83100
13	e90100	88900	87400	87800	88000	88800	89600	90200	88900	89700	87500	83000
14	e90000	88900	87400	87800	88000	88800	89500	90100	88900	89600	87300	82800
15	89900	88800	87400	87800	88000	88900	89500	90100	88800	89500	87100	82700
16	89800	88600	87400	87900	88000	89000	89700	90000	88800	89400	87000	82600
17	89500	88500	87300	88000	88000	89000	89600	89900	89200	89300	86900	82400
18	89600	88300	87300	88000	88200	89100	89600	90000	89300	89200	86800	82300
19	89500	88000	87400	88000	88100	89200	89700	89800	89300	89100	86700	82100
20	89500	87800	87300	88000	88100	89200	89700	89700	89400	89000	86500	82000
21	89400	87600	87200	88000	88100	89200	89600	89700	89400	89000	86300	81800
22	89300	87400	87300	88000	88200	89300	89600	89600	89500	89200	86200	81600
23	89300	87200	87200	88000	88400	89400	89600	89600	89500	89000	86000	81600
24	89200	87000	87300	88000	88400	89500	89600	89500	89500	88900	85900	82000
25	89100	87000	87200	87900	88600	89500	89600	89600	89500	88800	85700	81800
26	89100	87000	87300	87800	88600	89500	89500	89600	89600	88700	85600	81800
27	89000	87000	87300	87900	88600	89500	89600	89500	89700	88700	85400	81700
28	89000	87000	87300	88000	88600	89500	89600	89500	89800	88700	85300	81700
29	88900	87000	87300	88000	88600	89500	89500	89400	90000	88800	85100	81600
30	89300	87000	87400	88000	---	89500	89500	89300	90000	88800	84900	81500
31	89300	---	87400	88000	---	89500	---	89300	---	88700	84800	---
MAX	90700	89300	87500	88000	88600	89500	89700	90400	90000	90200	88700	84600
MIN	88900	87000	86900	87400	88000	88600	89400	89300	88800	88700	84800	81500
(+)	1187.23	1186.33	1136.47	1186.73	1136.95	1187.30	1187.30	1187.21	1187.49	1187.00	1185.47	1184.21
(++)	-1400	-2300	+400	+600	+600	+900	0	-200	+700	-1300	-3900	-3300

WTR YR 2000 MAX 90700 MIN 81500 (++) -9200

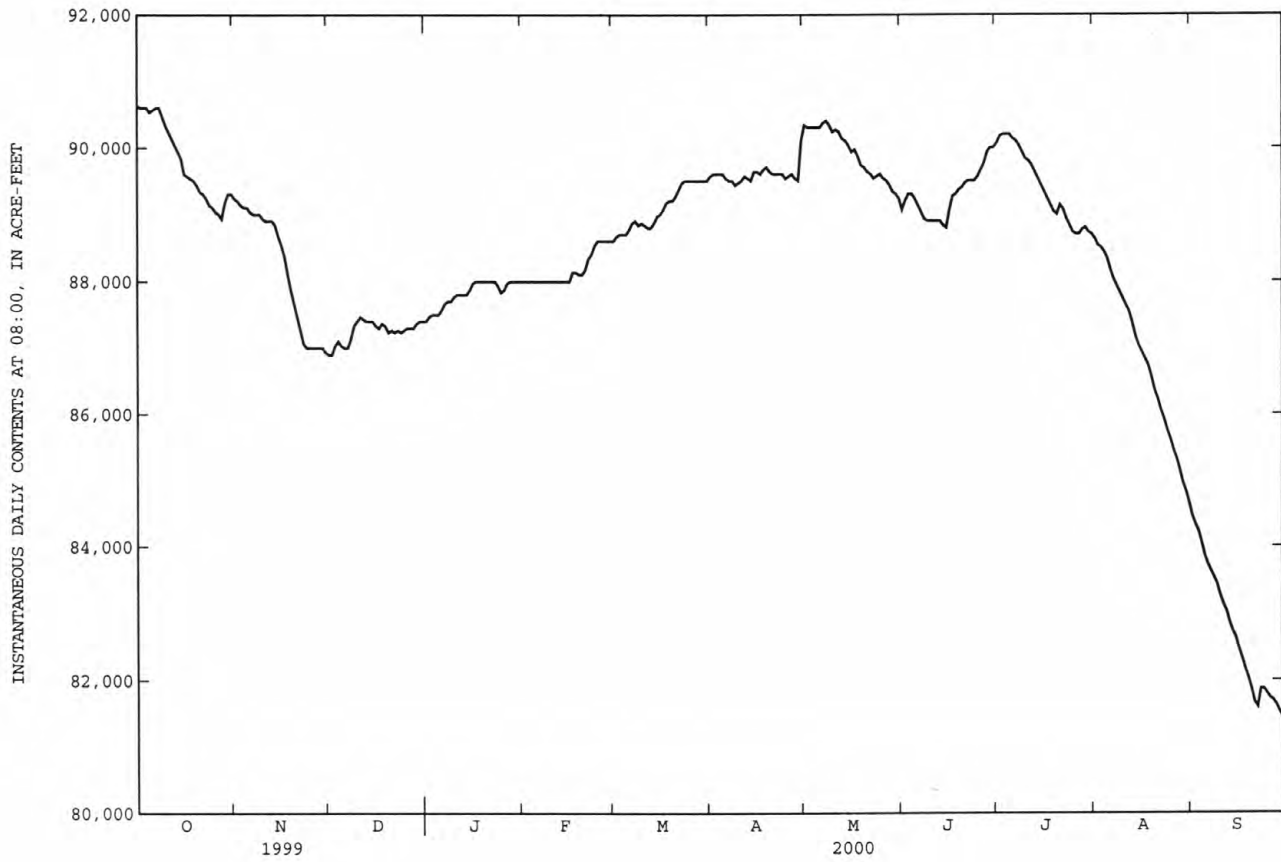
(+) ELEVATION, IN FEET, AT END OF MONTH
(++) CHANGE IN CONTENTS, IN ACRE-FEET

e Estimated

ARKANSAS RIVER BASIN

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07229445 STANLEY DRAPER LAKE OKLAHOMA CITY ,OK--Continued



ARKANSAS RIVER BASIN

07229900 LAKE THUNDERBIRD NEAR NORMAN, OK

LOCATION.--Lat 35°13'24", long 97°13'02", in NW 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, Hydrologic Unit 11090203, near center of dam on Little River, just downstream from Hog Creek, 13 mi east of Norman, and at mile 96.4.

DRAINAGE AREA.--256 mi².

PERIOD OF RECORD.--March 1965 to current year.

GAGE.--Nonrecording gage at outlet structure and at pump house. Datum of gage is sea level.

REMARKS.--Reservoir is formed by earth dam. Regulated storage began Mar. 1, 1965; minimum conservation pool first filled September 1965. Capacity, 196,200 acre-ft at elevation 1,049.4 ft, crest of drop inlet; 119,600 acre-ft at elevation 1,039.0 ft, top of conservation pool; 13,640 acre-ft at elevation 1,010.0 ft, minimum conservation pool. Dead storage, 13,600 acre-ft below elevation 997.0 ft, sill of gated outlet. Figures given herein represent total contents. Reservoir is used for flood control, irrigation (inactive), and municipal water supplies diverted to Del City, Midwest City, and Norman. U.S. Army Corps of Engineers satellite telemeter at station.

COOPERATION.--Elevations and data on diversions furnished by Central Oklahoma Master Conservancy District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 187,400 acre-ft, May 5, 1990, elevation, 1,048.38 ft; minimum since conservation pool first reached, 15,370 acre-ft, Nov. 30, 1965, elevation, 1,011.0 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 130,400 acre-ft, July 3, elevation, 1,040.72 ft; minimum, 106,800 acre-ft, Dec. 2, elevation, 1,036.81 ft.

> MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

Date	*Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Diversions (acre-feet)
Sept. 30.....	1037.64	111,500	-	-
Oct. 31.....	1037.28	109,400	-2,100	1,487
Nov. 30.....	1036.85	107,000	-2,400	1,217
Dec. 31.....	1037.35	109,800	+2,800	1,166
CAL YR 99	-	-	-1,300	
Jan. 31.....	1037.36	109,900	+100	1,145
Feb. 29.....	1037.59	111,200	+1,300	1,063
Mar. 31.....	1038.22	114,900	+3,700	1,138
Apr. 30.....	1038.37	115,800	+900	1,161
May 31.....	1038.80	118,400	+2,600	1,561
June 30.....	1040.30	127,600	+9,200	1,597
July 31.....	1039.18	120,700	-6,900	1,918
Aug. 31.....	1038.09	114,100	-6,600	2,335
Sept. 30.....	1037.20	109,000	+5,100	2,231
WTR YR 00	-	-	+7,700	

*Elevation at 2400



Canadian River at Calvin May 5, 1941

ARKANSAS RIVER BASIN

07230000 LITTLE RIVER BELOW LAKE THUNDERBIRD NEAR NORMAN, OK

LOCATION.--Lat 35°13'18", long 97°12'49", in NE 1/4 SE 1/4 sec.29, T.9 N., R.1 E., Cleveland County, Hydrologic Unit, 11090203, at right bank of outlet channel, 170 ft upstream from State Highway 9, 1,200 ft downstream from Lake Thunderbird, 1.0 mi upstream from Prairie Creek, 13.0 mi east of Norman, and at mile 96.2.

DRAINAGE AREA.--257 mi².

PERIOD OF RECORD.--October 1952 to current year. Prior to October 1964, published as Little River below Hog Creek near Norman.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 965.62 ft above sea level. Prior to Nov. 28, 1956, nonrecording gage 800 ft downstream at same datum. Nov. 28, 1956 to Oct. 14, 1964, water-stage recorder at site 800 ft downstream at same datum. Oct. 15, 1964 to Sept. 1, 1965, nonrecording gage at site 170 ft downstream at same datum.

REMARKS.--Records poor. Flow regulated by Lake Thunderbird since March 1965 (station 07229900). In prior years, occasional small diversions above station for irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.97	.86	.87	.87	.97	.87	1.0	1.2	.97	364	1.2	1.2
2	.97	.78	1.1	.87	.97	.97	.90	1.2	1.3	364	1.2	1.2
3	.97	.78	1.0	.90	.97	.90	.84	.93	1.2	365	1.2	1.2
4	.97	.81	1.2	.78	.94	.87	.78	227	1.0	364	1.2	1.2
5	.97	.79	.86	.83	.97	.87	.83	227	1.0	474	1.2	1.2
6	.97	.78	.87	.87	.97	.87	.87	227	1.0	557	1.2	1.2
7	.97	.78	.87	.87	.96	.93	.85	227	1.0	556	1.2	1.2
8	.97	.78	.87	.88	.86	.93	.86	227	.97	556	1.2	1.2
9	.97	.78	1.5	.87	.97	.87	.87	89	1.1	556	1.2	1.2
10	.97	.78	.98	.87	.95	.87	.87	1.0	1.1	433	1.2	1.2
11	.97	.78	.97	.87	.97	.87	.87	.97	1.1	263	1.2	1.2
12	.97	.78	.97	.87	.94	.87	.98	.97	1.1	82	1.2	1.2
13	.97	.78	.97	.87	.91	.87	.97	.94	1.0	1.3	1.2	1.2
14	.97	.78	.94	.87	.87	.87	.97	.97	1.0	1.3	1.2	1.2
15	.97	.78	.87	.87	.87	.87	.98	.97	1.0	1.3	1.2	1.2
16	.97	.78	.87	.87	.84	.87	1.0	.97	.97	1.3	1.2	1.2
17	.89	.78	.87	.87	.90	1.1	.97	.97	1.5	1.3	1.2	1.2
18	.87	1.5	.86	.87	.80	.98	.92	.93	1.1	1.3	1.2	1.2
19	.87	.90	.86	.87	.78	.88	.89	.96	138	1.3	1.2	1.2
20	.87	.87	.87	.87	.78	.87	.95	.94	131	1.2	1.2	1.2
21	.87	.87	.87	.87	.78	.97	.87	.94	1.6	1.2	1.2	1.1
22	.87	.87	.87	.87	.91	1.3	.87	.93	76	1.5	1.2	1.1
23	.87	.87	.85	.87	.90	.97	.87	.93	220	1.2	1.2	1.1
24	.87	.87	.84	.87	.82	.96	.87	.95	220	1.2	1.2	1.7
25	.87	.87	.87	.87	.87	.91	.87	1.1	220	1.2	1.2	1.1
26	.87	.88	.87	.87	.78	.97	.87	1.0	220	1.2	1.2	1.1
27	.87	.89	.83	.87	.87	.97	.97	1.0	220	1.3	1.2	1.1
28	.87	.87	.84	.87	.87	.97	.87	.97	100	1.2	1.2	1.1
29	.85	.87	.87	e.87	.87	.97	.87	.97	201	1.2	1.2	.96
30	1.3	.87	.87	e.87	---	.92	1.3	.97	365	1.2	1.2	.97
31	.97	---	.87	.93	---	.90	---	.97	---	1.2	1.2	---
TOTAL	29.10	25.38	28.62	26.94	25.86	28.81	27.40	1340.72	2132.01	4957.9	37.2	35.33
MEAN	.94	.85	.92	.87	.89	.93	.91	43.2	71.1	160	1.20	1.18
MAX	1.3	1.5	1.5	.93	.97	1.3	1.3	227	365	557	1.2	1.7
MIN	.85	.78	.83	.78	.78	.87	.78	.93	.97	1.2	1.2	.96
AC-FT	58	50	57	53	51	57	54	2660	4230	9830	74	70

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
MEAN	30.1	46.1	36.6	43.0	42.3	92.9	92.2	128	134	38.2	16.8	7.62
MAX	489	626	431	438	324	548	625	936	688	323	266	96.5
(WY)	1987	1984	1993	1985	1993	1985	1985	1990	1995	1989	1992	1989
MIN	.16	.18	.16	.17	.18	.18	.25	.20	.21	.19	.22	.20
(WY)	1966	1967	1966	1966	1967	1966	1966	1966	1967	1967	1967	1966

e Estimated

ARKANSAS RIVER BASIN

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07230000 LITTLE RIVER BELOW LAKE THUNDERBIRD NEAR NORMAN, OK--Continued

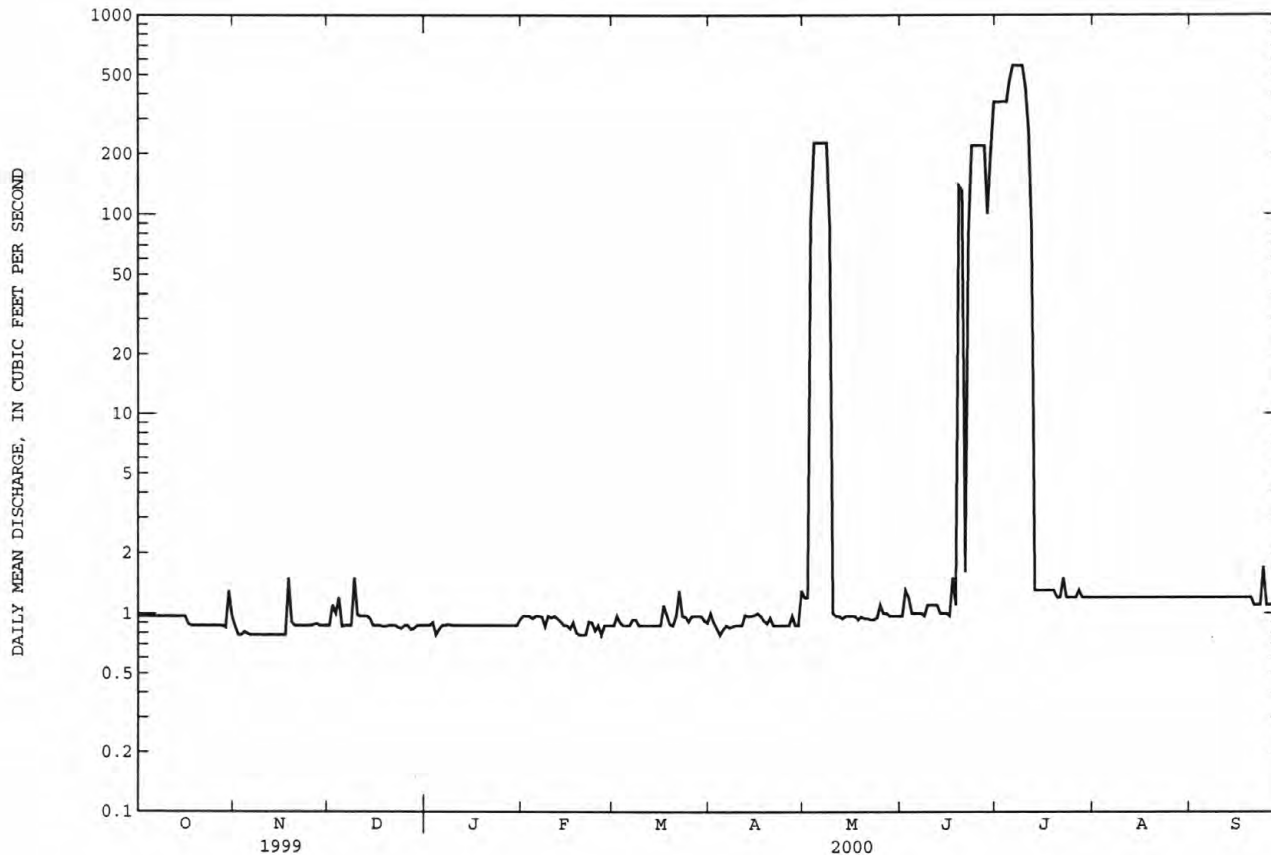
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1966 - 2000
ANNUAL TOTAL	32797.55	8695.27	
ANNUAL MEAN	89.9	23.8	^a 59.0
HIGHEST ANNUAL MEAN			251 1985
LOWEST ANNUAL MEAN			.22 1966
HIGHEST DAILY MEAN	777 May 6	557 Jul 6	1280 May 14 1990
LOWEST DAILY MEAN	.78 Jan 1	.78 at times	^b .10 Oct 1 1965
ANNUAL SEVEN-DAY MINIMUM	.78 Jan 1	.78 at times	.10 Oct 19 1965
INSTANTANEOUS PEAK FLOW		560 Jul 5,6	^c 1450 May 10 1990
INSTANTANEOUS PEAK STAGE		5.66 Jul 5,6	^d 8.62 Oct 26 1983
ANNUAL RUNOFF (AC-FT)	65050	17250	42740
10 PERCENT EXCEEDS	368	1.4	252
50 PERCENT EXCEEDS	1.1	.97	.69
90 PERCENT EXCEEDS	.78	.86	.35

^aPrior to regulation, water years 1953-64, 58.9 ft³/s.

^bNo flow at times in 1954-56, 1964.

^cMaximum discharge for period of record 34,600 ft³/s May 25, 1957, from rating curve extended above 15,000 ft³/s.

^dFrom high-water mark. Maximum gage height for period of record 28.85 ft May 25, 1957, from high-water mark.



ARKANSAS RIVER BASIN

07230500 LITTLE RIVER NEAR TECUMSEH, OK

LOCATION.--Lat 35°10'21", long 96°55'54", NE 1/4 NE 1/4 sec.13, T.8 N., R.3 E., Pottawatomie County, Hydrologic Unit 11090203, on downstream side of center pier of bridge on U.S. Highway 177, 1.5 mi downstream from Dance Creek, 5.0 mi south of Tecumseh, and at mile 77.2.

DRAINAGE AREA.--456 mi².

PERIOD OF RECORD.--October 1943 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 898.52 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1, to Sept. 30. Flow regulated or diverted since 1965 by Lake Thunderbird, 19.2 mi upstream (station 07229900). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1932 reached a stage of 25.58 ft, from floodmark.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e7.4	e31	e9.4	e193	e36	e58	e525	1460	e32	335	e11	e4.2
2	e8.3	e58	11	e108	e51	e67	e449	278	39	332	e10	e3.8
3	e8.3	e21	e78	e72	e59	e55	e208	e230	331	359	9.8	e3.7
4	e7.8	e13	e431	e45	e48	e54	e148	e210	119	306	e9.1	e3.8
5	e7.8	e13	e144	e34	e40	e74	e113	e250	e40	354	e8.2	e3.8
6	e8.1	e13	e61	e32	e30	e66	e96	e280	e27	630	e7.9	e3.1
7	e7.8	e12	e25	e27	e28	e54	e80	e323	e23	623	e8.0	e3.1
8	e7.8	e12	e55	e28	e25	60	e80	e359	e23	612	e7.6	e3.1
9	e7.8	e10	e960	e29	e25	e76	e60	e323	e20	609	e7.5	e3.2
10	e7.6	e10	e498	e25	e20	e71	e44	e204	e31	510	e7.0	e3.1
11	e7.6	e10	e229	e22	e14	e55	e72	e116	e48	e298	e6.5	e2.8
12	e7.5	e12	e141	e21	e13	e41	e420	e84	e31	e125	e6.1	e2.7
13	e7.4	e12	e88	e19	e12	e35	e230	e80	e32	e65	e6.0	e2.6
14	e7.4	e10	e60	e20	e14	e37	e160	e65	e30	e44	e5.9	e3.1
15	e7.4	e10	e45	e18	e15	e32	e113	e65	e28	e31	e5.5	e3.2
16	e7.4	e7.7	e37	e18	e52	e32	e94	e62	e28	e30	e4.9	e3.2
17	e7.4	e7.7	e32	e15	e144	e62	e87	e52	86	e25	e5.1	e3.3
18	e7.3	e6.4	e29	e15	e65	e263	e89	e45	100	e24	e5.2	e3.2
19	7.2	e6.4	e25	e14	e41	e138	e477	e43	60	e21	e4.4	e3.3
20	e6.8	e6.4	e24	e16	e30	e77	e199	e47	130	e19	e4.4	e3.2
21	e6.2	e6.4	e20	e16	e360	e703	e123	e39	230	e19	e4.3	e3.0
22	e5.6	e7.7	e19	e15	e476	e1430	e87	e34	240	e30	e4.7	e3.5
23	e5.2	e25	e16	e13	e341	e731	e67	e26	130	e68	e4.3	e3.5
24	e5.0	e18	e16	e13	e291	e540	e56	e36	e249	e38	e4.1	e3.8
25	e4.8	e11	e14	e13	e231	e355	e44	e39	e1020	e18	e4.0	e6.0
26	e4.7	e9.6	e19	e15	e159	e257	e37	e56	e435	e201	e3.7	e14
27	e4.6	e8.4	e19	e16	e109	e180	e56	e98	e550	e97	e4.0	e5.1
28	e4.5	e7.3	e17	e22	e64	e139	e53	e63	1460	e46	e4.0	e4.9
29	e6.6	e8.1	e15	e40	e49	e113	e47	e45	477	e27	e4.2	e5.0
30	e4.6	e8.6	e13	e35	---	e103	150	e37	417	e13	e4.2	e5.0
31	e4.3	---	e13	e41	---	e93	---	e34	---	e11	e4.2	---
TOTAL	208.2	391.7	3163.4	1010	2842	6051	4464	5083	6466	5920	185.8	119.3
MEAN	6.72	13.1	102	32.6	98.0	195	149	164	216	191	5.99	3.98
MAX	8.3	58	960	193	476	1430	525	1460	1460	630	11	14
MIN	4.3	6.4	9.4	13	12	32	37	26	20	11	3.7	2.6
AC-FT	413	777	6270	2000	5640	12000	8850	10080	12830	11740	369	237

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

MEAN	107	108	102	94.0	123	220	259	350	275	77.4	47.9	55.3
MAX	898	628	851	844	783	1086	1265	1687	1401	505	510	477
(WY)	1984	1984	1993	1985	1985	1990	1990	1990	1995	1989	1996	1970
MIN	.009	2.27	2.12	2.74	2.45	4.49	5.55	9.25	5.53	1.38	.000	.22
(WY)	1979	1981	1979	1981	1967	1966	1981	1981	1972	1967	1972	1980

e Estimated

ARKANSAS RIVER BASIN

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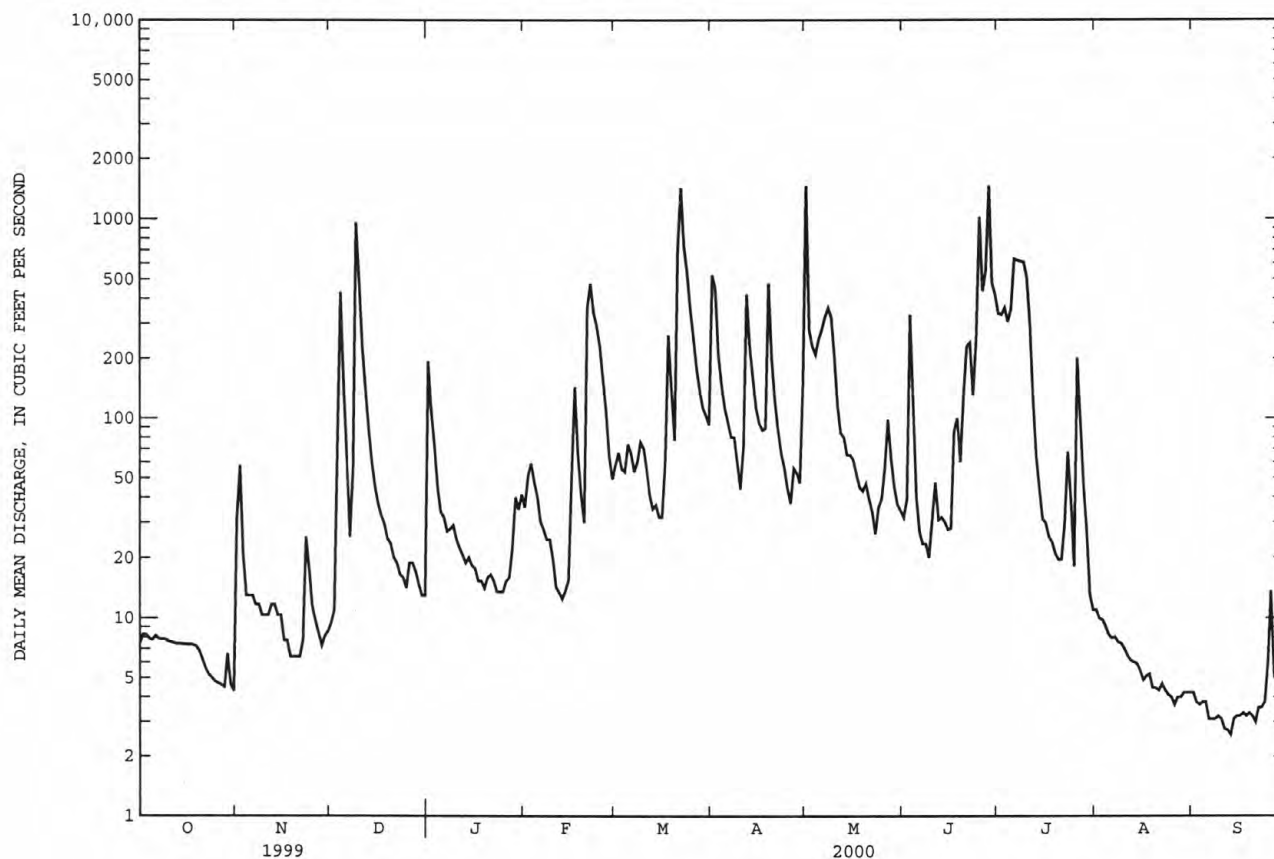
07230500 LITTLE RIVER NEAR TECUMSEH, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1966 - 2000
ANNUAL TOTAL	73687.5	35904.4	^a 151
ANNUAL MEAN	202	98.1	511
HIGHEST ANNUAL MEAN			9.34
LOWEST ANNUAL MEAN			1985
HIGHEST DAILY MEAN	3920 Apr 26	1460 May 1	9740 May 3 1990
LOWEST DAILY MEAN	4.3 Oct 31	2.6 Sep 13	.00 Jun 23 1966
ANNUAL SEVEN-DAY MINIMUM	4.9 Oct 25	2.9 Sep 7	.00 Jun 23 1966
INSTANTANEOUS PEAK FLOW		4120 May 1	^b 14000 May 3 1990
INSTANTANEOUS PEAK STAGE		14.70 May 1	^c 19.24 Oct 20 1984
ANNUAL RUNOFF (AC-FT)	146200	71220	109700
10 PERCENT EXCEEDS	727	300	498
50 PERCENT EXCEEDS	21	29	19
90 PERCENT EXCEEDS	6.8	4.4	1.8

^aPrior to regulation, water years 1944-64, 149 ft³/s.

^bMaximum discharge for period of record 32,400 ft³/s, May 25, 1957.

^cMaximum gage height for period of record 19.68, May 18, 1949.



ARKANSAS RIVER BASIN

07231000 LITTLE RIVER NEAR SASAKWA, OK

LOCATION.--Lat 34°57'55", long 96°30'44", NE 1/4 sec.25, T.6 N., R.7 E., Seminole County, Hydrologic Unit 11090203, near right abutment on downstream side of State Highway 56 bridge, 1.6 mi north of Sasakwa, 15.1 mi downstream from Salt Creek, and at mile 17.1.

DRAINAGE AREA.--884 mi².

PERIOD OF RECORD.--September 1942 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 731.76 ft above sea level. Prior to Apr. 11, 1946, nonrecording gage at site 6.4 miles upstream at datum 12.58 ft higher. Prior to Oct. 1, 1979, gage at site 6.4 miles upstream at datum 17.58 ft higher. Prior to Jan. 26, 1996 gage at site 6.4 miles upstream at datum 12.58 ft higher.

REMARKS.--Records poor. Flow regulated by Lake Thunderbird (station 07229900) 78.7 mi upstream since March 1965.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	59	e10	e40	66	74	145	3420	41	878	39	e4.1
2	e20	97	e9.9	e39	79	64	614	3000	39	673	29	e3.7
3	e19	39	e9.8	147	85	86	496	1900	38	520	23	e3.3
4	e19	e24	e126	252	79	75	274	850	155	500	19	e2.9
5	e18	e20	610	110	71	76	193	600	255	418	16	e2.5
6	e17	e18	240	74	64	69	148	540	98	381	e15	e2.2
7	e17	e17	109	53	49	64	123	438	62	567	e14	e1.7
8	e17	e16	68	53	e47	77	104	374	48	587	e13	e1.3
9	e17	e15	257	54	e45	102	103	457	40	576	e12	e.95
10	e16	e15	1290	56	e44	100	88	415	45	569	e12	e.60
11	e16	e14	674	52	e39	72	98	257	70	545	e12	e.39
12	e16	e13	316	e48	e37	56	130	174	60	340	e11	e.25
13	e15	e13	193	e46	e35	49	568	137	49	206	e11	.13
14	e13	e12	129	e43	e34	46	e305	112	42	125	e11	e.14
15	e12	e12	95	e41	e35	43	e193	98	43	66	e9.9	e.14
16	e9.5	e11	76	e40	33	e40	e154	94	45	48	e9.4	e.14
17	e6.2	e11	65	e38	33	55	e148	96	59	40	e8.9	e.14
18	4.0	e10	57	e37	200	159	e144	93	86	35	e8.7	e.14
19	e3.9	e10	53	e37	119	302	e142	77	191	31	e8.4	e.14
20	e3.8	e9.9	51	e35	78	181	e544	75	92	28	e8.2	e.14
21	e3.9	e9.7	e48	33	58	130	e312	70	135	27	e8.0	e.14
22	e4.0	e9.1	e47	e33	50	1780	e203	65	545	31	e7.8	e.14
23	e3.5	31	e46	e34	458	1940	e142	56	412	53	e7.6	e.14
24	e3.9	e20	e46.	e33	550	932	e121	53	187	101	e7.4	e.14
25	e3.4	e14	e45	e32	398	583	e111	53	178	54	e7.2	e.14
26	e3.2	e13	e45	e33	335	376	107	70	1840	34	e6.9	e3.5
27	e3.5	e12	e44	e33	216	272	111	109	442	42	e6.1	24
28	e3.2	e10	e45	e33	131	217	120	133	2090	430	e5.5	9.5
29	e3.1	e11	e44	42	94	194	105	85	2500	155	e5.2	e4.6
30	e3.4	e10	e41	67	---	176	130	59	1720	92	e4.9	e3.3
31	e5.4	---	e40	59	---	143	---	47	---	56	e4.5	---
TOTAL	319.9	575.7	4929.7	1727	3562	8533	6176	14007	11607	8208	361.6	70.60
MEAN	10.3	19.2	159	55.7	123	275	206	452	387	265	11.7	2.35
MAX	20	97	1290	252	550	1940	614	3420	2500	878	39	24
MIN	3.1	9.1	9.8	32	33	40	88	47	38	27	4.5	.13
AC-FT	635	1140	9780	3430	7070	16930	12250	27780	23020	16280	717	140

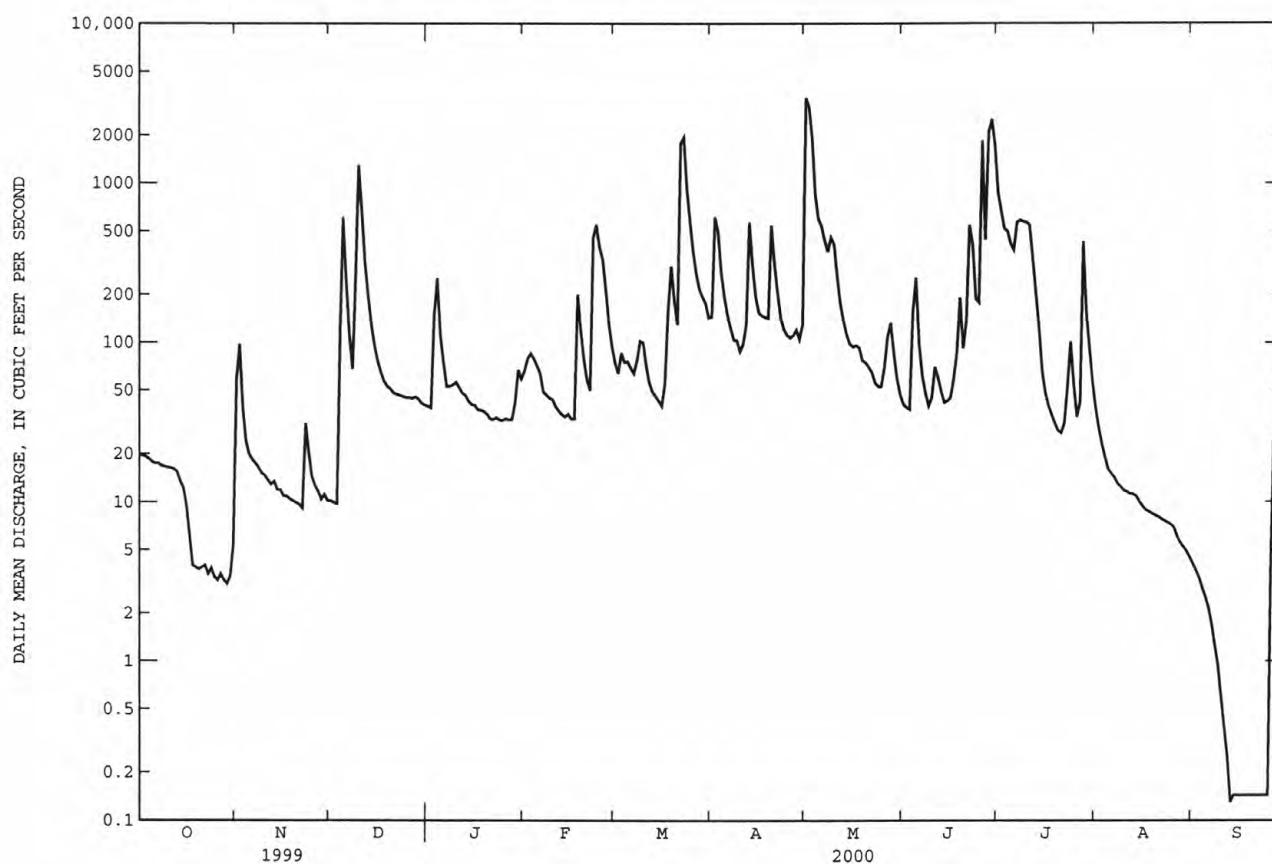
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

	MEAN	246	304	276	229	349	542	660	849	621	153	87.6	128
MAX	2523	1705	2095	1307	1852	2618	3591	2762	2135	775	904	753	
(WY)	1971	1993	1993	1985	1993	1990	1990	1990	1995	1999	1992	1970	
MIN	.000	.009	.30	1.69	1.80	7.39	17.2	30.7	11.2	2.00	.004	.005	
(WY)	1979	1981	1979	1967	1967	1967	1981	1981	1966	1967	1980	1980	

e Estimated

07231000 LITTLE RIVER NEAR SASAKWA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1966 - 2000
ANNUAL TOTAL	172877.6	60077.50	^a 370
ANNUAL MEAN	474	164	996
HIGHEST ANNUAL MEAN			19.0
LOWEST ANNUAL MEAN			1993
HIGHEST DAILY MEAN	14700 Apr 27	3420 May 1	15600 May 1 1985
LOWEST DAILY MEAN	3.1 Sep 8	.13 Sep 13	.00 Nov 23 1965
ANNUAL SEVEN-DAY MINIMUM	3.4 Oct 24	.14 Sep 13	.00 Nov 23 1965
INSTANTANEOUS PEAK FLOW		5760 Jun 26	^b 18500 May 1 1985
INSTANTANEOUS PEAK STAGE		16.67 Jun 26	^c 31.73 May 1 1985
INSTANTANEOUS LOW FLOW		.13 Sep 13	
ANNUAL RUNOFF (AC-FT)	342900	119200	268000
10 PERCENT EXCEEDS	1120	432	995
50 PERCENT EXCEEDS	59	48	55
90 PERCENT EXCEEDS	10	3.9	1.4

^aPrior to regulation, water year 1943-64, 410 ft³/s.^bMaximum discharge for period of record 44,600 ft³/s, May 11, 1950.^cMaximum gage height for period of record 33.48 ft, May 11, 1950.

ARKANSAS RIVER BASIN

07231500 CANADIAN RIVER AT CALVIN, OK

LOCATION.--Lat 34°58'40", long 96°14'36", in NW 1/4 SW 1/4 sec.22, T.6 N., R.10 E., Hughes County, Hydrologic Unit 11090202, on downstream left bank at north end of bridge on U.S. Highway 75, 0.5 mi northeast of Calvin, 2.6 mi upstream from Shawnee Creek, 8.4 mi downstream from Little River, and at mile 94.1.

DRAINAGE AREA.--27,952 mi², of which 4,801 mi² is probably noncontributing.

PERIOD OF RECORD.--January 1905 to December 1908 (gage heights and discharge measurements only, except for period July 1905 to December 1906), October 1938 to September 1942, July 1944 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1904 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1391: 1941. WRD-OK-97-1: 1996.

GAGE.--Water-stage recorder and nonrecording gage. Datum of gage is 682.72 ft above sea level. January 1905 to December 1908, nonrecording gage at site 0.7 mi upstream at datum 4.00 ft higher. Oct. 1, 1938 to Aug. 12, 1944, nonrecording gage at site 0.2 mi downstream and at same datum. Aug. 13, 1944 to July 31, 1977, water-stage recorder at site 0.2 mi downstream and datum 2.00 ft higher. Aug. 1, 1977 to Nov. 15, 1988, water-stage recorder 0.2 mi downstream and at present datum.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Occasional slight regulation by dams in New Mexico and Texas since 1964; Lake Thunderbird (station 07229900) since March 1965. U.S. Army Corps of Engineers' satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 25,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 1	1000	32,700	8.70	Jun 29	0630	25,500	7.95

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	169	599	e382	e529	e529	e561	e1960	e14900	e2510	e5200	e160	e18
2	146	1050	e350	e496	e594	e561	e3960	e19500	e2220	e2900	e170	e17
3	132	1100	e479	e692	e594	e561	e6070	e7370	e1660	e5600	e161	e16
4	119	661	e1060	e594	e529	e1510	e4100	e4380	e1590	e3200	e153	e15
5	114	492	e1570	e529	e398	e1310	e3070	e2320	e2150	e2300	e144	e15
6	105	405	e1460	e496	e496	e922	e2380	e1780	e1760	e1500	e127	e14
7	99	370	e1430	e496	e561	e758	e2000	e2450	e1560	e1080	e117	e13
8	95	331	e1400	e561	e594	e725	e1800	e2380	e1390	e830	e106	e13
9	97	306	e3310	e496	e529	e725	e1540	e3310	e1360	e710	e97	e13
10	98	279	e6770	e561	e496	e922	e1470	e3180	e1330	e600	e93	e13
11	91	270	e4430	e463	e561	e758	e1470	e2180	e1790	e570	e88	e13
12	87	262	e2730	e496	e529	e627	e1470	e1580	e1990	e540	e81	e13
13	81	258	e1470	e480	e496	e594	e1470	e1120	e1660	e490	e74	e12
14	81	250	e976	e496	e496	e692	e1800	e1120	e1460	e470	e65	e11
15	81	249	e791	e485	e496	e660	e2140	e1050	e1720	e450	e57	e11
16	73	246	e627	e480	e627	e561	e2470	e1050	e1660	e400	48	e11
17	66	254	e561	e465	e496	e1580	e3130	e920	e1330	e340	e45	e11
18	64	e237	e529	e490	e594	e1280	e2930	e853	e6070	e280	e42	e11
19	59	e236	e496	e485	e561	e1050	e2600	e853	e8640	e230	e39	e11
20	56	e235	e496	e480	e496	e856	e2270	e787	e5410	e190	e36	e10
21	56	e236	e496	e470	e561	e725	e2200	e720	e4490	e300	e34	e10
22	56	e237	e496	e460	e529	e805	e2140	e720	e5170	e500	e31	e10
23	55	e236	e561	e455	e529	e5390	e2000	e720	e3990	e574	e28	e10
24	55	e237	e529	e460	e561	e11700	e1870	e668	e3010	e506	e25	e462
25	56	e221	e529	e500	e725	e16100	e1740	e720	e2660	e280	e24	e579
26	56	e865	e496	e561	e1540	e9960	e1870	e945	e3690	e321	e23	e406
27	56	e559	e463	e725	e1050	e6460	e1870	e1330	e5010	e370	e22	e174
28	58	e479	e496	e594	e594	e4600	e1940	e4710	e9830	e342	e21	e96
29	60	e430	e529	e561	e529	e2910	e1740	e8310	e14500	e291	e20	e67
30	107	e398	e463	e561	---	e2320	e2600	e4720	e8390	e265	e20	e50
31	162	---	e463	e561	---	e2100	---	e2840	---	e207	e19	---
TOTAL	2690	11988	36838	16178	17290	80283	70070	99486	110000	31836	2170	2125
MEAN	86.8	400	1188	522	596	2590	2336	3209	3667	1027	70.0	70.8
MAX	169	1100	6770	725	1540	16100	6070	19500	14500	5600	170	579
MIN	55	221	350	455	398	561	1470	668	1330	190	19	10
AC-FT	5340	23780	73070	32090	34290	159200	139000	197300	218200	63150	4300	4210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2000, BY WATER YEAR (WY)

	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917
MEAN	1602	1175	1055	928	1310	1969	2679	4439	3356	1362	819	1198
MAX	21530	6529	9355	6655	7059	10230	15110	20640	15350	9669	8398	6467
(WY)	1942	1993	1993	1998	1985	1998	1990	1990	1941	1950	1906	1941
MIN	.10	3.82	7.76	16.4	23.4	20.9	45.7	195	33.7	10.8	.068	.000
(WY)	1957	1967	1967	1940	1967	1967	1956	1966	1966	1966	1980	1956

e Estimated

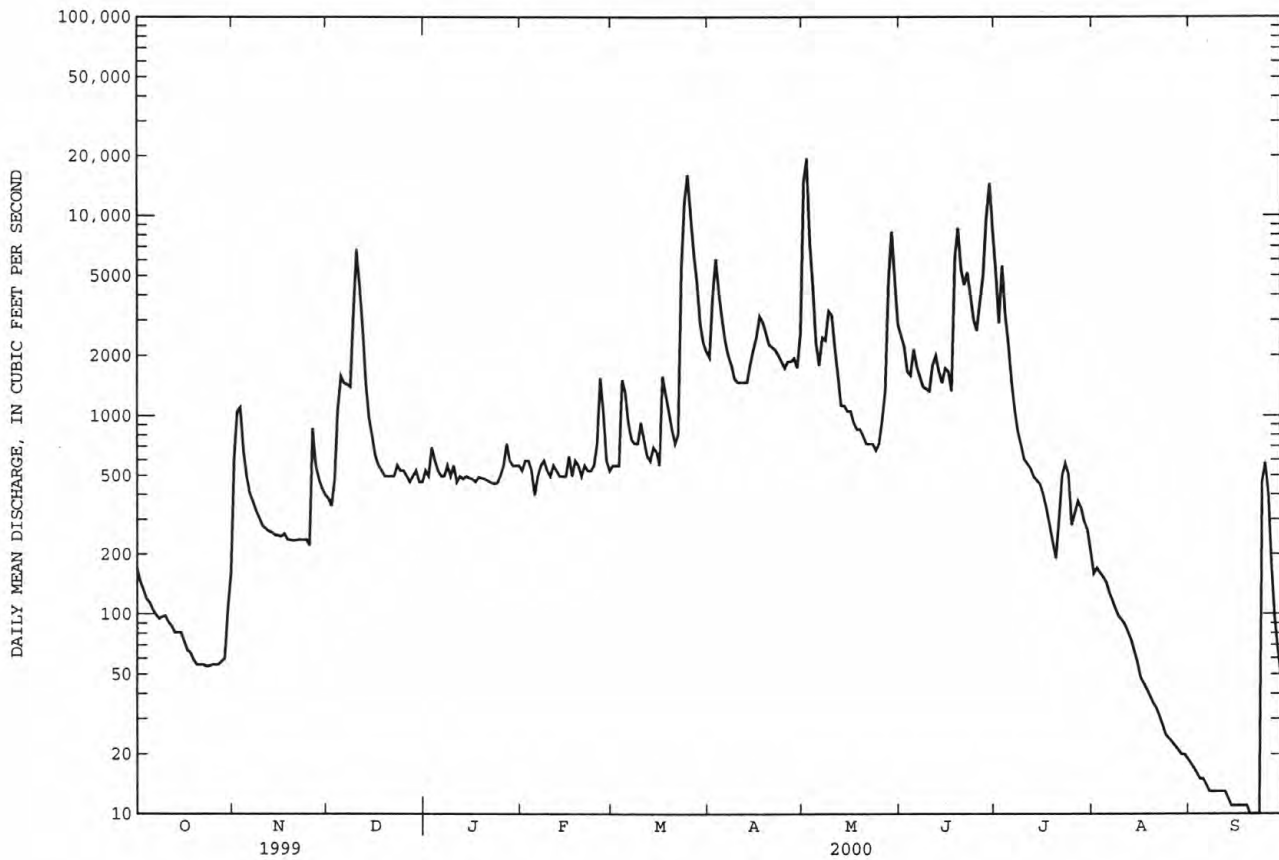
ARKANSAS RIVER BASIN

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07231500 CANADIAN RIVER AT CALVIN, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1906 - 2000	
ANNUAL TOTAL	866706		480954		1828	
ANNUAL MEAN	2375		1314		5513	
HIGHEST ANNUAL MEAN					184	
LOWEST ANNUAL MEAN					140000	
HIGHEST DAILY MEAN	68400	Apr 26	19500	May 2		May 29 1987
LOWEST DAILY MEAN	20	Aug 25	10	Sep 20-23	.00	Sep 10 1939
ANNUAL SEVEN-DAY MINIMUM	31	Aug 20	10	Sep 17	.00	Sep 10 1939
INSTANTANEOUS PEAK FLOW			32700	May 1	174000	May 11 1950
INSTANTANEOUS PEAK STAGE			8.70	May 1	^a 21.00	Aug 7 1906
ANNUAL RUNOFF (AC-FT)	1719000		954000		1324000	
10 PERCENT EXCEEDS	5350		3090		4140	
50 PERCENT EXCEEDS	599		529		410	
90 PERCENT EXCEEDS	59		41		26	

^aFrom floodmark, site and datum then in use.



ARKANSAS RIVER BASIN

07232250 BEAVER RIVER NEAR FELT, OK

LOCATION.--Lat 36°37'47", long 102°40'52", NE $\frac{1}{4}$, NE $\frac{1}{4}$, sec.24, T.2 N., R.3 E., Cimarron County, Hydrologic Unit 11100101, on downstream side of pier of bridge on U.S. Highway 64, 8.0 miles northeast of Felt, 11.0 miles southwest of Boise City, and at mile 754.9.

DRAINAGE AREA.--879 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage 4,246.05 ft above sea level.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--20 years, 1.02 ft³/s, 739 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,160 ft³/s, Aug. 13, 1981, gage height, 10.96 ft on the basis of step-backwater measurement at gage site; no flow most days.

EXTREMES FOR CURRENT YEAR.--No flow all year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

[illegible]



Canadian River at Calvin May 5, 1941

LOCATION.--Lat 36°34'19", long 101°122'52", NW 1/4 NW 1/4 sec.7, T.1 N., R.16 E., Texas County, Hydrologic Unit 11100103, near left bank on downstream side of pier of bridge on county road, 0.3 mi downstream from Frisco Creek, 4.0 mi east and 7.5 mi south of Guymon, and at mile 18.0.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Datum of gage 2,870.83 ft above sea level.

REMARKS.--No estimated daily discharge. Records good. Natural flow affected by flood retarding structures and irrigation development. Satellite telemeter at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft³/s:

No peak greater than base discharge.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2000, BY WATER YEAR (WY)

MEAN	1.24	.16	.000	.000	.000	.000	2.63	7.88	4.50	.025	1.08	1.59
MAX	21.0	3.23	.000	.000	.000	.000	52.7	86.0	42.3	.31	6.90	27.5
(WY)	1986	1999	1981	1981	1981	1981	1990	1989	1991	1981	1992	1985
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1981	1981	1981	1981	1981	1981	1981	1981	1981	1982	1983	1981

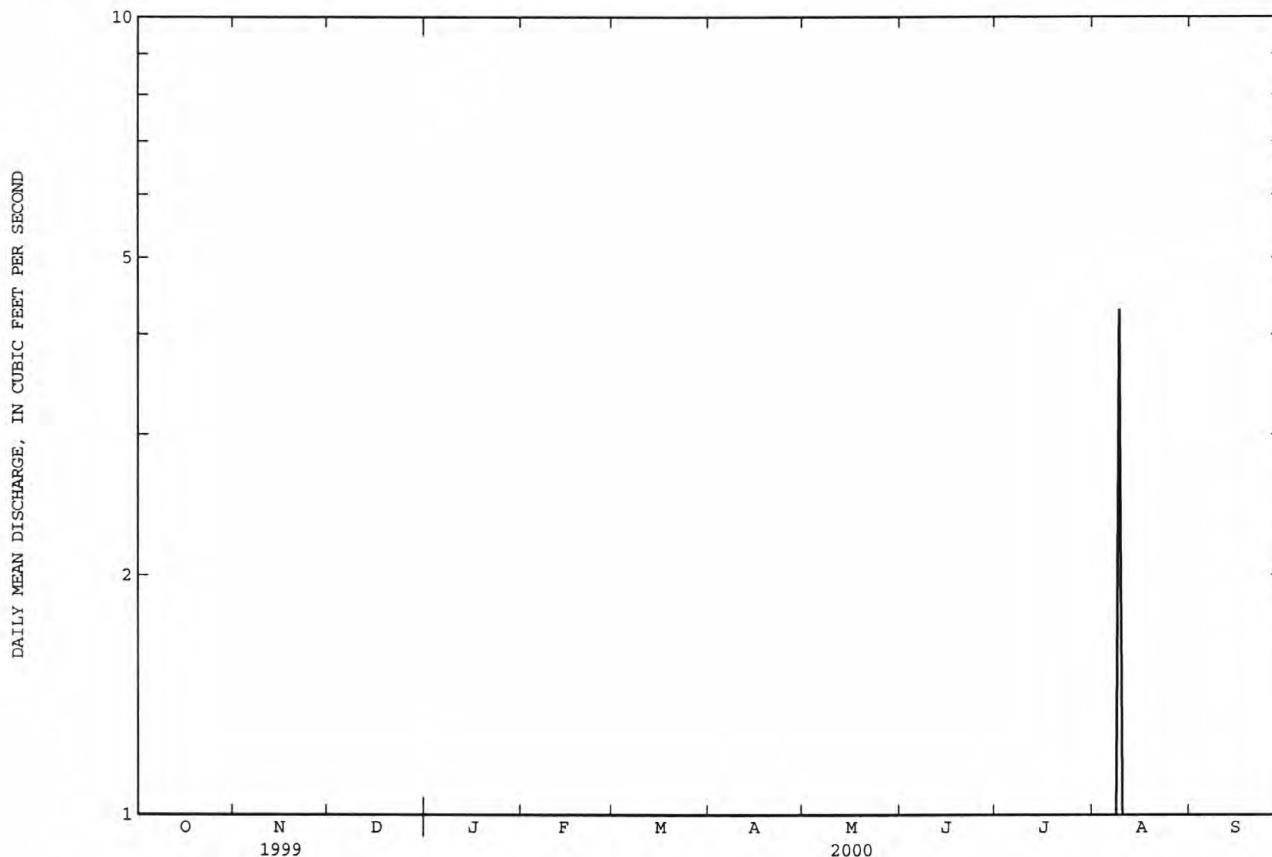
ARKANSAS RIVER BASIN

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07232900 COLDWATER CREEK NEAR GUYMON, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1981 - 2000
ANNUAL TOTAL		4.30	
ANNUAL MEAN		.012	1.60
HIGHEST ANNUAL MEAN			8.37 1982
LOWEST ANNUAL MEAN			.000 1983
HIGHEST DAILY MEAN		4.3 Aug 9	1500 May 18 1989
LOWEST DAILY MEAN	.00 all year	.00 most days	.00 every year
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Oct 1 1980
INSTANTANEOUS PEAK FLOW		21 Aug 9	5800 Jun 20 1982
INSTANTANEOUS PEAK STAGE		^a 8.67 Aug 9	14.34 Jun 20 1982
ANNUAL RUNOFF (AC-FT)		8.5	1160
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

^aFrom high-water mark.



ARKANSAS RIVER BASIN

07233650 PALO DURO CREEK AT RANGE, OK

LOCATION.--Lat 36°32'38", long 101°04'50", SE 1/4 SE 1/4 sec.14, T.1 N., R.18 E., Texas County, Hydrologic Unit 11100104, on downstream side of pier of county road bridge, 3.4 mi upstream from Hackberry Creek, 11.0 mi southeast of Hardesty, and at mile 14.9.

DRAINAGE AREA.--1,513 mi², of which 687 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Datum of gage 2,679.77 ft above sea level.

REMARKS.--Records poor. Flow regulated since April 1991 by Palo Duro Reservoir, 18 mi upstream. Natural flow also affected by local irrigation withdrawals. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.16	e1.0	1.2	1.1	1.2	e1.4	1.4	2.7	.97	.39	.05	.00
2	.12	e1.0	1.2	1.1	1.3	1.7	1.4	2.7	1.4	.35	.05	.00
3	.25	e1.0	1.2	1.1	1.3	1.7	1.3	2.5	1.0	.29	.04	.00
4	.37	1.0	1.3	1.2	1.4	1.6	1.2	2.3	.65	.23	.04	.00
5	.35	1.0	1.3	1.3	1.4	1.6	1.2	2.1	.53	.21	.04	.00
6	.29	.91	1.3	1.2	1.4	1.5	e1.2	1.8	.52	.19	.04	.00
7	.22	.96	1.3	1.2	1.4	e1.5	e1.1	1.6	.48	.17	.05	.00
8	1.9	.99	1.2	1.2	1.4	e1.4	e1.1	1.4	.40	.16	.05	.00
9	1.9	.99	1.2	1.3	1.4	e1.4	e1.1	1.3	.30	.12	.04	.00
10	1.3	.96	1.2	1.3	1.4	e1.3	e1.1	1.2	.40	.10	.04	.00
11	e1.2	.90	1.2	1.3	1.4	e1.2	e1.1	1.0	.83	.08	.04	.00
12	e1.1	.87	1.2	1.2	1.4	e1.2	e1.0	.92	1.1	.08	.03	.00
13	e1.1	.91	1.3	1.3	1.3	e1.1	e1.0	.90	1.4	.08	.03	.00
14	1.1	.85	1.3	1.3	1.3	e1.1	e1.1	.87	.76	.08	.03	.00
15	1.1	.91	1.3	1.3	1.3	e1.1	e1.1	.86	.50	.08	.02	.00
16	1.1	.90	1.3	1.3	1.3	e1.1	e1.2	.86	.32	.07	.02	.00
17	1.0	.89	1.3	1.3	1.4	e1.2	e1.1	.75	.37	.07	.02	.00
18	1.1	.91	1.3	1.4	1.3	e1.2	e1.0	.45	.33	.46	.03	.00
19	1.1	.95	1.4	1.4	1.2	e1.2	e1.0	.49	.47	.25	.03	.00
20	1.1	.98	1.3	1.3	1.6	e1.3	e1.0	.53	.37	.15	.03	.00
21	1.1	.92	1.4	1.2	1.8	e1.5	e1.0	.51	.28	.11	.02	.00
22	1.1	.88	1.3	1.2	1.4	e2.2	e1.0	.42	.35	.12	.01	.00
23	1.1	.83	1.3	1.2	1.2	2.0	e.95	.38	.32	.15	.01	.00
24	1.1	.91	1.3	1.1	1.2	1.9	e1.0	.46	.34	.13	.01	.00
25	1.1	1.1	1.3	1.0	1.2	1.7	e1.1	1.1	.36	.10	.01	.00
26	.96	1.1	1.3	1.1	1.1	1.4	1.4	e1.7	.42	.08	.01	.01
27	.95	1.1	1.2	1.2	1.1	1.3	1.5	e1.4	.45	.07	.00	.01
28	.88	1.1	1.3	1.2	1.1	1.2	2.4	1.3	.90	.06	.00	.01
29	1.0	1.2	1.2	1.2	e1.2	1.2	2.7	1.2	.78	.06	.00	.01
30	1.0	1.2	1.3	1.2	---	1.2	2.8	1.2	.47	.05	.00	.00
31	1.0	---	1.2	1.2	---	1.2	---	1.0	---	.05	.00	---
TOTAL	29.15	29.22	39.4	37.9	38.4	43.6	38.55	37.90	17.77	4.59	0.79	0.04
MEAN	.94	.97	1.27	1.22	1.32	1.41	1.28	1.22	.59	.15	.025	.001
MAX	1.9	1.2	1.4	1.4	1.8	2.2	2.8	2.7	1.4	.46	.05	.01
MIN	.12	.83	1.2	1.0	1.1	1.1	.95	.38	.28	.05	.00	.00
AC-FT	58	58	78	75	76	86	76	75	35	9.1	1.6	.08

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	.47	.95	1.19	1.24	1.38	1.56	1.70	1.58	1.04
MAX	.97	1.58	2.68	1.73	2.17	1.99	3.43	3.20	2.72
(WY)	1997	1997	1997	1997	1997	1998	1999	1999	1999
MIN	.12	.28	.43	.50	.67	1.14	.94	.51	.065
(WY)	1995	1995	1995	1995	1995	1996	1996	1996	1994
									2000
									1998

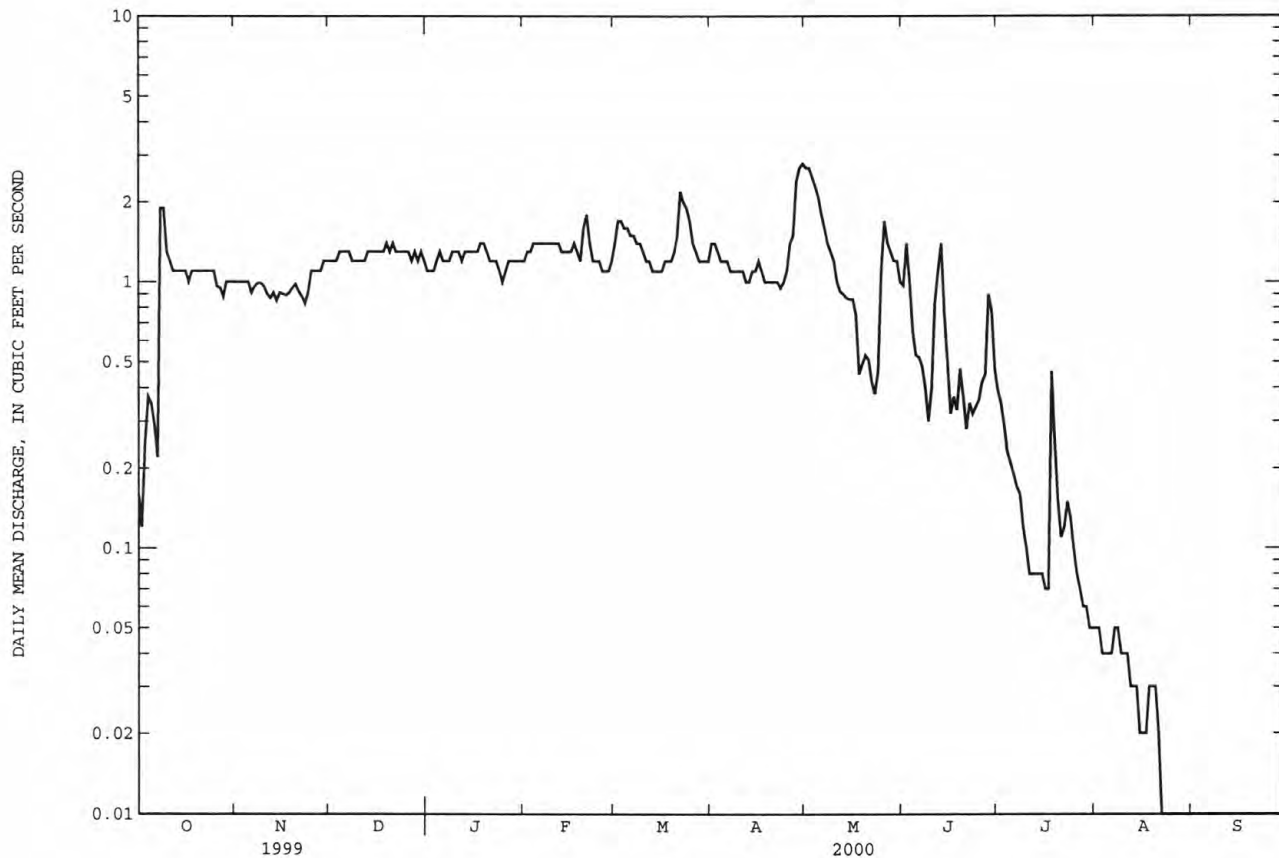
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ARKANSAS RIVER BASIN

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07233650 PALO DURO CREEK AT RANGE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	613.29	317.31	
ANNUAL MEAN	1.68	.87	1.02
HIGHEST ANNUAL MEAN			1.64 1999
LOWEST ANNUAL MEAN			.67 1996
HIGHEST DAILY MEAN	59 Jul 1	2.8 Apr 30	59 Jul 1 1999
LOWEST DAILY MEAN	.00 several days	.00 several days	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 24	.00 Aug 27	.00 Jun 23 1994
INSTANTANEOUS PEAK FLOW		3.1 Oct 8	105 Jun 30 1999
INSTANTANEOUS PEAK STAGE		8.39 Apr 30	10.53 Jun 30 1999
ANNUAL RUNOFF (AC-FT)	1220	629	736
10 PERCENT EXCEEDS	3.3	1.4	1.8
50 PERCENT EXCEEDS	1.2	1.1	1.0
90 PERCENT EXCEEDS	.15	.01	.02



ARKANSAS RIVER BASIN

07234000 BEAVER RIVER AT BEAVER, OK

(Headwater of the North Canadian River)

LOCATION.--Lat 36°49'20", long 100°31'08", SW 1/4 sec.7, T.4 N., R.24 E., Beaver County, Hydrologic Unit 11100102, near right bank on downstream side of pier of bridge on U.S. Highway 270 at Beaver, 1.1 mi downstream from Home Creek, 5.0 mi upstream from Clear Creek, and at mile 576.0.

DRAINAGE AREA.--7,955 mi², of which 4,270 mi² is probably noncontributing.

PERIOD OF RECORD.--March 1904 to December 1905 (gage heights only), October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Beaver Creek at Beaver 1904-5, and October 1937 to September 1970 as North Canadian River at Beaver.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,368.16 ft, sea level (levels by U.S. Army Corps of Engineers). Mar. 29, 1904 to Dec. 31, 1905, nonrecording gage at same vicinity at different datum. Mar. 1, 1938 to Sept. 30, 1946, water-stage recorder at present site at datum 3.0 ft higher.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Natural flow affected by irrigation development. Regulation by Optima Lake (station 07233200) 47.0 mi upstream, since Oct. 1978, and regulation by Palo Duro Reservoir since May 1991. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.68	2.7	4.3	5.0	e5.8	6.4	31	20	7.4	1.2	.12	.02
2	.60	2.7	4.3	4.9	e6.3	9.9	34	22	11	1.0	.10	.02
3	.72	2.9	4.2	4.9	6.9	12	32	22	15	.86	.09	.02
4	.78	2.9	4.5	4.0	6.6	13	29	21	9.0	.68	.08	.02
5	.80	3.0	4.9	4.9	6.8	12	28	20	7.5	.52	.07	.02
6	.82	2.9	4.8	5.3	6.7	10	26	20	6.6	.42	.06	.02
7	.83	3.7	4.9	5.7	6.7	11	25	19	6.1	.36	.05	.02
8	2.7	3.9	4.8	5.7	6.7	11	23	18	5.4	.29	.05	.02
9	4.3	3.7	4.7	5.0	6.9	11	23	18	4.8	.24	.07	.02
10	4.8	2.9	4.7	5.0	6.9	11	22	17	4.6	.22	.06	.02
11	5.1	3.0	4.8	4.9	6.6	10	22	16	5.0	.24	.05	.02
12	5.2	3.0	4.7	5.0	6.8	9.8	22	15	4.6	.24	.03	.02
13	4.9	3.1	4.6	4.9	6.6	9.7	22	15	4.4	.22	.03	.02
14	4.9	3.5	4.7	5.1	6.5	9.6	22	15	3.9	.17	.02	.02
15	4.7	3.6	3.9	5.9	6.6	9.4	21	15	3.2	.15	.02	.02
16	4.4	3.7	4.5	6.1	6.3	10	21	15	2.7	.15	.02	.02
17	4.2	4.0	4.5	6.5	6.6	11	20	14	2.5	.16	.02	.02
18	4.3	4.0	4.5	6.7	6.3	11	20	14	2.3	.24	.02	.01
19	4.3	3.8	4.6	6.7	6.3	11	20	14	2.0	.15	.02	.01
20	4.3	3.6	4.5	6.6	6.4	11	19	13	1.8	.14	.03	.01
21	4.2	3.6	4.5	6.7	6.6	11	18	13	3.5	.17	.03	.02
22	3.7	3.7	4.5	6.7	6.9	14	18	13	2.8	.20	.03	.01
23	3.1	3.8	4.5	6.6	7.2	25	18	12	2.1	.17	.03	.02
24	3.1	3.6	4.5	6.7	6.9	32	18	12	1.9	.15	.03	.02
25	3.4	3.8	4.5	6.4	6.9	30	18	11	1.6	.15	.03	.02
26	3.2	4.1	4.6	6.3	6.5	27	18	11	1.3	.15	.03	.02
27	3.0	4.1	4.6	e6.2	6.3	24	18	9.5	1.4	.14	.02	.01
28	2.8	4.0	4.7	e5.5	6.5	23	18	8.7	1.6	.13	.02	.01
29	2.9	4.0	4.8	e4.5	6.6	24	18	7.8	1.5	.12	.02	.01
30	2.7	4.1	4.8	e5.3	---	23	19	7.2	1.4	.13	.02	.01
31	2.6	---	4.8	e5.0	---	25	---	6.7	---	.12	.02	---
TOTAL	98.03	105.4	142.2	174.7	191.7	467.8	663	454.9	128.9	9.28	1.29	0.52
MEAN	3.16	3.51	4.59	5.64	6.61	15.1	22.1	14.7	4.30	.30	.042	.017
MAX	5.2	4.1	4.9	6.7	7.2	32	34	22	15	1.2	.12	.02
MIN	.60	2.7	3.9	4.0	5.8	6.4	18	6.7	1.3	.12	.02	.01
AC-FT	194	209	282	347	380	928	1320	902	256	18	2.6	1.0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2000, BY WATER YEAR (WY)

	MEAN	7.51	3.50	3.11	4.32	6.59	10.9	17.2	50.9	58.2	15.3	4.19	10.5
MAX	130	28.6	13.7	17.2	21.4	27.6	83.8	295	362	79.4	25.9	78.5	
(WY)	1986	1999	1988	1988	1993	1993	1990	1989	1989	1989	1982	1981	
MIN	.000	.000	.000	.040	.11	.11	.029	.093	.000	.000	.000	.000	
(WY)	1980	1981	1981	1981	1981	1981	1981	1981	1981	1981	1981	1980	

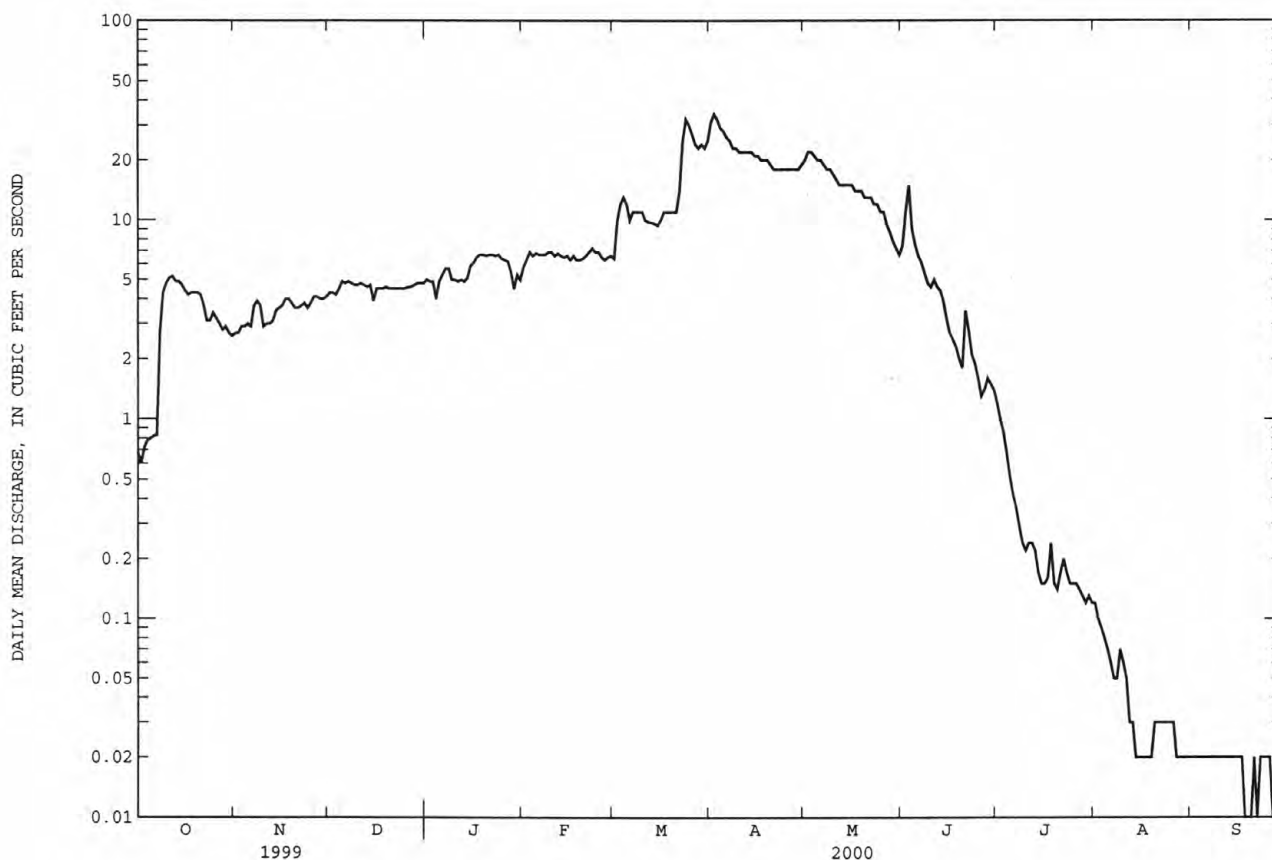
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ARKANSAS RIVER BASIN

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07234000 BEAVER RIVER AT BEAVER, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1979 - 2000
ANNUAL TOTAL	6723.20	2437.72	^a 16.0
ANNUAL MEAN	18.4	6.66	64.0
HIGHEST ANNUAL MEAN			2.25
LOWEST ANNUAL MEAN			3880
HIGHEST DAILY MEAN	326 Jun 11	34 Apr 2	May 31 1980
LOWEST DAILY MEAN	.26 Sep 10	.01 several days	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.29 Sep 5	.01 Sep 16	Oct 1 1978
INSTANTANEOUS PEAK FLOW		36 Mar 24	^b 5510 Jun 10 1983
INSTANTANEOUS PEAK STAGE		3.08 Apr 2	^c 10.50 Jun 10 1983
ANNUAL RUNOFF (AC-FT)	13340	4840	11600
10 PERCENT EXCEEDS	38	19	25
50 PERCENT EXCEEDS	9.2	4.6	1.6
90 PERCENT EXCEEDS	.59	.02	.00

^aPrior to regulation, water years 1938-78, 103 ft³/s.^bMaximum discharge for period of record, 70,000 ft³/s, Oct. 8, 1946, from slope-area measurement of peak flow in overflow section and extension of rating curve for main channel above 42,000 ft³/s.^cMaximum gage height for period of record, 14.55 ft, Oct. 8, 1946.

ARKANSAS RIVER BASIN

07237500 NORTH CANADIAN RIVER AT WOODWARD, OK

LOCATION.--Lat 36°26'12", long 99°16'41", SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.30, T.23 N., R.19 W., Woodward County, Hydrologic Unit 11100301, on downstream side of pier of bridge on State Highway 412 (formerly State Highway 15), 275 ft downstream from The Atchison, Topeka and Santa Fe Railway Co. bridge, 6.0 mi east of Woodward, 7.2 mi upstream from Indian Creek, 27.5 mi downstream from Wolf Creek, and at mile 460.2.

DRAINAGE AREA.--11,589 mi², of which 4,812 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1903 to September 1905 (gage heights only), October 1905 to June 1906, October 1938 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Canadian River (North Fork) near Woodward 1903-06. Gage-height records collected in this vicinity since 1919 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1731: 1951(M).

GAGE.--Water-stage recorder. Datum of gage is 1,829.95 ft above sea level. Prior to July 1906, nonrecording gage at railway bridge 275 ft upstream at different datum. Oct. 1, 1938 to Oct. 26, 1943, nonrecording gage and Oct. 27, 1943 to July 12, 1951, water-stage recorder, at site 7.8 mi upstream at datum 37.01 ft higher than present datum.

REMARKS.--No estimated daily discharge. Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Some regulation since May 1942 by Fort Supply Lake (station 07236500) on Wolf Creek, 33.0 mi upstream. Flow regulated since October 1978 by Optima Lake (station 07233200), 163.0 mi upstream, and by Palo Duro reservoir since May 1991. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 12, 1923, reached a stage of 11.0 ft, site and datum then in use; from reports of National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	39	79	64	122	136	432	221	280	308	53	15
2	36	41	86	62	125	223	423	215	339	211	51	15
3	37	42	86	62	129	221	409	294	339	178	49	14
4	37	42	90	64	128	215	399	353	324	159	47	14
5	36	41	100	78	124	211	388	210	311	145	44	14
6	36	41	96	104	124	207	382	210	302	165	42	14
7	39	42	97	108	123	210	350	271	294	221	47	13
8	63	42	99	111	124	223	288	271	240	223	63	13
9	71	42	100	112	126	211	276	238	157	218	42	13
10	73	47	99	112	128	208	268	173	135	210	123	13
11	76	71	100	107	117	206	261	159	139	165	58	12
12	76	75	100	86	100	202	258	147	143	118	45	12
13	76	77	99	121	98	200	253	138	135	109	40	12
14	76	78	100	124	97	166	250	135	295	99	37	12
15	73	79	98	126	97	136	248	130	310	93	35	12
16	53	81	100	127	97	132	244	128	283	86	33	12
17	46	82	100	128	97	134	238	125	217	81	32	12
18	44	83	101	128	97	137	235	120	184	78	31	11
19	42	83	102	110	94	142	231	115	169	73	30	11
20	42	82	101	88	95	134	222	112	211	71	28	11
21	41	83	100	84	97	194	218	110	329	91	26	11
22	40	83	100	83	99	296	217	108	348	109	26	11
23	40	75	100	83	106	467	217	103	331	89	24	11
24	40	58	99	82	101	397	217	97	316	78	22	11
25	40	55	98	81	116	337	217	103	306	70	21	12
26	40	53	98	81	106	301	213	380	403	67	20	12
27	40	52	98	82	135	272	217	294	400	64	19	11
28	39	51	98	82	121	313	211	238	421	61	18	11
29	39	51	90	97	111	387	211	183	399	60	17	11
30	38	53	71	117	---	384	211	155	374	57	17	10
31	39	---	66	120	---	388	---	204	---	55	16	---
TOTAL	1506	1824	2951	3014	3234	7390	8204	5740	8434	3812	1156	366
MEAN	48.6	60.8	95.2	97.2	112	238	273	185	281	123	37.3	12.2
MAX	76	83	102	128	135	467	432	380	421	308	123	15
MIN	36	39	66	62	94	132	211	97	135	55	16	10
AC-FT	2990	3620	5850	5980	6410	14660	16270	11390	16730	7560	2290	726

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2000, BY WATER YEAR (WY)

	MEAN	60.8	65.9	62.7	79.0	93.4	143	173	246	214	91.8	48.9	42.7
MAX	377	281	242	205	207	404	576	900	814	328	254	368	
(WY)	1986	1997	1997	1998	1999	1987	1999	1979	1989	1989	1996	1996	
MIN	2.33	5.75	8.33	11.0	12.6	30.6	32.6	13.3	9.57	4.24	1.73	.95	
(WY)	1992	1985	1995	1981	1981	1996	1996	1996	1996	1981	1991	1984	

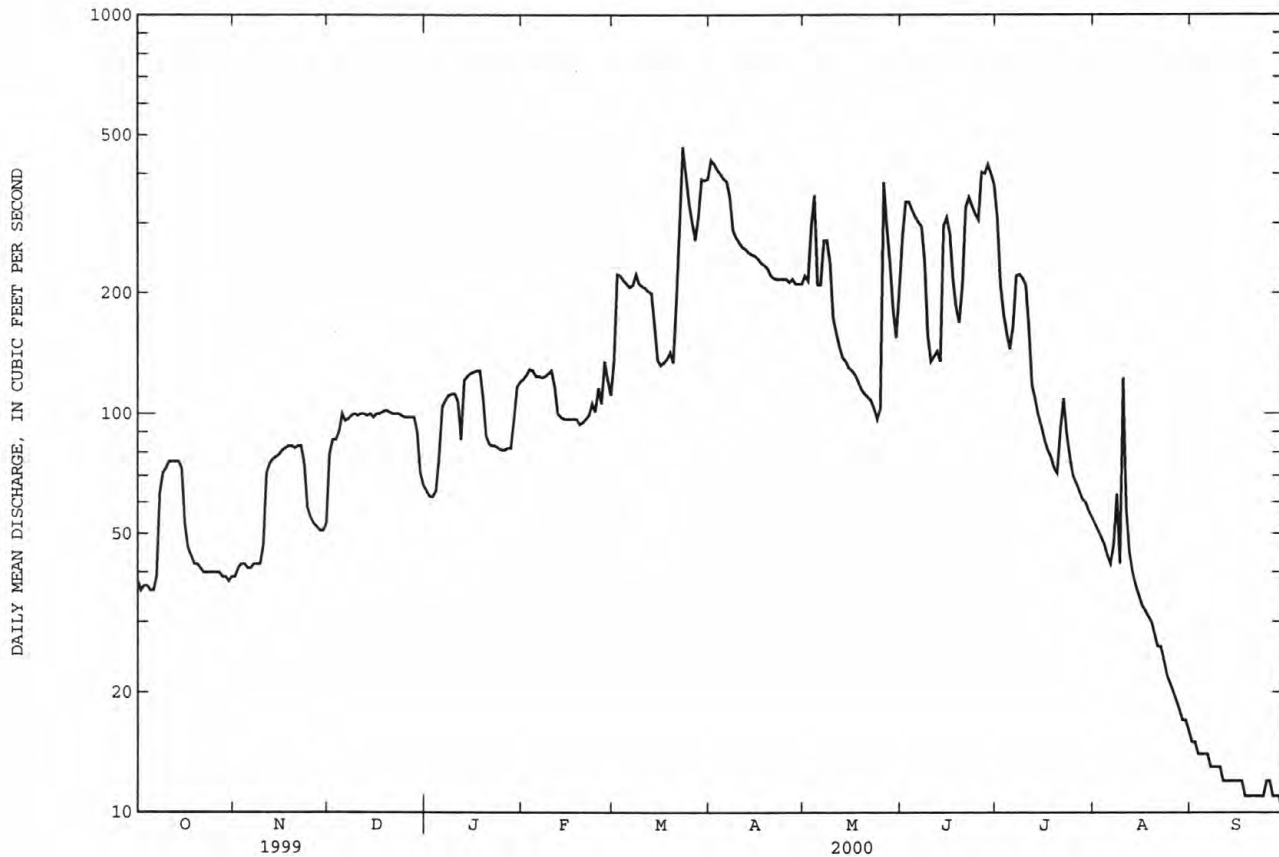
07237500 NORTH CANADIAN RIVER AT WOODWARD, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1979 - 2000	
ANNUAL TOTAL	84662		47631		^a 110	
ANNUAL MEAN	232		130		248	1999
HIGHEST ANNUAL MEAN					16.9	1981
LOWEST ANNUAL MEAN					2950	May 23 1989
HIGHEST DAILY MEAN	1310	Apr 19	467	Mar 23	.00	at times
LOWEST DAILY MEAN	31	Sep 10	10	Sep 30	.13	Sep 9 1984
ANNUAL SEVEN-DAY MINIMUM	37	Sep 30	11	Sep 18	^b 3090	May 23 1989
INSTANTANEOUS PEAK FLOW			625	May 26	^c 10.72	May 23 1989
INSTANTANEOUS PEAK STAGE			6.50	May 26	79750	
ANNUAL RUNOFF (AC-FT)	167900		94480		268	
10 PERCENT EXCEEDS	532		294		60	
50 PERCENT EXCEEDS	125		100		6.3	
90 PERCENT EXCEEDS	41		21			

^aPrior to regulation 1939-78, 194 ft³/s.

^bMaximum discharge for period of record 42,000 ft³/s, Oct. 10, 1946.

^cMaximum gage height for period of record 9.80 ft, Oct. 10, 1946, site and datum then in use.



ARKANSAS RIVER BASIN

07238000 NORTH CANADIAN RIVER NEAR SEILING, OK

LOCATION.--Lat 36°11'00", long 98°55'15", in NW 1/4 sec.28, T.20 N., R.16 W., Major County, Hydrologic Unit 11100301, near center of span on downstream side of pier of bridge on U.S. Highway 60, 2.0 mi upstream from Seiling Creek, 2.2 mi north of Seiling, 2.8 mi downstream from Deep Creek, and at mile 422.6.

DRAINAGE AREA.--12,261 mi², of which 4,847 mi is probably noncontributing.

PERIOD OF RECORD.--July 1946 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,675.53 ft above sea level. July 1, 1946 to Aug. 17, 1964, at site 60 ft downstream and prior to Oct. 1, 1954, at datum 5.00 ft higher.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records good July 1 to Sept. 30. Some regulation since May 1942 by Fort Supply Lake. Minor regulation since October 1978 by Optima Lake. Some regulation since May 1991 by Palo Duro Reservoir. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	66	88	118	177	164	503	260	235	441	94	22
2	55	65	103	114	177	285	615	267	305	357	89	21
3	54	67	116	112	179	491	575	261	471	275	86	19
4	56	70	129	109	179	368	507	315	446	256	82	18
5	58	72	148	110	176	296	482	360	373	237	77	17
6	58	73	153	116	175	271	458	263	333	e217	73	16
7	55	73	153	142	175	262	439	250	312	e216	71	15
8	58	73	154	157	174	283	393	279	297	e224	70	15
9	73	74	165	159	175	293	329	279	266	e222	81	15
10	85	73	165	159	176	263	312	260	224	e218	67	14
11	85	73	158	157	175	255	303	221	210	e210	100	13
12	84	90	155	156	167	250	294	204	211	e191	93	12
13	82	101	151	143	157	245	293	188	215	e166	68	12
14	81	104	149	153	154	241	290	177	381	e150	58	12
15	83	104	147	164	153	225	288	175	640	e139	53	11
16	83	105	144	167	151	416	303	173	471	e131	51	11
17	74	109	145	169	150	259	288	171	400	e127	48	11
18	65	109	146	172	150	250	279	167	373	e123	46	11
19	62	107	147	174	150	242	275	165	297	e120	46	9.8
20	65	108	147	162	148	228	264	164	268	e117	43	9.4
21	69	110	147	152	147	209	254	162	281	e131	40	9.8
22	68	112	146	146	151	251	250	162	379	192	37	11
23	65	116	145	142	169	1880	250	159	388	e181	35	11
24	64	112	145	139	169	2130	249	156	359	165	33	12
25	64	100	143	138	181	1010	250	151	367	140	31	14
26	65	94	143	137	209	616	248	1450	391	121	29	15
27	66	93	143	138	182	471	247	929	555	110	27	16
28	66	91	143	139	188	395	257	522	569	105	25	15
29	65	89	143	139	176	405	248	344	567	109	24	14
30	65	87	141	147	---	458	248	270	503	102	23	13
31	63	---	128	172	---	457	---	246	---	97	22	---
TOTAL	2094	2720	4430	4502	4890	13869	9991	9150	11087	5590	1722	415.0
MEAN	67.5	90.7	143	145	169	447	333	295	370	180	55.5	13.8
MAX	85	116	165	174	209	2130	615	1450	640	441	100	22
MIN	54	65	88	109	147	164	247	151	210	97	22	9.4
AC-FT	4150	5400	8790	8930	9700	27510	19820	18150	21990	11090	3420	823

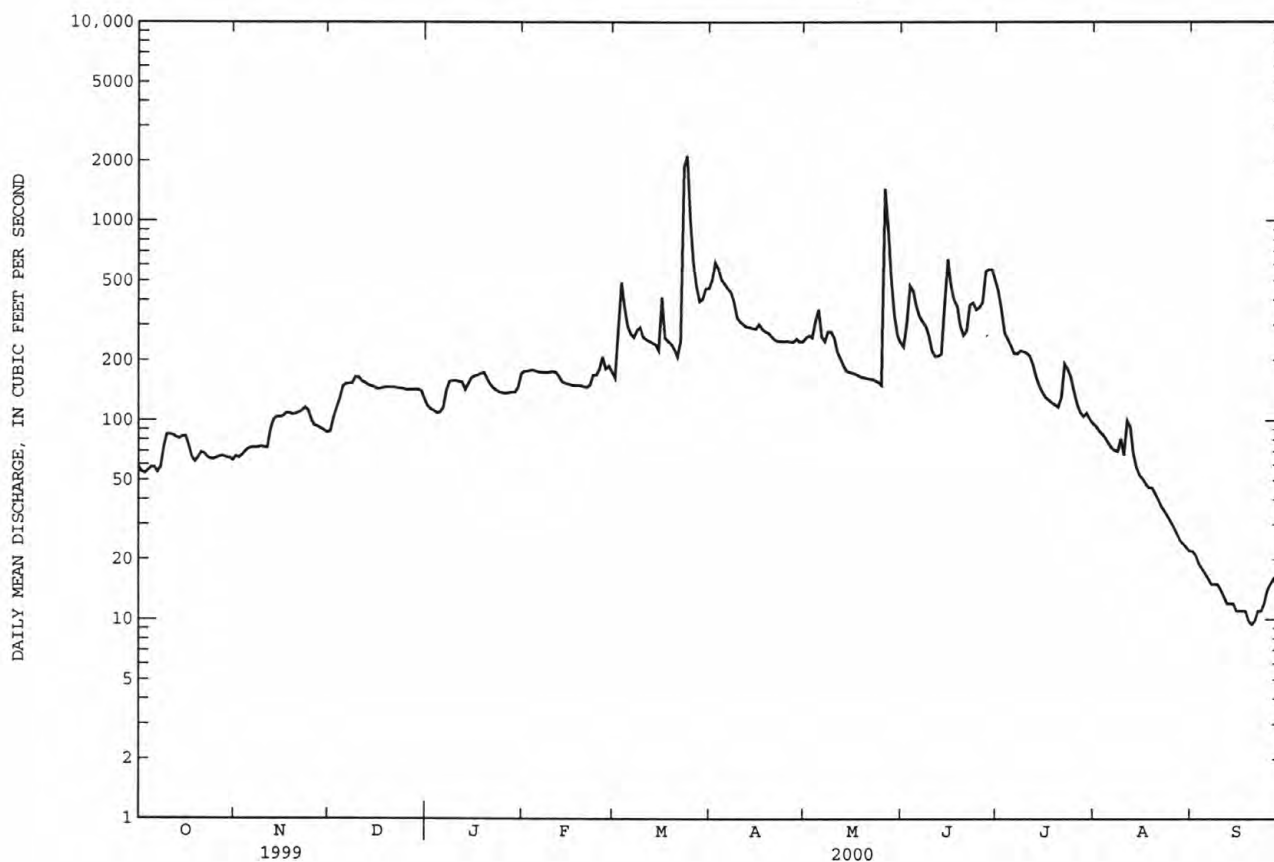
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2000, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	95.6	119	106	123	144	223	259	371	310	132	73.3	83.1										
MAX	471	540	333	360	303	645	1128	984	982	380	409	698										
(WY)	1997	1999	1997	1998	1998	1998	1999	1979	1989	1989	1996	1996										
MIN	2.73	10.6	24.5	30.5	36.7	61.8	57.3	32.3	18.8	8.13	1.23	.074										
(WY)	1992	1985	1979	1981	1981	1996	1981	1996	1981	1991	1984	1984										

e Estimated

07238000 NORTH CANADIAN RIVER NEAR SEILING, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1979 - 2000	
ANNUAL TOTAL	121189		70460.0		^a 170	
ANNUAL MEAN	332		193		380	
HIGHEST ANNUAL MEAN					29.4	
LOWEST ANNUAL MEAN					1999	
HIGHEST DAILY MEAN	2980	Apr 14	2130	Mar 24	5430	Sep 23 1997
LOWEST DAILY MEAN	46	Sep 11	9.4	Sep 20	.00	at times
ANNUAL SEVEN-DAY MINIMUM	52	Sep 6	10	Sep 15	.00	Sep 16 1980
INSTANTANEOUS PEAK FLOW			2960	Mar 23	^b 7200	Sep 23 1997
INSTANTANEOUS PEAK STAGE			12.11	Mar 23	^c 14.86	Sep 23 1997
ANNUAL RUNOFF (AC-FT)	240400		139800		123100	
10 PERCENT EXCEEDS	793		375		393	
50 PERCENT EXCEEDS	204		151		90	
90 PERCENT EXCEEDS	61		30		12	

^aPrior to regulation, water years 1947-78, 215 ft³/s.^bMaximum discharge for period of record, 33,000 ft³/s, May 19, 1951.^cMaximum gage height for period of record, 16.00 ft, Oct. 11, 1946, present datum.

ARKANSAS RIVER BASIN

07239000 NORTH CANADIAN RIVER AT CANTON, OK

LOCATION.--Lat 36°04'37", long 98°35'47", in NE 1/4 SW 174 sec.33, T.19 N., R.13 W., Blaine County, Hydrologic Unit 11100301, on right bank 2,700 ft downstream from Canton Lake, 1.5 mi northwest of Canton, 4.8 mi upstream from Minnehaha Creek, and at mile 393.8

DRAINAGE AREA.--12,484 mi², of which 4,883 mi is probably noncontributing.

PERIOD OF RECORD.--October 1937 to September 1993, July 1 to Sept. 30, 2000. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected in this vicinity since 1914 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,562.50 ft above sea level. Oct. 1, 1937 to Jan. 5, 1955, water-stage recorder at site 2.5 mi downstream at datum 1.91 ft lower prior to Oct. 1, 1950 and at datum 6.91 ft lower thereafter.

REMARKS.--No estimated daily discharge. Records good. Flow partly regulated by Fort Supply Lake for period May 1942 to April 1948 and completely regulated thereafter by Canton Lake. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.-- Flood of Oct. 13, 1923, reached a stage of 16.8 ft, at site 300 ft upstream from former site at datum 1.91 ft lower than present datum, from reports of National Weather Service.

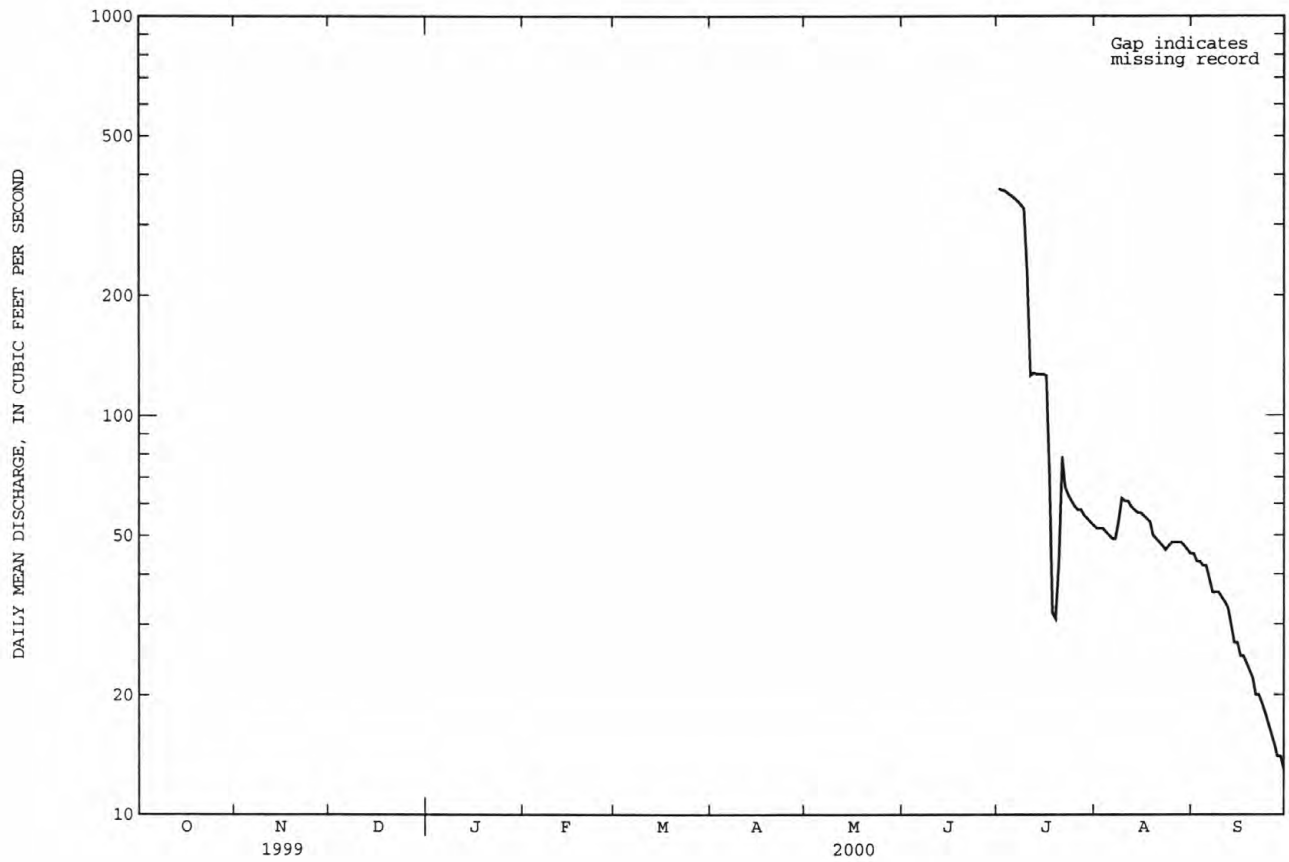
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	369	52	45
2	---	---	---	---	---	---	---	---	---	366	52	43
3	---	---	---	---	---	---	---	---	---	364	52	43
4	---	---	---	---	---	---	---	---	---	359	51	42
5	---	---	---	---	---	---	---	---	---	354	50	42
6	---	---	---	---	---	---	---	---	---	349	49	39
7	---	---	---	---	---	---	---	---	---	343	49	36
8	---	---	---	---	---	---	---	---	---	336	54	36
9	---	---	---	---	---	---	---	---	---	329	62	36
10	---	---	---	---	---	---	---	---	---	230	61	35
11	---	---	---	---	---	---	---	---	---	126	61	34
12	---	---	---	---	---	---	---	---	---	128	59	33
13	---	---	---	---	---	---	---	---	---	127	58	30
14	---	---	---	---	---	---	---	---	---	127	57	27
15	---	---	---	---	---	---	---	---	---	127	57	27
16	---	---	---	---	---	---	---	---	---	126	56	25
17	---	---	---	---	---	---	---	---	---	69	55	25
18	---	---	---	---	---	---	---	---	---	32	54	24
19	---	---	---	---	---	---	---	---	---	31	50	23
20	---	---	---	---	---	---	---	---	---	43	49	22
21	---	---	---	---	---	---	---	---	---	79	48	20
22	---	---	---	---	---	---	---	---	---	66	47	20
23	---	---	---	---	---	---	---	---	---	63	46	19
24	---	---	---	---	---	---	---	---	---	61	47	18
25	---	---	---	---	---	---	---	---	---	59	48	17
26	---	---	---	---	---	---	---	---	---	58	48	16
27	---	---	---	---	---	---	---	---	---	58	48	15
28	---	---	---	---	---	---	---	---	---	56	48	14
29	---	---	---	---	---	---	---	---	---	55	47	14
30	---	---	---	---	---	---	---	---	---	54	46	13
31	---	---	---	---	---	---	---	---	---	53	45	---
TOTAL	---	---	---	---	---	---	---	---	---	4997	1606	833
MEAN	---	---	---	---	---	---	---	---	---	161	51.8	27.8
MAX	---	---	---	---	---	---	---	---	---	369	62	45
MIN	---	---	---	---	---	---	---	---	---	31	45	13
AC-FT	---	---	---	---	---	---	---	---	---	9910	3190	1650

ARKANSAS RIVER BASIN

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07239000 NORTH CANADIAN RIVER AT CANTON, OK--Continued



ARKANSAS RIVER BASIN

07239300 NORTH CANADIAN RIVER BELOW WEAVERS CREEK NEAR WATONGA, OK

LOCATION.--Lat 35°48'43", long 98°25'14", NE ¹/₄, NE ¹/₄, sec.1, T.15 N., R.12 W., Blaine County, Hydrologic Unit 11100301, near right abutment on downstream side of U.S. Highway 281, 2.0 mi south of intersection of U.S. Highway 281 and State Highway 33 and at mile 361.2.

DRAINAGE AREA.--12,736 mi², of which 4,899 mi² is probably noncontributing.

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

REVISD RECORDS.--WRD OK-95-1: 1987 (M)

GAGE.--Water-stage recorder. Datum of gage is 1,453.60 ft above sea level (Oklahoma State Highway Department benchmark).

REMARKS.--No estimated daily discharge. Records poor Oct. 1 to June 30 due to lack of measurements and funding; records good July 1 to Sept. 30. Considerable regulation by Canton Lake (07238500) 33 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

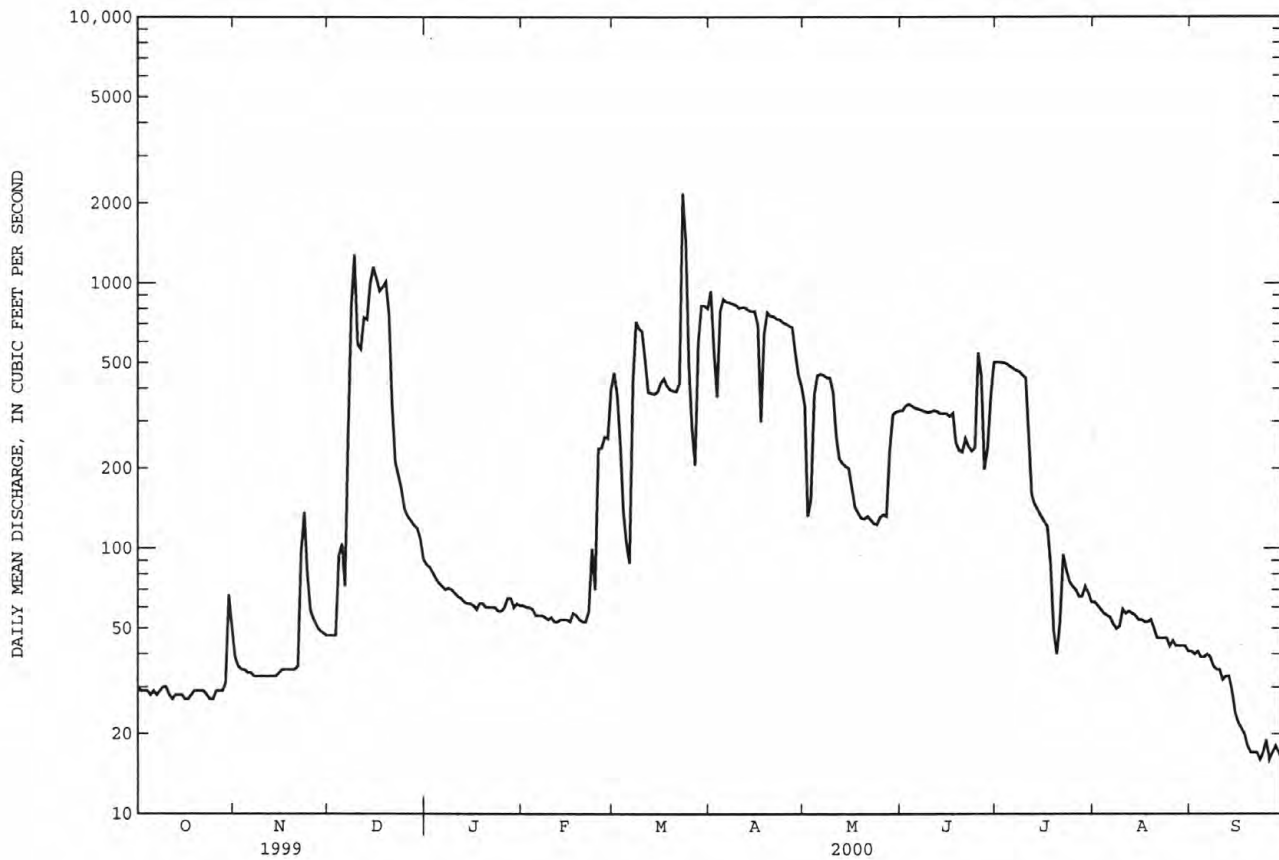
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	39	47	87	61	458	938	345	329	503	63	41
2	29	36	47	85	60	378	558	132	343	503	61	40
3	29	35	47	81	60	248	372	152	349	500	59	41
4	29	35	94	77	59	138	785	377	343	496	57	39
5	28	34	104	74	56	104	870	448	337	485	56	39
6	29	34	72	72	56	88	849	453	334	477	55	40
7	28	33	274	70	56	419	845	449	331	468	52	39
8	29	33	820	71	55	716	835	439	327	463	50	36
9	30	33	1280	70	54	673	827	438	325	449	51	35
10	30	33	585	68	55	659	805	387	326	438	59	35
11	28	33	563	66	53	510	811	265	330	266	57	32
12	27	33	740	65	53	387	811	217	327	159	58	33
13	28	33	727	63	54	384	790	209	321	146	57	33
14	28	33	992	62	54	381	783	203	321	139	56	29
15	28	34	1150	62	54	389	785	200	321	132	54	24
16	27	35	1040	61	53	419	694	169	314	126	54	22
17	27	35	933	59	57	436	299	143	322	121	53	21
18	28	35	966	62	56	409	644	136	249	88	53	20
19	29	35	1010	62	54	396	775	130	233	49	54	18
20	29	35	763	60	53	392	752	129	230	40	50	17
21	29	36	344	60	53	390	749	132	258	53	46	17
22	29	96	211	60	58	421	732	128	241	95	46	17
23	28	137	188	60	100	2180	729	124	232	83	46	16
24	27	80	166	58	70	1450	709	123	238	75	46	17
25	27	58	140	58	237	491	701	131	547	72	43	19
26	29	54	132	60	238	284	689	134	445	70	45	16
27	29	51	127	65	262	206	681	132	198	66	43	17
28	29	49	122	65	259	597	546	235	237	66	43	18
29	31	48	119	60	396	823	449	319	375	72	43	17
30	67	47	109	62	---	820	407	326	503	68	43	16
31	51	---	91	61	---	803	---	329	---	63	41	---
TOTAL	946	1342	14003	2046	2786	16449	21220	7534	9586	6831	1594	804
MEAN	30.5	44.7	452	66.0	96.1	531	707	243	320	220	51.4	26.8
MAX	67	137	1280	87	396	2180	938	453	547	503	63	41
MIN	27	333	47	58	53	88	299	123	198	40	41	16
AC-FT	1880	2660	27770	4060	5530	32630	42090	14940	19010	13550	3160	1590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2000, BY WATER YEAR (WY)

[illegible]

07239300 NORTH CANADIAN RIVER BELOW WEAVERS CREEK NEAR WATONGA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1984 - 2000	
ANNUAL TOTAL	152932		85141		215	
ANNUAL MEAN	419		233		476	1997
HIGHEST ANNUAL MEAN					32.1	1985
LOWEST ANNUAL MEAN					5170	Oct 3 1986
HIGHEST DAILY MEAN	2530	Apr 25	2180	Mar 23	5.0	Sep 26 1985
LOWEST DAILY MEAN	27	Sep 27	16	Sep 23,26,30	5.5	Sep 14 1985
ANNUAL SEVEN-DAY MINIMUM	28	Oct 11	17	Sep 20	6180	Oct 3 1986
INSTANTANEOUS PEAK FLOW			2920	Mar 23	19.24	Oct 3 1986
INSTANTANEOUS PEAK STAGE			15.66	Mar 23		
ANNUAL RUNOFF (AC-FT)	303300		168900		155600	
10 PERCENT EXCEEDS	962		703		692	
50 PERCENT EXCEEDS	251		74		60	
90 PERCENT EXCEEDS	31		29		17	



ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK

LOCATION.--Lat 35°37'01", long 98°03'54", in NW 1/4 SW 1/4 of sec.9, T.13 N., R.8 W., Canadian County, Hydrologic Unit 11100301, near left bank on downstream side of county road bridge, 1 mi north and 3 mi east of Calumet, and at mile 320.7.

DRAINAGE AREA.--12,962 mi², of which 4,899 is noncontributing.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,326.80 ft above sea level.

REMARKS.--Records good. Some regulation by Canton Lake (station 07238500). U.S. Geological Survey's satellite telemeter located at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	63	41	108	63	347	1040	876	397	704	78	36
2	32	49	41	100	63	454	1420	671	405	680	77	35
3	31	41	43	96	63	414	799	347	429	664	75	34
4	31	38	111	92	63	291	600	281	437	663	72	34
5	31	37	150	88	62	169	912	479	432	628	68	34
6	31	37	121	84	60	133	1000	569	425	608	65	32
7	29	36	88	81	58	116	977	568	418	595	64	33
8	31	36	185	80	57	402	958	562	413	580	61	33
9	31	35	1300	78	56	762	945	563	406	568	58	32
10	31	35	1550	77	55	743	928	553	406	552	56	30
11	31	35	685	75	54	736	918	513	409	535	60	28
12	30	35	741	73	53	594	919	398	410	409	62	27
13	28	35	881	71	53	442	924	319	405	248	60	26
14	27	35	866	68	53	422	904	298	406	207	58	26
15	26	35	1300	66	55	419	904	288	403	188	57	25
16	26	36	1410	66	54	449	931	282	399	175	57	22
17	25	36	1170	66	53	542	841	253	527	163	55	20
18	25	36	1100	63	62	531	506	210	765	155	54	17
19	26	36	1240	63	66	478	746	195	473	136	54	16
20	26	36	1220	63	56	455	887	186	409	93	51	14
21	27	36	845	62	53	445	858	187	380	86	49	14
22	27	37	389	61	54	452	849	185	397	85	46	13
23	27	39	247	61	61	1360	836	177	412	111	44	13
24	27	108	212	61	99	2420	821	172	394	114	44	14
25	27	88	189	60	91	1980	801	195	639	100	43	14
26	27	60	161	61	261	929	782	302	1730	93	41	14
27	26	50	149	65	242	593	779	220	1060	86	39	14
28	26	46	140	66	251	439	768	205	601	83	39	13
29	29	44	134	67	246	708	666	246	602	82	37	12
30	42	42	127	64	---	946	615	382	621	85	37	12
31	47	---	122	62	---	935	---	396	---	e79	37	---
TOTAL	914	1312	16958	2248	2517	20106	25834	11078	15610	9555	1698	687
MEAN	29.5	43.7	547	72.5	86.8	649	861	357	520	308	54.8	22.9
MAX	47	108	1550	108	261	2420	1420	876	1730	704	78	36
MIN	25	35	41	60	53	116	506	172	380	79	37	12
AC-FT	1810	2600	33640	4460	4990	39880	51240	21970	30960	18950	3370	1360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	170	183	216	194	247	349	470	568	583	235	218	182
MAX	745	603	547	777	600	976	1110	1878	1086	860	556	535
(WY)	1997	1997	2000	1998	1994	1998	1997	1993	1997	1989	1995	1989
MIN	18.4	27.9	28.5	35.0	28.8	28.8	32.6	24.7	86.5	29.2	35.1	13.3
(WY)	1993	1991	1991	1989	1991	1991	1991	1996	1994	1998	1994	1998

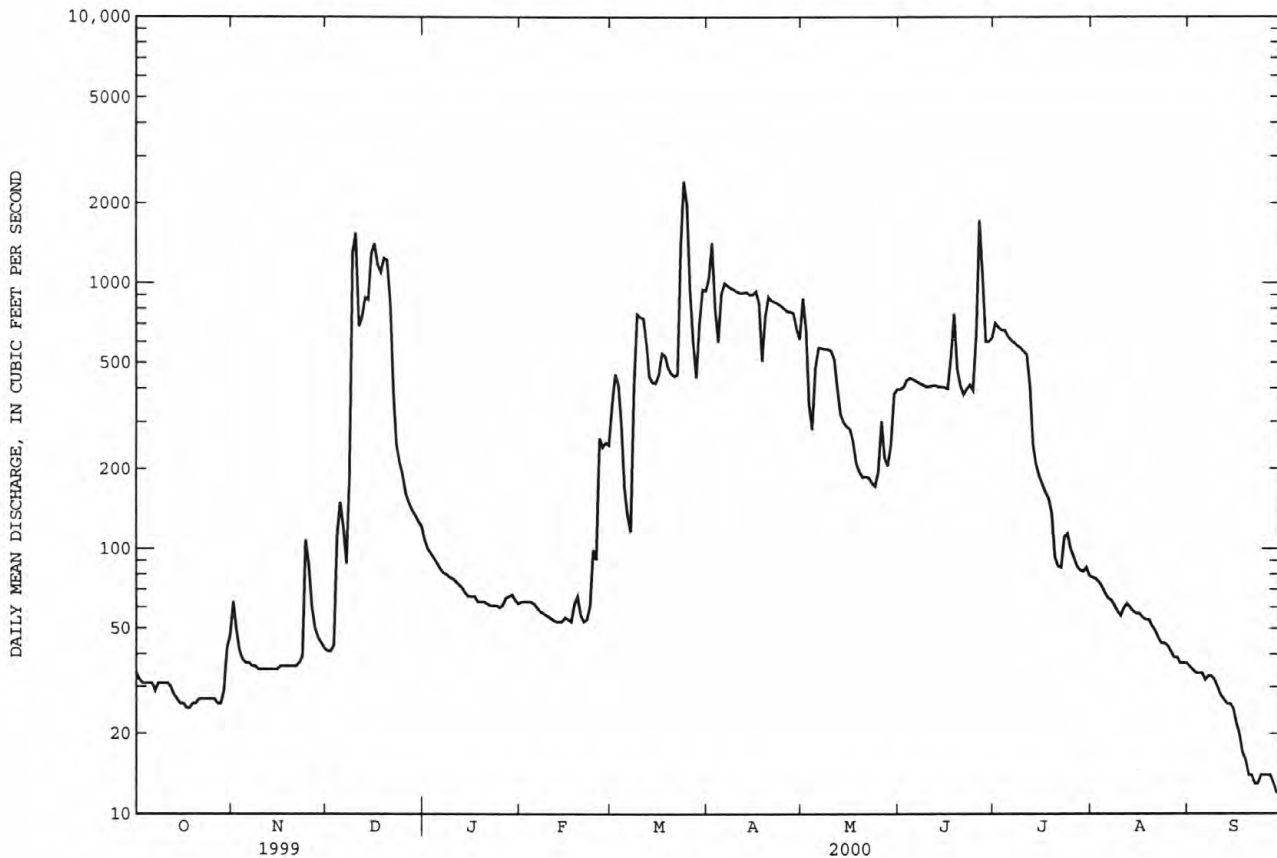
e Estimated

ARKANSAS RIVER BASIN

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07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	175697		108517		301	
ANNUAL MEAN	481		296		635	1997
HIGHEST ANNUAL MEAN					85.3	1992
LOWEST ANNUAL MEAN					8430	May 10 1993
HIGHEST DAILY MEAN	2840	Apr 26	2420	Mar 24	9.1	Sep 30 1998
LOWEST DAILY MEAN	25	Oct 17	12	Sep 29,30	10	Sep 25 1998
ANNUAL SEVEN-DAY MINIMUM	26	Oct 14	13	Sep 24	9310	May 10 1993
INSTANTANEOUS PEAK FLOW			2600	Mar 24	14.32	Mar 18 1998
INSTANTANEOUS PEAK STAGE			11.93	Mar 24	218100	
ANNUAL RUNOFF (AC-FT)	348500		215200		852	
10 PERCENT EXCEEDS	1090		846		105	
50 PERCENT EXCEEDS	320		92		29	
90 PERCENT EXCEEDS	32		29			



ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.

pH: October 1988 to current year.

WATER TEMPERATURE: October 1988 to current year.

DISSOLVED OXYGEN: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1988.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments. Samples were collected monthly and specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,040 microsiemens, Oct. 2, 1994; minimum, 85 microsiemens, Aug. 17, 1996.

pH: Maximum, 9.4 units, Sept. 25, 1989; minimum, 6.9 units, Sept. 16, 1995.

WATER TEMPERATURE: Maximum, 39.0°C, July 2, 1990; minimum, 0.0°C, many days during winter period.

DISSOLVED OXYGEN: Maximum, 16.2 mg/L, Sept. 16, 1999; minimum, 3.1 mg/L, July 15, 1989.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,670 microsiemens, Sept. 22, 23; minimum, 328 microsiemens, Mar. 24.

pH: Maximum, 8.7 units, Mar. 21, 22, 23, Apr. 12, 13, 14, 15; minimum, 7.7 units, Feb. 26, 27, June 25, 26, 27.

WATER TEMPERATURE: Maximum 33.9°C, Aug. 10; minimum, 0.0°C, Jan. 27, 28, 29.

DISSOLVED OXYGEN: Maximum, 15.1 mg/L, Jan. 27, 28; minimum, 4.8 mg/L, June 26.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
13...	0925	1028	1028	6.43	255	730	7.2	7.9	1480	28.0	5.00
13...	0926	1028	1028	6.43	255	730	7.2	8.0	1480	28.0	10.0
13...	0927	1028	1028	6.43	255	730	7.2	8.1	1480	28.0	20.0
13...	0928	1028	1028	6.43	255	730	7.2	8.1	1480	28.0	30.0
13...	0929	1028	1028	6.43	255	730	9.5	8.1	1480	28.0	40.0
13...	0930	1028	1028	6.43	255	730	9.5	8.1	1480	28.1	50.0
13...	0931	1028	1028	6.43	255	730	7.2	8.1	1480	28.4	60.0
OCT											
13...	0920	80020	1028	5.09	26	740	87	8.1	1430	20.2	17.5
NOV											
16...	1100	80020	1028	5.18	36	740	107	11.0	1420	19.5	12.8
DEC											
15...	1030	80020	1028	9.20	1330	745	97	12.2	1440	7.6	4.7
JAN											
31...	1035	80020	1028	5.34	61	742	104	14.3	1330	3.0	1.1
FEB											
29...	0900	80020	1028	6.41	248	719	106	10.8	1390	15.7	11.5
MAR											
21...	0945	80020	1028	7.09	446	728	106	10.8	1470	15.0	12.2
APR											
12...	0900	80020	1028	8.64	919	735	94	9.4	1380	7.0	13.5
MAY											
09...	1000	80020	1028	7.45	523	725	116	9.8	1460	16.3	20.9
JUN											
14...	0845	80020	1028	6.94	415	722	99	7.8	1490	24.0	24.2
JUL											
18...	1010	80020	1028	6.02	157	727	103	7.9	1510	27.7	25.8
AUG											
08...	0955	80020	1028	5.45	62	727	182	13.9	1600	39.5	26.2
SEP											
06...	0925	80020	1028	5.09	32	730	99	8.0	1610	29.0	23.4

ARKANSAS RIVER BASIN

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07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 13...	--	--	--	--	--	--	--	--	221	208	253	0
NOV 16...	410	180	91.5	44.6	8.4	3	143	42	246	238	290	0
DEC 15...	--	--	--	--	--	--	--	--	139	176	215	0
JAN 31...	--	--	--	--	--	--	--	--	268	266	304	10
FEB 29...	430	230	105	41.3	8.4	3	134	40	214	201	246	0
MAR 21...	--	--	--	--	--	--	--	--	217	206	237	7
APR 12...	--	--	--	--	--	--	--	--	209	198	241	0
MAY 09...	460	250	109	43.8	5.3	3	143	40	214	200	244	0
JUN 14...	--	--	--	--	--	--	--	--	184	169	206	0
JUL 18...	--	--	--	--	--	--	--	--	204	194	236	0
AUG 08...	480	260	107	50.9	5.9	3	165	43	212	212	259	0
SEP 06...	--	--	--	--	--	--	--	--	167	162	197	0
DATE	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 13...	--	--	--	--	.75	.032	--	.71	.04	--	--	<.050
NOV 16...	165	.7	9.9	261	1.7	.139	--	1.5	.18	--	--	<.050
DEC 15...	--	--	--	--	.97	.073	--	.89	.09	1.1	--	.084
JAN 31...	--	--	--	--	.42	.077	.389	.34	.10	.83	1.72	.406
FEB 29...	181	.6	18.5	268	1.6	.125	--	1.4	.16	1.8	--	.180
MAR 21...	--	--	--	--	.37	<.020	--	--	--	.47	--	.100
APR 12...	--	--	--	--	.56	.041	--	.52	.05	--	--	<.050
MAY 09...	194	.7	18.6	282	.35	<.020	--	--	--	--	--	<.050
JUN 14...	--	--	--	--	.37	<.020	--	--	--	--	--	<.050
JUL 18...	--	--	--	--	.61	.025	.133	.59	.03	.75	.589	.144
AUG 08...	198	.7	20.9	308	.44	<.020	--	--	--	--	--	<.050
SEP 06...	--	--	--	--	.85	.126	--	.73	.16	--	--	<.050

ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 13...	--	<.010	.245	.092	.080	3.4	--	3.0	7	--	--	--
NOV 16...	--	<.010	.377	.142	.123	2.3	6.8	4.7	3	1.19	85.3	878
DEC 15...	--	<.010	.343	.121	.112	1.7	--	5.8	216	--	--	--
JAN 31...	.056	.017	.089	.059	.029	1.5	--	<2.0	10	--	--	--
FEB 29...	--	<.010	.279	.102	.091	2.6	13	5.7	162	1.26	619	924
MAR 21...	--	<.010	.098	E.043	.032	1.0	--	3.1	57	--	--	--
APR 12...	--	<.010	.074	E.030	.024	1.3	--	2.7	72	--	--	--
MAY 09...	--	<.010	--	<.050	<.010	1.8	11	--	55	1.27	1320	936
JUN 14...	--	<.010	.043	<.050	.014	3.0	--	<2.0	96	--	--	--
JUL 18...	.036	.011	.546	.193	.178	2.1	--	--	46	--	--	--
AUG 08...	--	<.010	--	<.050	<.010	2.2	6.6	2.0	11	1.37	169	1010
SEP 06...	.033	.010	.251	.112	.082	1.9	--	3.0	<10	--	--	--
DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 13...	--	.8	K63	920	--	--	--	--	--	--	--	--
NOV 16...	869	6.2	120	210	5.3	84	<2	E5.7	<14.0	<13	27	<10
DEC 15...	--	68	370	580	--	--	--	--	--	--	--	--
JAN 31...	--	2.7	140	98	--	--	--	--	--	--	--	--
FEB 29...	880	75	K2400	490	4.8	144	<2	E4.2	<14.0	<13	16	<10
MAR 21...	--	32	290	210	--	--	--	--	--	--	--	--
APR 12...	--	32	210	260	--	--	--	--	--	--	--	--
MAY 09...	919	16	240	270	4.1	129	<2	<8.0	<14.0	<13	<10	<10
JUN 14...	--	37	190	1200	--	--	--	--	--	--	--	--
JUL 18...	--	28	K85	K130	--	--	--	--	--	--	--	--
AUG 08...	985	4.1	80	280	5.2	118	<2	<8.0	<14.0	<13	<10	<10
SEP 06...	--	2.0	200	590	--	--	--	--	--	--	--	--

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WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

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07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible][illegible]

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

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07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1440	1430	1440	1220	1180	1210	1350	1320	1330	1480	1460	1470
2	1450	1410	1430	1180	738	1000	1350	1280	1330	1470	1460	1470
3	1440	1410	1420	1050	751	909	1330	1300	1320	1470	1460	1470
4	1430	1410	1420	1140	1050	1080	1320	484	991	1480	1470	1480
5	1430	1400	1420	1320	1140	1240	835	492	645	1480	1470	1480
6	1430	1400	1420	1370	1320	1350	952	682	819	1480	1450	1470
7	1440	1410	1420	1390	1370	1380	927	771	825	1460	1440	1450
8	1450	1360	1400	1400	1380	1390	1380	784	972	1460	1430	1440
9	1400	1380	1390	1400	1380	1390	1420	936	1140	1440	1430	1430
10	1410	1370	1390	1410	1390	1400	946	740	864	1440	1420	1430
11	1390	1380	1380	1420	1400	1410	1060	946	1030	1430	1420	1420
12	1400	1380	1390	1430	1400	1410	1400	1060	1190	1420	1410	1410
13	1420	1390	1410	1420	1400	1410	1440	1400	1430	1410	1410	1410
14	1430	1410	1420	1430	1400	1420	1470	1440	1460	1420	1410	1420
15	1460	1420	1450	1430	1400	1420	1550	1470	1500	1430	1410	1420
16	1470	1440	1460	1440	1370	1400	1520	1510	1510	1420	1410	1410
17	1490	1450	1470	1400	1380	1390	1520	1510	1510	1420	1410	1410
18	1500	1400	1480	1410	1380	1390	1520	1510	1510	1410	1400	1400
19	1480	1470	1480	1410	1390	1400	1520	1520	1520	1400	1380	1390
20	1480	1470	1480	1430	1400	1410	1520	1520	1520	1390	1380	1390
21	1480	1470	1480	1430	1390	1410	1520	1520	1520	1390	1380	1380
22	1480	1460	1470	1420	1360	1400	1520	1510	1520	1390	1370	1380
23	1480	1450	1470	1400	1370	1390	1520	1500	1510	1380	1370	1380
24	1460	1430	1450	1420	506	1120	1510	1500	1510	1390	1380	1380
25	1450	1430	1440	989	506	833	1520	1500	1510	1390	1380	1390
26	1450	1430	1440	942	579	740	1500	1490	1500	1400	1350	1370
27	1440	1430	1440	807	583	690	1500	1500	1500	1360	1320	1340
28	1440	1420	1440	1060	807	928	1510	1490	1500	1330	1320	1320
29	1440	1160	1400	1250	1060	1170	1490	1480	1490	1340	1320	1330
30	1210	1120	1180	1320	1250	1280	1480	1480	1480	1350	1300	1330
31	1230	1170	1200	---	---	---	1480	1480	1480	1340	1300	1320
MONTH	1500	1120	1420	1440	506	1250	1550	484	1320	1480	1300	1410

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1360	1310	1340	1350	1300	1320	1350	1220	1320	1300	1040	1130
2	1370	1300	1340	1360	1330	1340	1220	813	973	1210	1050	1130
3	1370	1300	1330	1350	1300	1330	969	940	952	1310	1210	1260
4	1350	1310	1330	1300	952	1130	1190	969	1050	1420	1310	1360
5	1350	1310	1320	1060	953	1020	1320	1190	1280	1440	1420	1430
6	1340	1310	1320	1080	1050	1060	1340	1300	1310	1440	1430	1440
7	1340	1320	1330	1130	1080	1100	1340	1310	1320	1450	1440	1440
8	1340	1320	1330	1360	968	1160	1330	1320	1320	1460	1440	1450
9	1340	1320	1330	1360	1310	1340	1360	1320	1330	1470	1450	1460
10	1340	1320	1330	1410	1310	1370	1410	1340	1380	1490	1460	1470
11	1350	1340	1340	1420	1410	1420	1410	1370	1390	1500	1480	1490
12	1360	1340	1350	1420	1400	1420	1380	1370	1380	1520	1500	1510
13	1350	1340	1340	1410	1400	1400	1380	1360	1370	1540	1510	1530
14	1350	1330	1340	1420	1410	1420	---	---	---	1570	1540	1560
15	1350	1320	1340	1440	1420	1430	---	---	---	1600	1570	1580
16	1320	1290	1300	1430	1400	1420	---	---	---	1610	1600	1610
17	1310	1300	1300	1400	1210	1320	---	---	---	1620	1610	1620
18	1320	1310	1310	1380	1250	1320	---	---	---	---	---	---
19	1310	1120	1250	1420	1340	1380	---	---	---	---	---	---
20	1250	1060	1150	1460	1420	1440	1450	1430	1430	---	---	---
21	1290	1250	1280	1470	1390	1460	1450	1440	1440	---	---	---
22	1300	1240	1290	1470	1440	1460	1440	1440	1440	---	---	---
23	1280	1250	1270	1450	357	1000	1450	1440	1440	---	---	---
24	1270	1060	1200	359	328	342	1440	1440	1440	1470	1400	1460
25	1110	1040	1070	443	350	389	1440	1430	1440	1430	1370	1400
26	1090	499	835	683	443	549	1470	1430	1450	1410	722	1050
27	819	498	647	871	683	781	1460	1440	1440	1370	1080	1280
28	1360	562	1020	1010	871	947	1450	1440	1450	1370	1330	1350
29	1390	1280	1330	1320	1010	1140	1450	1430	1430	1480	1330	1380
30	---	---	---	1360	1320	1350	1430	1300	1390	1500	1480	1490
31	---	---	---	1360	1350	1360	---	---	---	1520	1480	1490
MONTH	1390	498	1250	1470	328	1190	---	---	---	---	---	---

ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1530	1510	1520	1310	1210	1270	---	---	---	1560	1520	1540
2	1520	1490	1500	1350	1300	1320	---	---	---	1580	1560	1570
3	1490	1440	1460	1400	1350	1370	1460	1420	1440	1590	1570	1580
4	1470	1440	1450	1430	1360	1400	1500	1460	1480	1600	1580	1590
5	1480	1450	1470	1490	1410	1450	1540	1500	1520	1600	1590	1600
6	1490	1470	1480	1480	1280	1430	1560	1530	1550	1610	1600	1610
7	1500	1470	1480	1440	1420	1430	1590	1560	1570	1610	1580	1600
8	1490	1470	1480	1450	1430	1440	1600	1580	1590	1590	1560	1580
9	1490	1460	1480	1480	1450	1460	1600	1580	1590	1580	1560	1580
10	1490	1470	1480	1480	1470	1480	1600	1590	1590	1570	1540	1560
11	1480	1460	1470	1500	1480	1490	1590	1560	1570	1580	1560	1570
12	1480	1450	1470	1500	1490	1490	1560	1540	1550	1610	1540	1590
13	1480	1450	1460	1490	1440	1480	1560	1540	1550	1600	1540	1560
14	1460	1410	1430	1490	1470	1480	1550	1540	1540	---	---	---
15	1460	1400	1430	1500	1490	1500	1560	1540	1550	---	---	---
16	1420	1400	1410	1510	1490	1500	1560	1550	1560	---	---	---
17	1400	1060	1250	1510	1500	1500	1580	1540	1560	---	---	---
18	1080	830	942	1530	1490	1510	1570	1540	1560	---	---	---
19	1220	866	1070	1520	1500	1510	1570	1560	1560	---	---	---
20	1360	1220	1300	1530	1500	1510	1570	1560	1570	---	---	---
21	1370	1240	1310	1520	1420	1450	1580	1570	1580	1660	1650	1660
22	1420	1370	1400	1480	1370	1420	1590	1580	1580	1670	1630	1660
23	1400	1270	1330	1430	1270	1370	1600	1580	1590	1670	1640	1650
24	1470	1380	1420	1270	1180	1220	1590	1560	1580	1650	1620	1630
25	1420	676	1270	1390	1230	1330	1580	1560	1570	1640	1620	1630
26	771	352	460	1450	1380	1410	1560	1550	1560	1650	1610	1630
27	655	425	571	1470	1450	1460	1560	1550	1560	1620	1600	1610
28	882	655	813	1500	1460	1480	1560	1540	1550	1610	1560	1590
29	864	801	843	1490	1440	1470	1550	1540	1540	1590	1560	1570
30	1220	808	1020	---	---	---	1540	1530	1540	1590	1560	1580
31	---	---	---	---	---	---	1540	1480	1520	---	---	---
MONTH	1530	352	1280	---	---	---	---	---	---	---	---	---
YEAR	1670	328	1370									

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.8	7.9	8.4	8.1	8.3	8.6	8.4	8.4	8.4	8.4	8.4
2	8.1	7.8	8.0	8.4	8.1	8.3	8.6	8.5	8.5	8.4	8.4	8.4
3	8.1	7.9	8.0	8.4	8.1	8.2	8.6	8.5	8.5	8.5	8.4	8.4
4	8.1	7.9	8.0	8.4	8.1	8.2	8.5	8.0	8.4	8.5	8.5	8.5
5	8.1	7.9	8.0	8.4	8.2	8.3	8.1	8.1	8.1	8.5	8.4	8.5
6	8.1	7.9	8.0	8.4	8.2	8.2	8.4	8.1	8.3	8.5	8.4	8.4
7	8.1	7.9	8.0	8.3	8.1	8.2	8.5	8.4	8.4	8.4	8.4	8.4
8	8.2	7.9	8.0	8.3	8.1	8.2	8.5	8.4	8.4	8.4	8.4	8.4
9	8.2	7.9	8.0	8.4	8.1	8.2	8.4	8.2	8.3	8.4	8.4	8.4
10	8.2	7.9	8.0	8.3	8.1	8.2	8.4	8.3	8.3	8.5	8.4	8.4
11	8.2	7.9	8.1	8.3	8.1	8.2	8.4	8.4	8.4	8.5	8.4	8.5
12	8.2	7.9	8.0	8.4	8.1	8.2	8.5	8.4	8.4	8.5	8.4	8.5
13	8.3	7.9	8.2	8.4	8.2	8.2	8.6	8.5	8.5	8.5	8.5	8.5
14	8.3	8.1	8.1	8.4	8.2	8.3	8.6	8.6	8.6	8.5	8.5	8.5
15	8.3	8.0	8.1	8.5	8.2	8.3	8.6	8.0	8.1	8.5	8.5	8.5
16	8.3	8.0	8.1	8.3	8.1	8.2	8.2	8.1	8.2	8.5	8.4	8.5
17	8.2	8.1	8.2	8.3	8.1	8.2	8.2	8.2	8.2	8.5	8.5	8.5
18	8.4	8.1	8.1	8.4	8.1	8.2	8.3	8.2	8.2	8.5	8.5	8.5
19	8.4	8.2	8.3	8.4	8.2	8.3	8.3	8.3	8.3	8.5	8.5	8.5
20	8.4	8.2	8.3	8.4	8.2	8.3	8.3	8.3	8.3	8.6	8.5	8.5
21	8.4	8.2	8.3	8.5	8.2	8.3	8.3	8.3	8.3	8.5	8.5	8.5
22	8.4	8.1	8.3	8.4	8.2	8.3	8.3	8.3	8.3	8.5	8.5	8.5
23	8.4	8.1	8.3	8.5	8.2	8.3	8.3	8.3	8.3	8.6	8.5	8.5
24	8.4	8.2	8.3	8.3	8.0	8.3	8.3	8.3	8.3	8.6	8.5	8.5
25	8.5	8.2	8.3	8.2	8.0	8.2	8.3	8.3	8.3	8.6	8.5	8.5
26	8.4	8.2	8.3	8.2	8.0	8.1	8.3	8.3	8.3	8.6	8.5	8.5
27	8.5	8.1	8.3	8.2	8.0	8.1	8.3	8.3	8.3	8.5	8.5	8.5
28	8.5	8.1	8.3	8.3	8.1	8.2	8.3	8.3	8.3	8.5	8.5	8.5
29	8.4	8.1	8.2	8.4	8.3	8.3	8.3	8.3	8.3	8.5	8.5	8.5
30	8.2	8.0	8.1	8.4	8.3	8.4	8.3	8.3	8.3	8.5	8.5	8.5
31	8.3	8.0	8.1	---	---	---	8.4	8.3	8.4	8.5	8.4	8.5
MAX	8.5	8.2	8.3	8.5	8.3	8.4	8.6	8.6	8.6	8.6	8.5	8.5
MIN	8.0	7.8	7.9	8.2	8.0	8.1	8.1	8.0	8.1	8.4	8.4	8.4

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY			MARCH			APRIL			MAY			
1	8.5	8.5	8.5	8.2	8.1	8.2	8.5	8.4	8.5	8.3	8.0	8.1
2	8.5	8.5	8.5	8.2	8.1	8.1	8.4	8.2	8.3	8.1	8.0	8.1
3	8.6	8.5	8.5	8.3	8.2	8.3	8.3	8.2	8.3	8.2	8.1	8.1
4	8.6	8.5	8.5	8.3	8.1	8.3	8.4	8.3	8.3	8.4	8.1	8.2
5	8.5	8.4	8.5	8.2	8.1	8.2	8.4	8.4	8.4	8.4	8.3	8.4
6	8.5	8.4	8.4	8.2	8.2	8.2	8.4	8.3	8.4	8.5	8.3	8.4
7	8.5	8.4	8.4	8.3	8.2	8.2	8.4	8.4	8.4	8.5	8.4	8.4
8	8.5	8.4	8.4	8.4	8.2	8.2	8.5	8.4	8.4	8.5	8.3	8.4
9	8.5	8.4	8.5	8.3	8.2	8.2	8.5	8.5	8.5	8.5	8.3	8.4
10	8.5	8.4	8.5	8.4	8.3	8.3	8.5	8.5	8.5	8.5	8.3	8.4
11	8.6	8.4	8.5	8.4	8.4	8.4	8.5	8.5	8.5	8.4	8.3	8.3
12	8.5	8.4	8.5	8.5	8.4	8.4	8.7	8.5	8.6	8.4	8.2	8.3
13	8.5	8.4	8.5	8.6	8.4	8.5	8.7	8.7	8.7	8.3	8.2	8.3
14	8.5	8.3	8.5	8.6	8.5	8.6	8.7	8.6	8.7	8.4	8.2	8.3
15	8.4	8.3	8.3	8.6	8.5	8.5	8.7	8.6	8.7	8.4	8.2	8.3
16	8.4	8.3	8.3	8.6	8.5	8.5	8.6	8.5	8.6	8.5	8.3	8.4
17	8.4	8.3	8.3	8.5	8.4	8.5	8.6	8.4	8.5	8.5	8.3	8.4
18	8.4	8.2	8.3	8.6	8.4	8.4	8.4	8.0	8.2	8.4	8.3	8.3
19	8.4	8.3	8.4	8.6	8.5	8.6	8.5	8.3	8.3	8.3	8.2	8.3
20	8.4	8.2	8.3	8.6	8.6	8.6	8.5	8.4	8.5	8.3	8.1	8.2
21	8.5	8.3	8.4	8.7	8.6	8.6	8.5	8.5	8.5	8.2	8.1	8.1
22	8.4	8.3	8.3	8.7	8.6	8.7	8.5	8.5	8.5	8.2	7.9	8.1
23	8.5	8.3	8.4	8.7	8.1	8.4	8.5	8.5	8.5	8.2	7.9	8.1
24	8.4	8.2	8.3	8.2	8.1	8.2	8.6	8.5	8.5	8.2	8.0	8.1
25	8.5	8.2	8.3	8.1	8.0	8.0	8.6	8.5	8.5	8.4	8.1	8.2
26	8.4	7.7	7.8	8.1	8.0	8.0	8.5	8.5	8.5	8.3	7.9	8.0
27	7.9	7.7	7.9	8.2	8.1	8.2	8.5	8.5	8.5	8.6	8.1	8.4
28	8.2	7.9	8.0	8.4	8.2	8.3	8.5	8.5	8.5	8.6	8.5	8.5
29	8.2	8.2	8.2	8.4	8.3	8.3	8.5	8.3	8.4	8.5	8.3	8.4
30	---	---	---	8.4	8.3	8.4	8.4	8.2	8.3	8.3	8.2	8.3
31	---	---	---	8.5	8.4	8.4	---	---	---	8.4	8.2	8.3
MAX	8.6	8.5	8.5	8.7	8.6	8.7	8.7	8.7	8.7	8.6	8.5	8.5
MIN	7.9	7.7	7.8	8.1	8.0	8.0	8.3	8.0	8.2	8.1	7.9	8.0

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.5	8.3	8.4	8.2	8.1	8.2	---	---	---	8.6	8.2	8.4
2	8.4	8.3	8.3	8.2	8.0	8.1	---	---	---	8.6	8.2	8.3
3	8.5	8.4	8.4	8.3	8.1	8.2	8.5	8.4	8.4	8.6	8.2	8.3
4	8.5	8.4	8.5	8.3	8.1	8.2	8.5	8.4	8.4	8.6	8.1	8.3
5	8.5	8.4	8.5	8.4	8.1	8.3	8.5	8.3	8.5	8.6	8.1	8.3
6	8.4	8.3	8.4	8.6	8.1	8.5	8.4	8.3	8.3	8.5	8.1	8.3
7	8.4	8.3	8.3	8.6	8.4	8.5	8.4	8.2	8.3	8.5	8.1	8.2
8	8.3	8.3	8.3	8.5	8.4	8.5	8.4	8.3	8.3	8.5	8.0	8.2
9	8.3	8.2	8.3	8.5	8.4	8.5	8.5	8.2	8.4	8.5	8.1	8.2
10	8.3	8.2	8.3	8.6	8.4	8.5	8.5	8.3	8.4	8.4	8.0	8.2
11	8.4	8.3	8.3	8.6	8.4	8.5	8.6	8.4	8.5	8.5	8.1	8.2
12	8.4	8.1	8.3	8.5	8.3	8.4	8.6	8.4	8.5	8.4	8.0	8.2
13	8.3	8.1	8.2	8.4	8.2	8.3	8.5	8.3	8.4	8.5	8.1	8.3
14	8.4	8.1	8.3	8.4	8.1	8.3	8.4	8.3	8.4	8.5	8.1	8.3
15	8.5	8.3	8.3	8.4	8.2	8.3	8.5	8.3	8.3	8.5	8.1	8.3
16	8.4	8.2	8.3	8.4	8.2	8.3	8.6	8.4	8.4	8.5	8.1	8.3
17	8.3	8.0	8.2	8.5	8.2	8.3	8.6	8.3	8.4	8.5	8.1	8.2
18	8.0	7.9	7.9	8.4	8.3	8.3	8.6	8.3	8.4	8.5	8.1	8.3
19	8.3	7.9	8.1	8.4	8.2	8.3	8.6	8.3	8.4	8.6	8.1	8.2
20	8.5	8.3	8.3	8.4	8.2	8.3	8.6	8.3	8.4	8.5	8.0	8.4
21	8.4	8.3	8.4	8.5	8.2	8.3	8.6	8.3	8.4	8.5	8.2	8.3
22	8.5	8.3	8.4	8.5	8.3	8.4	8.6	8.3	8.4	8.5	8.1	8.2
23	8.5	8.3	8.4	8.5	8.3	8.4	8.6	8.3	8.4	8.4	8.1	8.2
24	8.4	8.3	8.4	8.5	8.3	8.4	8.6	8.2	8.4	8.3	8.1	8.2
25	8.3	7.7	8.3	8.5	8.3	8.4	8.6	8.3	8.4	8.4	8.1	8.2
26	7.8	7.7	7.7	8.4	8.3	8.4	8.6	8.2	8.4	8.4	8.1	8.2
27	7.8	7.7	7.7	8.4	8.2	8.3	8.5	8.2	8.3	8.4	8.1	8.2
28	8.0	7.8	8.0	8.3	8.1	8.2	8.5	8.1	8.3	8.5	8.1	8.2
29	8.0	8.0	8.0	8.2	8.1	8.2	8.5	8.1	8.3	8.5	8.1	8.2
30	8.3	8.0	8.1	---	---	---	8.5	8.1	8.3	8.5	8.1	8.3
31	---	---	---	---	---	---	8.6	8.1	8.4	---	---	---
MAX	8.5	8.4	8.5	---	---	---	8.6	8.4	8.5	8.6	8.2	8.4
MIN	7.8	7.7	7.7	---	---	---	8.4	8.1	8.3	8.3	8.0	8.2

ARKANSAS RIVER BASIN

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	22.1	13.6	17.5	17.2	12.1	14.6	11.4	5.9	8.7	9.5	5.8	7.5
2	20.4	14.1	16.8	13.6	8.6	10.9	14.6	10.0	11.9	10.3	7.3	8.7
3	19.6	13.2	15.8	13.4	7.0	10.1	13.3	8.6	10.9	9.7	6.0	8.0
4	19.7	11.9	15.4	15.8	7.9	11.7	10.4	6.6	8.5	6.0	2.8	4.4
5	22.2	12.3	16.9	18.6	10.7	14.4	6.8	4.8	5.8	5.4	1.9	3.6
6	23.5	15.4	18.9	20.6	13.7	16.8	6.0	3.1	4.5	6.2	2.5	4.1
7	22.1	14.2	17.8	20.9	14.4	17.4	7.4	3.4	5.3	6.3	2.5	4.4
8	22.0	16.4	18.7	20.1	14.2	16.8	8.5	5.2	6.8	8.0	5.4	6.7
9	24.2	16.6	20.0	19.4	13.2	16.1	8.0	6.2	7.3	8.3	5.3	6.7
10	25.4	16.7	20.8	19.4	13.5	16.3	6.2	4.9	5.5	7.8	4.3	5.9
11	25.5	17.2	21.2	19.9	12.8	16.1	5.6	4.8	5.2	8.0	4.3	6.0
12	25.4	17.4	21.1	20.2	13.7	16.7	6.4	5.4	5.9	9.2	4.8	6.7
13	24.6	17.4	20.6	20.3	13.9	16.8	6.6	5.4	6.0	8.2	5.0	6.5
14	23.6	15.6	19.4	19.2	14.0	16.3	6.1	5.3	5.7	7.1	3.4	5.2
15	24.0	16.2	19.9	17.4	11.7	14.4	5.5	4.5	5.1	8.9	4.2	6.4
16	20.4	15.4	18.1	17.7	10.7	14.1	5.2	4.5	4.8	8.8	7.8	8.2
17	16.0	10.7	13.5	17.8	12.2	14.7	5.3	4.7	4.9	8.4	7.4	7.8
18	17.2	11.7	14.0	18.7	12.6	15.3	5.6	4.9	5.2	8.9	6.4	7.6
19	16.5	9.4	12.8	15.5	11.1	13.2	5.2	4.7	5.0	10.2	6.7	8.0
20	17.6	9.0	13.1	14.3	8.7	11.4	4.7	4.0	4.3	7.4	4.2	5.8
21	19.9	10.9	15.1	14.8	8.9	11.5	4.1	3.2	3.7	7.0	3.6	5.1
22	19.7	12.3	15.7	14.5	9.9	12.0	4.3	2.7	3.5	8.2	4.1	6.0
23	17.5	11.3	14.3	12.4	9.0	11.1	5.0	2.5	3.7	8.9	5.2	6.6
24	16.7	9.3	12.9	10.2	7.1	8.5	5.8	3.6	4.6	6.1	2.6	4.5
25	17.9	9.8	13.7	9.2	5.4	7.2	6.4	3.4	4.9	5.5	2.7	4.1
26	19.6	10.9	15.1	10.5	5.5	7.8	7.3	4.8	5.8	3.8	1.0	2.1
27	19.0	12.3	15.5	11.8	6.6	9.0	6.8	4.1	5.3	1.3	.0	.7
28	20.7	13.6	16.9	11.8	7.3	9.4	7.3	3.6	5.3	2.6	.1	1.3
29	21.3	15.0	17.8	11.0	6.5	8.6	8.3	4.7	6.5	4.6	.0	2.0
30	16.7	12.9	14.4	10.3	5.6	7.8	8.9	6.2	7.4	4.9	.3	2.3
31	13.9	12.5	13.1	---	---	---	8.6	5.6	7.0	5.2	.6	2.7
MONTH	25.5	9.0	16.7	20.9	5.4	12.9	14.6	2.5	6.0	10.3	.0	5.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.0	1.6	2.8	14.0	10.8	12.5	12.2	10.9	11.5	17.5	16.6	17.1
2	6.7	1.6	3.8	12.9	10.5	11.5	12.4	10.2	11.2	17.4	16.2	16.8
3	9.1	3.7	6.0	10.5	8.6	9.7	13.3	11.7	12.4	19.6	15.9	17.6
4	8.2	4.2	5.9	11.9	7.1	9.4	14.5	10.7	12.6	22.6	17.3	19.8
5	7.6	2.9	5.0	14.1	9.1	11.5	15.8	12.5	14.2	21.5	20.1	20.5
6	7.9	3.2	5.5	17.7	11.3	14.4	17.5	14.6	16.0	23.0	20.0	21.2
7	10.4	4.4	7.2	18.2	15.2	16.6	17.8	15.9	16.8	25.5	21.4	23.4
8	11.4	5.2	8.1	16.3	13.2	14.9	16.2	13.9	15.1	25.9	23.4	24.6
9	13.1	7.1	9.9	14.8	12.4	13.4	15.3	13.6	14.5	24.3	21.3	22.5
10	13.6	8.9	11.1	13.0	10.4	11.8	16.5	13.1	14.8	23.0	20.2	21.7
11	10.2	6.8	8.4	11.0	8.7	9.9	16.5	15.4	16.0	26.7	21.7	24.0
12	9.7	4.2	6.9	12.0	8.8	10.5	15.4	13.9	14.4	25.9	23.1	24.7
13	8.9	6.6	7.5	13.4	10.1	11.8	14.8	13.3	13.9	23.7	19.8	21.8
14	10.0	4.3	7.0	13.6	12.1	12.9	16.6	13.9	15.0	23.1	18.8	21.0
15	13.3	5.9	9.3	17.1	12.8	14.7	16.6	15.8	16.2	21.8	18.8	20.4
16	11.9	7.5	9.8	16.1	9.5	12.6	16.8	14.5	15.7	22.9	19.8	21.2
17	11.2	8.8	9.9	9.5	8.1	8.5	16.7	14.2	15.6	23.3	21.4	22.1
18	11.2	7.2	9.4	8.3	7.5	8.0	21.3	15.6	18.2	24.4	19.8	22.0
19	11.1	5.9	8.1	11.6	7.5	9.4	22.2	19.8	21.0	21.5	18.8	20.1
20	12.0	5.8	8.8	13.8	9.3	11.6	21.0	18.3	19.4	24.7	17.8	21.1
21	15.4	8.5	11.6	13.0	12.1	12.4	19.0	16.6	18.0	27.3	20.7	23.8
22	15.1	12.9	13.9	12.1	11.6	11.7	18.5	16.7	17.3	28.9	22.6	25.7
23	16.4	11.5	13.7	12.9	11.6	12.2	18.3	15.8	17.0	30.3	23.8	27.3
24	17.5	11.6	14.5	14.9	12.9	13.7	19.6	16.5	18.0	31.5	25.7	28.5
25	17.6	14.1	15.8	17.3	14.9	16.1	21.0	18.0	19.4	28.3	24.0	25.2
26	14.1	11.5	12.7	19.3	16.3	17.8	20.2	18.5	19.2	27.5	23.2	25.1
27	13.1	9.4	11.3	19.6	16.9	18.3	20.5	18.2	19.4	27.2	23.3	25.3
28	13.4	9.9	11.7	18.7	16.4	17.5	21.0	18.1	19.6	28.8	22.6	25.6
29	14.7	11.1	12.6	16.5	13.3	14.8	20.3	18.6	19.4	28.9	23.4	26.2
30	---	---	---	13.3	11.7	12.4	19.4	17.4	18.3	29.2	24.8	26.9
31	---	---	---	12.5	11.4	12.0	---	---	---	29.3	25.7	27.4
MONTH	17.6	1.6	9.2	19.6	7.1	12.7	22.2	10.2	16.3	31.5	15.9	22.9

07239450 NORTH CANADIAN RIVER NEAR CALUMET, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	28.8	25.5	27.2	28.0	25.8	26.9	---	---	---	32.7	23.9	27.9
2	27.4	23.8	25.5	28.2	26.3	27.2	---	---	---	33.0	24.2	28.2
3	23.8	22.9	23.4	29.1	26.5	27.7	30.4	25.1	27.8	33.6	24.7	28.8
4	26.2	22.7	24.2	29.3	26.7	28.1	31.4	24.9	27.8	33.4	24.8	28.7
5	26.4	23.2	24.9	29.4	26.4	27.9	31.3	24.5	27.7	31.6	24.7	27.7
6	26.2	22.6	24.4	29.9	26.7	28.3	32.6	24.4	28.1	31.1	23.0	26.6
7	26.4	22.6	24.5	30.3	27.2	28.8	32.7	25.6	28.8	30.7	21.9	26.0
8	26.8	22.7	24.8	30.7	27.6	29.1	33.0	24.8	28.5	31.2	22.5	26.3
9	27.1	23.9	25.4	30.4	27.5	29.0	33.5	25.2	28.8	30.8	22.3	26.1
10	26.1	24.2	24.8	30.0	26.9	28.6	33.9	26.0	29.3	30.9	22.8	26.2
11	26.6	23.3	24.7	30.8	27.3	29.0	33.8	26.0	29.6	30.8	22.6	26.2
12	28.9	24.6	26.6	31.0	28.2	29.6	33.5	26.5	29.6	31.4	21.8	26.3
13	28.7	25.7	27.2	32.9	28.0	30.2	33.5	26.0	29.2	31.8	22.8	26.9
14	27.7	24.4	26.1	32.5	27.0	29.8	31.6	24.4	27.6	31.9	22.5	26.3
15	27.9	24.1	26.0	33.1	27.3	30.1	32.2	23.8	27.7	28.0	20.1	23.8
16	26.4	22.5	24.6	32.8	28.1	30.4	32.9	25.3	28.7	27.9	18.1	22.6
17	22.5	19.3	20.2	30.7	27.0	28.9	32.8	25.4	28.7	27.7	18.3	22.4
18	21.1	18.8	19.8	31.1	25.8	28.2	32.1	24.7	28.2	26.3	17.0	20.9
19	23.5	21.0	22.0	33.4	26.7	29.7	32.1	24.7	27.9	28.2	16.3	20.9
20	27.4	22.8	24.8	32.5	26.7	29.6	31.0	22.9	26.6	24.3	16.5	20.6
21	26.6	24.3	25.2	31.2	24.3	27.5	31.8	23.0	26.9	25.4	14.7	19.8
22	27.3	23.1	25.0	30.3	23.6	26.8	31.7	23.8	27.4	30.0	20.2	24.1
23	29.2	25.0	27.0	30.3	24.6	27.0	32.4	24.6	28.1	24.1	16.9	20.4
24	30.3	26.2	28.2	30.9	24.4	27.4	33.5	24.6	28.6	16.9	12.6	15.2
25	29.1	25.1	26.9	29.5	23.5	26.4	33.2	24.8	28.6	20.3	9.7	14.3
26	25.2	24.1	24.8	31.5	23.7	27.3	33.0	25.0	28.5	22.2	10.3	15.7
27	24.8	23.7	24.1	29.4	25.4	27.2	32.9	24.5	28.2	23.9	12.1	17.4
28	24.2	22.9	23.5	31.3	24.0	27.2	32.6	24.3	27.9	25.0	13.9	19.0
29	24.6	22.7	23.7	30.9	25.7	27.9	33.1	24.2	28.1	24.4	14.6	19.0
30	26.9	23.1	25.0	---	---	---	31.3	24.0	27.4	23.6	14.6	18.5
31	---	---	---	---	---	---	31.4	23.6	27.3	---	---	---
MONTH	30.3	18.8	24.8	---	---	---	---	---	---	33.6	9.7	23.1
YEAR	33.9	.0	17.1									

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.3	8.6	9.9	10.9	9.6	10.0	12.8	10.4	11.4	12.0	11.2	11.6
2	11.2	8.6	9.8	12.6	9.9	11.4	11.0	9.0	10.1	11.5	11.1	11.2
3	11.5	9.1	10.1	12.6	10.2	11.5	10.7	8.7	9.5	11.7	11.1	11.3
4	11.7	9.1	10.4	12.4	9.7	11.0	---	---	---	13.2	11.7	12.7
5	11.7	8.3	10.1	11.5	8.5	10.1	---	---	---	13.4	12.6	13.0
6	11.2	7.7	9.3	11.4	8.1	9.4	---	---	---	13.2	12.4	12.9
7	10.8	7.9	9.2	11.1	7.8	9.2	---	---	---	13.3	12.4	12.8
8	10.7	7.7	8.9	10.5	7.7	9.0	---	---	---	12.4	11.6	12.0
9	10.5	7.2	8.7	10.6	7.9	9.0	---	---	---	12.1	11.6	11.8
10	10.4	7.1	8.3	10.5	7.9	9.0	---	---	---	12.5	11.8	12.1
11	9.9	6.4	8.1	10.9	8.1	9.4	---	---	---	12.6	12.0	12.2
12	9.8	6.5	8.0	11.0	8.3	9.4	---	---	---	12.4	11.6	12.0
13	10.1	6.9	8.2	11.1	8.2	9.3	---	---	---	12.7	11.6	12.2
14	10.0	7.1	8.6	11.1	8.3	9.5	---	---	---	13.3	12.3	12.8
15	9.6	6.3	8.1	11.8	8.9	10.2	---	---	---	13.0	11.5	12.4
16	9.6	6.3	8.0	12.3	9.3	10.5	12.0	11.9	12.0	12.1	11.3	11.6
17	10.7	8.1	9.6	11.9	9.4	10.3	12.1	12.0	12.0	12.6	11.5	11.9
18	11.3	8.7	10.0	11.8	8.9	10.2	12.2	12.1	12.1	13.0	11.6	12.2
19	11.5	9.8	10.6	12.6	9.1	10.8	12.2	12.1	12.1	12.8	11.6	12.1
20	11.7	9.4	10.6	13.0	10.3	11.5	12.7	12.2	12.5	13.6	11.7	12.7
21	11.4	8.7	10.1	13.0	10.4	11.5	13.0	12.7	12.9	13.8	12.4	13.1
22	11.4	8.8	9.9	11.9	10.0	10.9	13.2	12.8	13.0	13.4	12.1	12.7
23	11.8	8.9	10.3	13.4	10.1	11.7	13.2	12.6	12.9	13.4	12.1	12.6
24	12.1	9.6	10.8	13.0	11.5	12.0	12.8	12.5	12.6	14.2	12.4	13.3
25	12.0	9.2	10.6	13.1	11.6	12.5	12.9	12.2	12.6	14.2	12.7	13.4
26	11.8	8.9	10.2	12.8	11.2	12.1	12.5	12.1	12.2	14.9	13.0	13.9
27	11.5	9.0	10.1	12.1	11.0	11.6	12.6	12.1	12.3	15.1	14.2	14.6
28	11.4	8.3	9.8	12.5	11.2	11.7	12.8	11.9	12.4	15.1	14.1	14.6
29	11.4	8.2	9.3	12.8	11.3	11.9	12.2	11.5	11.9	14.9	13.9	14.3
30	10.6	8.5	9.4	12.7	11.0	11.9	11.7	11.4	11.5	14.8	13.6	14.2
31	11.3	9.6	10.3	---	---	---	12.1	11.5	11.7	14.6	13.4	13.9
MONTH	12.1	6.3	9.5	13.4	7.7	10.6	---	---	---	15.1	11.1	12.7

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	14.6	13.4	13.9	10.8	9.9	10.3	12.4	12.1	12.3	9.3	7.8	8.9
2	14.7	13.0	13.9	10.5	9.9	10.2	12.1	11.6	11.8	9.8	8.9	9.3
3	13.7	12.2	12.9	11.1	10.3	10.7	12.0	11.5	11.7	10.1	9.0	9.5
4	14.0	12.2	13.0	11.2	9.8	10.7	12.5	11.6	12.2	10.3	8.5	9.4
5	14.5	12.8	13.5	10.2	9.1	9.8	12.3	11.8	12.1	10.3	8.4	9.3
6	14.3	12.5	13.3	9.4	8.1	9.0	12.3	11.3	11.8	11.1	9.0	9.8
7	13.9	12.0	12.8	---	---	---	---	---	---	11.2	9.0	9.9
8	14.1	11.7	12.7	---	---	---	---	---	---	11.0	8.6	9.7
9	13.6	10.8	12.2	---	---	---	---	---	---	11.5	9.0	10.1
10	13.5	10.6	11.8	---	---	---	---	---	---	11.5	9.5	10.5
11	14.0	11.0	12.4	---	---	---	---	---	---	---	---	---
12	14.1	11.9	13.0	---	---	---	12.5	9.2	10.6	---	---	---
13	14.0	11.5	12.5	---	---	---	10.0	9.2	9.5	---	---	---
14	14.1	12.1	12.9	---	---	---	---	---	---	---	---	---
15	13.5	10.9	12.4	---	---	---	---	---	---	---	---	---
16	13.6	10.9	12.1	---	---	---	---	---	---	---	---	---
17	12.9	10.7	11.7	---	---	---	---	---	---	---	---	---
18	13.7	10.4	12.0	---	---	---	---	---	---	---	---	---
19	13.9	11.9	12.8	---	---	---	---	---	---	10.7	8.3	9.5
20	14.0	11.3	12.5	---	---	---	10.0	8.5	9.2	10.5	8.3	9.5
21	13.4	10.0	11.7	---	---	---	10.4	9.2	9.7	---	---	---
22	12.2	9.5	10.5	12.1	11.2	11.6	10.1	9.3	9.7	---	---	---
23	13.0	9.5	11.0	11.6	9.1	10.5	10.4	9.4	9.8	---	---	---
24	12.3	9.0	10.5	9.2	8.6	8.9	10.5	9.5	9.9	8.7	6.7	7.6
25	12.9	8.2	10.3	8.6	7.8	8.2	10.4	9.2	9.7	9.5	6.5	7.9
26	9.4	8.2	8.7	9.1	8.6	9.0	10.3	9.2	9.7	7.8	6.4	7.0
27	10.5	9.1	10.0	10.2	9.1	9.7	10.6	9.2	9.8	---	---	---
28	11.0	9.7	10.4	11.4	9.7	10.5	10.4	9.2	9.8	---	---	---
29	11.2	10.1	10.6	11.2	10.4	10.6	10.5	9.1	9.7	---	---	---
30	---	---	---	12.3	11.2	11.9	9.4	8.7	9.2	---	---	---
31	---	---	---	12.6	12.1	12.3	---	---	---	---	---	---
MONTH	14.7	8.2	12.0	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	---	---	---	8.6	6.9	7.7	---	---	---	10.7	7.8	9.1
2	7.5	6.5	7.0	9.1	6.9	7.8	---	---	---	11.0	7.5	9.1
3	8.3	7.1	7.6	9.2	7.1	8.0	14.4	12.1	13.3	10.8	7.2	8.8
4	8.7	7.1	7.8	8.4	6.5	7.3	14.4	12.0	13.0	---	---	---
5	8.5	6.9	7.6	---	---	---	14.3	11.9	13.1	---	---	---
6	8.2	6.7	7.4	---	---	---	14.4	11.9	13.1	---	---	---
7	8.2	7.0	7.5	8.2	6.2	7.1	14.5	11.8	12.9	11.5	7.6	9.3
8	8.0	6.9	7.4	7.9	6.3	7.0	14.6	11.1	12.8	---	---	---
9	7.8	6.6	7.2	8.0	6.2	7.0	13.1	10.4	11.9	---	---	---
10	7.4	6.4	6.9	8.2	5.7	7.1	13.0	10.6	11.6	---	---	---
11	8.0	6.5	7.2	8.9	6.3	7.4	13.2	9.9	11.5	---	---	---
12	---	---	---	8.7	6.3	7.4	13.0	9.8	11.4	---	---	---
13	---	---	---	11.3	6.2	8.7	13.7	10.7	12.1	---	---	---
14	---	---	---	11.2	8.8	9.8	14.0	10.9	12.5	10.3	7.0	8.4
15	10.1	8.0	8.9	10.9	8.2	9.6	12.5	7.6	10.4	10.8	7.3	8.7
16	8.9	7.6	8.2	10.6	8.0	9.1	11.3	7.7	9.5	10.9	7.4	9.0
17	9.0	8.0	8.4	10.4	7.1	8.6	11.1	8.1	9.4	10.9	7.4	8.9
18	8.0	7.5	7.8	10.1	7.5	8.8	11.2	8.1	9.5	---	---	---
19	9.0	7.8	8.3	9.6	7.4	8.5	11.0	8.5	9.5	---	---	---
20	9.2	7.4	8.3	8.9	6.7	7.8	11.2	8.5	9.7	---	---	---
21	8.7	6.8	7.7	9.7	6.6	7.9	11.2	8.6	9.7	12.1	8.0	10.2
22	9.8	7.5	8.3	9.5	6.5	7.8	11.0	8.4	9.6	10.9	6.9	8.8
23	9.3	7.1	8.0	9.6	6.7	7.9	10.7	8.2	9.3	11.3	6.9	9.1
24	8.8	6.6	7.6	9.0	6.7	7.8	11.4	8.2	9.6	11.5	8.8	10.1
25	7.9	5.1	6.6	8.9	6.6	7.7	10.8	8.3	9.6	12.3	9.1	10.9
26	5.3	4.8	5.0	9.0	6.6	7.7	10.8	8.2	9.3	11.9	8.6	10.3
27	6.6	5.3	6.1	9.2	6.5	7.7	10.7	8.0	9.2	11.4	7.7	9.7
28	7.5	6.3	7.2	9.3	6.5	7.8	10.6	7.6	9.0	12.0	7.7	9.5
29	7.4	7.1	7.2	8.8	6.4	7.5	10.4	7.2	8.6	12.0	7.8	9.7
30	9.2	7.1	8.0	---	---	---	---	---	---	12.5	8.3	10.2
31	---	---	---	---	---	---	11.0	7.2	9.0	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
YEAR	15.1	4.8	10.3									



Discharge from airshaft site No. 4

ARKANSAS RIVER BASIN

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OK

LOCATION.--Lat 35°33'47", long 97°57'26", SW 1/4 NW 1/4 sec.33, T.13 N., R.7 W., Canadian County, Hydrologic Unit 11100301, near left downstream end of bridge on new U.S. Highway 81, 2.0 mi north of courthouse in El Reno, 2.3 mi downstream from Target Creek, and at mile 307.3.

DRAINAGE AREA.--13,042 mi² of which 4,899 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1902 to April 1908, October 1937 to current year. Monthly discharge only for some periods, published in WSP 1311. Gage-height records collected at site 1.1 mi upstream February 1914 to March 1934 and at site 0.1 mi upstream thereafter are contained in reports of National Weather Service. Published as Canadian River (North Fork) near El Reno 1902-4.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,295.00 ft above sea level. October 1902 to April 1908, nonrecording gage at site about 450 ft upstream at different datum. October 1937 to September 1988, gage at site 500 ft upstream and datum 4.02 ft higher.

REMARKS.--No estimated daily discharge. Records good. Some regulation by Fort Supply Lake (station 07236500) for period May 1942 to April 1948 and by Canton Lake (station 07238500) thereafter. U.S. Geological Survey's satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 15, 1923, reached an elevation of 1,326.3 ft above mean sea level at railroad bridge 1.1 mi above station, from reports of National Weather Service.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	73	48	134	75	315	1410	1470	375	795	90	40
2	39	61	49	122	74	480	1820	920	385	753	86	39
3	38	50	52	117	75	476	1080	438	410	721	83	38
4	38	44	136	111	75	352	636	290	428	708	79	37
5	38	42	238	105	74	204	975	439	421	664	74	37
6	37	41	168	102	72	153	1150	611	403	628	71	35
7	36	41	121	97	70	130	1120	606	393	605	70	35
8	38	41	140	96	68	368	1090	594	385	587	67	35
9	38	40	2160	94	67	774	1060	597	379	568	64	34
10	38	39	1890	92	67	760	1060	580	377	549	61	32
11	38	39	774	90	66	729	1040	550	383	530	61	30
12	38	39	693	87	64	642	1030	420	381	446	65	29
13	36	39	891	84	64	451	1030	311	376	260	62	28
14	34	38	932	81	63	425	1010	290	377	215	61	28
15	33	38	1180	79	65	423	1010	281	374	198	59	27
16	33	38	1320	78	65	449	1040	276	369	188	58	25
17	32	38	1120	78	64	580	1000	261	662	180	57	24
18	32	38	1050	77	67	557	527	212	1100	170	58	22
19	32	38	1110	76	80	492	710	195	600	161	56	20
20	33	38	1080	75	69	462	984	184	451	118	54	18
21	34	38	872	75	65	447	949	184	418	106	53	17
22	34	39	523	74	65	587	938	187	425	101	51	16
23	33	41	302	73	72	2390	930	178	420	112	48	17
24	34	93	257	72	95	2850	910	174	384	130	47	18
25	33	124	233	72	114	2430	894	185	537	116	46	17
26	34	80	201	74	215	1200	873	305	2140	107	45	17
27	33	62	184	78	278	791	864	470	1330	100	43	16
28	32	56	172	78	267	546	851	259	944	95	42	17
29	37	52	163	79	264	696	745	207	833	93	41	16
30	139	50	156	78	---	1130	728	359	728	94	41	15
31	66	---	149	74	---	1100	---	374	---	96	40	---
TOTAL	1231	1490	18364	2702	2819	23389	29464	12407	17188	10194	1833	779
MEAN	39.7	49.7	592	87.2	97.2	754	982	400	573	329	59.1	26.0
MAX	139	124	2160	134	278	2850	1820	1470	2140	795	90	40
MIN	32	38	48	72	63	130	527	174	369	93	40	15
AC-FT	2440	2960	36420	5360	5590	46390	58440	24610	34090	20220	3640	1550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
MEAN	189	133	114	109	143	223	284	425	521	279	181	208
MAX	1904	884	592	826	673	971	1129	2354	3121	2597	2460	2786
(WY)	1987	1975	2000	1998	1994	1998	1997	1993	1949	1951	1950	1950
MIN	.000	.000	.000	.000	.000	.000	.000	8.00	.17	.73	.000	.000
(WY)	1953	1955	1955	1955	1955	1955	1955	1953	1953	1952	1954	1952

ARKANSAS RIVER BASIN

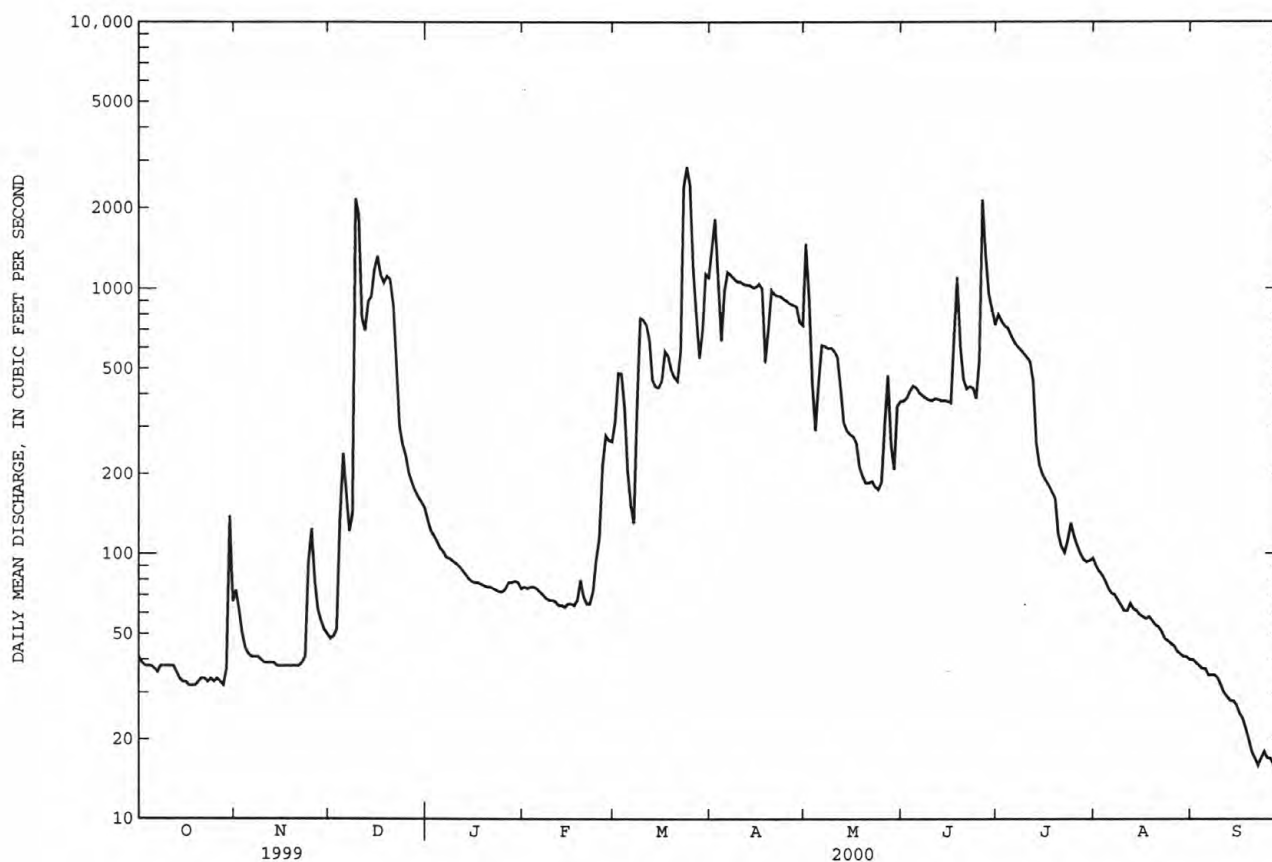
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07239500 NORTH CANADIAN RIVER NEAR EL RENO, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	171086		121860		^a 234	
ANNUAL MEAN	469		333		807	1951
HIGHEST ANNUAL MEAN					31.8	1953
LOWEST ANNUAL MEAN					13300	May 10 1993
HIGHEST DAILY MEAN	2310	Apr 25	2850	Mar 24	.00	Oct 16 1948
LOWEST DAILY MEAN	32	Oct 17	15	Sep 30	.00	Jul 3 1952
ANNUAL SEVEN-DAY MINIMUM	33	Oct 14	17	Sep 24	15000	Oct 28 1941
INSTANTANEOUS PEAK FLOW			3420	Mar 23	^b 22.22	Sep 21 1965
INSTANTANEOUS PEAK STAGE			10.89	Mar 23	169600	
ANNUAL RUNOFF (AC-FT)	339300		241700		700	
10 PERCENT EXCEEDS	1020		946		58	
50 PERCENT EXCEEDS	300		112		2.4	
90 PERCENT EXCEEDS	38		34			

^aPrior to regulation, 1903-07, 1938-48, 264 ft³/s.

^bPresent datum.



ARKANSAS RIVER BASIN

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1944-45, 1950-51, 1953, 1955-57, 1974-79, October 1991 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1954 to September 1957, May 1974 to September 1975, October 1991 to current year.

WATER TEMPERATURE: October 1954 to September 1957, May 1974 to September 1975, October 1991 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1991.

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

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,200 microsiemens, July 25, 1974, Oct. 11, 1978; minimum, 103 microsiemens, Mar. 17, 1998.

WATER TEMPERATURE: Maximum, 35.0°C, July 1, 23, 1994, July 7, 1998; minimum, 0.0°C, many days in winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,620 microsiemens, Aug. 16,30,31; minimum, 458 microsiemens, Feb. 27.

WATER TEMPERATURE: Maximum, 34.2°C, Aug. 11; minimum, 0.0°C, Jan. 27.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1510	1440	1500	1220	1130	1170	1340	1280	1310	1290	1280	1280
2	1520	1490	1510	1220	1190	1210	1350	1250	1330	1280	1270	1280
3	1520	1480	1500	1190	823	976	1320	1240	1280	1360	1270	1310
4	1510	1480	1500	1090	870	998	1320	909	1120	1390	1360	1380
5	1500	1470	1490	1180	1090	1120	909	504	589	1410	1390	1400
6	1490	1460	1480	1340	1180	1270	939	648	824	1450	1410	1430
7	1500	1470	1490	1370	1330	1350	928	708	818	1450	1430	1440
8	1490	1400	1430	1380	1360	1360	924	799	833	1430	1420	1420
9	1430	1390	1420	1380	1360	1370	841	464	697	1430	1410	1420
10	1430	1400	1420	1390	1370	1380	872	724	816	1420	1410	1410
11	1420	1380	1400	1400	1380	1380	1030	869	955	1410	1390	1400
12	1400	1390	1390	1400	1390	1390	1290	1020	1080	1400	1380	1390
13	1410	1390	1400	1410	1390	1400	1450	1290	1410	1390	1380	1380
14	1410	1390	1400	1410	1390	1400	1480	1440	1460	1390	1370	1380
15	1420	1390	1410	1420	1390	1400	1530	1450	1510	1390	1370	1380
16	1430	1410	1430	1420	1390	1410	1550	1370	1500	1370	1360	1370
17	1460	1430	1450	1420	1390	1410	1550	1240	1460	1360	1350	1360
18	1470	1380	1460	1420	1400	1410	1560	1430	1540	1360	1340	1350
19	1470	1460	1470	1430	1400	1410	1560	1500	1550	1350	1330	1340
20	1470	1460	1470	1430	1410	1420	1570	1490	1560	1340	1320	1330
21	1470	1460	1470	1440	1410	1430	1570	1520	1550	1330	1310	1320
22	1460	1460	1460	1430	1400	1420	1550	1460	1540	1320	1300	1310
23	1460	1450	1460	1420	1380	1400	1540	1380	1480	1320	1290	1310
24	1460	1440	1450	1420	1400	1410	1380	1280	1310	1320	1300	1310
25	1450	1430	1440	1400	549	817	1330	1280	1310	1310	1300	1310
26	1440	1420	1430	995	866	927	1320	1300	1310	1310	1270	1290
27	1430	1420	1430	941	654	720	1320	1300	1310	1280	1260	1270
28	1440	1430	1430	913	696	810	1320	1310	1320	1270	1260	1270
29	1430	1200	1410	1140	913	1030	1310	1300	1300	1280	1260	1270
30	1260	485	775	1280	1140	1220	1300	1280	1290	1280	1270	1270
31	1130	825	999	---	---	---	1290	1280	1290	1280	1260	1260
MONTH	1520	485	1410	1440	549	1250	1570	464	1250	1450	1260	1340

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1290	1260	1270	1160	1100	1110	1400	947	1250	1100	821	953
2	1290	1260	1280	1280	1130	1220	1140	817	984	1170	1050	1100
3	1300	1270	1280	1240	1190	1220	984	874	952	1260	1170	1220
4	1300	1260	1280	1220	1030	1150	1120	984	1040	---	---	---
5	1290	1260	1280	1030	891	933	1380	1120	1290	---	---	---
6	1280	1260	1270	1010	930	961	1410	1370	1400	---	---	---
7	1270	1260	1270	---	---	---	1430	1410	1420	---	---	---
8	1280	1260	1270	---	---	---	1440	1430	1430	---	---	---
9	1270	1250	1260	---	---	---	1450	1440	1440	---	---	---
10	1260	1230	1250	---	---	---	1460	1440	1450	---	---	---
11	1260	1240	1250	---	---	---	1470	1450	1460	---	---	---
12	1270	1240	1260	---	---	---	1460	1440	1450	---	---	---
13	1260	1250	1250	---	---	---	1450	1440	1450	---	---	---
14	1270	1240	1250	---	---	---	1460	1440	1450	---	---	---
15	1260	1240	1250	---	---	---	1480	1460	1470	---	---	---
16	1270	1230	1250	---	---	---	1460	1440	1450	---	---	---
17	1230	1220	1220	---	---	---	1450	1350	1420	---	---	---
18	1240	1220	1230	---	---	---	1350	1300	1320	---	---	---
19	1240	1180	1220	---	---	---	1460	1340	1400	1490	1470	1480
20	1200	1020	1130	---	---	---	1470	1460	1460	1490	1470	1480
21	1210	1050	1140	---	---	---	1490	1460	1480	1490	1400	1450
22	1230	1180	1210	---	---	---	1490	1480	1490	1450	1360	1410
23	1200	1170	1180	---	---	---	1500	1480	1490	1470	1390	1430
24	1200	1130	1170	---	---	---	1510	1500	1500	1460	1340	1430
25	1130	878	953	---	---	---	1510	1500	1510	1390	1300	1340
26	977	665	855	---	---	---	1540	1510	1520	1340	660	1160
27	689	458	566	---	---	---	1530	1500	1520	1220	659	872
28	987	475	628	---	---	---	1530	1510	1520	1290	1060	1190
29	1110	987	1060	---	---	---	1550	1500	1510	1350	1280	1300
30	---	---	---	1380	1220	1340	1510	1080	1440	1440	1350	1410
31	---	---	---	1400	1370	1390	---	---	---	1540	1420	1500
MONTH	1300	458	1160	---	---	--	1550	817	1400	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	1570	1520	1530	---	---	---	1400	1380	1390	1580	1480	1550
2	1610	1400	1530	---	---	---	1410	1360	1380	---	---	---
3	1590	1450	1490	---	---	---	1440	1380	1410	---	---	---
4	1480	1430	1450	---	---	---	1470	1440	1450	---	---	---
5	1520	1450	1490	---	---	---	1500	1470	1480	---	---	---
6	1530	1510	1520	---	---	---	1520	1500	1500	1600	1580	1590
7	1540	1510	1520	1480	1470	1470	1530	1520	1520	1600	1590	1590
8	1530	1500	1520	1510	1470	1490	1580	1520	1540	1600	1580	1590
9	1520	1500	1510	1530	1500	1520	1570	1540	1560	1590	1570	1580
10	1530	1510	1520	1550	1510	1530	1580	1520	1550	1590	1580	1580
11	1530	1490	1510	1550	1500	1530	1570	1550	1560	1590	1570	1580
12	1540	1510	1520	1520	1470	1490	1560	1540	1550	1590	1570	1580
13	1530	1500	1510	1510	1460	1470	1550	1530	1540	1590	1560	1580
14	1530	1490	1510	1470	1410	1460	1540	1530	1540	1590	1570	1580
15	1550	1500	1530	1470	1450	1460	1600	1500	1540	1590	1560	1580
16	1560	1530	1540	1470	1450	1460	1620	1490	1530	---	---	---
17	1550	910	1300	1460	1380	1430	1520	1470	1510	---	---	---
18	1050	889	973	1470	1430	1450	1520	1420	1490	---	---	---
19	1110	842	960	1510	1460	1470	1540	1450	1500	---	---	---
20	1240	1090	1170	1510	1470	1490	1540	1500	1520	---	---	---
21	1260	1080	1180	1500	1360	1420	1560	1530	1540	---	---	---
22	1280	1170	1230	1420	1260	1380	1570	1530	1550	---	---	---
23	1280	1160	1220	1420	1370	1400	1580	1500	1560	---	---	---
24	1300	1210	1260	1390	1160	1270	1600	1560	1570	---	---	---
25	1300	861	1190	1280	1160	1200	1580	1570	1570	---	---	---
26	---	---	---	1350	1280	1320	1580	1560	1570	---	---	---
27	---	---	---	1410	1330	1370	1590	1500	1550	---	---	---
28	---	---	---	1440	1400	1410	1600	1520	1570	---	---	---
29	---	---	---	1440	1420	1430	1610	1520	1570	---	---	---
30	---	---	---	1440	1390	1420	1620	1510	1540	---	---	---
31	---	---	---	1420	1370	1400	1620	1540	1580	---	---	---
MONTH	---	---	---	---	---	---	1620	1360	1520	---	---	---
YEAR	1620	458	1350									

ARKANSAS RIVER BASIN

07239500 NORTH CANADIAN RIVER NEAR EL RENO, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	22.1	14.6	18.0	16.8	12.8	14.7	10.7	6.3	8.5	9.1	6.0	7.6
2	20.9	15.5	17.6	13.1	9.0	11.0	13.5	9.9	11.5	9.7	7.5	8.6
3	19.8	14.0	16.3	12.7	7.5	10.1	12.6	8.8	10.6	9.6	6.6	8.2
4	19.4	12.8	15.7	14.8	8.6	11.5	10.7	7.4	9.0	6.6	3.0	4.5
5	21.3	13.1	16.9	17.7	11.1	14.1	7.4	5.0	6.1	5.0	2.1	3.7
6	23.1	16.1	19.1	19.7	14.1	16.6	5.5	3.0	4.5	5.9	2.6	4.2
7	22.1	15.2	18.2	20.0	14.9	17.2	6.6	3.5	5.2	5.9	2.7	4.5
8	21.5	16.9	19.0	19.3	14.8	16.8	10.0	5.6	7.6	7.9	5.9	6.8
9	23.9	17.2	20.1	18.6	13.7	15.9	8.3	6.1	7.0	8.0	5.4	6.6
10	24.8	17.5	20.8	18.7	13.9	16.0	6.1	5.3	5.6	7.4	4.5	5.9
11	24.7	17.9	21.1	19.0	13.4	16.0	5.6	4.8	5.2	7.5	4.4	6.0
12	25.1	18.5	21.4	19.5	14.3	16.6	6.4	5.6	5.9	8.7	5.1	6.8
13	24.3	18.2	20.8	19.6	14.5	16.8	6.5	5.2	5.8	7.9	5.2	6.5
14	23.2	16.3	19.5	18.6	14.4	16.2	6.1	5.3	5.7	6.8	3.6	5.2
15	23.8	17.2	20.2	16.7	12.1	14.2	5.5	4.4	5.0	8.3	4.4	6.3
16	21.0	16.5	18.8	16.9	11.4	14.0	5.3	4.4	4.9	8.8	8.0	8.4
17	16.5	12.1	14.2	17.3	12.7	14.7	5.3	4.6	5.0	8.5	7.6	8.1
18	16.6	12.2	14.0	18.0	13.1	15.3	5.8	4.8	5.2	8.8	6.7	7.7
19	16.4	10.0	13.0	15.3	11.6	13.4	5.4	4.8	5.1	10.1	7.0	8.2
20	16.9	9.9	13.1	13.7	9.3	11.4	4.9	4.0	4.4	7.8	4.5	6.0
21	18.9	11.6	14.9	14.2	9.5	11.5	4.1	3.3	3.8	6.9	3.9	5.4
22	19.2	12.9	15.6	14.2	10.7	12.4	4.1	2.9	3.5	7.9	4.3	6.1
23	17.2	11.8	14.2	12.9	9.1	11.3	4.7	2.5	3.6	8.8	5.2	6.7
24	16.0	9.9	12.7	9.6	6.4	8.1	5.5	3.5	4.5	6.0	2.9	4.6
25	16.7	10.8	13.6	8.4	5.5	7.2	5.9	3.3	4.7	5.4	2.9	4.2
26	18.6	11.6	14.9	9.7	5.6	7.6	6.9	4.6	5.7	4.1	1.0	2.3
27	18.4	13.0	15.6	11.0	6.9	8.9	6.3	4.0	5.2	1.1	.0	.7
28	20.2	14.4	17.1	11.4	7.5	9.3	6.7	3.5	5.2	3.2	.5	1.7
29	20.8	15.6	17.8	10.6	7.1	8.7	7.9	4.6	6.4	4.3	.2	2.1
30	17.0	12.9	14.1	9.8	5.9	7.7	8.4	6.1	7.4	4.3	.4	2.3
31	13.8	12.6	13.2	---	---	---	8.0	5.4	6.9	4.9	.8	2.9
MONTH	25.1	9.9	16.8	20.0	5.5	12.8	13.5	2.5	6.0	10.1	.0	5.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.5	1.9	2.8	14.3	10.8	12.6	12.3	10.6	11.4	17.3	15.8	16.5
2	6.1	1.6	3.7	13.0	10.7	11.7	12.3	10.5	11.3	17.3	16.2	16.8
3	8.5	3.7	5.8	10.7	8.9	9.9	13.3	11.6	12.3	19.5	16.0	17.5
4	7.8	4.1	5.8	11.6	7.4	9.5	14.6	10.7	12.6	---	---	---
5	7.2	3.0	4.9	13.8	9.0	11.5	16.2	12.9	14.4	---	---	---
6	7.4	3.3	5.5	17.2	11.2	14.2	17.7	14.6	16.0	---	---	---
7	9.9	4.6	7.1	18.1	15.1	16.6	18.2	16.3	17.1	---	---	---
8	10.8	5.4	8.0	16.4	13.0	14.9	16.6	14.2	15.4	---	---	---
9	12.4	7.2	9.9	15.1	13.0	13.9	15.6	13.8	14.7	---	---	---
10	13.6	9.2	11.2	13.1	10.6	12.1	16.6	13.5	15.0	---	---	---
11	10.7	7.0	8.8	11.3	9.0	10.2	16.5	15.4	16.1	---	---	---
12	9.3	4.5	6.9	12.0	8.9	10.4	15.4	14.2	14.6	25.8	23.4	24.9
13	8.6	6.6	7.5	13.5	10.1	11.8	14.8	13.5	14.1	23.9	20.1	22.1
14	9.6	4.5	6.9	13.5	12.2	12.8	16.5	13.9	14.9	23.3	18.8	21.1
15	12.5	6.2	9.1	17.0	12.6	14.7	16.7	15.9	16.2	21.9	19.0	20.5
16	11.5	7.8	9.9	16.3	9.8	12.8	17.1	14.7	15.9	22.7	19.9	21.2
17	11.4	9.0	10.3	9.8	8.3	8.8	16.9	14.6	15.8	23.4	21.4	22.2
18	11.4	7.3	9.6	8.6	7.8	8.2	21.3	15.7	18.2	24.8	19.9	22.2
19	10.6	5.9	8.0	11.6	7.5	9.4	23.0	19.8	21.2	21.9	18.8	20.2
20	11.4	6.0	8.8	13.8	9.4	11.6	21.4	18.6	19.8	24.6	17.6	20.9
21	14.7	8.9	11.6	12.9	12.2	12.4	19.5	17.2	18.4	27.4	20.5	23.8
22	14.9	13.1	13.9	12.2	11.7	11.9	18.4	16.8	17.4	29.0	22.4	25.6
23	15.9	11.7	13.8	13.3	11.7	12.4	18.4	16.0	17.1	30.5	24.3	27.3
24	17.1	11.4	14.5	14.6	12.8	13.7	19.8	16.8	18.2	31.6	25.6	28.5
25	17.7	14.6	16.0	17.2	14.5	15.9	21.1	18.1	19.5	28.7	24.3	25.4
26	14.6	11.1	12.5	19.2	16.3	17.7	20.0	18.6	19.3	27.4	23.0	25.0
27	13.4	9.7	11.6	19.7	17.1	18.4	21.0	18.5	19.5	25.6	22.3	24.1
28	13.4	10.2	11.9	19.1	16.8	17.8	21.1	18.2	19.6	28.6	22.6	25.4
29	14.8	11.2	12.8	16.8	13.9	15.0	20.2	18.9	19.5	29.6	23.3	26.4
30	---	---	---	13.9	12.4	13.0	19.3	16.2	18.2	29.6	24.7	27.0
31	---	---	---	12.7	11.6	12.2	---	---	---	29.8	25.6	27.6
MONTH	17.7	1.6	9.3	19.7	7.4	12.8	23.0	10.5	16.5	---	---	---

ARKANSAS RIVER BASIN

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07239500 NORTH CANADIAN RIVER NEAR EL RENO, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	28.8	25.5	27.2	28.2	25.8	26.9	31.6	24.6	27.9	32.3	24.7	28.3
2	27.6	24.2	25.7	28.4	26.3	27.2	32.1	25.1	28.4	32.6	24.9	28.6
3	24.2	23.0	23.6	29.3	26.7	27.8	30.5	25.3	27.9	33.5	25.5	29.2
4	26.1	22.7	24.1	29.8	26.9	28.3	31.3	25.2	28.1	33.1	25.5	29.0
5	26.5	23.2	24.8	29.7	26.7	28.2	31.8	25.1	28.3	31.6	25.1	28.1
6	26.3	22.6	24.4	30.3	26.9	28.5	32.8	24.9	28.6	31.1	23.6	27.1
7	26.6	22.5	24.5	30.6	27.4	29.0	32.7	26.0	29.1	30.8	22.8	26.5
8	27.0	22.6	24.7	31.0	27.9	29.3	32.9	25.4	28.9	31.1	23.2	26.7
9	26.5	23.8	25.1	31.0	27.8	29.3	33.3	25.6	29.1	30.7	23.1	26.5
10	25.7	24.1	24.7	30.6	27.2	28.9	33.8	26.3	29.7	31.1	23.6	26.8
11	26.9	23.1	24.8	31.2	27.4	29.2	34.2	26.5	30.0	31.0	23.6	27.0
12	29.1	24.6	26.6	31.6	28.3	29.8	33.7	26.7	29.9	31.4	23.0	27.0
13	29.4	25.6	27.3	33.1	28.1	30.3	33.6	26.5	29.5	31.6	23.5	27.2
14	27.7	24.6	26.1	32.7	27.2	30.0	31.8	24.7	28.0	31.6	23.1	26.7
15	28.2	24.0	26.0	33.3	27.5	30.3	32.5	24.3	28.1	27.9	20.9	24.3
16	26.4	22.7	24.8	32.9	28.2	30.5	33.0	25.7	29.1	27.3	18.9	22.9
17	22.7	18.9	20.2	31.7	27.0	29.3	32.9	25.8	28.9	27.2	19.2	22.7
18	20.9	18.9	19.7	31.5	26.1	28.6	32.2	25.2	28.5	24.9	16.9	20.7
19	22.8	20.6	21.5	33.5	26.6	29.8	32.5	25.2	28.5	24.5	15.8	19.8
20	26.4	22.5	24.3	32.5	27.0	29.8	31.4	23.6	27.3	---	---	---
21	26.1	24.3	25.1	30.9	24.6	27.8	32.0	23.8	27.4	---	---	---
22	27.1	23.1	25.0	30.0	23.9	27.0	32.0	24.5	27.9	---	---	---
23	29.4	25.1	27.0	30.2	24.6	27.1	32.5	25.2	28.5	---	---	---
24	30.8	26.2	28.3	30.9	24.5	27.5	33.5	25.3	28.9	---	---	---
25	29.2	25.9	27.1	29.8	23.7	26.7	33.2	25.4	29.0	---	---	---
26	26.6	24.5	25.0	31.5	24.0	27.6	33.0	25.3	28.8	---	---	---
27	24.9	23.9	24.4	29.3	25.4	27.3	32.9	25.0	28.6	---	---	---
28	23.9	23.1	23.5	30.8	24.1	27.2	32.8	24.8	28.5	---	---	---
29	24.6	23.0	23.8	30.9	25.8	28.1	33.1	24.8	28.6	---	---	---
30	27.2	23.2	25.0	30.6	24.4	27.4	31.6	24.8	28.1	---	---	---
31	---	---	---	30.6	24.0	27.2	31.8	24.4	27.8	---	---	---
MONTH	30.8	18.9	24.8	33.5	23.7	28.4	34.2	23.6	28.6	---	---	---

ARKANSAS RIVER BASIN

07239700 NORTH CANADIAN RIVER NEAR YUKON, OK

LOCATION.--Lat 35°32'22", long 97°44'32", SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.12 N., R.5 W., Canadian County, Hydrologic Unit 11100301, near left downstream end of bridge on new State Highway 4, 2.2 mi north of State Highway 66, 2.9 mi downstream from Shell Creek, and at mile 292.0.

DRAINAGE AREA.--13,183 mi² of which 4,899 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1943 to September 1999 (discharge measurements only), October 1999 to current year.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,247.66 ft above sea level.

REMARKS.--Records fair. Some regulation by Fort Supply Lake (station 07236500) for period May 1942 to April 1948 and by Canton Lake (station 07238500) thereafter. U.S. Geological Survey's satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e45	59	52	127	78	241	1270	4400	324	878	107	44
2	e44	62	59	116	78	406	2620	2050	325	1300	102	43
3	e43	54	61	115	79	563	1550	1040	333	1250	99	42
4	e43	48	100	107	78	404	688	521	346	841	95	41
5	e43	46	193	103	78	230	742	443	362	752	91	40
6	e42	45	150	100	78	155	1040	648	329	684	87	40
7	e41	45	e120	97	76	131	1050	658	315	650	85	38
8	e42	45	87	97	74	181	1000	627	306	636	82	38
9	e42	45	2230	94	74	547	984	623	302	621	78	37
10	e42	45	2740	92	73	674	969	591	298	579	75	38
11	e42	44	1330	90	72	654	954	567	300	557	72	37
12	e42	44	695	88	71	638	956	460	296	522	73	38
13	e40	44	870	85	70	457	947	341	293	345	73	34
14	39	45	835	83	70	384	930	301	305	260	72	34
15	37	44	979	83	69	370	913	286	302	219	69	35
16	e36	44	1550	82	69	376	966	277	297	204	67	34
17	e35	44	1490	81	70	477	995	268	1160	194	65	32
18	e35	44	1220	80	69	526	585	233	1930	184	63	28
19	36	43	1250	78	75	467	471	207	877	172	63	27
20	36	44	1370	76	77	424	784	192	511	150	62	26
21	36	44	1110	77	71	410	827	185	478	148	60	26
22	36	44	670	77	76	463	806	190	462	148	57	26
23	35	45	306	76	83	2440	800	176	428	127	55	23
24	36	46	239	75	82	3490	786	168	384	141	54	25
25	37	93	213	75	135	3100	752	181	1360	133	52	28
26	36	81	188	77	131	1610	734	216	3220	120	51	28
27	36	64	169	81	286	844	744	609	2260	116	49	27
28	35	58	157	82	234	527	715	370	1780	114	48	25
29	35	55	148	82	238	431	668	222	1870	122	47	23
30	97	53	140	82	---	865	1170	284	1030	108	46	23
31	83	---	134	81	---	933	---	e330	---	108	45	---
TOTAL	1307	1517	20855	2739	2814	23418	28416	17664	22783	12383	2144	980
MEAN	42.2	50.6	673	88.4	97.0	755	947	570	759	399	69.2	32.7
MAX	97	93	2740	127	286	3490	2620	4400	3220	1300	107	44
MIN	35	43	52	75	69	131	471	168	293	108	45	23
AC-FT	2590	3010	41370	5430	5580	46450	56360	35040	45190	24560	4250	1940

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

	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MEAN	42.2	50.6	673	88.4	97.0	755	947	570	759	399	69.2	32.7
MAX	42.2	50.6	673	88.4	97.0	755	947	570	759	399	69.2	32.7
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MIN	42.2	50.6	673	88.4	97.0	755	947	570	759	399	69.2	32.7
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000

e Estimated

ARKANSAS RIVER BASIN

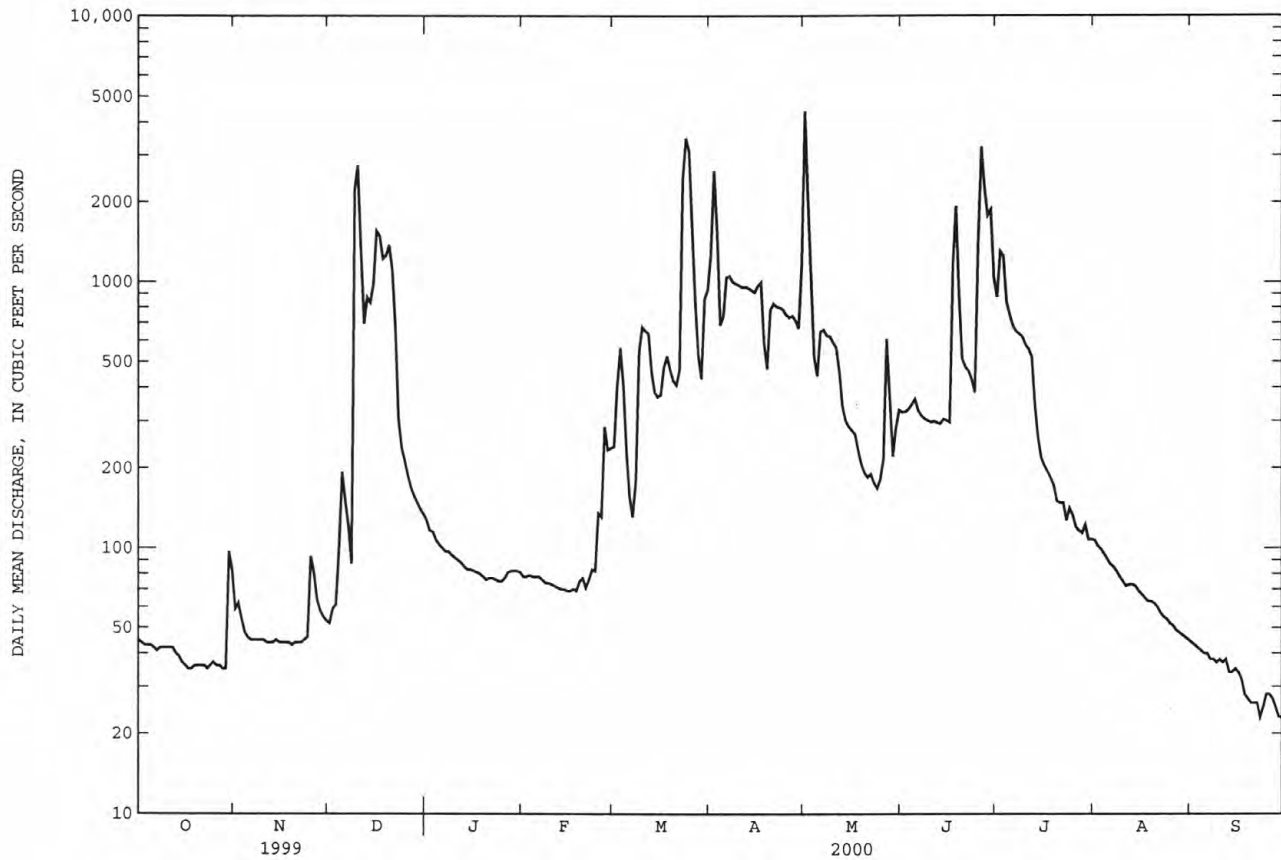
285

07239700 NORTH CANADIAN RIVER NEAR YUKON, OK--Continued

SUMMARY STATISTICS

FOR 2000 WATER YEAR

ANNUAL TOTAL	137020	
ANNUAL MEAN	374	
HIGHEST DAILY MEAN	4400	May 1
LOWEST DAILY MEAN	23	Sep 23,29,30
ANNUAL SEVEN-DAY MINIMUM	26	Sep 23
INSTANTANEOUS PEAK FLOW	5170	May 1
INSTANTANEOUS PEAK STAGE	11.95	May 1
ANNUAL RUNOFF (AC-FT)	271800	
10 PERCENT EXCEEDS	972	
50 PERCENT EXCEEDS	116	
90 PERCENT EXCEEDS	38	



ARKANSAS RIVER BASIN

07239700 NORTH CANADIAN RIVER NEAR YUKON, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1999 to September 30, 2000.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1999 to September 30, 2000.

WATER TEMPERATURE: November 1999 to September 30, 2000.

INSTRUMENTATION.--Water-quality monitor since November 1999.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,580 microsiemens, Sept. 2, 3; minimum recorded, 351 microsiemens, May 1.

WATER TEMPERATURE: Maximum recorded, 34.2°C, Aug. 11; minimum recorded, 0.0°C, Jan. 27, 29.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	1250	1110	1190	1370	1350	1360
2	---	---	---	---	---	---	1270	1190	1250	1350	1340	1350
3	---	---	---	---	---	---	1230	1190	1220	1340	1320	1330
4	---	---	---	---	---	---	1230	631	1080	1360	1330	1340
5	---	---	---	---	---	---	913	536	715	1370	1340	1350
6	---	---	---	---	---	---	720	499	569	1370	1350	1350
7	---	---	---	---	---	---	840	690	759	1360	1340	1350
8	---	---	---	---	---	---	821	670	752	1340	1320	1330
9	---	---	---	---	---	---	753	452	604	1340	1320	1330
10	---	---	---	---	---	---	753	616	692	1350	1330	1330
11	---	---	---	1390	1370	1380	868	662	783	1340	1330	1330
12	---	---	---	1390	1360	1380	987	852	923	1340	1320	1330
13	---	---	---	1390	1370	1380	1320	973	1180	1340	1320	1330
14	---	---	---	1390	1360	1380	1370	1320	1350	1340	1320	1330
15	---	---	---	1380	1360	1370	1410	1370	1390	1340	1320	1330
16	---	---	---	1380	1360	1370	1450	1410	1440	1330	1320	1320
17	---	---	---	1390	1360	1380	1450	1430	1440	1330	1320	1320
18	---	---	---	1390	1370	1380	1440	1430	1430	1330	1320	1320
19	---	---	---	1390	1370	1380	1450	1440	1440	1330	1320	1320
20	---	---	---	1400	1370	1380	1460	1450	1450	1340	1320	1330
21	---	---	---	1380	1360	1370	1450	1440	1440	1330	1320	1320
22	---	---	---	1400	1360	1380	1440	1420	1430	1330	1310	1320
23	---	---	---	1370	1340	1360	1430	1400	1410	1330	1300	1310
24	---	---	---	1380	1350	1370	1410	1390	1400	1330	1310	1320
25	---	---	---	1370	978	1290	1400	1380	1390	1340	1320	1320
26	---	---	---	982	586	795	1390	1370	1380	1330	1280	1300
27	---	---	---	967	953	955	1380	1360	1370	1290	1260	1270
28	---	---	---	954	732	797	1380	1360	1370	1280	1260	1270
29	---	---	---	931	755	848	1370	1360	1360	1300	1270	1280
30	---	---	---	1120	931	1020	1360	1350	1360	1300	1280	1290
31	---	---	---	---	---	---	1370	1350	1360	1310	1280	1290
MONTH	---	---	---	---	---	---	1460	452	1190	1370	1260	1320

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1300	1280	1290	1410	1350	1390	1370	1180	1320	615	351	438
2	1310	1290	1300	1420	1380	1410	1180	863	995	888	615	813
3	1320	1280	1300	1440	1320	1380	926	804	876	1030	875	966
4	1320	1300	1310	1400	1320	1370	1010	925	956	1200	1030	1130
5	1330	1290	1300	1320	1060	1200	1280	1010	1120	1350	1200	1270
6	1330	1280	1300	1160	1060	1110	1350	1280	1330	1370	1320	1350
7	1320	1280	1300	1160	1120	1140	1370	1340	1360	1330	1320	1320
8	1320	1290	1300	1240	971	1130	1390	1370	1380	1340	1330	1340
9	1320	1300	1300	1360	953	1190	1400	1380	1390	1340	1330	1330
10	1310	1290	1300	1370	1330	1350	1400	1390	1400	1350	1330	1340
11	1320	1300	1300	1420	1350	1400	1420	1400	1410	1490	1350	1440
12	1320	1270	1300	1430	1410	1420	1410	1390	1400	1490	1470	1480
13	1320	1290	1310	1420	1390	1410	1410	1390	1400	1500	1460	1480
14	1310	1290	1300	1400	1390	1390	1410	1400	1400	1490	1480	1490
15	1310	1290	1300	1400	1380	1390	1420	1400	1410	1500	1480	1490
16	1320	1310	1320	1390	1370	1380	1420	1390	1400	1500	1480	1500
17	1320	1270	1300	1380	1210	1350	1400	1370	1390	1490	1460	1480
18	1290	1270	1280	1290	1170	1240	1370	1270	1310	1480	1460	1470
19	1310	1280	1300	1260	1190	1240	1390	1270	1310	1460	1430	1450
20	1300	1240	1280	1330	1260	1300	1450	1390	1430	1440	1430	1430
21	1260	1120	1200	1360	1330	1350	1440	1250	1360	1440	1420	1430
22	1240	1150	1210	1360	1280	1340	1270	1250	1260	1420	1390	1410
23	1260	1210	1240	---	---	---	1260	1240	1250	1410	1390	1400
24	1260	1220	1230	---	---	---	1260	1250	1250	1430	1390	1410
25	1260	1010	1190	---	---	---	1260	1250	1250	1410	1370	1390
26	1190	1010	1120	---	---	---	1260	1240	1250	1410	1310	1380
27	1190	606	865	---	---	---	1260	1240	1250	1310	576	897
28	798	593	699	---	---	---	1250	1240	1240	1180	798	1010
29	1350	627	1070	---	---	---	1250	1240	1240	1290	1180	1240
30	---	---	---	1340	1010	1200	1240	474	1130	1490	1280	1380
31	---	---	---	1370	1340	1360	---	---	---	1540	1490	1520
MONTH	1350	593	1230	---	---	---	1450	474	1280	1540	351	1310
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	1520	1490	1510	1300	938	1130	1420	1400	1410	1570	1540	1550
2	1520	1470	1500	1320	898	1170	1410	1380	1400	1580	1520	1550
3	1490	1470	1480	1340	908	1150	1410	1370	1390	1580	1520	1550
4	1480	1460	1470	1440	1340	1390	1440	1380	1420	1570	1510	1540
5	1460	1430	1450	1440	1390	1420	1460	1440	1450	1550	1510	1530
6	1480	1460	1470	1460	1440	1450	1470	1450	1460	1560	1510	1530
7	1500	1470	1490	1490	1460	1470	1490	1470	1480	1540	1510	1520
8	1510	1480	1490	1490	1480	1480	1490	1480	1490	1540	1510	1520
9	1510	1480	1500	1500	1480	1490	1500	1490	1490	1550	1500	1530
10	1520	1490	1510	1500	1490	1490	1500	1490	1500	1540	1490	1520
11	1520	1500	1510	1500	1480	1490	1510	1490	1500	1540	1470	1520
12	1520	1500	1520	1500	1480	1490	1540	1490	1510	1550	1490	1520
13	1510	1500	1510	1490	1450	1460	1530	1480	1500	1550	1480	1510
14	1510	1490	1500	1450	1440	1440	1520	1480	1510	1540	1470	1500
15	1500	1490	1490	1450	1420	1440	1520	1480	1510	1550	1480	1510
16	1510	1490	1500	1460	1420	1430	1530	1490	1510	1550	1490	1520
17	1500	600	1120	1440	1390	1420	1550	1510	1520	1550	1470	1510
18	903	617	752	1430	1390	1410	1550	1500	1520	1540	1470	1500
19	880	782	830	1450	1400	1430	1520	1450	1490	1550	1440	1500
20	1130	880	1010	1460	1430	1440	1530	1480	1510	1520	1420	1480
21	1200	1040	1160	1450	1320	1370	1530	1460	1510	1510	1440	1470
22	1200	1020	1120	1340	1160	1290	1530	1470	1510	1510	1420	1470
23	1240	1150	1210	1340	1160	1290	1560	1470	1520	1460	1420	1440
24	1300	1130	1200	1380	1300	1340	1560	1490	1520	1430	1340	1380
25	1320	382	925	1300	1200	1240	1560	1510	1530	1460	1370	1410
26	803	397	586	1360	1230	1290	---	---	---	1470	1420	1440
27	655	395	467	1390	1360	1370	---	---	---	1490	1420	1440
28	678	485	614	1440	1350	1400	---	---	---	1460	1410	1430
29	783	527	655	1440	1360	1410	1570	1530	1550	1460	1410	1430
30	938	783	857	1450	1430	1440	1570	1520	1550	1470	1410	1440
31	---	---	---	1440	1410	1420	1570	1520	1540	---	---	---
MONTH	1520	382	1210	1500	898	1390	---	---	---	1580	1340	1490
YEAR	1580	351	1320									

ARKANSAS RIVER BASIN

07239700 NORTH CANADIAN RIVER NEAR YUKON, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	---	---	---	---	---	---	11.3	6.4	8.7	9.6	6.1	7.9
2	---	---	---	---	---	---	14.3	10.2	11.9	10.3	7.8	9.1
3	---	---	---	---	---	---	13.4	9.1	11.2	10.0	7.1	8.5
4	---	---	---	---	---	---	11.4	7.7	9.7	7.1	3.0	4.9
5	---	---	---	---	---	---	8.2	5.6	6.8	5.6	2.2	4.0
6	---	---	---	---	---	---	6.1	3.3	4.8	6.2	2.7	4.4
7	---	---	---	---	---	---	7.3	3.0	5.3	6.6	2.9	4.9
8	---	---	---	---	---	---	10.2	5.9	7.9	8.3	6.2	7.2
9	---	---	---	---	---	---	10.1	6.2	7.9	8.4	5.4	6.9
10	---	---	---	---	---	---	6.4	5.3	5.8	8.0	4.5	6.2
11	---	---	---	20.1	14.0	16.6	5.7	4.9	5.3	8.0	4.9	6.4
12	---	---	---	20.3	14.2	16.9	6.9	5.7	6.2	9.3	5.4	7.1
13	---	---	---	20.4	14.6	17.2	6.3	4.7	5.6	8.3	5.2	6.8
14	---	---	---	19.4	14.6	16.7	6.1	5.0	5.6	7.4	3.9	5.6
15	---	---	---	---	---	---	5.3	4.2	4.9	9.0	4.6	6.7
16	---	---	---	---	---	---	5.3	4.3	4.8	9.5	8.2	8.9
17	---	---	---	18.1	12.9	15.1	5.4	4.6	5.0	9.0	8.1	8.6
18	---	---	---	18.4	13.8	16.1	5.8	4.7	5.2	9.4	7.1	8.2
19	---	---	---	16.2	12.0	13.9	5.4	4.7	5.1	10.6	7.4	8.6
20	---	---	---	---	---	---	5.2	4.0	4.4	7.9	4.4	6.0
21	---	---	---	---	---	---	4.2	3.3	3.8	7.5	4.2	5.8
22	---	---	---	---	---	---	4.2	2.8	3.5	8.4	4.7	6.5
23	---	---	---	13.8	9.4	11.8	4.8	2.4	3.7	9.3	5.6	7.1
24	---	---	---	11.1	7.4	9.0	5.6	3.3	4.4	6.5	3.1	5.1
25	---	---	---	8.9	5.4	7.1	6.1	3.2	4.7	5.8	3.1	4.6
26	---	---	---	8.9	5.6	7.1	7.1	4.5	5.7	4.4	1.5	2.5
27	---	---	---	---	---	---	6.5	4.0	5.2	1.5	.0	1.0
28	---	---	---	11.7	7.7	9.4	7.1	3.3	5.2	3.6	.7	2.0
29	---	---	---	10.6	8.0	9.3	8.1	4.5	6.5	5.1	.0	2.7
30	---	---	---	10.5	6.2	8.1	8.9	6.2	7.5	5.3	.8	2.8
31	---	---	---	---	---	---	8.5	5.4	7.0	6.1	1.1	3.5
MONTH	---	---	---	---	---	---	14.3	2.4	6.1	10.6	.0	5.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	4.2	2.1	3.3	15.0	10.7	12.9	12.8	11.1	11.8	17.0	15.8	16.4
2	6.8	2.1	4.1	13.3	10.8	11.8	12.7	10.5	11.5	17.5	16.3	16.8
3	9.0	3.7	5.9	10.8	9.0	10.0	13.0	11.6	12.2	19.3	16.0	17.5
4	8.1	4.0	5.8	11.8	7.5	9.6	14.8	10.8	12.7	21.8	17.3	19.4
5	7.6	3.1	5.2	14.1	9.1	11.5	17.0	12.6	14.7	21.1	19.7	20.2
6	8.6	3.5	6.0	17.6	11.4	14.5	18.1	14.7	16.3	23.1	19.9	21.2
7	9.9	4.9	7.2	18.4	15.0	16.7	18.7	16.5	17.5	26.2	21.7	23.7
8	11.5	5.6	8.3	17.7	13.0	15.5	17.0	14.6	15.8	26.2	23.5	24.9
9	12.7	7.4	10.0	15.4	13.0	14.3	15.8	13.7	14.8	24.9	21.8	23.1
10	14.0	9.1	11.4	13.9	11.1	12.5	17.1	13.9	15.4	23.9	20.4	22.3
11	11.0	7.4	8.9	11.8	9.2	10.5	16.7	15.8	16.2	26.7	22.0	24.2
12	10.2	4.7	7.3	12.2	8.9	10.6	15.8	14.4	14.8	26.0	24.0	25.0
13	8.6	6.8	7.8	13.7	10.1	11.9	15.1	13.9	14.4	24.2	20.4	22.4
14	8.3	4.6	6.4	13.9	12.2	13.0	16.5	13.7	14.9	23.5	19.0	21.3
15	13.4	6.6	9.6	17.2	12.6	14.8	17.0	15.7	16.2	21.9	19.0	20.6
16	12.2	8.0	10.1	16.5	10.2	13.2	17.5	14.8	16.2	22.7	20.0	21.3
17	12.1	9.4	10.7	10.2	8.9	9.3	17.5	14.9	16.3	23.4	21.2	22.2
18	11.9	7.4	9.8	8.9	8.2	8.6	21.5	15.8	18.3	24.5	20.3	22.4
19	11.5	6.1	8.4	11.8	7.6	9.6	23.6	19.8	21.6	22.3	18.9	20.3
20	12.1	6.3	9.1	14.1	9.2	11.6	22.4	18.9	20.4	24.5	17.7	21.0
21	15.4	9.2	11.8	13.1	12.2	12.4	20.4	17.7	19.2	27.2	20.5	23.8
22	15.6	13.0	14.1	12.2	11.8	12.0	19.2	17.0	17.9	28.7	22.4	25.6
23	16.4	11.8	14.0	13.3	11.8	12.5	19.0	16.1	17.4	30.2	24.0	27.1
24	17.6	11.7	14.9	15.0	12.8	13.9	20.4	16.9	18.6	31.4	25.5	28.4
25	17.6	14.8	16.1	17.1	14.2	15.6	21.5	18.2	19.8	29.0	24.5	25.6
26	14.8	11.4	13.0	19.1	16.2	17.5	20.5	18.5	19.6	27.5	23.1	25.4
27	13.8	9.8	11.7	19.7	16.9	18.3	21.5	18.4	19.8	25.8	22.4	24.1
28	14.1	10.3	12.2	19.3	16.9	18.0	21.5	18.3	20.0	27.9	22.4	25.0
29	15.3	11.5	13.1	17.2	14.0	15.4	20.6	18.9	19.6	29.3	23.5	26.4
30	---	---	---	14.4	13.2	13.7	19.6	16.5	18.2	29.6	24.4	27.0
31	---	---	---	13.3	11.8	12.6	---	---	---	30.0	25.7	27.8
MONTH	17.6	2.1	9.5	19.7	7.5	13.0	23.6	10.5	16.7	31.4	15.8	23.0

ARKANSAS RIVER BASIN

07240000 LAKE HEFNER CANAL NEAR OKLAHOMA CITY, OK

LOCATION.--Lat 35°33'11", long 97°37'11", in SW 1/4 SW 1/4 sec.34, T.13 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, attached to left wing wall just downstream from outlet of inverted siphon, 2,600 ft upstream from Lake Hefner, 3.0 mi northeast of Bethany, and 7.6 mi northwest of the State Capitol in Oklahoma City.

PERIOD OF RECORD.--March 1944 to current year.

REVISED RECORDS.--WDR OK-80-1: 1968-80 (Datum).

GAGE.--Water stage recorder and concrete control. Datum of gage is 1,196.06 ft above sea level. Prior to Apr. 8, 1947, nonrecording gage at site 2.7 mi upstream at different datum. Apr. 8, 1947, to Apr. 30, 1950, water-stage recorder at site 3.0 mi upstream at different datum. May 1, 1950 to May 19, 1954, Apr. 26, 1957 to Feb. 19, 1968, at present site and datum 4.90 ft higher. May 20, 1954, to Apr. 25, 1957, water-stage recorder and concrete control at site 2,500 ft downstream at datum 2.10 ft higher than present datum.

REMARKS.--Records poor. Use of canal began in March 1944. Canal diverts water from North Canadian River just upstream from Lake Overholser (station 07240500) and delivers water to Lake Hefner, capacity, 80,600 acre-ft, for municipal water supply of Oklahoma City. Subsequent to April 1950, small ground-water seepage, when head gates are closed, included in records.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,630 ft³/s, Dec. 17, 1999; no flow at times in each year.

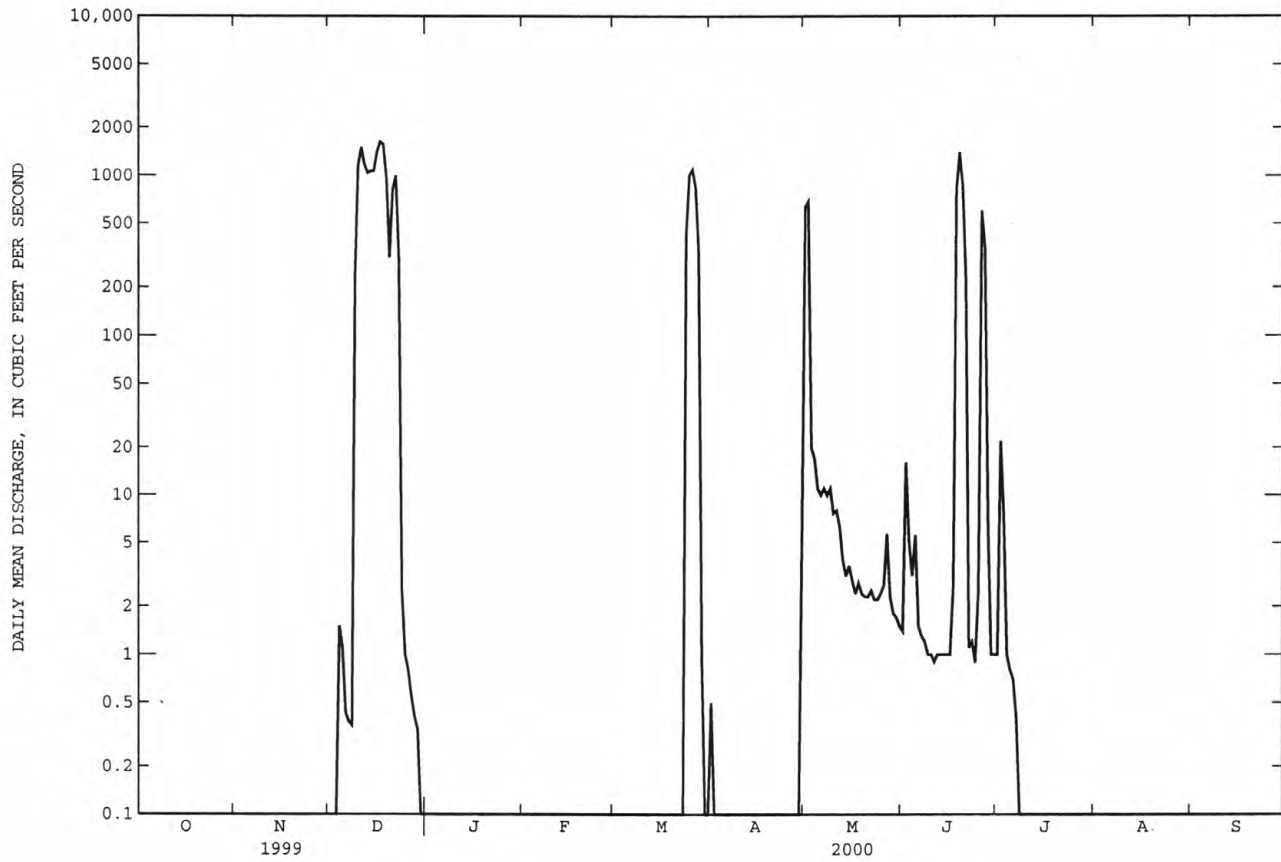
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	e.00	e.00	e.00	e.50	636	e1.4	e1.0	e.00	e.00
2	e.00	.00	.00	e.00	e.00	e.00	e.00	686	16	22	e.00	e.00
3	e.00	.00	.00	e.00	e.00	e.00	e.00	20	5.1	7.5	e.00	e.00
4	e.00	.00	1.5	e.00	e.00	e.00	e.00	e17	3.1	e1.0	e.00	e.00
5	.00	.00	1.1	e.00	e.00	e.00	e.00	e11	5.6	e.80	e.00	e.00
6	e.00	.00	.43	e.00	.00	e.00	e.00	e10	e1.5	e.70	e.00	e.00
7	e.00	.00	.38	e.00	e.00	e.00	e.00	e11	e1.3	e.40	e.00	e.00
8	e.00	.00	.36	e.00	e.00	e.00	e.00	10	e1.2	e.00	e.00	e.00
9	e.00	.00	236	e.00	e.00	e.00	e.00	11	e1.0	e.00	e.00	e.00
10	e.00	.00	1160	e.00	e.00	e.00	e.00	7.7	e1.0	e.00	e.00	e.00
11	e.00	.00	1500	e.00	e.00	e.00	e.00	8.0	e.90	e.00	e.00	e.00
12	e.00	.00	1170	e.00	e.00	e.00	e.00	6.3	e1.0	e.00	e.00	e.00
13	e.00	.00	1040	e.00	e.00	e.00	e.00	3.9	e1.0	e.00	e.00	e.00
14	e.00	.00	1070	e.00	e.00	e.00	e.00	3.1	e1.0	e.00	e.00	e.00
15	e.00	.00	1070	e.00	e.00	.00	e.00	3.6	e1.0	e.00	e.00	e.00
16	e.00	.00	1410	e.00	e.00	.00	e.00	2.9	e1.0	e.00	e.00	e.00
17	e.00	.00	1630	e.00	e.00	e.00	e.00	2.4	2.7	e.00	e.00	e.00
18	e.00	.00	1570	e.00	e.00	e.00	e.00	2.8	820	e.00	e.00	e.00
19	e.00	.00	959	e.00	e.00	e.00	e.00	2.4	1400	e.00	e.00	e.00
20	.00	.00	306	e.00	e.00	.00	.00	2.3	841	e.00	e.00	e.00
21	.00	.00	822	e.00	e.00	.00	e.00	2.3	220	e.00	e.00	e.00
22	.00	.00	998	e.00	e.00	.00	e.00	2.5	1.1	e.00	e.00	e.00
23	.00	.00	300	e.00	e.00	.00	e.00	2.2	1.2	e.00	e.00	e.00
24	.00	.00	e2.5	e.00	e.00	422	e.00	2.2	.89	e.00	e.00	e.00
25	.00	.00	e1.0	e.00	e.00	1010	e.00	2.4	2.5	e.00	e.00	e.00
26	.00	.00	e.80	e.00	e.00	1090	e.00	2.7	603	e.00	e.00	e.00
27	.00	.00	.55	e.00	e.00	843	e.00	5.7	358	e.00	e.00	e.00
28	.00	.00	.41	e.00	e.00	326	e.00	2.3	7.0	e.00	e.00	e.00
29	.00	.00	.34	e.00	e.00	1.0	e.00	e1.8	e1.0	e.00	e.00	e.00
30	.00	.00	e.00	e.00	---	e.00	7.0	e1.7	e1.0	e.00	e.00	e.00
31	.00	---	e.00	e.00	---	e.00	---	e1.5	---	.00	e.00	---
TOTAL	0.00	0.00	15250.37	0.00	0.00	3692.00	7.50	1484.7	4302.49	33.40	0.00	0.00
MEAN	.000	.000	492	.000	.000	119	.25	47.9	143	1.08	.000	.000
MAX	.00	.00	1630	.00	.00	1090	7.0	686	1400	.22	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	1.5	.89	.00	.00	.00
AC-FT	.00	.00	30250	.00	.00	7320	15	2940	8530	66	.00	.00

CAL YR 1999 TOTAL 24464.42 MEAN 67.0 MAX 1630 MIN .00 AC-FT 48530
WTR YR 2000 TOTAL 24770.46 MEAN 67.7 MAX 1630 MIN .00 AC-FT 49130

e Estimated

07240000 LAKE HEFNER CANAL NEAR OKLAHOMA CITY, OK--Continued



ARKANSAS RIVER BASIN

07240200 NORTH CANADIAN RIVER AT HIGHWAY 66 AT OKLAHOMA CITY, OK

LOCATION.--Lat 35°30'52", long 97°39'48", in NE 1/4 SW 1/4 sec.18, T.12 N., R.4 W., Oklahoma County, Hydrologic Unit 11100301, on downstream left bank of old Highway 66 bridge, 2 mi upstream from Overholser dam and at mile 283.5.

DRAINAGE AREA.--13,217 mi², of which 4,899 mi² is probably non-contributing.

PERIOD OF RECORD.--December 1999 to September 2000.

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

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

EXTREMES FOR PERIOD OF RECORD.--(December 1999 to September 2000) Maximum elevation, 1,243.72 ft, Mar. 25, minimum elevation observed, 1237.42 ft, Feb. 6.

GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	---	---	---	---	---	---	---	---	---	1242.58	1242.12	1242.31
2	---	---	---	---	---	---	---	---	---	1242.34	1242.03	1242.13
3	---	---	---	---	---	---	1240.53	1239.35	1240.08	1242.07	1241.81	1241.93
4	---	---	---	---	---	---	1239.56	1239.03	1239.32	1241.84	1241.43	1241.65
5	---	---	---	---	---	---	1241.47	1239.56	1240.57	1241.51	1240.96	1241.25
6	---	---	---	---	---	---	1241.51	1240.66	1241.22	1241.68	1240.78	1241.16
7	---	---	---	---	---	---	1240.66	1239.75	1240.12	1242.13	1241.40	1241.72
8	---	---	---	---	---	---	1239.75	1238.78	1239.20	1242.56	1241.77	1242.06
9	---	---	---	---	---	---	1243.00	1239.19	1241.97	1242.79	1242.15	1242.34
10	---	---	---	---	---	---	1243.29	1243.00	1243.15	1243.12	1242.07	1242.45
11	---	---	---	---	---	---	1243.04	1241.84	1242.54	1242.34	1241.49	1241.87
12	---	---	---	---	---	---	1241.85	1240.20	1240.66	1242.00	1240.54	1241.16
13	---	---	---	---	---	---	1240.72	1240.30	1240.60	1240.97	1239.26	1239.96
14	---	---	---	---	---	---	1240.80	1240.55	1240.63	1239.35	---	---
15	---	---	---	---	---	---	1241.48	1240.52	1240.80	1238.13	---	---
16	---	---	---	---	---	---	1242.39	1241.48	1242.08	---	---	---
17	---	---	---	---	---	---	1242.46	1242.21	1242.37	---	---	---
18	---	---	---	---	---	---	1242.21	1241.61	1241.86	---	---	---
19	---	---	---	---	---	---	1242.94	1241.58	1242.39	---	---	---
20	---	---	---	---	---	---	1243.30	1242.89	1243.11	---	---	---
21	---	---	---	---	---	---	1243.18	1241.76	1242.50	---	---	---
22	---	---	---	---	---	---	1241.76	1240.89	1241.21	---	---	---
23	---	---	---	---	---	---	1242.65	1240.46	1241.66	---	---	---
24	---	---	---	---	---	---	1242.70	1242.65	1242.68	---	---	---
25	---	---	---	---	---	---	1242.68	1242.65	1242.66	---	---	---
26	---	---	---	---	---	---	1242.67	1242.63	1242.65	---	---	---
27	---	---	---	---	---	---	1242.68	1242.61	1242.63	---	---	---
28	---	---	---	---	---	---	1242.66	1242.55	1242.61	---	---	---
29	---	---	---	---	---	---	1242.66	1242.50	1242.59	---	---	---
30	---	---	---	---	---	---	1242.62	1242.37	1242.51	---	---	---
31	---	---	---	---	---	---	1242.90	1242.32	1242.44	---	---	---
MONTH	---	---	---	---	---	---	1243.30	1238.78	1241.68	1243.12	1239.26	1241.69

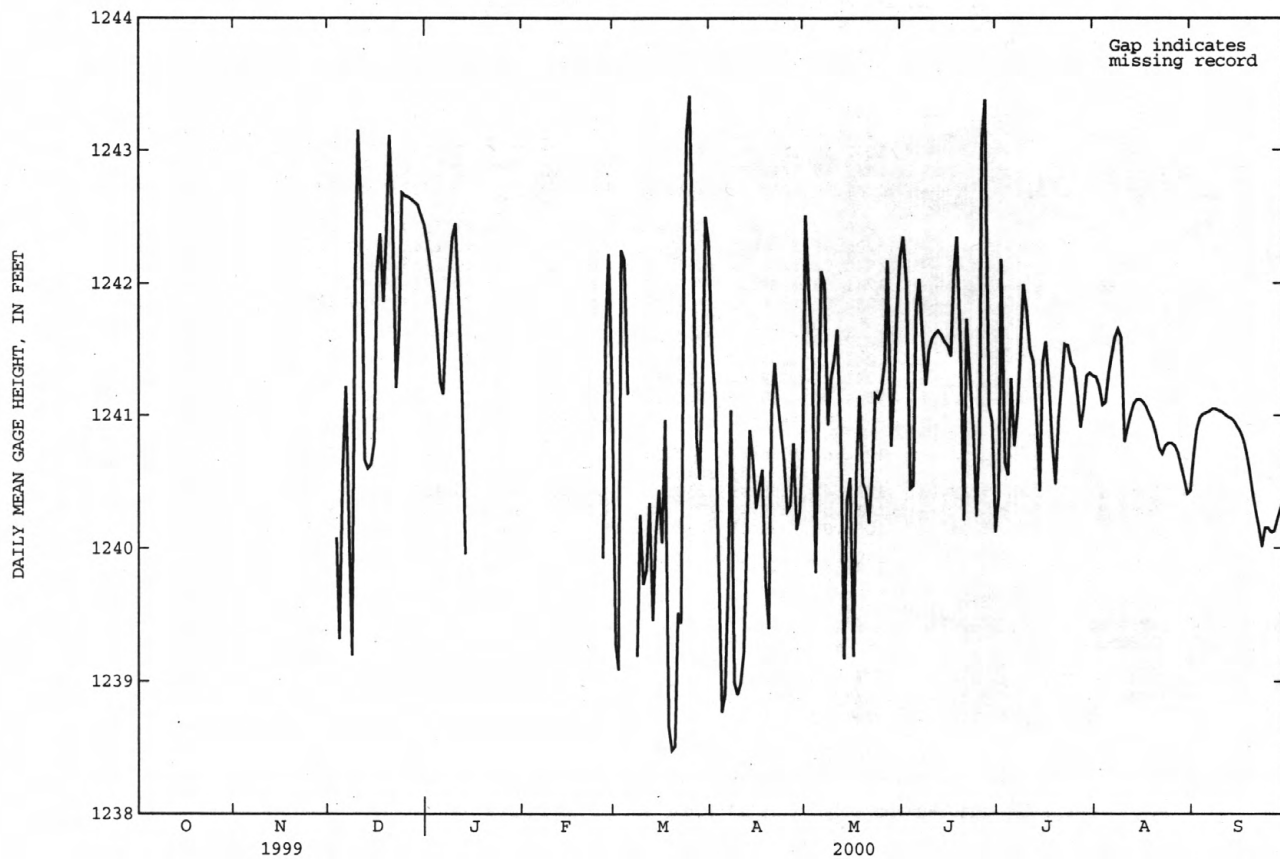
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GAGE HEIGHT, FEET, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	1240.83	1238.19	1239.28	1242.40	1241.26	1241.48	1243.24	1241.23	1242.51
2	---	---	---	1241.44	1238.23	1239.09	1242.75	1240.00	1241.14	1242.71	1240.26	1241.95
3	---	---	---	1242.49	1241.44	1242.25	1240.88	1239.05	1239.90	1242.51	1239.60	1241.49
4	---	---	---	1242.40	1241.83	1242.17	1239.05	1238.62	1238.77	1240.69	1239.24	1239.82
5	---	---	---	1241.86	1240.34	1241.16	1239.07	1238.69	1238.90	1241.42	1240.69	1241.01
6	---	---	---	1240.39	---	---	1241.55	1238.98	1239.72	1242.53	1241.42	1242.09
7	---	---	---	1238.46	---	---	1241.93	1239.42	1241.04	1242.57	1240.97	1242.00
8	---	---	---	1240.02	1238.24	1239.19	1239.42	1238.86	1238.99	1241.24	1240.37	1240.93
9	---	---	---	1241.52	1239.12	1240.25	1238.98	1238.86	1238.90	1241.38	1240.98	1241.28
10	---	---	---	1242.00	1238.72	1239.73	1239.35	1238.87	1238.99	1241.51	1241.34	1241.42
11	---	---	---	1242.30	1238.67	1239.84	1239.62	1238.98	1239.22	1241.78	1241.50	1241.65
12	---	---	---	1241.60	1238.66	1240.34	1241.17	1238.97	1240.09	1241.53	1239.81	1240.89
13	---	---	---	1241.45	1238.44	1239.46	1241.29	1240.64	1240.89	1239.81	1239.00	1239.17
14	---	---	---	1241.03	1238.85	1240.10	1240.81	1240.50	1240.66	1241.27	1238.96	1240.37
15	---	---	---	1241.69	1238.52	1240.44	1240.52	1240.15	1240.30	1240.93	1240.11	1240.53
16	---	---	---	1241.62	1238.41	1240.04	1240.50	1240.34	1240.46	1240.11	1238.79	1239.19
17	1238.68	---	---	1241.83	1239.31	1240.97	1240.68	1240.49	1240.59	1241.31	1238.88	1240.59
18	1239.41	1238.60	1239.03	1239.47	1238.49	1238.66	1240.60	1239.26	1239.73	1241.36	1240.76	1241.15
19	1238.91	---	---	1238.56	1238.39	1238.48	1239.91	1239.27	1239.40	1240.76	1240.32	1240.49
20	---	---	---	1238.85	1238.35	1238.51	1241.42	1239.91	1241.05	1240.49	1240.31	1240.42
21	---	---	---	1239.81	1238.77	1239.52	1241.51	1241.23	1241.40	1240.31	1240.09	1240.19
22	1238.25	---	---	1239.87	1239.30	1239.44	1241.25	1240.96	1241.10	1241.06	1240.15	1240.57
23	1238.12	---	---	1242.71	1239.87	1241.96	1240.96	1240.76	1240.87	1241.21	1241.06	1241.16
24	1238.13	---	---	1243.64	1242.37	1243.11	1240.98	1240.48	1240.66	1241.17	1241.07	1241.13
25	1239.55	---	---	1243.72	1243.10	1243.41	1240.48	1240.10	1240.28	1241.24	1241.15	1241.20
26	1240.40	1239.52	1239.93	1243.36	1240.76	1242.17	1240.65	1240.04	1240.32	1241.85	1241.23	1241.40
27	1242.28	1240.40	1241.63	1241.63	1240.14	1240.83	1241.02	1240.41	1240.79	1242.51	1241.72	1242.17
28	1242.44	1241.75	1242.22	1241.60	1239.18	1240.52	1240.41	1239.92	1240.14	1241.72	1240.26	1240.77
29	1241.75	1240.63	1241.20	1242.12	1240.90	1241.32	1240.35	1239.98	1240.27	1241.54	1240.80	1241.22
30	---	---	---	1243.22	1241.58	1242.50	1242.86	1239.39	1240.80	1242.03	1241.54	1241.82
31	---	---	---	1242.91	1241.58	1242.31	---	---	---	1242.33	1242.03	1242.20
MONTH	1242.44	1238.60	1240.80	1243.72	1238.19	1240.59	1242.86	1238.62	1240.23	1243.24	1238.79	1241.06
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	1242.38	1242.32	1242.35	1241.93	1239.81	1240.38	1241.31	1241.27	1241.29	1240.81	1240.57	1240.69
2	1242.50	1240.93	1242.01	1242.68	1240.96	1242.18	1241.27	1241.15	1241.22	1240.96	1240.81	1240.89
3	1240.93	1240.00	1240.45	1240.96	1239.84	1240.64	1241.15	1241.00	1241.08	1241.00	1240.96	1240.98
4	1241.34	1239.72	1240.47	1241.28	1239.72	1240.55	1241.23	1240.96	1241.10	1241.03	1241.00	1241.01
5	1242.06	1241.34	1241.81	1241.36	1241.13	1241.28	1241.40	1241.22	1241.32	1241.03	1241.00	1241.02
6	1242.16	1241.83	1242.03	1241.13	1240.30	1240.77	1241.53	1241.40	1241.46	1241.05	1241.02	1241.03
7	1241.83	1241.35	1241.60	1241.40	1240.16	1241.02	1241.65	1241.53	1241.59	1241.07	1241.03	1241.05
8	1241.36	1241.10	1241.23	1241.53	1241.40	1241.49	1241.67	1241.62	1241.65	1241.06	1241.04	1241.05
9	1241.57	1241.33	1241.49	1242.10	1241.53	1241.99	1241.63	1241.56	1241.59	1241.05	1241.02	1241.04
10	1241.60	1241.55	1241.58	1241.91	1241.66	1241.80	1241.56	1239.69	1240.80	1241.04	1241.02	1241.03
11	1241.65	1241.59	1241.62	1241.66	1241.32	1241.50	1240.98	1240.70	1240.91	1241.03	1241.00	1241.01
12	1241.67	1241.62	1241.64	1241.53	1241.26	1241.41	1241.06	1240.97	1241.01	1241.01	1240.98	1240.99
13	1241.64	1241.55	1241.61	1241.52	1240.00	1241.00	1241.11	1241.06	1241.09	1240.99	1240.97	1240.98
14	1241.58	1241.54	1241.56	1241.18	1239.62	1240.43	1241.13	1241.11	1241.12	1240.98	1240.93	1240.96
15	1241.56	1241.49	1241.53	1241.60	1241.18	1241.40	1241.13	1241.11	1241.12	1240.94	1240.90	1240.92
16	1241.49	1241.40	1241.45	1241.66	1241.42	1241.56	1241.12	1241.08	1241.10	1240.90	1240.86	1240.88
17	1242.69	1241.41	1242.06	1241.42	1241.04	1241.24	1241.09	1241.04	1241.06	1240.86	1240.78	1240.82
18	1242.49	1242.12	1242.35	1241.04	1240.45	1240.78	1241.04	1240.98	1241.00	1240.79	1240.65	1240.72
19	1242.32	1240.67	1241.57	1240.83	1240.29	1240.48	1240.98	1240.91	1240.95	1240.66	1240.50	1240.59
20	1240.67	1239.87	1240.21	1240.03	1240.83	1240.97	1240.92	1240.81	1240.86	1240.53	1240.35	1240.42
21	1242.40	1240.50	1241.73	1241.31	1240.91	1241.24	1240.81	1240.68	1240.75	1240.35	1240.21	1240.28
22	1241.83	1241.06	1241.30	1241.61	1241.28	1241.54	1240.75	1240.66	1240.71	1240.22	1240.09	1240.16
23	1241.06	1240.67	1240.89	1241.61	1241.42	1241.53	1240.80	1240.75	1240.77	1240.10	1239.93	1240.01
24	1240.67	1239.64	1240.24	1241.42	1241.38	1241.45	1240.80	1240.79	1240.79	1240.17	1240.06	1240.15
25	1243.02	1239.33	1240.87	1241.40	1241.29	1241.36	1240.80	1240.78	1240.79	1240.17	1240.13	1240.15
26	1243.46	1242.77	1243.08	1241.29	1241.01	1241.16	1240.79	1240.75	1240.77	1240.13	1240.10	1240.12
27	1243.49	1242.12	1243.38	1241.01	1240.79	1240.91	1240.75	1240.68	1240.72	1240.17	1240.09	1240.13
28	1243.25	1239.84	1241.07	1241.14	1240.97	1241.05	1240.68	1240.57	1240.62	1240.26	1240.17	1240.22
29	1241.47	1240.00	1240.95	1241.33	1241.14	1241.30	1240.57	1240.47	1240.52	1240.33	1240.26	1240.30
30	1240.38	1239.71	1240.12	1241.33	1241.30	1241.32	1240.47	1240.34	1240.41	1240.38	1240.32	1240.36
31	---	---	---	1241.31	1241.29	1241.30	1240.57	1240.32	1240.43	---	---	---
MONTH	1243.49	1239.33	1241.47	1242.68	1239.62	1241.19	1241.67	1239.69	1240.99	1241.07	1239.93	1240.67
YEAR	1243.72	1238.19	1241.02									

ARKANSAS RIVER BASIN

07240200 NORTH CANADIAN RIVER AT HIGHWAY 66 AT OKLAHOMA CITY, OK--Continued





Broken Bow Reregulation Dam near Broken Bow

ARKANSAS RIVER BASIN

07240500 LAKE OVERHOLSER NEAR OKLAHOMA CITY ,OK

LOCATION.--Lat 35°29'11", long 97°39'58", in SE 1/4 NW 1/4 sec.30, T.12 N., R.4 W., Oklahoma County, Hydrologic Unit 11100301, in a concrete block building 200 ft north of dam on dike between lake and bypass channel and at mile 281.5

DRAINAGE AREA.--13,221 mi², of which 4,899 mi² is probably noncontributing.

PERIOD OF RECORD.--October 1937 to September 1991, October 1999 to September 2000.

GAGE.--Water-stage recorder. Datum of gage is sea level. Prior to Oct. 1, 1955, nonrecording gage at datum 1,065.77 ft.

REMARKS.--Reservoir is formed by Ambursan-type dam flanked by long earth-fill sections. Outlet facilities are 23 taintor gates and one uncontrolled spillway. Storage began in 1917. Dam was partly washed out in 1923 and rebuilt in 1924. Capacity, 17,100 acre-ft below elevation 1,242.27 ft, top of spillway gates. Dead storage, 1,400 acre-ft below elevation 1,229.77 ft, sill of outlet works. Figures given herein represent total contents. Water diverted for municipal water supply by Oklahoma City. Revised capacity table used since Oct. 1, 1950. U.S. Geological Survey satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum contents, 20,900 acre-ft, June 14, 1944, elevation, 1,242.67 ft from capacity table then in use; maximum elevation, 1242.70 ft, Apr. 18, 1990; minimum observed, 1,870 acre-ft, May 14, 1955, elevation, 1,230.62 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,500 acre-ft, Mar. 26, elevation 1,242.52 ft; minimum, 6,770 acre-ft, Sept. 30, elevation, 1,235.33 ft.

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

1230.0	1,529	1237.5	9,861
1232.0	3,367	1240.0	13,640
1235.0	6,316	1242.5	17,460

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY OBSERVATION AT 0800 HOURS

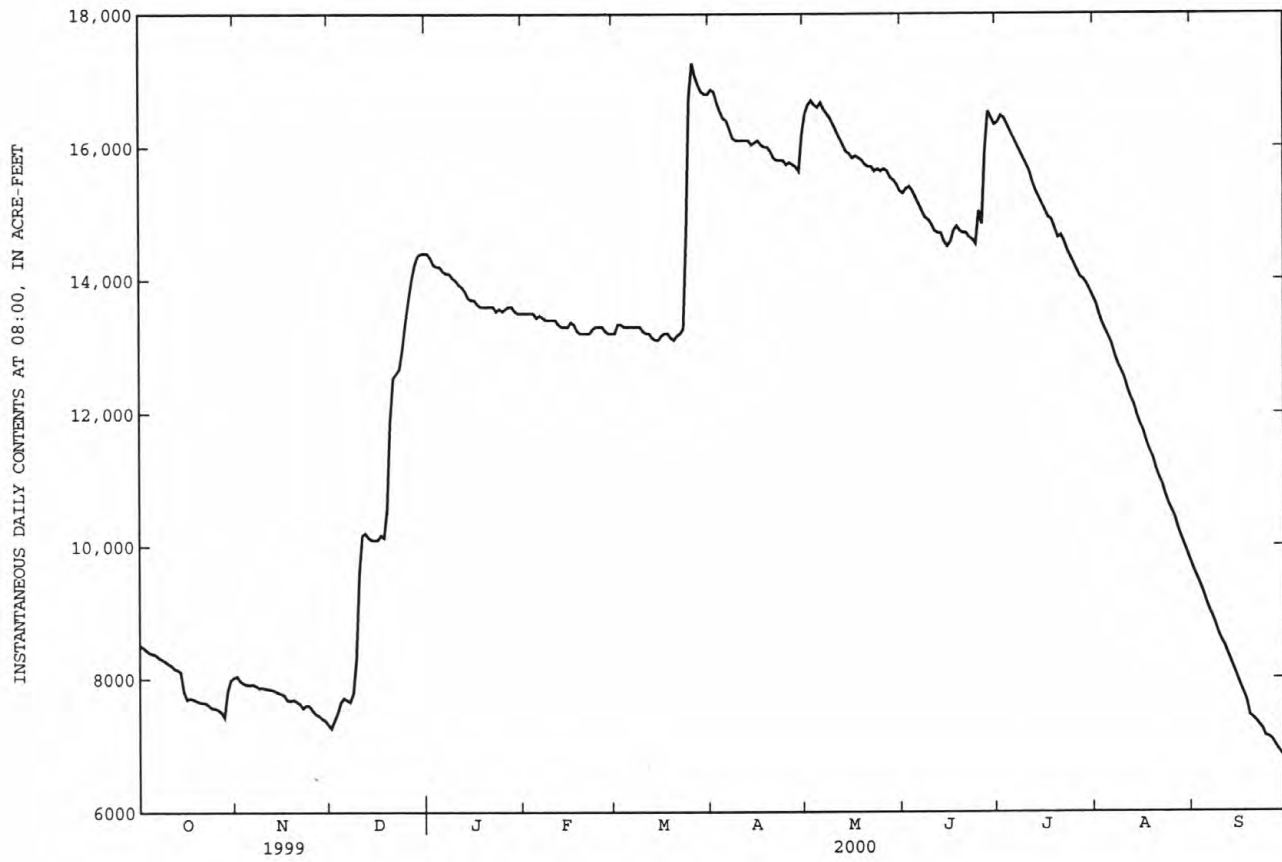
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8510	8050	7290	14400	13500	13200	16800	16500	15300	16300	13700	9720
2	e8500	8040	7250	14400	13500	13200	16900	16500	15300	16400	13600	9600
3	e8470	7940	7450	14300	13500	13400	16800	16700	15400	16500	13400	9500
4	e8420	7940	7510	14200	13500	13300	16600	16700	15400	16400	13300	9380
5	e8390	7910	7720	14200	13500	13300	16500	16600	15300	16300	13200	9270
6	e8380	7920	7710	14200	13400	13300	16400	16600	15200	16200	13100	9110
7	e8360	7920	7670	14100	13500	13300	16400	16700	15100	16100	13000	9000
8	e8310	7890	7650	14100	13400	13300	16200	16500	15000	16000	12800	8900
9	e8290	7860	7850	14100	13400	13300	16100	16500	14900	15900	12700	8770
10	e8260	7880	8510	14000	13400	13300	16100	16400	14900	15800	12600	8620
11	e8220	7850	10100	14000	13400	13200	16100	16300	14800	15700	12500	8540
12	8200	7850	10200	13900	13400	13200	16100	16200	14700	15600	12300	8450
13	8140	7840	10200	13900	13300	13200	16100	16100	14700	15400	12200	8320
14	8140	7820	10100	13800	13300	13100	16100	16000	14700	15300	12100	8210
15	8090	7790	10100	13700	13300	13100	16000	15900	14500	15200	11900	8090
16	7670	7780	10100	13700	13300	13100	16100	15900	14500	15100	11800	7970
17	7710	7750	10100	13700	13400	13200	16100	15800	14600	15000	11700	7850
18	7720	7650	10200	13600	13300	13200	16000	15900	14800	14900	11500	7740
19	7690	7690	10100	13600	13200	13200	16000	15800	14800	14900	11400	7620
20	7670	7690	10800	13600	13200	13100	16000	15800	14700	14700	11300	7350
21	7650	7650	12400	13600	13200	13100	15900	15700	14700	14600	11100	7430
22	7650	7620	12600	13600	13200	13200	15800	15700	14700	14700	11000	7320
23	7640	7540	12600	13600	13200	13200	15800	15700	14600	14500	10900	7280
24	7580	7640	12700	13500	13300	13300	15800	15600	14600	14400	10700	7220
25	7560	7580	13100	13600	13300	15400	15800	15700	14500	14300	10600	7090
26	7560	7510	13500	13500	13300	17400	15700	15600	15300	e14200	10500	7130
27	7530	7460	13800	13600	13300	17200	15800	15700	14600	e14100	10400	7060
28	7490	7450	14100	13600	13200	17000	15700	15600	16600	14000	10200	6990
29	7400	7390	14300	13600	13200	16900	15700	15500	16500	14000	10100	6910
30	8010	7380	14400	13500	---	16800	15600	15500	16400	13900	9970	6850
31	7970	---	14400	13500	---	16800	---	15400	---	13800	9850	---
MAX	8510	8050	14400	14400	13500	17400	16900	16700	16600	16500	13700	9720
MIN	7400	7380	7250	13500	13200	13100	15600	15400	14500	13800	9850	6850
(+)	1236.19	1235.77	1240.52	1239.93	1239.68	1242.09	1241.29	1241.15	1241.82	1240.09	1237.49	1235.39
(++)	---	-590	+7020	-900	-300	+3600	-1200	-200	+1000	-2600	-3950	-3000

WTR YR 2000 MAX 17400 MIN 6850 (++) -1660

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

e Estimated

07240500 LAKE OVERHOLSER NEAR OKLAHOMA CITY ,OK--Continued



LOCATION.--Lat 35°28'43", long 97°39'47", in NE $\frac{1}{4}$ of NW $\frac{1}{4}$ of sec.31, T. 12N., R. 4W, Oklahoma County, Hydrologic Unit 111003301, on left downstream side of bridge on NW 10th Street, 0.5 mi downstream from Lake Overholser, 2.4 mi upstream from Mustang Creek, 9.1 mi southwest of State Capitol of Oklahoma, and at river mile 281.0.

DRAINAGE AREA.--13,222 mi², of which 4,899 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to September 1968, October 1969 to September 1972, October 1973 to September 1987, October 1988 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,194.66 ft above sea level. Prior to Oct. 1, 1961, at datum 10.00 ft higher. Prior to March 24, 1971, gage located at current site. March 25, 1971, to Sept. 30, 1987, gage located 200 ft upstream.

REMARKS.--Records fair. Flow regulated by Canton Lake (station 07238500) and Lake Overholser (station 07240500). Diversions upstream from station into Lake Overholser and Lake Hefner Canal (station 07240000). U.S. Geological Survey's satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	85	54	119	88	309	671	2460	250	583	112	e31
2	49	89	53	125	87	268	1460	1310	485	944	111	e30
3	48	67	79	145	85	272	1530	1140	450	1120	110	e30
4	47	47	96	141	87	345	1020	634	341	679	82	e29
5	48	44	102	134	91	319	915	459	e300	638	71	e29
6	48	42	146	90	91	307	964	452	336	629	70	28
7	48	40	150	56	91	253	1120	e445	374	506	64	28
8	49	69	131	58	e90	e325	1050	542	344	517	71	28
9	51	90	706	61	e89	400	983	590	e310	476	74	29
10	52	24	e150	81	e88	561	932	550	e280	527	113	28
11	52	20	e70	127	e86	430	970	562	e300	512	64	28
12	52	37	e50	138	e88	344	815	591	e280	451	71	27
13	55	65	e45	135	e86	465	930	450	e270	423	70	27
14	56	62	e42	134	e84	275	915	332	295	266	69	26
15	54	55	e38	117	e86	397	889	345	e280	201	69	26
16	52	39	e37	97	e54	220	898	375	e270	227	68	26
17	53	17	e36	87	30	371	887	307	882	242	67	27
18	54	26	e35	84	69	442	743	e290	665	238	66	26
19	55	42	e34	86	106	353	511	e300	e250	201	66	27
20	55	51	e35	84	122	306	669	e290	e180	159	65	25
21	55	50	e34	e80	130	318	802	e260	124	165	64	25
22	56	86	e35	e82	123	352	810	e280	281	171	55	25
23	55	50	e36	85	124	1060	794	e250	184	156	50	24
24	55	17	e40	83	123	1250	778	234	190	154	50	25
25	55	17	e38	77	131	37	761	e270	189	156	52	23
26	56	25	e36	83	144	419	705	e300	671	157	49	23
27	56	72	e35	88	157	153	730	415	1050	142	49	23
28	55	49	47	92	220	288	729	540	967	118	46	22
29	56	e50	77	92	293	396	677	e290	1330	121	e40	22
30	96	e52	110	94	---	491	954	e270	789	114	e35	22
31	102	---	125	90	---	662	---	e260	---	112	31	---
TOTAL	1732	1479	2702	3045	3143	12388	26612	15793	12917	11105	2074	789
MEAN	55.9	49.3	87.2	98.2	108	400	887	509	431	358	66.9	26.3
MAX	102	90	706	145	293	1250	1530	2460	1330	1120	113	31
MIN	47	17	34	56	30	37	511	234	124	112	31	22
AC-FT	3440	2930	5360	6040	6230	24570	52780	31330	25620	22030	4110	1560

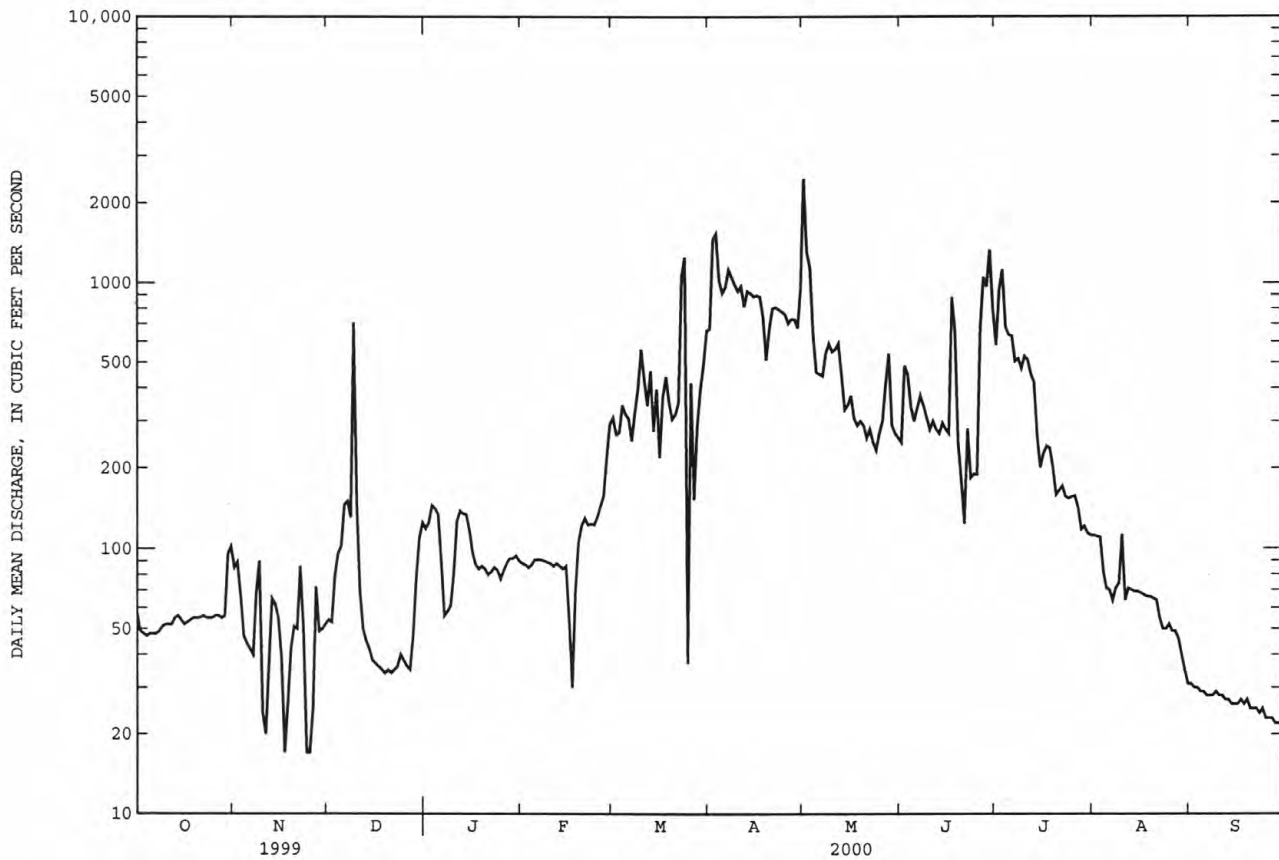
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 2000, BY WATER YEAR (WY)

MEAN	184	131	109	105	136	192	191	353	443	173	105	107
MAX	2426	1489	563	922	708	1487	1149	2922	2774	1749	884	826
(WY)	1987	1975	1993	1998	1997	1990	1997	1993	1995	1957	1957	1989
MIN	.000	.000	.016	.045	.061	.000	.027	.45	.013	.039	.000	.000
(WY)	1953	1955	1957	1955	1955	1954	1954	1956	1953	1954	1953	1954

e Estimated

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1953 - 2000	
ANNUAL TOTAL	152031		93779		186	
ANNUAL MEAN	417		256		749	
HIGHEST ANNUAL MEAN					1987	
LOWEST ANNUAL MEAN					1954	
HIGHEST DAILY MEAN	3910	Apr 26	2460	May 1	13300	May 10 1993
LOWEST DAILY MEAN	17	Nov 17	17	Nov 17	^a .00	Oct 1 1952
ANNUAL SEVEN-DAY MINIMUM	35	Dec 17	23	Sep 24	.00	Oct 1 1952
INSTANTANEOUS PEAK FLOW			3650	Mar 24	19500	Jun 11 1995
INSTANTANEOUS PEAK STAGE			13.03	Mar 24	^b 29.85	May 28 1987
ANNUAL RUNOFF (AC-FT)	301600		186000		134500	
10 PERCENT EXCEEDS	834		729		520	
50 PERCENT EXCEEDS	315		108		22	
90 PERCENT EXCEEDS	49		30		.77	

^aNo flow at times in 1952-57.^bFrom high-water mark.

ARKANSAS RIVER BASIN

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.

pH: October 1988 to June 1991.

WATER TEMPERATURE: October 1988 to current year.

DISSOLVED OXYGEN: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1988.

REMARKS.--Interruptions in record were due to malfunction of the recording instrument and insufficient flow for probes to function properly. 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, 2,050 microsiemens, Nov. 19, 1991; minimum, 100 microsiemens, Nov. 20, 1994.

pH: Maximum, 8.9 units, Oct. 27, 1989, Nov. 27, 1989, Sept. 15, 17, 1990; minimum, 6.2 units, Aug. 8, 1989.

WATER TEMPERATURE: Maximum, 34.5°C, July 12, 1998; minimum, -0.5°C, Dec. 22, 23, 24, 1998.

DISSOLVED OXYGEN: Maximum, 17.5 mg/l, Oct. 12, 1992; minimum, 2.3 mg/l, Apr. 20, 1990.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded (more than 20 percent missing record), 1,520 microsiemens, Feb. 16; minimum recorded, 290 microsiemens, May 1.

WATER TEMPERATURE: Maximum, 31.7°C, Aug. 10; minimum, 0.3°C, Jan. 27, 28.

DISSOLVED OXYGEN: Maximum recorded (more than 20 percent missing record), 16.1 mg/l, Sept. 28; minimum recorded, 3.9 mg/l, Aug. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
12...	1312	1028	1028	6.82	426	732	7.6	8.4	1450	29.5	5.0
12...	1313	1028	1028	6.82	426	732	7.6	8.4	1460	29.5	15.0
12...	1314	1028	1028	6.82	426	732	7.6	8.4	1450	29.5	25.0
12...	1315	1028	1028	6.82	426	732	7.6	8.4	1450	29.6	35.0
12...	1316	1028	1028	6.82	426	732	7.6	8.4	1450	29.6	45.0
12...	1317	1028	1028	6.82	426	732	7.6	8.4	1450	29.5	55.0
12...	1318	1028	1028	6.82	426	732	7.6	8.4	1450	29.5	65.0
		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)
OCT											
13...	1110	80020	1028	7.10	55	745	107	9.6	8.2	1310	19.5
NOV											
16...	1350	80020	1028	7.03	40	742	111	10.4	8.2	1180	17.0
DEC											
15...	1245	80020	1028	6.36	8.3	745	97	11.1	7.8	650	8.3
JAN											
31...	1225	80020	1028	7.32	90	744	104	13.3	8.1	1290	4.0
FEB											
29...	1230	80020	1028	8.10	295	720	111	10.9	8.1	669	13.3
MAR											
21...	1230	80020	1028	8.17	319	729	113	11.3	8.6	1430	13.0
APR											
12...	1115	80020	1028	8.03	689	735	101	10.0	8.3	1350	14.1
MAY											
09...	1300	80020	1028	7.77	613	725	107	8.7	8.2	1380	22.9
JUN											
14...	1100	80020	1028	6.72	300	724	142	11.0	8.2	1510	25.7
JUL											
18...	1235	80020	1028	6.03	238	729	106	7.8	8.4	1440	28.3
AUG											
08...	1220	80020	1028	5.04	76	731	120	8.6	8.4	1420	29.8
SEP											
06...	1115	80020	1028	4.50	23	735	107	8.1	8.3	1440	27.2

ARKANSAS RIVER BASIN

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07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 13...	--	--	--	--	--	--	--	--	247	236	287	0
NOV 16...	360	120	82.5	38.0	7.2	3	118	41	257	244	298	0
DEC 15...	--	--	--	--	--	--	--	--	140	156	190	0
JAN 31...	--	--	--	--	--	--	--	--	279	276	337	0
FEB 29...	220	72	53.2	21.4	8.9	2	56.6	35	158	150	183	0
MAR 21...	--	--	--	--	--	--	--	--	217	209	243	6
APR 12...	--	--	--	--	--	--	--	--	219	206	251	0
MAY 09...	430	230	104	41.5	6.1	3	133	40	212	200	245	0
JUN 14...	--	--	--	--	--	--	--	--	187	180	220	0
JUL 18...	--	--	--	--	--	--	--	--	222	208	237	8
AUG 08...	400	170	85.4	44.7	7.0	3	150	44	221	226	261	7
SEP 06...	--	--	--	--	--	--	--	--	174	169	206	0
DATE	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 13...	--	--	--	--	.78	.116	.300	.67	.15	1.1	1.33	.310
NOV 16...	124	.7	9.3	199	1.3	.170	.311	1.1	.22	1.6	1.38	.322
DEC 15...	--	--	--	--	1.0	.317	.434	.71	.41	1.5	1.92	.452
JAN 31...	--	--	--	--	.64	.166	.710	.48	.21	1.4	3.14	.730
FEB 29...	54.4	.5	8.8	117	1.8	.217	.560	1.6	.28	2.4	2.48	.602
MAR 21...	--	--	--	--	.73	.037	--	.69	.05	.96	--	.227
APR 12...	--	--	--	--	.61	.034	--	.58	.04	.71	--	.097
MAY 09...	172	.6	17.9	262	.53	<.020	--	--	--	--	--	<.050
JUN 14...	--	--	--	--	.38	<.020	--	--	--	--	--	<.050
JUL 18...	--	--	--	--	.37	<.020	--	--	--	--	--	<.050
AUG 08...	159	.7	20.7	263	1.4	.097	--	1.3	.12	--	--	<.050
SEP 06...	--	--	--	--	1.4	.109	--	1.3	.14	--	--	<.050

ARKANSAS RIVER BASIN

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 13...	.033	.010	.273	.105	.089	2.7	--	6.5	34	--	--	--
NOV 16...	.036	.011	.445	.151	.145	3.1	13	5.8	37	1.03	81.7	758
DEC 15...	.059	.018	.509	.166	.166	4.0	--	5.6	62	--	--	--
JAN 31...	.066	.020	.276	.142	.090	4.3	--	<2.0	38	--	--	--
FEB 29...	.138	.042	.767	.283	.250	2.3	16	2.4	112	.60	350	439
MAR 21...	--	<.010	.159	.070	.052	1.1	--	4.9	45	--	--	--
APR 12...	--	<.010	.169	.063	.055	2.1	--	4.3	104	--	--	--
MAY 09...	--	<.010	.166	.071	.054	2.5	11	--	55	1.20	1460	880
JUN 14...	--	<.010	.117	E.049	.038	2.4	--	<2.0	42	--	--	--
JUL 18...	--	<.010	.153	.061	.050	1.6	--	--	49	--	--	--
AUG 08...	--	<.010	.273	.142	.089	1.5	13	13	21	1.23	185	904
SEP 06...	--	<.010	.141	.063	.046	1.8	--	4.6	39	--	--	--
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 13...	--	7.1	420	730	--	--	--	--	--	--	--	--
NOV 16...	728	2.2	2600	1300	5.4	93	<2	<8.0	<14.0	<13	13	<10
DEC 15...	--	46	260	230	--	--	--	--	--	--	--	--
JAN 31...	--	19	580	120	--	--	--	--	--	--	--	--
FEB 29...	415	96	240	220	2.7	72	<2	<8.0	<14.0	<13	12	20
MAR 21...	--	28	240	270	--	--	--	--	--	--	--	--
APR 12...	--	42	420	240	--	--	--	--	--	--	--	--
MAY 09...	859	28	640	570	4.9	133	<2	<8.0	<14.0	<13	<10	<10
JUN 14...	--	24	270	210	--	--	--	--	--	--	--	--
JUL 18...	--	30	K77	K7	--	--	--	--	--	--	--	--
AUG 08...	867	22	670	110	8.6	115	<2	<8.0	<14.0	<13	E6	<10
SEP 06...	--	.6	570	100	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	1310	1290	1300	1340	682	1130	1340	1220	1300	588	290	420
2	1300	1270	1290	1340	795	1200	1300	947	1120	728	434	595
3	1300	1260	1280	1120	860	1030	977	845	895	861	728	792
4	1320	1280	1310	1200	1100	1170	971	930	948	---	---	---
5	1350	1310	1330	1180	1020	1100	1170	971	1040	1150	1010	1080
6	1370	1330	1350	---	---	---	1330	1170	1280	---	---	---
7	1370	1330	1350	---	---	---	1350	1240	1310	---	---	---
8	1380	1340	1360	1110	955	1020	1360	1340	1360	---	---	---
9	1390	1360	1380	1230	1060	1120	1360	1350	1360	1420	1280	1380
10	1420	1380	1400	1440	1190	1380	1360	1350	1360	1420	1400	1410
11	1420	1400	1420	1500	1250	1410	1360	1340	1360	1420	1370	1400
12	1450	1420	1430	1530	1440	1510	1360	1320	1340	1450	1330	1420
13	1460	1430	1450	1530	1480	1510	1360	1340	1350	1450	1420	1440
14	1480	1450	1460	1520	1500	1510	1380	1360	1370	1460	1440	1450
15	1500	1480	1490	1510	1500	1510	1400	1360	1380	1460	1450	1460
16	1520	1350	1480	1520	1330	1480	1400	1310	1370	---	---	---
17	1510	1280	1380	1520	1450	1490	1400	1380	1390	---	---	---
18	1300	1240	1270	1460	1270	1360	1400	1310	1360	1460	1420	1440
19	1290	1250	1270	1400	1300	1350	1330	1290	1300	1460	1420	1450
20	1270	1260	1260	1430	1360	1400	1420	1280	1360	1440	1410	1430
21	1270	1230	1260	1440	1420	1430	1430	1420	1420	1420	1340	1410
22	1230	1110	1190	1440	1280	1400	1440	1430	1440	1390	1330	1360
23	1150	998	1090	1400	553	1110	1440	1430	1440	1350	1300	1330
24	1220	998	1150	848	497	609	1450	1440	1440	1330	1240	1310
25	1220	1020	1110	564	545	553	1450	1440	1440	1320	1220	1290
26	1140	1010	1080	758	484	560	1440	1440	1440	1300	1260	1290
27	1140	1060	1100	741	532	595	1450	1390	1430	1290	576	1130
28	1110	669	1000	796	499	677	1450	1430	1450	805	586	730
29	735	669	707	902	796	847	1460	1290	1440	949	759	871
30	---	---	---	1240	901	1010	1460	398	1180	1070	932	996
31	---	---	---	1370	1240	1330	---	---	---	1260	1060	1140
MONTH	1520	669	1270	---	---	---	1460	398	1320	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	1450	1260	1420	1040	803	916	---	---	---	1430	1420	1420
2	1440	1330	1410	1100	716	945	---	---	---	1440	1430	1430
3	1330	1240	1280	1090	810	919	---	---	---	1440	1430	1440
4	1340	1300	1310	1280	1090	1210	1340	1250	1310	1440	1430	1440
5	1320	1110	1200	1340	1280	1320	1340	1290	1330	1450	1430	1440
6	1320	1240	1290	1410	1330	1380	1380	1330	1350	1460	1440	1450
7	1470	1320	1400	1430	1380	1420	1420	1370	1390	1460	1440	1440
8	1490	1470	1480	1440	1430	1440	1460	1410	1440	1440	1430	1430
9	1520	1490	1510	1450	1430	1440	1480	1460	1470	1440	1430	1430
10	1520	1490	1500	1460	1450	1450	1490	740	1170	1430	1430	1430
11	1530	1500	1510	1460	1450	1450	1100	867	993	1430	1420	1430
12	1530	1510	1520	1470	1430	1450	1310	1090	1220	1430	1410	1420
13	1530	1520	1530	1460	1440	1450	1480	1300	1380	1430	1420	1420
14	1520	1480	1500	1440	1230	1360	1510	1450	1490	1430	1420	1430
15	1490	1440	1470	1350	1090	1320	1510	1490	1500	1430	1420	1430
16	1460	1430	1440	1400	1230	1350	1510	1480	1500	1450	1430	1440
17	1440	442	949	1410	1390	1400	1500	1440	1460	1460	1440	1450
18	---	---	---	1400	1370	1390	1450	1420	1440	1470	1460	1460
19	---	---	---	1400	1370	1390	1450	1440	1440	1480	1470	1470
20	---	---	---	---	---	---	1450	1440	1450	1520	1420	1460
21	---	---	---	---	---	---	1450	1420	1430	1440	1440	1440
22	---	---	---	---	---	---	1430	1410	1430	1440	1430	1440
23	---	---	---	---	---	---	1430	1430	1430	1440	1400	1430
24	---	---	---	---	---	---	1460	1430	1440	1400	1300	1370
25	---	---	---	---	---	---	1440	1430	1430	1320	1310	1320
26	---	---	---	---	---	---	1430	1420	1430	1330	1320	1320
27	913	770	882	---	---	---	1420	1410	1420	1330	1310	1320
28	770	546	626	---	---	---	1420	1410	1420	1320	1300	1310
29	662	431	542	---	---	---	1430	1410	1420	1310	1300	1310
30	829	662	766	---	---	---	1420	1410	1420	1300	1280	1290
31	---	---	---	---	---	---	1420	1400	1420	---	---	---
MONTH	1530	431	1260	1470	716	1320	1510	740	1390	1520	1280	1410
YEAR	1530	290	1280									

ARKANSAS RIVER BASIN

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07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	22.5	14.2	17.9	17.1	11.3	14.8	---	---	---	8.3	7.2	7.7
2	21.7	16.0	18.0	13.9	8.9	11.1	11.8	9.2	10.3	9.0	7.8	8.3
3	20.5	15.4	17.3	13.5	7.6	10.6	11.5	9.3	10.6	9.4	7.8	8.8
4	20.0	13.8	16.5	13.9	9.9	11.5	11.4	9.3	10.4	7.8	6.4	7.0
5	22.5	14.4	17.9	15.9	11.1	13.1	9.3	6.7	8.0	6.4	4.3	5.3
6	23.1	15.9	19.0	17.6	13.5	15.1	6.9	5.6	6.4	5.3	3.9	4.5
7	22.0	14.6	18.0	18.7	14.7	16.0	5.9	4.7	5.4	5.4	4.0	4.6
8	22.4	17.6	19.6	18.5	15.4	16.6	7.9	5.5	6.7	5.9	5.2	5.5
9	22.8	18.3	20.3	17.5	15.7	16.5	---	---	---	6.7	5.4	5.9
10	23.7	18.6	21.0	16.7	14.9	15.8	---	---	---	7.0	5.6	6.2
11	24.7	18.9	21.6	17.3	14.2	15.7	---	---	---	7.2	6.4	6.7
12	24.3	19.2	21.4	17.3	14.5	15.9	---	---	---	7.4	6.3	6.8
13	26.1	18.7	21.6	17.2	15.2	16.3	---	---	---	7.8	6.6	7.1
14	25.2	17.0	20.4	16.6	15.4	16.2	---	---	---	6.9	5.9	6.5
15	24.9	17.3	20.6	16.5	15.8	16.2	---	---	---	8.6	5.2	6.4
16	22.0	16.2	19.0	---	---	---	---	---	---	9.4	8.5	8.9
17	17.0	11.9	14.4	---	---	---	---	---	---	9.2	8.3	8.8
18	17.3	12.5	14.4	---	---	---	---	---	---	9.5	7.4	8.2
19	17.7	10.4	13.6	16.0	14.0	14.7	---	---	---	10.7	7.6	8.7
20	18.5	10.4	14.0	14.9	14.1	14.5	---	---	---	8.3	5.0	6.4
21	20.2	11.5	15.5	14.3	13.6	14.0	---	---	---	7.3	4.2	5.5
22	20.3	12.8	15.9	14.8	13.3	13.9	---	---	---	8.8	5.2	6.6
23	17.9	11.9	14.5	13.8	10.4	12.1	---	---	---	9.6	5.6	7.1
24	17.5	10.3	13.4	---	---	---	---	---	---	6.9	4.3	5.4
25	17.9	9.9	13.8	---	---	---	---	---	---	6.1	3.3	4.6
26	20.0	11.8	15.6	---	---	---	---	---	---	4.1	1.5	2.6
27	19.4	13.1	15.8	---	---	---	---	---	---	1.5	.3	1.0
28	20.4	14.2	17.1	---	---	---	---	---	---	2.2	.5	1.2
29	20.8	15.3	17.7	---	---	---	8.6	3.8	5.8	5.3	1.2	2.8
30	16.3	14.0	15.0	---	---	---	7.4	6.0	6.6	5.4	1.7	3.1
31	14.8	13.5	14.0	---	---	---	8.1	6.4	7.1	6.4	2.2	3.9
MONTH	26.1	9.9	17.3	---	---	---	---	---	---	10.7	.3	5.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.7	2.6	3.1	14.5	12.6	13.3	13.3	11.5	12.3	17.0	16.2	16.5
2	6.6	2.1	3.9	13.5	10.0	11.8	13.2	10.7	11.9	17.3	16.2	16.7
3	8.9	4.1	6.0	10.3	9.5	9.9	12.9	11.7	12.3	18.7	16.7	17.5
4	7.9	4.4	5.9	10.0	8.9	9.5	14.6	10.6	12.6	20.8	17.3	19.3
5	7.6	3.8	5.3	11.7	10.0	11.0	16.9	12.6	14.7	20.5	20.2	20.3
6	8.6	3.6	5.8	15.8	11.7	13.5	18.1	15.0	16.6	---	---	---
7	10.6	5.7	7.7	18.2	15.5	16.6	18.0	17.0	17.5	---	---	---
8	11.6	6.4	8.5	16.6	14.6	15.5	17.1	14.5	15.9	---	---	---
9	13.0	7.6	9.9	15.9	13.2	14.7	15.8	13.8	14.9	25.1	22.7	23.3
10	14.7	9.9	11.6	14.5	10.8	13.0	17.0	13.9	15.5	23.2	21.7	22.4
11	10.3	6.8	8.8	12.4	8.8	10.5	16.9	15.7	16.4	25.5	22.8	23.9
12	10.6	5.0	7.5	11.3	9.0	10.2	15.7	14.4	14.8	25.5	24.4	25.0
13	8.8	6.5	7.8	13.5	10.9	12.0	15.3	14.0	14.6	24.6	21.7	22.9
14	10.6	4.9	7.2	13.2	12.5	12.9	15.9	13.9	14.8	26.0	19.4	22.0
15	13.7	6.6	9.4	16.5	13.1	14.3	16.9	15.7	16.2	21.4	20.4	20.8
16	12.9	8.2	10.4	16.5	11.4	13.3	17.2	14.9	16.1	27.1	20.3	22.6
17	11.0	9.9	10.5	11.4	9.2	10.1	17.4	15.6	16.5	26.4	21.5	22.8
18	10.9	9.0	9.6	9.2	8.4	8.8	20.7	16.3	18.2	23.5	21.7	22.4
19	9.7	7.9	8.8	11.5	7.8	9.6	23.1	20.2	21.5	21.9	20.3	21.3
20	9.8	7.7	8.8	13.9	9.4	11.6	22.0	19.1	20.3	22.1	19.8	20.7
21	11.7	9.1	10.4	12.9	12.3	12.6	20.3	18.9	19.6	25.1	21.3	23.1
22	14.2	11.7	13.3	12.3	12.0	12.1	19.9	17.5	18.5	25.6	23.5	24.6
23	14.6	12.9	13.8	13.2	12.1	12.5	18.6	16.5	17.5	27.1	25.3	26.3
24	15.4	13.6	14.6	16.6	12.9	14.0	20.0	17.6	18.7	28.6	26.5	27.6
25	16.5	15.0	15.7	18.7	13.5	15.6	21.1	18.9	19.9	28.7	26.5	27.6
26	15.5	13.3	14.5	18.2	14.4	16.2	20.6	19.3	19.9	26.5	25.0	25.7
27	13.7	12.3	12.8	20.1	16.0	17.8	20.8	19.0	19.9	26.9	24.7	25.5
28	12.4	11.5	12.2	19.0	15.5	17.2	21.3	19.1	20.3	26.3	23.5	24.7
29	13.3	12.1	12.7	17.9	14.5	16.0	20.7	19.3	19.8	26.5	25.0	26.0
30	---	---	---	14.5	13.4	13.9	19.3	16.8	18.3	27.8	25.6	26.7
31	---	---	---	14.0	13.0	13.3	---	---	---	28.2	26.7	27.5
MONTH	16.5	2.1	9.5	20.1	7.8	13.0	23.1	10.6	16.9	---	---	---

ARKANSAS RIVER BASIN

07241000 NORTH CANADIAN RIVER BELOW LAKE OVERHOLSER NEAR OKLAHOMA CITY, OK --Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN		MAX	MIN	MEAN
		OCTOBER				NOVEMBER					DECEMBER				JANUARY
1	---	---	---		---	---	---		---	---	---		---	---	---
2	---	---	---		---	---	---		12.1	11.2	11.7		---	---	---
3	---	---	---		---	---	---		12.4	11.5	12.1		---	---	---
4	---	---	---		---	---	---		13.0	11.9	12.3		---	---	---
5	---	---	---		---	---	---		14.3	13.0	13.5		---	---	---
6	---	---	---		---	---	---		---	---	---		---	---	---
7	---	---	---		---	---	---		---	---	---		14.5	13.7	14.2
8	---	---	---		---	---	---		---	---	---		14.6	14.3	14.5
9	---	---	---		---	---	---		---	---	---		14.7	14.5	14.6
10	---	---	---		---	---	---		---	---	---		14.8	14.5	14.6
11	---	---	---		---	---	---		---	---	---		15.0	14.6	14.9
12	---	---	---		---	---	---		---	---	---		15.1	14.9	15.0
13	---	---	---		---	---	---		---	---	---		15.4	15.1	15.2
14	---	---	---		---	---	---		---	---	---		15.6	15.0	15.3
15	---	---	---		---	---	---		---	---	---		15.6	14.0	15.1
16	---	---	---		---	---	---		---	---	---		14.0	13.6	13.8
17	---	---	---		---	---	---		---	---	---		13.6	13.4	13.5
18	---	---	---		---	---	---		---	---	---		13.6	13.0	13.3
19	12.4	9.8	11.3		---	---	---		---	---	---		13.0	12.0	12.5
20	12.4	7.7	10.8		---	---	---		---	---	---		12.8	12.1	12.4
21	12.2	7.7	9.9		---	---	---		---	---	---		12.4	11.8	12.1
22	11.4	7.4	9.3		---	---	---		---	---	---		11.8	10.9	11.4
23	11.6	6.8	9.2		---	---	---		---	---	---		10.9	10.4	10.7
24	11.8	7.7	9.7		---	---	---		---	---	---		10.6	9.8	10.3
25	12.4	7.7	10.2		---	---	---		---	---	---		---	---	---
26	11.5	8.6	10.1		---	---	---		---	---	---		---	---	---
27	11.1	6.1	9.3		---	---	---		---	---	---		---	---	---
28	10.3	6.7	8.5		---	---	---		---	---	---		---	---	---
29	9.5	5.6	7.4		---	---	---		---	---	---		---	---	---
30	---	---	---		---	---	---		---	---	---		---	---	---
31	---	---	---		---	---	---		---	---	---		---	---	---
MONTH	---	---	---		---	---	---		---	---	---		---	---	---

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OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	11.4	10.7	11.0	10.9	10.5	10.7	10.3	10.0	10.2
2	---	---	---	11.4	10.3	10.9	11.5	10.7	11.0	10.7	9.5	10.0
3	---	---	---	---	---	---	11.0	10.7	10.8	10.2	9.6	9.9
4	13.0	12.2	12.5	---	---	---	11.2	10.4	10.8	9.7	8.7	9.3
5	13.3	12.4	12.9	---	---	---	10.6	9.7	10.2	9.0	8.6	8.8
6	13.4	12.2	12.8	---	---	---	10.1	9.2	9.6	---	---	---
7	12.9	11.7	12.3	---	---	---	9.5	9.2	9.3	---	---	---
8	12.7	11.5	12.1	10.5	9.2	10.0	10.1	9.5	9.8	---	---	---
9	12.3	10.9	11.7	11.0	9.9	10.3	10.2	9.8	10.0	8.8	7.9	8.4
10	11.7	10.0	10.9	11.0	9.7	10.5	10.1	9.5	9.8	9.1	8.4	8.7
11	12.3	11.2	11.8	12.0	10.3	11.3	9.8	9.5	9.7	8.9	8.0	8.5
12	12.8	11.8	12.3	11.9	11.1	11.6	10.2	9.8	10.0	8.7	8.0	8.3
13	12.6	11.7	12.2	12.4	10.8	11.2	10.3	9.9	10.1	9.4	8.4	8.9
14	13.0	11.9	12.5	11.2	10.8	10.9	10.1	9.6	9.9	10.0	8.8	9.2
15	12.5	11.2	11.9	11.0	10.1	10.7	9.8	9.4	9.6	9.8	9.2	9.4
16	12.3	11.0	11.7	11.2	9.9	10.5	10.0	9.5	9.7	9.8	8.4	9.0
17	11.5	10.3	11.1	12.0	11.2	11.7	9.8	9.4	9.6	9.3	8.5	8.9
18	11.7	10.2	10.9	12.1	12.0	12.0	9.6	8.5	9.2	9.4	8.7	9.0
19	11.9	11.1	11.5	12.3	11.4	11.8	8.9	8.1	8.6	9.7	8.9	9.3
20	12.2	11.4	11.8	11.8	10.7	11.2	9.5	8.4	8.9	9.9	9.1	9.6
21	11.8	10.8	11.4	11.5	9.2	10.3	9.4	8.9	9.2	9.8	8.7	9.3
22	11.3	10.1	10.7	9.7	9.5	9.5	9.6	9.0	9.3	9.6	8.3	9.0
23	11.7	10.1	10.7	10.3	9.5	9.8	9.7	9.2	9.5	9.0	8.1	8.5
24	11.7	10.1	10.8	10.2	8.6	9.5	9.7	9.1	9.4	8.7	7.2	8.1
25	11.2	9.7	10.4	9.1	8.6	8.8	9.5	8.9	9.2	7.9	7.2	7.6
26	11.4	10.0	10.7	9.3	8.6	8.9	9.4	9.0	9.2	8.6	7.5	7.9
27	12.1	10.7	11.3	9.0	8.7	8.9	9.4	8.9	9.2	8.5	7.6	7.9
28	12.1	11.0	11.4	9.2	8.5	8.9	9.4	8.8	9.1	8.4	7.4	8.0
29	11.1	10.8	10.9	9.9	9.0	9.5	9.4	8.9	9.2	8.4	7.3	7.8
30	---	---	---	10.5	9.9	10.2	10.3	8.9	9.6	8.1	6.9	7.5
31	---	---	---	10.6	10.2	10.5	---	---	---	7.7	6.9	7.3
MONTH	---	---	---	---	---	---	11.5	8.1	9.7	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	10.8	6.8	8.5	---	---	---	12.0	9.6	10.8	---	---	---
2	9.9	9.6	9.7	---	---	---	12.1	9.3	10.5	---	---	---
3	9.7	8.3	9.0	---	---	---	15.0	9.6	11.8	---	---	---
4	8.7	7.9	8.4	---	---	---	17.6	13.5	15.8	---	---	---
5	9.0	8.0	8.5	---	---	---	14.7	12.7	13.7	---	---	---
6	---	---	---	9.8	8.7	9.2	14.1	12.1	13.1	---	---	---
7	---	---	---	9.8	8.7	9.2	13.5	11.7	12.4	10.7	6.9	8.4
8	11.3	9.7	10.4	9.8	8.8	9.2	14.1	11.4	12.4	10.8	7.2	8.8
9	10.5	9.6	10.1	10.4	8.8	9.4	13.7	11.6	12.5	11.0	7.2	8.8
10	11.5	9.9	10.4	10.1	8.9	9.4	13.6	10.3	12.0	11.4	7.4	9.1
11	13.2	10.3	11.1	---	---	---	13.5	9.7	11.6	11.2	7.7	9.0
12	11.6	10.2	10.7	---	---	---	---	---	---	11.8	6.9	8.3
13	11.3	10.1	10.6	8.3	7.3	7.8	---	---	---	10.5	6.5	8.0
14	11.4	10.0	10.7	9.5	7.3	8.2	---	---	---	10.5	5.7	7.7
15	11.6	10.5	11.0	9.3	7.5	8.2	---	---	---	10.0	5.3	7.3
16	---	---	---	8.9	7.5	8.0	---	---	---	10.0	6.3	7.7
17	---	---	---	8.9	7.6	8.1	---	---	---	10.1	6.9	8.0
18	---	---	---	9.2	7.9	8.4	9.7	6.6	7.6	10.5	6.9	8.1
19	---	---	---	11.6	7.2	8.7	8.6	6.6	7.4	10.6	6.8	8.2
20	---	---	---	9.8	7.6	8.4	9.0	6.6	7.5	11.3	6.1	8.4
21	---	---	---	12.8	8.6	10.1	8.8	6.2	7.3	11.1	7.2	8.7
22	---	---	---	11.9	8.7	10.0	8.3	6.0	6.9	10.5	7.1	8.4
23	---	---	---	11.2	9.5	10.2	8.1	5.8	6.8	10.9	6.7	8.3
24	---	---	---	11.2	9.1	10.1	---	---	---	9.2	6.8	7.9
25	---	---	---	11.6	8.9	10.0	8.7	6.5	7.3	11.6	7.6	9.3
26	---	---	---	11.1	8.5	9.5	8.4	6.2	7.1	12.0	7.8	9.4
27	9.3	8.3	8.8	11.4	8.8	9.9	8.2	6.2	6.9	14.3	7.6	10.6
28	8.9	6.6	8.5	11.0	9.0	10.0	8.0	5.7	6.7	16.1	10.1	12.2
29	---	---	---	11.8	9.6	10.5	6.9	4.9	5.8	15.4	9.9	11.9
30	---	---	---	12.3	9.5	10.8	6.7	3.9	5.4	15.6	9.6	12.0
31	---	---	---	12.0	9.7	10.7	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK

LOCATION.--Lat 35°33'56", long 97°22'01", in SW 1/4 SW 1/4 sec.25, T.13 N., R.2 W., Oklahoma County, Hydrologic Unit 11100302, on right downstream abutment of county road bridge, 3.8 mi downstream from Crutcho Creek, 4.0 mi west of Jones, and at mile 252.7.

DRAINAGE AREA.--13,413 mi², of which 4,899 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,109.40 ft above sea level.

REMARKS.--Records fair. Flow regulated by Canton Lake (station 07238500) and by Lake Overholser (station 07240500) where diversions are made into Lake Hefner Canal (station 07240000). Low flow sustained in part by sewage effluent from Oklahoma City. U.S. Geological Survey telemeter located at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	188	68	167	151	342	1210	7270	439	937	160	66
2	81	120	69	162	137	483	1420	2670	802	2100	157	60
3	80	109	352	193	136	480	1850	1490	1190	e1460	e150	59
4	80	83	561	189	141	438	1250	1330	650	e1030	e140	58
5	80	64	288	168	127	436	882	854	622	700	e135	58
6	77	61	163	161	123	336	964	789	515	e671	e132	57
7	75	63	198	113	122	286	914	776	539	e605	e120	51
8	85	59	159	125	119	355	1140	1060	534	e553	e117	39
9	101	93	1280	114	117	227	e977	928	480	e516	113	50
10	82	108	968	103	113	456	e900	840	479	e501	109	51
11	79	46	183	137	115	621	840	785	597	e570	e141	50
12	76	40	101	170	116	526	e994	804	492	534	e110	47
13	73	50	77	164	114	442	e910	789	460	e464	e108	46
14	74	93	65	163	116	442	e973	626	469	e420	105	46
15	71	89	58	151	116	328	e943	498	465	e324	103	44
16	68	84	53	141	109	501	e948	589	458	e221	102	44
17	66	62	53	131	169	405	e956	558	1810	e268	101	45
18	68	36	51	122	132	682	e890	433	1680	e294	101	44
19	67	36	51	115	102	529	e740	510	591	280	104	41
20	69	54	50	112	135	436	652	454	572	e228	106	40
21	67	65	49	110	127	356	e735	433	368	e407	105	41
22	67	66	50	109	127	636	e910	491	743	872	105	39
23	66	107	52	111	434	779	e880	389	737	e497	98	40
24	66	79	e55	110	162	2130	e850	378	673	e308	88	574
25	66	46	e54	109	455	674	832	674	659	e239	e86	147
26	66	36	e53	113	260	398	e856	569	846	e243	87	76
27	65	69	e54	126	170	790	857	450	1590	e235	85	57
28	64	96	57	145	162	407	e910	744	1330	e250	83	51
29	62	69	63	159	304	824	e872	563	1600	e340	83	44
30	685	67	119	208	---	751	2260	384	1270	e220	77	40
31	364	---	156	169	---	935	---	407	---	e180	76	---
TOTAL	3175	2238	5610	4370	4711	17431	30315	29535	23660	16467	3387	2105
MEAN	102	74.6	181	141	162	562	1010	953	789	531	109	70.2
MAX	685	188	1280	208	455	2130	2260	7270	1810	2100	160	574
MIN	62	36	49	103	102	227	652	378	368	180	76	39
AC-FT	6300	4440	11130	8670	9340	34570	60130	58580	46930	32660	6720	4180

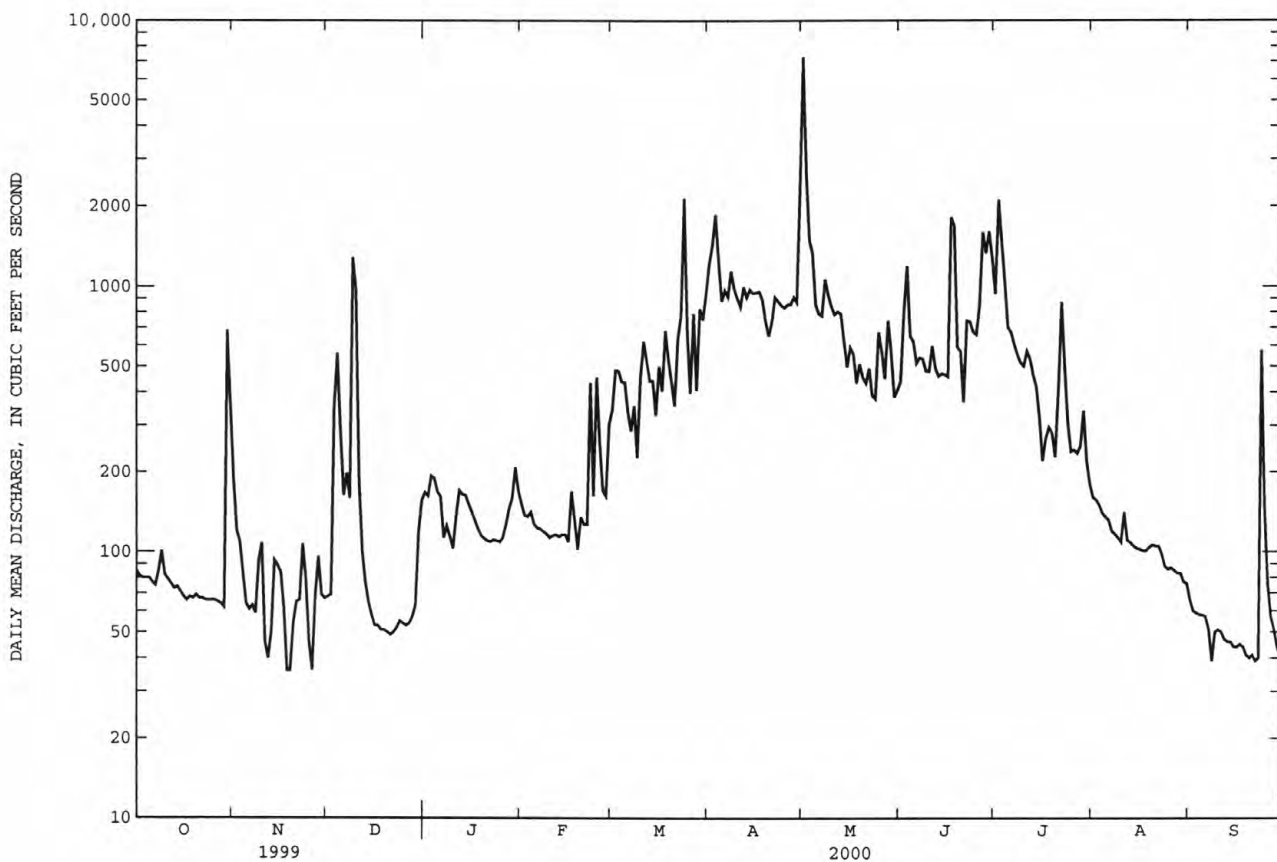
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	284	335	404	343	384	656	667	1050	1179	458	348	389
MAX	860	928	968	1162	879	2011	1415	4095	3662	1044	966	1350
(WY)	1997	1997	1992	1998	1997	1998	1999	1993	1995	1989	1989	1989
MIN	92.3	74.6	109	102	95.5	116	121	122	130	90.9	77.2	70.2
(WY)	1993	2000	1989	1994	1991	1991	1991	1996	1996	1998	1998	2000

e Estimated

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	212932		143004		542	
ANNUAL MEAN	583		391		835	
HIGHEST ANNUAL MEAN					167	
LOWEST ANNUAL MEAN					22700	
HIGHEST DAILY MEAN	7780	Apr 25	7270	May 1	22700	May 9 1993
LOWEST DAILY MEAN	36	Nov 18	^a 36	Nov 18	28	Jul 28 1991
ANNUAL SEVEN-DAY MINIMUM	51	Dec 17	41	Sep 17	32	Jul 22 1991
INSTANTANEOUS PEAK FLOW			15200	May 1	38100	May 9 1993
INSTANTANEOUS PEAK STAGE			20.64	May 1	24.80	May 9 1993
ANNUAL RUNOFF (AC-FT)	422400		283600		392300	
10 PERCENT EXCEEDS	1130		910		1100	
50 PERCENT EXCEEDS	378		162		252	
90 PERCENT EXCEEDS	66		54		74	

^aAlso occurred Nov. 19, 26.

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year

pH: October 1988 to June 1991.

WATER TEMPERATURE: October 1988 to current year.

DISSOLVED OXYGEN: October 1988 to current year.

INSTRUMENTATION.--Water quality monitor since October 1988.

REMARKS.--Interruptions in record were due to malfunction of the recording instrument, and the sensors being impeded by shallow depths and excessive sand movement. Samples were collected monthly and specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 2,630 microsiemens, July 18, 1990; minimum 117 microsiemens, Sept. 6, 1992.

pH: Maximum 9.1 units, June 27, 1991; minimum 6.3 units, Aug. 8, 1989.

WATER TEMPERATURE: Maximum 36.5°C, July 2, 1996; minimum recorded, 0.0°C, several days during winter period.

DISSOLVED OXYGEN: Maximum 23.3 mg/L, Sept. 19, 1999; minimum 0.6 mg/L, Aug. 30, 1999.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,190 microsiemens, Sept. 8; minimum, 163 microsiemens, June 20.

WATER TEMPERATURE: Maximum, 34.6°C, July 15; minimum, 0.0°C, Jan. 27.

DISSOLVED OXYGEN: Maximum recorded (greater than 20 percent missing record), 18.0 mg/L, Aug. 9; minimum recorded, 2.2 mg/L, Sept. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST- CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
12...	1440	1028	1028	10.05	558	735	9.4	8.5	1450	29.0	10.0
12...	1441	1028	1028	10.05	558	735	9.1	8.5	1450	29.0	30.0
12...	1442	1028	1028	10.05	558	735	9.2	8.5	1450	29.0	50.0
12...	1443	1028	1028	10.05	558	735	9.0	8.5	1450	29.0	70.0
12...	1444	1028	1028	10.05	558	735	9.0	8.5	1450	29.1	90.0
12...	1446	1028	1028	10.05	558	735	9.2	8.5	1450	29.1	170
12...	1447	1028	1028	10.05	558	735	8.9	8.5	1450	29.1	190
12...	1448	1028	1028	10.05	558	735	8.8	8.5	1450	29.0	210
12...	1449	1028	1028	10.05	558	735	8.7	8.5	1450	29.0	230
OCT											
13...	1240	80020	1028	8.84	75	746	120	10.3	7.9	1410	21.5
NOV											
17...	0940	80020	1028	8.78	72	742	91	9.1	8.0	1460	19.3
DEC											
15...	1400	80020	1028	8.64	53	747	96	11.6	8.1	1120	6.2
JAN											
31...	1330	80020	1028	9.07	169	744	104	12.9	8.1	1330	8.9
FEB											
29...	1520	80020	1028	9.65	355	726	122	11.6	8.4	1100	24.4
MAR											
22...	0930	80020	1028	10.18	661	732	88	9.1	8.3	1070	11.4
APR											
11...	1100	80020	1028	10.39	779	735	105	9.8	8.5	1380	16.8
MAY											
10...	0930	80020	1028	10.42	687	730	95	8.3	8.3	1370	26.1
JUN											
14...	1415	80020	1028	9.54	310	727	110	8.6	8.3	1490	26.1
JUL											
19...	0955	80020	1028	9.31	277	732	100	7.7	8.4	1460	34.3
AUG											
09...	0955	80020	1028	8.62	113	736	109	8.5	8.2	1470	30.0
SEP											
06...	1420	80020	1028	8.42	83	735	185	13.4	8.8	1700	34.0

ARKANSAS RIVER BASIN

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07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	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)
OCT 13...	--	--	--	--	--	--	--	--	252	233	284	0
NOV 17...	380	100	87.9	39.0	7.8	3	152	46	281	278	339	0
DEC 15...	--	--	--	--	--	--	--	--	275	266	324	0
JAN 31...	--	--	--	--	--	--	--	--	238	232	283	0
FEB 29...	350	130	83.5	35.2	7.0	2	104	39	287	227	267	5
MAR 22...	--	--	--	--	--	--	--	--	178	167	204	0
APR 11...	--	--	--	--	--	--	--	--	220	203	235	6
MAY 10...	400	190	98.8	37.7	6.8	3	125	40	219	209	242	6
JUN 14...	--	--	--	--	--	--	--	--	205	193	235	0
JUL 19...	--	--	--	--	--	--	--	--	240	221	270	0
AUG 09...	400	160	88.5	43.9	7.4	4	163	46	233	240	281	6
SEP 06...	--	--	--	--	--	--	--	--	230	222	227	22
DATE	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 13...	--	--	--	--	.70	<.020	.970	--	--	1.7	4.29	1.01
NOV 17...	202	.7	10.6	175	.99	.121	1.54	.87	.16	2.6	6.83	1.58
DEC 15...	--	--	--	--	1.4	.649	2.16	.73	.84	3.6	9.55	2.24
JAN 31...	--	--	--	--	1.4	.542	1.26	.84	.70	2.7	5.59	1.34
FEB 29...	110	.6	4.1	198	.78	<.020	.191	--	--	.98	.845	.206
MAR 22...	--	--	--	--	.78	.075	.522	.70	.10	1.3	2.31	.536
APR 11...	--	--	--	--	.65	.033	--	.61	.04	.79	--	.143
MAY 10...	174	.6	15.8	224	.47	<.020	.839	--	--	1.3	3.71	.866
JUN 14...	--	--	--	--	.37	<.020	.094	--	--	.47	.416	.107
JUL 19...	--	--	--	--	.36	<.020	--	--	--	--	--	<.050
AUG 09...	201	.7	18.2	208	.84	.032	.731	.81	.04	1.6	3.24	.758
SEP 06...	--	--	--	--	.86	<.020	.473	--	--	1.4	2.09	.501

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 13...	.131	.040	1.42	.499	.464	6.4	--	6.5	15	--	--	--
NOV 17...	.135	.041	1.48	.540	.483	5.5	8.0	2.6	18	1.20	172	884
DEC 15...	.260	.079	1.65	.614	.539	4.2	--	3.7	14	--	--	--
JAN 31...	.263	.080	.681	.284	.222	3.2	--	13	38	--	--	--
FEB 29...	.049	.015	.396	.155	.129	2.2	18	6.8	280	.96	679	708
MAR 22...	.046	.014	.491	.203	.160	1.8	--	7.7	120	--	--	--
APR 11...	--	<.010	.322	.117	.105	1.5	--	3.3	142	--	--	--
MAY 10...	.089	.027	.518	.206	.169	2.0	11	--	147	1.16	1580	852
JUN 14...	.043	.013	.291	.100	.095	2.0	--	2.1	69	--	--	--
JUL 19...	--	<.010	.040	<.050	.013	2.1	--	4.9	73	--	--	--
AUG 09...	.089	.027	.966	.361	.315	2.8	8.8	5.6	15	1.24	278	912
SEP 06...	.092	.028	1.42	.543	.464	.8	--	7.4	<10	--	--	--
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOC- CI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 13...	--	3.4	250	K27000	--	--	--	--	--	--	--	--
NOV 17...	853	15	--	--	4.1	150	<2	<8.0	<14.0	<13	E7	<10
DEC 15...	--	9.6	K73	K50	--	--	--	--	--	--	--	--
JAN 31...	--	5.2	470	280	--	--	--	--	--	--	--	--
FEB 29...	681	120	240	660	2.3	144	<2	<8.0	<14.0	<13	E9	<10
MAR 22...	--	56	1100	3200	--	--	--	--	--	--	--	--
APR 11...	--	55	250	220	--	--	--	--	--	--	--	--
MAY 10...	813	54	3200	950	4.3	172	<2	<8.0	<14.0	<13	13	<10
JUN 14...	--	32	310	220	--	--	--	--	--	--	--	--
JUL 19...	--	34	210	230	--	--	--	--	--	--	--	--
AUG 09...	882	6.4	71	93	6.4	185	<2	<8.0	<14.0	<13	E7	<10
SEP 06...	--	3.0	190	44	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CARBOX- IN WATER WHOLE RECOV- ERABLE (UG/L) (30245)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYAN- AZINE TOTAL (UG/L) (81757)	CYCLO- ATE WATER WHOLE RECOV- ERABLE (UG/L) (30254)	DEETHYL ATRA- ZINE, WATER, WHOLE, TOTAL (UG/L) (75981)	DEF TOTAL (UG/L) (39040)	DE-ISO PROPYL ATRAZIN WATER, WHOLE, TOTAL (UG/L) (75980)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DIPHEN- AMID WATER WHOLE RECOV- ERABLE (UG/L) (30255)	DISUL- FOTON UNFLT RECOVER (UG/L) (39011)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	--	<.1	<.01	<.2	<.1	<.2	<.02	<.2	E.01	<.001	<.1	<.03
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 29...	<.2	<.1	<.01	<.2	<.1	<.2	<.02	<.2	<.02	<.001	<.1	<.07
MAR 22...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	<.2	<.1	<.01	<.2	<.1	<.2	<.02	<.2	.04	.001	<.1	<.03
JUN 14...	--	--	<.01	--	--	--	<.02	--	<.02	--	--	<.03
JUL 19...	--	--	<.01	--	--	--	<.02	--	E.01	--	--	<.03
AUG 09...	<.2	.2	<.01	<.2	<.1	<.2	<.02	<.2	<.02	.001	<.1	<.03
SEP 06...	--	--	<.01	--	--	--	<.02	--	E.02	--	--	<.03
DATE	ENDO- SULFAN I TOTAL (UG/L) (39388)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT. REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEXAZI- NONE WATER WHOLE RECOV- ERABLE (UG/L) (30264)	ISODRIN SUR SCD 1398 WTR, UNFLTRD PERCENT (90571)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	<.001	<.001	<.01	<.01	<.001	<.001	<.2	58	65	.003	<.03	<.01
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 29...	<.001	<.001	<.01	<.01	<.001	<.001	<.2	60	79	.001	<.03	<.01
MAR 22...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	<.001	<.001	<.01	<.01	<.001	<.001	<.2	90	86	.001	<.03	<.01
JUN 14...	--	--	<.01	<.01	--	--	--	--	77	--	<.03	--
JUL 19...	--	--	<.01	<.01	--	--	--	--	57	--	<.03	--
AUG 09...	<.001	<.001	<.01	<.01	.001	<.001	<.2	76	40	.002	<.03	<.01
SEP 06...	--	--	<.01	<.01	--	--	--	--	91	--	<.03	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1330	1270	1310	780	653	743	1220	1160	1200	1400	1290	1360
2	1360	1290	1330	924	732	796	1210	1050	1150	1410	1380	1400
3	1340	1310	1320	1120	924	1030	1050	444	653	1400	1210	1330
4	1370	1320	1350	1170	1120	1160	794	259	508	1420	1260	1390
5	1410	1350	1380	1340	1160	1280	651	331	485	1420	1360	1380
6	1410	1360	1380	1380	1320	1360	799	651	770	1380	1320	1340
7	1440	1370	1400	1370	1330	1350	945	771	901	1350	1320	1330
8	1440	1370	1400	1370	1290	1330	901	691	729	1370	1160	1300
9	1460	1120	1220	1400	1120	1270	718	212	413	1520	1180	1370
10	1370	1250	1340	1250	1130	1220	430	367	397	1410	1320	1340
11	1420	1350	1380	1530	1240	1370	564	422	488	1370	1320	1330
12	1440	1370	1410	1600	1440	1520	770	564	673	1340	1320	1320
13	1470	1410	1450	1780	1580	1670	980	770	893	1350	1310	1320
14	1480	1300	1380	1740	1360	1430	1150	980	1070	1350	1320	1330
15	1370	1320	1340	1380	1330	1350	1270	1140	1190	1370	1330	1350
16	1400	1320	1350	1400	1330	1370	1290	1220	1250	1350	1310	1330
17	1400	1350	1370	1470	1380	1430	1350	1270	1300	1340	1310	1320
18	1390	1350	1370	1650	1380	1500	1340	1270	1280	1340	1250	1310
19	1370	1330	1360	1760	1630	1670	1360	1270	1310	1360	1310	1330
20	1380	1330	1360	1840	1490	1620	1370	1320	1340	1390	1360	1370
21	1440	1350	1410	1560	1460	1500	1490	1340	1380	1390	1360	1370
22	1620	1430	1520	1490	1440	1470	1490	1390	1420	1400	1370	1390
23	1780	1600	1690	1520	1330	1400	1440	1380	1400	1410	1360	1380
24	1900	1720	1810	1630	1240	1360	1480	1330	1410	1400	1360	1380
25	1980	1840	1910	1460	1250	1370	1330	1280	1300	1400	1370	1390
26	2090	1950	2020	1720	1400	1560	1330	1290	1310	1410	1320	1370
27	2180	2010	2100	1850	1390	1660	1340	1300	1320	1540	1300	1380
28	2140	1970	2040	1430	1370	1390	1380	1310	1350	1680	1450	1570
29	2090	1920	2000	1420	1180	1320	1430	1260	1330	1860	1570	1700
30	2060	310	1010	1180	1110	1140	1450	1200	1280	1750	1380	1580
31	653	385	492	---	---	---	1290	1210	1260	1380	1290	1330
MONTH	2180	310	1460	1850	653	1350	1490	212	1060	1860	1160	1380

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1320	1260	1290	805	750	775	1300	957	1220	---	---	---
2	1290	1270	1280	1260	764	1030	1200	985	1100	---	---	---
3	1330	1260	1300	1020	776	900	1040	880	977	---	---	---
4	1280	1250	1260	1300	788	1090	931	848	889	---	---	---
5	1290	1270	1280	1370	1300	1340	976	928	948	997	882	942
6	1310	1270	1300	1370	1320	1350	1210	976	1060	1130	997	1070
7	1290	1270	1280	1330	1110	1230	1340	1210	1290	1250	1130	1200
8	1310	1260	1280	1110	602	875	1370	1280	1330	1340	1250	1320
9	1280	1240	1260	1020	969	999	1390	1370	1380	---	---	---
10	1290	1230	1260	1240	1020	1100	1390	1380	1390	---	---	---
11	1280	1250	1270	1390	1240	1380	1390	1360	1380	1400	1380	1390
12	1290	1250	1270	1470	1340	1420	1380	1210	1320	1420	1370	1390
13	1280	1250	1260	1520	1450	1480	1360	1200	1290	1430	1360	1410
14	1260	1240	1250	1520	1480	1490	1400	1360	1380	1420	1410	1420
15	1270	1200	1240	1480	1460	1470	1380	1320	1350	1530	1380	1420
16	1240	1200	1220	1500	1450	1490	1320	970	1180	1440	1420	1430
17	1240	894	1170	1450	894	1250	1350	1250	1310	1450	1410	1430
18	957	862	906	1370	894	1240	1370	1340	1360	1560	1400	1440
19	1210	957	1100	1350	1210	1270	1360	1320	1350	1440	1420	1430
20	1180	1120	1150	1360	1290	1330	1320	1260	1290	1440	1420	1430
21	1160	1120	1140	1400	1350	1370	1420	1260	1350	1440	1400	1420
22	1190	1080	1150	1400	848	1030	1420	1400	1410	1440	1150	1310
23	1100	425	642	1170	688	994	1420	1410	1420	1400	1280	1350
24	925	704	815	993	558	707	1420	1400	1410	1420	1390	1410
25	962	322	701	606	535	558	1440	1410	1420	1400	733	1060
26	787	440	636	790	606	694	1440	1420	1430	1120	795	975
27	989	787	909	915	524	625	1430	1140	1340	1240	807	1080
28	1070	988	1030	780	597	661	1390	1270	1350	1310	792	1150
29	1120	805	1050	896	643	746	1410	1390	1400	975	845	939
30	---	---	---	895	806	840	1430	1080	1330	1150	975	1050
31	---	---	---	1230	895	1020	---	---	---	1250	1150	1200
MONTH	1330	322	1130	1520	524	1090	1440	848	1290	---	---	---

ARKANSAS RIVER BASIN

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07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1420	1250	1310	734	623	691	1310	1250	1280	1540	1480	1510
2	1500	380	1330	796	235	559	1420	1310	1380	1550	1500	1530
3	1120	308	871	799	361	646	1420	1370	1390	1540	1490	1520
4	1420	1050	1210	1080	759	899	1390	1360	1380	1560	1490	1520
5	1420	1110	1290	1240	1080	1150	1390	1350	1370	1530	1450	1480
6	1370	1210	1280	1300	1240	1280	1420	1360	1400	1700	1500	1570
7	1410	1220	1370	1370	1300	1340	1430	1370	1390	1770	1480	1590
8	1450	1400	1420	1420	1370	1390	1490	1430	1450	2190	1240	1480
9	1460	1440	1450	1430	1410	1420	1480	1400	1440	2040	1450	1600
10	1460	1390	1430	1450	1420	1440	1450	1390	1430	1480	1410	1450
11	1440	1040	1300	1450	1440	1450	1590	1370	1440	1460	1410	1430
12	1450	1200	1370	1470	1440	1450	1570	1370	1440	1480	1410	1450
13	1480	1450	1460	1460	1440	1460	1420	1380	1390	1510	1460	1480
14	1500	1390	1470	1460	1440	1450	1610	1350	1440	1520	1450	1500
15	1480	1400	1440	1450	1420	1430	1510	1410	1470	1540	1470	1500
16	1490	1480	1480	1450	1430	1440	1520	1460	1490	1530	1470	1500
17	1480	337	905	1450	1430	1440	1560	1450	1500	1500	1440	1470
18	815	183	586	1460	1430	1440	1560	1450	1510	1550	1440	1480
19	716	345	629	1460	1410	1440	1510	1470	1490	1520	1440	1480
20	487	163	300	1450	1400	1430	1500	1460	1470	1550	1460	1500
21	767	487	660	1460	835	1230	1600	1460	1520	1510	1480	1500
22	980	572	726	923	244	608	1510	1440	1480	1490	1470	1480
23	1040	956	986	968	620	766	1520	1450	1490	1500	1460	1480
24	1190	1040	1110	1130	968	1080	1540	1480	1500	1460	206	680
25	1260	1160	1210	1160	1110	1130	1520	1480	1500	671	340	534
26	1170	659	1050	1240	1130	1180	1540	1500	1520	877	671	762
27	900	533	779	1340	980	1270	1540	1480	1510	1210	877	1050
28	884	268	704	1220	976	1140	1520	1480	1500	1340	1210	1280
29	560	483	517	1310	707	1030	1560	1490	1530	1360	1290	1330
30	623	486	543	1240	909	1100	1550	1480	1510	1590	1270	1370
31	---	---	---	1330	1170	1260	1510	1480	1490	---	---	---
MONTH	1500	163	1070	1470	235	1190	1610	1250	1450	2190	206	1380
YEAR	2190	163	1260									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.8	16.1	18.9	16.8	13.3	15.3	11.3	6.9	9.2	11.1	7.1	9.0
2	22.4	16.6	19.1	13.3	9.2	11.2	14.9	10.6	12.7	12.1	9.7	10.9
3	20.6	16.4	18.4	12.8	8.1	10.6	13.2	10.0	11.7	10.9	8.3	9.7
4	19.5	13.9	16.7	15.3	9.5	12.4	12.6	9.1	10.8	8.3	3.5	5.1
5	21.6	14.8	18.0	18.9	12.7	15.5	9.1	6.7	7.8	5.7	2.6	4.3
6	23.0	17.7	20.2	20.5	15.5	17.8	7.3	4.3	6.1	6.5	3.4	5.2
7	21.6	15.9	18.9	20.7	16.4	18.4	8.2	4.9	6.7	7.7	3.7	5.9
8	22.7	18.6	20.2	19.6	16.1	17.7	12.0	7.5	9.5	8.9	7.7	8.3
9	24.1	19.1	21.5	18.3	14.4	16.4	12.0	8.0	10.1	9.3	6.4	7.8
10	25.3	19.0	22.1	19.5	14.6	16.9	8.0	6.1	7.1	8.4	5.5	7.1
11	25.5	20.1	22.8	20.9	15.3	17.9	8.1	6.4	7.2	8.2	5.3	7.1
12	25.4	20.2	22.8	21.0	15.6	18.1	10.3	8.1	8.8	10.1	6.4	8.3
13	24.9	19.5	22.1	21.1	15.8	18.3	9.3	6.1	7.6	9.2	6.2	7.6
14	23.8	18.4	21.2	19.6	15.9	17.8	8.3	5.7	6.9	7.2	4.3	5.9
15	24.1	18.4	21.3	17.6	13.5	15.7	7.4	4.1	5.6	10.3	4.7	7.2
16	21.6	17.4	19.9	17.7	12.8	15.4	6.9	4.0	5.4	11.3	9.7	10.6
17	17.4	12.4	14.4	18.3	14.2	16.2	8.1	5.3	6.6	11.0	9.6	10.2
18	16.2	12.5	14.1	18.9	14.1	16.4	9.0	5.7	7.1	9.6	7.7	8.7
19	16.4	11.5	13.9	16.8	13.3	15.0	7.3	5.8	6.5	11.1	8.0	9.3
20	17.4	11.4	14.3	14.8	10.6	12.8	6.3	4.1	5.2	8.6	4.2	6.0
21	19.3	12.8	15.9	15.3	10.4	12.8	6.0	3.0	4.4	7.0	4.2	5.7
22	19.7	14.6	17.0	16.2	13.5	14.8	7.1	3.1	5.0	8.7	5.1	6.9
23	17.7	13.6	15.7	15.1	10.0	12.6	8.0	3.8	5.7	9.5	6.3	7.7
24	17.1	11.6	14.3	10.9	6.9	9.1	8.5	5.4	6.6	6.9	3.4	5.0
25	17.2	12.1	14.7	11.3	6.6	8.8	8.8	5.0	6.7	5.9	3.5	4.8
26	19.6	13.2	16.2	12.3	7.0	9.4	9.8	6.5	7.9	4.6	.9	2.4
27	19.6	15.1	17.3	14.1	8.6	10.9	8.7	5.6	6.9	.9	.0	.5
28	20.9	15.5	18.1	12.9	9.1	11.0	9.0	4.4	6.5	1.5	.2	.8
29	21.2	16.6	18.7	12.3	8.9	10.6	10.6	6.2	8.2	4.2	.3	2.1
30	18.2	13.9	15.4	10.9	7.4	9.2	10.5	8.1	9.3	5.1	1.3	3.3
31	14.9	13.6	14.1	---	---	---	9.2	6.5	8.2	6.9	3.0	5.0
MONTH	25.5	11.4	18.0	21.1	6.6	14.2	14.9	3.0	7.5	12.1	.0	6.4

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	5.9	3.5	4.3	15.2	10.0	12.8	15.3	11.9	13.0	---	---	---
2	6.6	2.2	4.3	13.8	10.5	11.7	15.4	11.3	12.9	---	---	---
3	9.3	4.3	6.7	10.5	8.2	9.4	13.3	11.9	12.5	---	---	---
4	8.0	4.9	6.4	13.0	6.8	9.8	15.3	10.5	12.7	---	---	---
5	7.4	3.0	5.4	14.5	9.7	12.3	18.5	11.9	15.1	21.7	19.3	20.0
6	8.7	4.1	6.6	17.9	11.6	14.8	20.1	14.7	17.5	23.5	19.3	21.0
7	10.9	5.9	8.4	18.5	15.3	17.0	20.1	16.8	18.4	27.2	21.9	24.3
8	11.6	6.4	9.2	17.6	13.5	15.8	17.3	13.2	15.4	26.5	23.5	25.3
9	12.6	7.8	10.5	15.6	11.3	13.9	16.5	13.4	15.1	---	---	---
10	14.4	10.2	12.4	14.2	10.4	11.9	17.6	13.2	15.4	---	---	---
11	12.6	7.2	9.1	12.0	8.5	10.3	17.6	15.4	16.6	27.6	22.4	24.8
12	9.8	4.8	7.4	13.2	8.0	10.8	15.4	13.6	14.3	26.8	23.9	25.1
13	9.2	7.0	8.3	14.8	10.3	12.7	15.7	13.4	14.4	24.1	20.5	22.5
14	9.7	4.6	7.2	15.6	11.7	13.9	17.7	13.5	15.5	23.8	19.3	21.8
15	13.2	7.1	10.1	19.2	13.3	16.1	17.0	15.1	16.1	22.8	19.2	20.5
16	12.3	8.6	10.4	17.7	9.1	13.0	18.1	14.5	16.3	22.8	19.8	21.2
17	11.6	9.2	10.2	9.3	7.7	8.6	19.2	14.5	16.9	23.0	20.9	22.0
18	11.3	6.8	9.5	9.4	8.9	9.2	20.1	16.6	18.6	24.8	20.6	22.5
19	11.2	5.4	7.9	12.4	7.7	9.9	24.9	20.1	22.0	23.3	19.0	20.7
20	11.7	6.5	9.4	15.2	8.9	12.2	23.4	17.1	19.8	25.2	18.3	21.5
21	14.0	9.7	11.8	14.0	11.9	12.5	21.8	16.9	19.5	27.5	22.0	24.7
22	15.5	13.2	14.3	12.3	11.8	12.1	20.9	17.9	19.0	28.5	22.9	25.7
23	15.6	12.3	14.1	14.4	12.2	13.1	20.1	16.0	18.0	29.5	23.8	26.8
24	18.1	12.0	15.3	15.6	12.5	14.1	21.7	16.9	19.3	31.4	25.7	28.6
25	17.0	14.3	15.8	19.9	13.8	16.7	22.8	18.5	20.7	30.3	24.4	25.8
26	14.3	11.4	12.7	22.1	16.5	19.2	21.7	18.4	20.1	27.0	23.3	25.1
27	14.7	8.5	11.8	20.2	16.0	18.4	21.8	18.4	20.3	28.2	24.2	26.2
28	15.1	10.5	12.9	19.6	15.4	17.4	22.9	18.1	20.5	28.3	23.6	26.2
29	15.6	11.7	13.3	16.3	13.4	14.2	22.1	18.9	19.9	28.8	23.7	26.5
30	---	---	---	15.4	12.4	13.7	19.5	17.3	18.2	30.1	24.3	27.2
31	---	---	---	15.7	12.3	14.2	---	---	---	30.6	25.1	27.9
MONTH	18.1	2.2	9.9	22.1	6.8	13.3	24.9	10.5	17.1	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	30.4	25.2	28.0	29.5	25.4	27.5	32.3	25.1	28.8	32.6	25.5	28.8
2	29.1	24.0	26.2	28.5	24.6	25.9	32.7	25.8	29.4	32.1	26.1	29.0
3	24.9	23.6	24.1	29.3	25.0	26.8	31.9	26.1	29.2	32.7	26.4	29.4
4	27.8	23.5	25.3	30.3	26.3	28.3	31.4	26.5	28.8	31.5	26.2	28.9
5	27.0	23.1	25.1	30.4	25.8	28.3	31.6	24.9	28.3	31.3	25.4	28.0
6	26.3	21.7	24.2	31.7	26.6	29.2	32.5	25.6	29.2	30.5	23.6	26.8
7	27.0	22.3	24.8	32.2	27.6	30.0	32.8	25.7	29.2	30.6	23.0	26.5
8	27.5	21.9	24.9	32.2	27.6	30.1	32.7	25.3	28.8	31.2	22.8	26.6
9	27.0	23.8	25.5	32.1	27.7	30.0	33.5	25.6	29.5	29.5	23.9	26.4
10	25.7	23.7	24.3	31.7	26.8	29.4	34.1	27.0	30.4	30.6	23.9	26.9
11	27.0	22.9	24.6	32.5	27.4	30.0	34.1	27.7	30.9	30.4	24.0	26.9
12	29.5	24.9	27.1	31.4	28.2	29.6	33.9	27.2	30.5	31.3	24.3	27.4
13	29.5	25.1	27.3	33.6	28.5	30.9	33.4	27.1	30.2	30.6	24.4	27.3
14	28.1	23.4	25.9	33.7	27.7	30.8	31.4	24.8	28.2	30.4	24.5	27.0
15	29.3	23.8	26.6	34.6	28.0	31.3	32.5	27.3	29.4	27.0	21.6	24.3
16	27.8	22.3	25.0	33.9	28.8	31.5	33.0	26.2	29.6	26.4	19.7	22.9
17	22.3	18.0	19.4	31.7	27.0	29.2	32.4	26.1	29.3	26.3	20.0	22.9
18	21.2	18.9	19.8	30.5	26.3	28.3	31.8	25.1	28.5	25.3	19.4	22.1
19	23.6	20.7	22.0	33.8	26.6	29.9	31.0	25.3	28.2	25.4	17.8	21.2
20	26.8	22.7	24.6	32.5	27.6	30.1	30.5	22.9	26.7	24.0	18.5	20.9
21	26.1	23.2	24.3	29.9	24.7	27.2	31.5	23.5	27.4	24.8	17.0	20.6
22	27.5	21.9	24.4	28.3	22.9	25.2	31.7	24.6	28.1	28.5	21.1	24.1
23	29.5	25.0	27.2	28.6	24.2	26.1	32.5	25.7	29.0	25.0	20.3	23.3
24	30.9	25.7	28.2	30.8	24.0	27.3	33.0	25.8	29.3	20.3	15.0	17.3
25	30.1	25.6	27.2	29.2	23.6	26.7	32.7	25.9	29.3	18.3	11.9	14.9
26	26.9	25.1	26.0	31.3	23.9	27.6	32.6	25.2	28.8	21.1	13.3	17.1
27	25.8	24.0	25.0	29.8	24.7	26.1	31.9	24.5	28.1	23.3	15.4	19.0
28	25.3	23.4	24.1	30.3	23.4	26.3	32.0	24.6	28.3	24.6	16.8	20.4
29	25.1	23.1	24.0	29.3	25.4	27.5	32.5	25.0	28.6	24.5	17.9	20.9
30	28.1	22.9	25.2	30.5	24.8	27.6	30.8	25.5	28.4	23.2	16.8	19.9
31	---	---	---	31.0	24.7	28.0	30.6	24.8	27.7	---	---	---
MONTH	30.9	18.0	25.0	34.6	22.9	28.5	34.1	22.9	28.9	32.7	11.9	23.9

ARKANSAS RIVER BASIN

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07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	11.0	6.3	8.5	6.9	5.1	6.1	12.6	10.4	11.5	---	---	---
2	11.1	5.4	8.2	8.7	6.7	8.0	11.6	9.4	10.5	---	---	---
3	---	---	---	9.8	7.7	8.8	9.5	7.3	8.3	---	---	---
4	---	---	---	9.6	6.9	8.5	9.8	7.2	8.5	---	---	---
5	---	---	---	9.4	7.6	8.3	10.6	9.2	10.0	---	---	---
6	---	---	---	9.4	6.7	8.1	11.7	10.6	11.3	---	---	---
7	---	---	---	10.8	6.2	8.1	11.6	10.8	11.2	12.8	11.6	12.3
8	---	---	---	12.5	6.5	9.1	11.0	9.6	10.6	11.6	10.8	11.2
9	---	---	---	12.2	7.4	9.3	10.0	8.3	9.1	11.7	10.7	11.2
10	---	---	---	10.8	6.9	8.3	10.6	8.3	9.9	12.5	11.0	11.7
11	---	---	---	9.1	5.6	7.2	10.4	10.0	10.2	12.5	11.3	11.8
12	---	---	---	9.9	5.4	7.6	10.0	7.5	9.5	12.4	11.2	11.7
13	---	---	---	10.8	6.0	7.9	10.3	9.8	10.1	12.6	11.2	12.0
14	---	---	---	12.4	5.7	8.3	10.4	8.2	9.7	13.6	12.2	12.8
15	11.0	6.5	8.4	12.8	5.8	9.0	10.7	8.2	9.5	12.9	10.9	12.3
16	11.8	6.0	8.5	12.8	7.5	9.6	10.7	9.8	10.5	11.1	10.6	10.8
17	11.3	7.8	9.5	13.7	8.3	10.7	10.3	19.4	10.0	11.7	10.5	11.1
18	11.4	7.7	9.4	12.6	9.3	11.0	---	---	---	11.9	10.9	11.3
19	11.6	7.6	9.6	14.2	9.3	11.3	---	---	---	11.7	11.0	11.3
20	11.8	8.2	9.8	15.1	10.0	11.9	---	---	---	13.1	11.3	12.4
21	12.0	7.8	9.6	14.7	10.1	12.0	---	---	---	13.1	12.3	12.6
22	11.7	6.6	9.2	12.9	9.6	10.6	---	---	---	12.7	11.8	12.3
23	11.6	7.3	9.3	11.3	8.7	10.3	---	---	---	12.6	11.7	12.1
24	12.2	7.0	9.8	12.6	10.2	11.5	---	---	---	14.0	11.9	13.1
25	12.0	8.0	9.8	12.1	10.7	11.3	---	---	---	13.9	12.8	13.3
26	11.5	7.3	9.2	12.5	10.8	11.4	---	---	---	15.0	13.1	14.0
27	10.5	6.6	8.5	12.0	7.7	10.3	---	---	---	15.3	14.3	15.0
28	9.7	6.7	8.1	11.7	10.2	10.9	---	---	---	15.2	14.5	15.0
29	9.0	6.4	7.6	12.1	9.0	10.8	---	---	---	14.9	13.8	14.4
30	7.1	4.5	6.0	12.6	10.3	11.4	---	---	---	13.9	12.8	13.5
31	6.8	6.0	6.3	---	---	---	---	---	---	13.2	12.3	12.8
MONTH	---	---	---	15.1	5.1	9.6	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	12.8	12.0	12.4	11.2	10.0	10.6	11.4	10.1	10.7	---	---	---
2	13.6	12.2	12.9	11.6	10.0	10.6	11.7	10.2	10.9	---	---	---
3	13.0	11.1	12.1	11.3	10.1	10.6	10.8	10.2	10.5	---	---	---
4	13.2	10.7	12.2	12.4	11.0	11.7	11.2	10.2	10.8	---	---	---
5	13.6	11.8	12.8	12.3	10.6	11.4	11.0	9.6	10.4	9.1	7.9	8.5
6	13.4	11.8	12.6	12.0	9.8	11.0	10.4	9.4	9.9	11.1	8.5	9.5
7	13.1	11.2	12.0	10.9	9.3	10.0	10.6	9.3	9.9	13.9	7.7	10.3
8	13.4	11.0	12.0	9.5	8.2	9.0	11.5	9.7	10.6	10.7	7.3	8.8
9	13.5	10.5	11.9	11.7	8.7	10.2	11.5	10.0	10.6	---	---	---
10	13.2	9.6	11.0	11.5	9.6	10.6	11.3	9.7	10.5	---	---	---
11	14.3	8.6	11.7	11.7	10.2	11.0	10.8	9.3	10.0	10.1	6.9	8.2
12	14.9	11.2	12.7	11.4	10.1	10.9	10.9	9.7	10.2	9.7	6.5	8.0
13	14.7	10.1	12.4	11.9	10.2	11.0	11.3	9.8	10.4	10.7	7.1	8.7
14	15.0	10.9	12.8	11.2	9.6	10.5	11.5	9.9	10.6	11.5	7.6	9.3
15	14.6	9.8	12.1	11.5	9.0	10.2	11.1	9.6	10.2	11.6	7.4	9.3
16	12.9	8.5	10.5	11.1	8.7	10.0	10.7	8.2	9.6	11.6	7.8	9.4
17	11.7	5.6	9.5	11.4	10.6	11.0	11.4	9.4	10.2	9.3	7.6	8.4
18	8.0	4.6	6.7	11.6	10.4	11.0	10.9	9.1	10.0	12.3	7.3	9.4
19	11.4	7.3	9.6	11.3	10.1	10.9	10.4	8.3	9.7	11.3	7.5	9.3
20	12.0	8.8	10.8	10.9	9.1	10.2	11.9	8.3	10.0	12.2	8.1	9.9
21	12.4	8.1	10.0	10.2	9.0	9.8	12.6	9.6	10.9	12.6	7.2	9.7
22	---	---	---	11.2	8.6	10.1	11.8	9.7	10.6	12.4	7.0	9.0
23	---	---	---	11.1	9.4	10.4	12.2	10.3	11.1	13.3	6.3	9.7
24	---	---	---	9.4	9.0	9.2	12.3	10.1	11.1	11.0	6.3	8.5
25	11.0	7.5	8.9	---	---	---	12.1	9.9	10.9	7.1	2.2	4.9
26	10.4	8.7	9.7	---	---	---	12.0	9.9	10.8	8.5	6.1	6.9
27	12.0	10.1	11.0	9.5	8.1	8.9	12.2	9.2	10.2	11.3	6.2	8.3
28	12.4	9.7	10.9	9.1	7.2	8.3	12.3	9.6	10.8	10.7	6.4	8.1
29	11.9	9.9	10.6	10.0	8.2	9.3	12.1	9.7	10.8	10.5	6.8	8.4
30	---	---	---	11.7	9.9	10.7	11.4	8.8	10.1	12.5	6.8	9.4
31	---	---	---	11.7	10.0	10.9	---	---	---	12.1	6.3	8.9
MONTH	---	---	---	---	---	---	12.6	8.2	10.4	---	---	---

ARKANSAS RIVER BASIN

07241520 NORTH CANADIAN RIVER AT BRITTON ROAD AT OKLAHOMA CITY, OK--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]



High flow measurement equipment

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK

LOCATION.--Lat 35°30'01", long 97°11'37", in SW 1/4 NW 1/4 sec.22, T.12 N., R.1 E., Oklahoma County, Hydrologic Unit 11100302, on left bank downstream side county road bridge, 2.2 mi northwest of Harrah, 3.8 mi downstream from Choctaw Creek, and at mile 230.0.

DRAINAGE AREA.--13,501 mi², of which 4,899 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Datum of gage is 1,055.69 ft above sea level. June 19, 1981 to May 31, 1987, gage 0.8 mi downstream at same datum.

REMARKS.--Records poor. Flow regulated by Canton Lake (station 07238500) and by Lake Overholser (station 07240500) where diversions are made into Lake Hefner Canal (station 07240000). Low flow sustained in part by sewage effluent from Oklahoma City. U.S. Geological Survey's satellite telemeter located at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e184	e289	e169	e249	e220	e439	e1100	7820	366	e864	267	e160
2	e180	e197	182	e245	e205	556	e1270	3670	e375	e1550	255	e145
3	e178	e187	188	e231	e199	e547	e1490	1620	1320	2480	e243	e136
4	e179	e155	e724	e247	e193	e530	e1930	1600	723	1280	e232	e134
5	e178	e137	e399	e234	e201	e530	937	1090	e523	918	e213	e136
6	e176	e125	e210	e229	e199	e464	e1020	804	e489	784	e212	134
7	170	e129	e238	e179	e198	e412	e937	741	460	e703	e211	e146
8	e183	e121	e226	e186	e196	392	e1090	883	e499	e636	e204	e145
9	e201	e151	e1580	e174	e192	e375	e1250	e1000	e427	e603	202	e140
10	e182	e175	e1290	e163	e188	e574	e1020	888	e395	e583	199	e151
11	e176	e131	e512	e193	e199	e769	929	754	e440	e596	193	e145
12	e172	e129	e249	e237	e199	e724	e1020	799	e609	e583	e190	147
13	167	e137	e198	e234	e196	e655	984	707	e462	596	e240	e156
14	e168	e177	e160	e233	e191	e639	e1030	e609	454	e563	207	e150
15	e166	e167	178	e216	e187	e555	e1020	e481	e449	e455	204	e146
16	e164	e155	e170	e203	182	e684	e1030	e455	e368	e335	196	e141
17	e161	135	e168	e195	e170	e616	e1010	565	e726	e299	194	e143
18	e163	e127	e163	e186	e228	e749	e1020	e386	2200	e365	195	e145
19	e163	e129	e166	e179	e174	e937	897	e408	915	375	195	e140
20	e165	e127	e172	e176	e147	e834	636	e439	e585	e289	199	e141
21	e163	e145	e175	e173	e187	e715	604	e370	368	e241	187	139
22	e164	e153	e181	e172	e169	588	e847	e404	e527	e687	190	e147
23	e163	e205	e183	e175	464	e870	e911	389	e843	e1160	190	e147
24	e162	e153	e189	e172	e191	e1040	e912	e315	e726	e396	180	e285
25	e163	e129	e189	e171	e503	e2270	904	e330	e679	e297	180	514
26	e163	e115	e189	e172	e285	e819	e883	e519	e609	e294	177	237
27	e163	e137	e188	e185	e252	e643	e843	e730	e825	e274	172	e182
28	e161	e185	185	e196	e232	e920	e952	e361	e1820	e284	170	e157
29	e159	e178	e182	e195	259	e610	e860	e721	e1280	e309	174	e152
30	e711	e179	e178	e219	---	e962	926	366	e1760	e416	174	e139
31	e424	---	e227	272	---	e945	---	e360	---	e316	177	---
TOTAL	6072	4659	9408	6291	6406	22363	30262	30584	22222	19531	6222	4980
MEAN	196	155	303	203	221	721	1009	987	741	630	201	166
MAX	711	289	1580	272	503	2270	1930	7820	2200	2480	267	514
MIN	159	115	160	163	147	375	604	315	366	241	170	134
AC-FT	12040	9240	18660	12480	12710	44360	60020	60660	44080	38740	12340	9880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2000, BY WATER YEAR (WY)

	436	393	336	321	379	605	604	975	940	406	281	320
MEAN	436	393	336	321	379	605	604	975	940	406	281	320
MAX	3634	1627	1209	1351	1293	2596	2312	4265	4041	1154	1228	1699
(WY)	1987	1975	1992	1998	1987	1990	1988	1993	1989	1989	1989	1989
MIN	71.3	56.7	68.1	58.3	61.1	76.1	76.6	79.5	75.5	87.7	54.5	64.0
(WY)	1970	1970	1977	1970	1970	1971	1971	1971	1972	1970	1972	1972

e Estimated

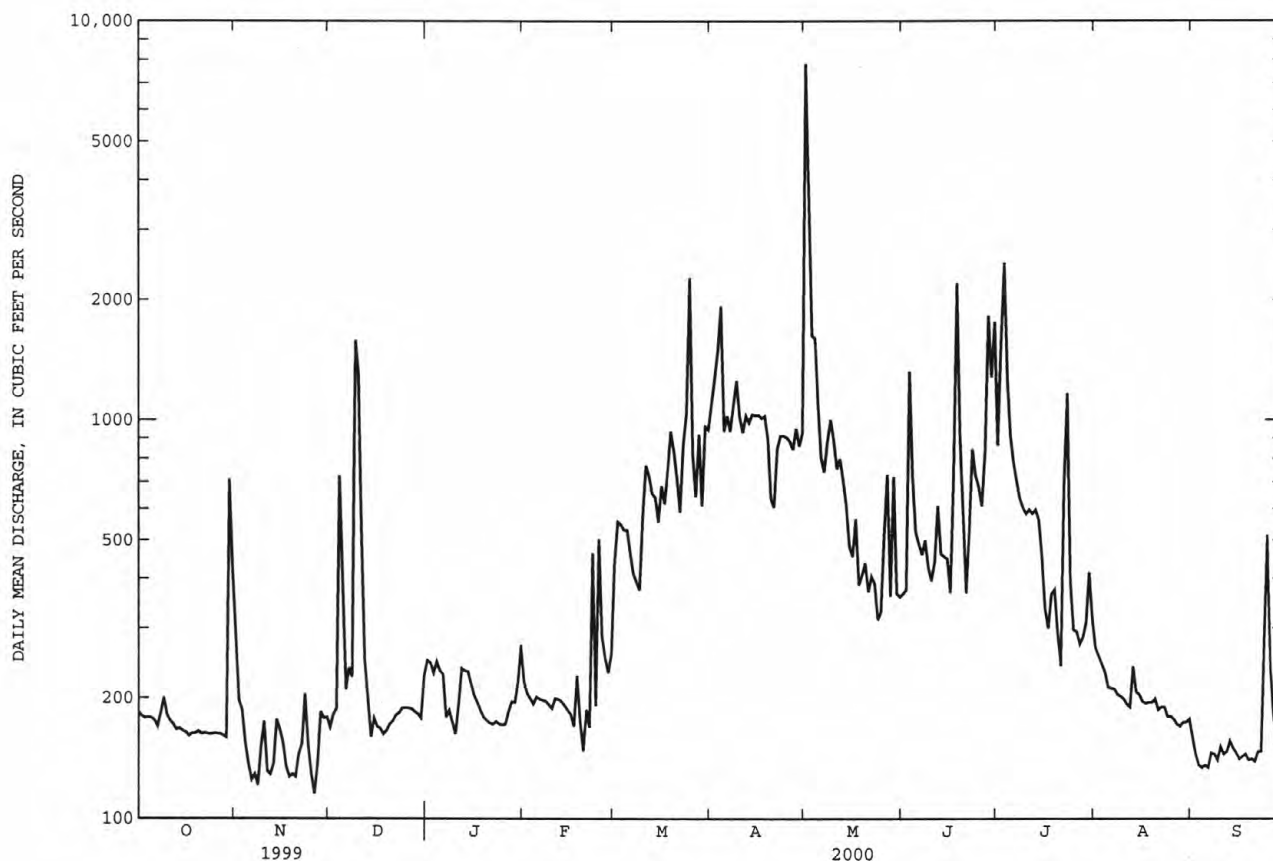
ARKANSAS RIVER BASIN

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07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1969 - 2000	
ANNUAL TOTAL	261906		169000		500	
ANNUAL MEAN	718		462		1322	
HIGHEST ANNUAL MEAN					93.0	
LOWEST ANNUAL MEAN					1972	
HIGHEST DAILY MEAN	7990	Apr 26	7820	May 1	20000	May 29 1987
LOWEST DAILY MEAN	115	Nov 26	115	Nov 26	28	Aug 8 1972
ANNUAL SEVEN-DAY MINIMUM	137	Nov 6	137	Nov 6	31	Jul 30 1972
INSTANTANEOUS PEAK FLOW			11100	May 1	27200	May 29 1987
INSTANTANEOUS PEAK STAGE			16.15	May 1	^a 22.64	May 29 1987
ANNUAL RUNOFF (AC-FT)	519500		335200		362000	
10 PERCENT EXCEEDS	1380		947		1080	
50 PERCENT EXCEEDS	480		232		225	
90 PERCENT EXCEEDS	163		149		72	

^aAt present site.



ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1968 to current year.

pH: October 1988 to current year.

WATER TEMPERATURE: October 1968 to current year.

DISSOLVED OXYGEN: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1988.

REMARKS.--Interruptions in record were due to malfunctions of the recording instrument and extended periods of excessive movement of sand impeding streamflow from passing by the sensors. Samples were collected monthly and specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily (observed), 4,700 microsiemens, Sept. 25, 1980; minimum, 125 microsiemens, Apr. 21, 1990.

pH: Maximum, 9.5 units, June 13, 14, 1996, Sept. 3, 1999; minimum, 6.9 units, Apr. 27, 1990.

WATER TEMPERATURE: Maximum daily (observed), 36.0°C, July 11, 1982; minimum, 0.0°C on several days during winter periods.

DISSOLVED OXYGEN: Maximum, 22.9 mg/L, Sept. 24, 1999; minimum, 1.0 mg/L, July 3, 1991.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,680 microsiemens, Oct. 30; minimum recorded, 238 microsiemens, May 1.

pH: Maximum recorded, 9.3 units, Aug. 17, 25; minimum recorded, 7.1 units, Oct. 30.

WATER TEMPERATURE: Maximum, 34.6°C, Aug. 12; minimum, 2.2°C Jan. 27.

DISSOLVED OXYGEN: Maximum recorded, 20.1 mg/L, Aug. 3; minimum recorded, 2.1 mg/L, June 1.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
13...	1227	1028	1028	6.91	573	736	13.8	8.6	1390	31.4	10
13...	1229	1028	1028	6.91	573	736	12.9	8.6	1390	30.9	20
13...	1231	1028	1028	6.91	573	736	13.0	8.6	1400	30.9	30
13...	1233	1028	1028	6.91	573	736	13.1	8.6	1390	31.0	40
13...	1235	1028	1028	6.91	573	736	13.2	8.6	1390	31.2	50
13...	1237	1028	1028	6.91	573	736	13.0	8.6	1390	31.2	60
13...	1239	1028	1028	6.91	573	736	12.9	8.6	1390	31.3	70
13...	1245	1028	1028	6.91	573	736	13.0	8.6	1390	31.3	110
13...	1247	1028	1028	6.91	573	736	13.4	8.6	1390	31.4	120
13...	1249	1028	1028	6.91	573	736	13.4	8.6	1390	31.1	130
13...	1251	1028	1028	6.91	573	736	13.3	8.6	1390	31.1	140
13...	1253	1028	1028	6.91	573	736	13.3	8.6	1390	31.3	150
13...	1255	1028	1028	6.91	573	736	13.4	8.6	1390	31.4	160
13...	1257	1028	1028	6.91	573	736	13.5	8.6	1390	31.4	170
13...	1259	1028	1028	6.91	573	736	13.0	8.6	1390	31.3	180
OCT											
13...	1340	80020	1028	5.53	157	747	171	14.4	8.4	1070	23.0
NOV											
17...	1100	80020	1028	5.63	182	745	105	10.1	8.0	1090	16.0
DEC											
15...	1445	80020	1028	5.75	212	750	112	12.9	8.0	805	8.3
JAN											
31...	1430	80020	1028	5.64	185	744	124	14.2	7.8	1330	8.1
FEB											
29...	1350	80020	1028	5.85	237	727	126	11.9	8.3	958	15.4
MAR											
22...	1035	80020	1028	6.85	432	735	96	9.8	8.2	1220	12.5
APR											
11...	1230	80020	1028	7.42	852	737	106	9.9	8.3	1340	16.9
MAY											
10...	1105	80020	1028	7.73	958	730	98	8.3	8.2	1130	21.2
JUN											
14...	1300	80020	1028	6.64	454	727	124	9.6	8.3	1310	25.3
JUL											
19...	1125	80020	1028	6.39	363	732	125	9.4	8.4	1260	27.2
AUG											
09...	1120	80020	1028	5.90	219	736	153	11.6	8.7	1190	27.4
SEP											
06...	1330	80020	1028	5.62	153	735	157	12.0	8.7	1130	27.3

ARKANSAS RIVER BASIN

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07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	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)	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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA- LITY 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)
OCT 13...	--	--	--	--	--	--	--	--	198	179	198	10
NOV 17...	270	52	63.4	27.4	9.0	3	114	47	217	220	268	0
DEC 15...	--	--	--	--	--	--	--	--	191	182	222	0
JAN 31...	--	--	--	--	--	--	--	--	183	174	212	0
FEB 29...	290	76	68.2	27.8	6.7	3	97.3	42	219	209	244	6
MAR 22...	--	--	--	--	--	--	--	--	204	196	239	0
APR 11...	--	--	--	--	--	--	--	--	219	199	226	8
MAY 10...	340	130	83.8	31.0	6.2	2	97.7	38	211	205	235	7
JUN 14...	--	--	--	--	--	--	--	--	189	179	218	0
JUL 19...	--	--	--	--	--	--	--	--	208	186	217	5
AUG 09...	310	120	69.6	33.7	8.8	3	135	47	190	195	215	11
SEP 06...	--	--	--	--	--	--	--	--	150	147	155	12
DATE	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN DIS- SOLVED (MG/L AS N) (00602)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 13...	--	--	--	--	.89	.036	2.19	.86	.05	3.2	9.70	2.30
NOV 17...	136	1.0	9.9	131	1.2	.110	2.56	1.1	.14	3.8	11.3	2.62
DEC 15...	--	--	--	--	1.5	.586	3.32	.96	.75	5.0	14.7	3.41
JAN 31...	--	--	--	--	1.8	.385	2.56	1.4	.50	4.4	11.3	2.63
FEB 29...	110	.7	6.8	134	.61	<.020	1.86	--	--	2.5	8.25	1.90
MAR 22...	--	--	--	--	.84	.047	1.90	.80	.06	2.8	8.42	1.92
APR 11...	--	--	--	--	.69	.039	.807	.65	.05	1.5	3.57	.821
MAY 10...	135	.6	14.4	172	1.7	.166	.089	1.5	.21	1.8	.394	.112
JUN 14...	--	--	--	--	.43	<.020	.879	--	--	1.3	3.89	.904
JUL 19...	--	--	--	--	.87	.045	.749	.83	.06	1.6	3.32	.768
AUG 09...	160	.8	12.2	163	1.5	.076	1.05	1.4	.10	2.6	4.63	1.08
SEP 06...	--	--	--	--	.84	<.020	4.04	--	--	5.0	17.9	4.14

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00671)	CARBON DIOXIDE DIS- SOLVED (MG/L AS CO2) (00405)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L) (00310)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT 13...	.361	.110	2.46	.824	.802	1.5	--	12	21	--	--	--
NOV 17...	.204	.062	2.28	.847	.744	4.6	8.2	4.1	30	.88	318	648
DEC 15...	.325	.099	2.15	.782	.702	3.7	--	5.6	24	--	--	--
JAN 31...	.220	.067	.475	.225	.155	5.6	--	6.4	58	--	--	--
FEB 29...	.125	.038	.432	.172	.141	2.0	14	9.9	44	.83	389	608
MAR 22...	.053	.016	.800	.317	.261	2.4	--	6.8	104	--	--	--
APR 11...	.046	.014	.632	.223	.206	1.9	--	3.5	198	--	--	--
MAY 10...	.076	.023	.328	.321	.107	2.3	13	--	97	.96	1820	704
JUN 14...	.082	.025	1.10	.396	.359	1.7	--	3.1	101	--	--	--
JUL 19...	.062	.019	1.28	.445	.417	1.4	--	5.3	70	--	--	--
AUG 09...	.122	.037	1.74	.642	.567	.7	12	12	43	.99	432	730
SEP 06...	.348	.106	2.14	.793	.698	.5	--	6.8	13	--	--	--
DATE	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 13...	--	3.2	3900	K20000	--	--	--	--	--	--	--	--
NOV 17...	639	7.4	--	--	3.8	101	<2	<8.0	<14.0	<13	E6	10
DEC 15...	--	8.2	970	210	--	--	--	--	--	--	--	--
JAN 31...	--	28	170	150	--	--	--	--	--	--	--	--
FEB 29...	587	35	160	160	2.6	130	<2	<8.0	<14.0	<13	<10	<10
MAR 22...	--	40	1100	8800	--	--	--	--	--	--	--	--
APR 11...	--	62	620	450	--	--	--	--	--	--	--	--
MAY 10...	665	31	3100	1600	4.2	166	<2	<8.0	<14.0	<13	<10	30
JUN 14...	--	39	500	550	--	--	--	--	--	--	--	--
JUL 19...	--	35	140	56	--	--	--	--	--	--	--	--
AUG 09...	707	22	90	96	5.8	128	<2	<8.0	<14.0	<13	E8	<10
SEP 06...	--	<.5	170	97	--	--	--	--	--	--	--	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CARBOX- IN WATER WHOLE RECOV- ERABLE (UG/L) (30245)	CHLOR- DANE, TECH- NICAL TOTAL (UG/L) (39350)	CHLOR- PYRIFOS TOTAL RECOVER (UG/L) (38932)	CYAN- AZINE TOTAL (UG/L) (81757)	CYCLO- ATE WATER WHOLE RECOV- ERABLE (UG/L) (30254)	DEETHYL ATRA- ZINE, WATER, WHOLE, TOTAL (UG/L) (75981)	DEF TOTAL (UG/L) (39040)	DE-ISO PROPYL ATRAZIN WATER, WHOLE, TOTAL (UG/L) (75980)	DI- AZINON, TOTAL (UG/L) (39570)	DI- ELDRIN TOTAL (UG/L) (39380)	DIPHEN- AMID WATER WHOLE RECOV- ERABLE (UG/L) (30255)	DISUL- FOTON UNFLT RECOVER (UG/L) (39011)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	--	<.1	<.01	<.2	<.1	<.2	<.02	<.2	.03	.001	<.1	<.03
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 29...	<.2	<.1	E.01	<.2	<.1	<.2	<.02	<.2	.04	.003	<.1	<.07
MAR 22...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	<.2	<.1	<.01	<.2	<.1	<.2	<.02	<.2	.06	.002	<.1	<.03
JUN 14...	--	--	<.01	--	--	--	<.02	--	.06	--	--	<.03
JUL 19...	--	--	<.01	--	--	--	<.02	--	.04	--	--	<.03
AUG 09...	<.2	.2	<.01	<.2	<.1	<.2	<.02	<.2	E.01	.002	<.1	<.03
SEP 06...	--	--	<.01	--	--	--	<.02	--	.05	--	--	<.03

DATE	ENDO- SULFAN I TOTAL (UG/L) (39388)	ENDRIN WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	FONOFOS (DY- FONATE) WATER WHOLE TOT.REC (UG/L) (82614)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEXAZI- NONE WATER WHOLE RECOV- ERABLE (UG/L) (30264)	ISODRIN SUR SCD 1398 WTR, UNFLTRD PERCENT (90571)	ISO- FENFOS, SUR SCD 1319 WTR, UNFLTRD PERCENT (90712)	LINDANE TOTAL (UG/L) (39340)	MALA- THION, TOTAL (UG/L) (39530)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)
OCT 13...	--	--	--	--	--	--	--	--	--	--	--	--
NOV 17...	<.001	<.001	<.01	<.01	<.001	<.001	<.2	62	73	.015	<.03	<.01
DEC 15...	--	--	--	--	--	--	--	--	--	--	--	--
JAN 31...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 29...	<.001	<.001	<.01	<.01	.001	<.001	<.2	68	103	.009	<.03	<.01
MAR 22...	--	--	--	--	--	--	--	--	--	--	--	--
APR 11...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 10...	<.001	<.001	<.01	<.01	.001	<.001	<.2	88	90	.002	<.03	<.01
JUN 14...	--	--	<.01	<.01	--	--	--	--	81	--	<.03	--
JUL 19...	--	--	<.01	<.01	--	--	--	--	72	--	<.03	--
AUG 09...	<.001	<.001	<.01	<.01	.001	<.001	<.2	92	33	.007	<.03	<.01
SEP 06...	--	--	<.01	<.01	--	--	--	--	103	--	<.03	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	967	877	924	776	521	605	1240	1140	1180	1150	1050	1110
2	1010	967	988	789	755	768	1250	990	1100	1210	1150	1190
3	1010	945	985	873	768	801	1030	597	952	1220	1200	1210
4	1020	963	988	988	873	940	749	572	640	1240	1100	1180
5	1040	945	992	1030	988	1010	764	392	478	1250	1140	1230
6	1040	991	1010	1080	1000	1030	711	507	584	1230	1180	1200
7	1050	1010	1030	1100	1080	1090	842	711	781	1200	1170	1190
8	1140	1000	1040	1090	1050	1080	921	839	894	1180	1100	1130
9	1100	1020	1050	1080	1020	1050	839	325	629	1180	1060	1140
10	1120	936	1010	1170	1000	1100	477	325	415	1220	1060	1140
11	1030	966	1010	1130	1020	1060	525	464	480	1200	1110	1150
12	1050	1000	1030	1040	1020	1020	623	525	583	1200	1140	1180
13	1090	1050	1060	1110	1020	1070	722	618	673	1210	1190	1200
14	1110	1050	1090	1370	1040	1160	819	722	769	1220	1190	1200
15	1130	1080	1110	1380	1140	1210	884	819	864	1220	1190	1200
16	1150	1110	1130	1170	1100	1120	945	882	926	1230	1200	1210
17	1150	1090	1120	1130	1070	1100	1000	931	956	1200	1170	1190
18	1150	1090	1110	1120	1080	1100	1010	952	975	1180	1160	1170
19	1130	1070	1100	1090	1020	1050	1050	968	1000	1180	1120	1160
20	1140	1070	1090	1180	1060	1120	1030	971	997	1180	1140	1170
21	1110	1080	1090	1330	1150	1210	1030	970	993	1230	1150	1200
22	1120	1090	1110	1240	1180	1210	1050	981	1020	1190	1160	1180
23	1190	1120	1150	1390	1190	1230	1070	1010	1030	1190	1170	1180
24	1250	1190	1230	1400	1120	1220	1060	988	1030	1190	1160	1180
25	1330	1250	1290	1380	1120	1230	1110	1060	1080	1170	1140	1160
26	1420	1300	1350	1160	1080	1130	1060	997	1030	1300	1120	1160
27	1430	1340	1390	1230	1050	1150	1040	984	1010	1200	1110	1140
28	1490	1400	1440	1660	1230	1410	1030	960	996	1270	1100	1160
29	1540	1370	1460	1420	1230	1330	1060	990	1020	1360	1250	1310
30	1680	1030	1350	1380	1240	1300	1090	985	1030	1510	1360	1420
31	1030	495	535	---	---	---	1160	1050	1080	1480	1200	1340
MONTH	1680	495	1110	1660	521	1100	1250	325	877	1510	1050	1190

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1200	1120	1140	1040	774	929	1240	938	1110	866	238	334
2	1140	1090	1120	857	730	757	1250	979	1100	392	335	368
3	1120	1090	1100	1140	857	993	1150	973	1040	534	392	458
4	1150	1110	1130	921	781	841	1010	846	896	777	534	688
5	1130	1100	1120	1230	921	1130	931	862	903	803	617	672
6	1140	1120	1130	1260	1220	1240	1010	931	963	891	624	726
7	1150	1100	1130	1240	1170	1210	1220	1010	1120	995	780	852
8	1200	1100	1130	---	---	---	1300	1220	1270	1210	973	1120
9	1150	1130	1140	943	686	812	1330	1260	1300	1200	905	1030
10	1150	1120	1130	1080	933	981	1340	1330	1340	1260	975	1140
11	1140	1120	1130	1320	1040	1160	1350	1330	1330	1210	1100	1130
12	1140	1120	1130	1360	1240	1290	1340	1300	1330	1370	1200	1330
13	1150	1130	1140	1380	1300	1340	1300	1180	1240	1390	1340	1360
14	1140	1120	1130	1440	1360	1400	1340	1220	1300	1380	1330	1350
15	1140	1110	1130	1370	1340	1350	1350	1330	1340	1350	1250	1310
16	1140	1110	1130	1420	1340	1360	1330	1030	1280	1290	1240	1260
17	1120	1080	1100	1410	1200	1320	1280	1030	1190	1350	1280	1310
18	1170	939	1070	1240	913	1080	1330	1280	1310	1350	1240	1290
19	959	897	927	1260	1130	1210	1350	1280	1320	1310	1240	1280
20	1120	903	1020	1240	1140	1190	1290	1210	1250	1320	1300	1310
21	1130	1090	1110	1230	1130	1170	1250	1200	1220	1310	1280	1300
22	---	---	---	1250	844	1120	1350	1230	1320	1300	1240	1270
23	---	---	---	1110	935	1030	1350	1330	1340	1270	1060	1170
24	761	553	636	1140	641	892	1340	1330	1330	1220	1110	1190
25	896	761	812	671	625	640	1340	1310	1330	1260	1170	1200
26	949	475	607	730	652	692	1340	1320	1330	1260	817	960
27	796	649	702	878	660	772	1330	1280	1300	929	842	884
28	925	796	875	719	612	649	1320	1080	1190	1030	846	918
29	1020	924	952	855	691	758	1260	1220	1240	1070	833	955
30	---	---	---	830	692	786	1260	624	1130	943	867	908
31	---	---	---	938	830	874	---	---	---	1020	943	982
MONTH	---	---	---	---	---	---	1350	624	1220	1390	238	1030

ARKANSAS RIVER BASIN

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07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	1140	1020	1090	788	594	692	1100	910	1030	1190	1140	1160
2	1220	1130	1170	877	386	800	1080	912	1010	1170	1100	1130
3	1320	681	950	393	306	348	1180	1050	1140	1180	1050	1120
4	755	689	716	408	374	389	1210	1150	1180	1140	1040	1090
5	818	755	782	491	408	438	---	---	---	1160	1060	1120
6	932	818	857	1160	491	881	---	---	---	1200	1060	1130
7	1260	932	1060	1240	1160	1190	---	---	---	1160	1100	1130
8	1420	1240	1320	1260	1210	1230	---	---	---	1170	1080	1130
9	1440	1410	1430	1290	1250	1270	---	---	---	1120	1040	1080
10	1450	1420	1440	1320	1230	1290	---	---	---	1320	1050	1170
11	1440	1360	1410	1340	1310	1320	1220	1110	1150	1160	1080	1120
12	1430	1130	1260	1340	1320	1330	1380	1080	1220	1160	1050	1100
13	1300	1180	1230	1360	1300	1330	1150	1080	1110	1140	1080	1100
14	1350	1270	1310	1340	1310	1320	1110	1040	1070	1120	1070	1100
15	1390	1340	1370	1340	1260	1310	1160	1060	1110	1150	1080	1110
16	1380	1350	1370	1270	1200	1230	1160	1100	1140	1140	1070	1100
17	1390	853	1220	1260	1210	1230	1200	1100	1140	1160	1090	1110
18	930	493	559	1290	1250	1270	1200	1110	1140	1160	1070	1110
19	654	557	582	1300	1260	1280	1150	1080	1110	1160	1060	1090
20	733	541	647	1320	1240	1280	1160	1080	1130	1140	1080	1100
21	599	506	541	1260	1120	1180	1170	1010	1110	1130	1100	1110
22	738	599	688	1230	789	984	1180	1130	1160	1160	1100	1130
23	854	690	728	804	497	584	1220	1120	1170	1160	1030	1120
24	1030	843	985	865	608	755	1230	1120	1170	1150	602	976
25	1160	1020	1080	1010	865	958	1220	1120	1170	602	389	449
26	1190	1040	1100	1040	1010	1030	1180	1070	1120	705	532	637
27	1100	667	931	1060	890	992	1140	1080	1110	822	705	763
28	906	802	849	1200	954	1100	1150	1060	1120	968	822	889
29	869	437	584	1060	954	1010	1180	1040	1120	1010	968	1000
30	648	579	613	1100	759	907	1200	1090	1160	1050	1000	1030
31	---	---	---	1020	852	960	1240	1160	1190	---	---	---
MONTH	1450	437	996	1360	306	1030	---	---	---	1320	389	1050

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	7.7	8.0	7.3	7.2	7.3	7.9	7.7	7.8	8.2	7.9	8.1
2	8.3	7.9	8.0	7.4	7.3	7.3	8.0	7.7	7.9	8.3	8.1	8.2
3	8.7	7.8	8.1	7.4	7.3	7.4	8.0	7.3	7.8	8.4	8.3	8.3
4	8.4	8.0	8.2	7.5	7.4	7.5	7.5	7.4	7.4	8.3	8.1	8.3
5	8.3	7.9	8.1	7.6	7.5	7.5	7.6	7.4	7.5	8.3	8.1	8.2
6	8.2	7.7	7.9	7.6	7.4	7.5	7.8	7.6	7.6	8.2	8.1	8.2
7	7.9	7.6	7.7	7.7	7.4	7.4	7.9	7.8	7.9	8.2	8.1	8.2
8	7.8	7.5	7.7	8.0	7.6	7.8	7.9	7.9	7.9	8.2	8.1	8.1
9	8.2	7.5	7.7	8.0	7.6	7.8	7.9	7.5	7.8	8.2	8.1	8.1
10	8.3	7.7	8.0	8.4	7.7	7.9	7.8	7.6	7.7	8.2	8.1	8.1
11	8.5	7.8	8.1	8.1	7.7	7.8	7.7	7.7	7.7	8.2	8.1	8.1
12	8.7	7.9	8.2	7.9	7.5	7.7	7.7	7.7	7.7	8.3	8.1	8.2
13	8.7	7.9	8.3	7.8	7.5	7.7	7.8	7.7	7.7	8.3	8.2	8.2
14	8.5	7.9	8.2	8.1	7.6	7.8	7.8	7.7	7.8	8.3	8.2	8.2
15	8.4	7.7	8.0	8.5	8.0	8.3	8.0	7.8	7.9	8.3	8.2	8.3
16	8.3	7.7	8.0	8.4	8.0	8.2	8.0	7.9	8.0	8.3	8.2	8.2
17	8.2	7.8	7.9	8.2	7.9	8.0	8.0	7.9	7.9	8.2	8.2	8.2
18	8.1	7.7	7.9	8.1	7.8	7.9	7.9	7.9	7.9	8.3	8.2	8.2
19	7.9	7.7	7.8	8.0	7.7	7.8	8.0	7.9	7.9	8.2	8.0	8.1
20	7.9	7.7	7.8	7.9	7.7	7.8	8.0	7.9	8.0	8.1	8.0	8.1
21	7.9	7.6	7.7	8.0	7.8	7.8	8.0	7.9	7.9	8.2	8.0	8.1
22	7.9	7.6	7.7	8.0	7.8	7.8	8.0	7.9	7.9	8.1	8.0	8.1
23	7.9	7.7	7.8	8.0	7.8	7.9	8.0	7.9	7.9	8.1	8.0	8.1
24	7.9	7.7	7.7	7.9	7.7	7.8	8.1	7.9	8.0	8.2	8.1	8.1
25	7.8	7.6	7.7	7.9	7.7	7.8	8.1	8.0	8.1	8.2	8.0	8.1
26	7.7	7.5	7.6	7.8	7.7	7.7	8.2	8.1	8.1	8.2	7.9	8.0
27	7.8	7.5	7.6	7.8	7.7	7.8	8.2	8.1	8.1	8.0	7.9	7.9
28	7.7	7.5	7.6	7.9	7.7	7.8	8.1	8.0	8.1	8.0	7.9	7.9
29	7.6	7.5	7.5	7.9	7.8	7.9	8.1	8.0	8.0	8.0	7.9	8.0
30	7.5	7.1	7.4	7.9	7.8	7.8	8.0	7.6	7.9	8.0	7.9	8.0
31	7.4	7.2	7.3	---	---	---	8.2	7.9	8.1	7.9	7.8	7.8
MAX	8.7	8.0	8.3	8.5	8.0	8.3	8.2	8.1	8.1	8.4	8.3	8.3
MIN	7.4	7.1	7.3	7.3	7.2	7.3	7.5	7.3	7.4	7.9	7.8	7.8

ARKANSAS RIVER BASIN

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY				MARCH			APRIL			MAY		
1	7.9	7.8	7.9	8.2	8.0	8.1	8.3	8.2	8.2	8.8	7.5	8.4
2	7.9	7.8	7.9	8.0	7.9	8.0	8.2	8.0	8.1	8.2	8.0	8.1
3	7.9	7.8	7.8	7.9	7.8	7.8	8.1	8.0	8.0	8.0	7.6	7.7
4	7.9	7.8	7.9	7.8	7.8	7.8	8.0	7.9	8.0	7.9	7.6	7.8
5	7.9	7.9	7.9	8.1	7.8	8.0	8.1	8.0	8.1	8.0	7.9	7.9
6	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.1	8.2	8.1	7.9	8.0
7	8.1	8.0	8.0	8.2	8.0	8.1	8.3	8.2	8.2	8.4	8.0	8.1
8	8.1	7.9	8.0	8.2	8.0	8.1	8.3	8.2	8.3	8.5	8.3	8.4
9	8.1	7.9	7.9	8.2	8.0	8.1	8.3	8.2	8.3	8.3	8.0	8.1
10	8.3	7.8	8.0	8.3	8.1	8.2	8.3	8.3	8.3	8.3	8.1	8.2
11	8.4	8.0	8.2	8.3	8.1	8.2	8.3	8.2	8.3	8.4	8.0	8.1
12	8.5	8.3	8.3	8.2	8.1	8.1	8.3	8.3	8.3	8.6	8.3	8.4
13	8.5	8.2	8.3	8.2	8.1	8.2	8.3	8.2	8.2	8.6	8.2	8.3
14	8.5	8.2	8.4	8.3	8.2	8.2	8.4	8.3	8.3	8.7	8.4	8.6
15	8.6	8.2	8.4	8.4	8.2	8.3	8.4	8.3	8.3	8.8	8.4	8.5
16	8.6	8.1	8.3	8.4	8.3	8.3	8.4	8.1	8.3	8.6	8.3	8.4
17	8.5	8.1	8.3	8.3	8.2	8.3	8.4	8.1	8.3	8.3	8.2	8.3
18	8.3	7.8	8.1	8.2	8.0	8.1	8.4	8.3	8.3	8.3	8.0	8.2
19	8.0	7.8	7.9	8.2	8.1	8.2	8.3	8.2	8.3	8.3	8.1	8.2
20	8.4	7.9	8.2	8.3	8.1	8.2	8.5	8.2	8.4	8.6	8.1	8.3
21	8.7	8.3	8.4	8.3	8.2	8.2	8.6	8.4	8.4	8.7	8.3	8.5
22	8.6	8.1	8.4	8.3	8.1	8.2	8.5	8.4	8.4	8.8	8.4	8.6
23	8.4	7.7	8.0	8.3	8.1	8.2	8.5	8.3	8.4	8.7	8.3	8.5
24	8.1	7.7	7.8	8.3	7.9	8.0	8.4	8.3	8.3	8.7	8.2	8.4
25	8.1	8.0	8.1	8.0	7.9	7.9	8.4	8.3	8.3	8.4	7.8	8.0
26	8.1	7.7	7.8	8.1	8.0	8.0	8.3	8.2	8.3	7.8	7.5	7.6
27	8.0	7.8	7.9	8.1	8.0	8.1	8.4	8.2	8.3	7.9	7.5	7.6
28	8.2	7.9	8.0	8.2	8.0	8.1	8.3	8.0	8.2	7.9	7.5	7.6
29	8.4	8.1	8.2	8.1	8.0	8.0	8.3	8.2	8.2	8.3	7.8	7.9
30	---	---	---	8.2	7.9	8.1	8.3	7.8	8.2	8.6	7.7	8.0
31	---	---	---	8.3	8.2	8.3	---	---	---	9.1	8.2	8.7
MAX	8.7	8.3	8.4	8.4	8.3	8.3	8.6	8.4	8.4	9.1	8.4	8.7
MIN	7.9	7.7	7.8	7.8	7.8	7.8	8.0	7.8	8.0	7.8	7.5	7.6

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	8.8	8.3	8.6	8.1	7.9	8.0	9.1	8.1	8.5	9.2	8.5	8.9
2	8.6	8.3	8.5	8.5	8.0	8.3	9.2	8.1	8.4	9.2	8.5	8.8
3	8.4	7.8	8.0	8.1	7.6	7.8	9.2	8.1	8.9	9.2	8.4	8.8
4	7.9	7.8	7.8	7.6	7.6	7.6	9.2	7.8	8.7	---	---	---
5	7.9	7.8	7.8	7.7	7.3	7.5	8.9	7.8	8.6	---	---	---
6	8.0	7.9	7.9	8.5	7.2	8.1	8.9	7.8	8.5	---	---	---
7	8.6	8.0	8.2	8.7	8.4	8.5	9.0	7.8	8.2	---	---	---
8	8.6	8.1	8.2	8.7	8.4	8.6	---	---	---	8.9	8.2	8.5
9	8.6	8.4	8.4	8.7	8.4	8.6	---	---	---	8.9	8.1	8.5
10	8.5	8.3	8.4	8.9	8.5	8.7	---	---	---	9.2	8.4	8.7
11	8.8	8.3	8.4	8.8	8.5	8.6	9.2	8.4	8.7	9.2	8.6	8.9
12	8.7	8.3	8.5	8.6	8.3	8.5	8.8	8.1	8.5	9.1	8.4	8.9
13	8.3	8.1	8.2	8.7	8.2	8.5	8.8	8.1	8.4	9.0	8.4	8.7
14	8.5	8.1	8.3	8.7	8.3	8.5	---	---	---	9.1	8.3	8.7
15	8.8	8.1	8.4	8.7	8.1	8.4	---	---	---	8.9	8.4	8.6
16	8.6	8.2	8.4	8.9	8.1	8.3	---	---	---	8.8	8.1	8.4
17	8.2	7.8	7.9	8.8	8.0	8.6	9.3	8.5	9.0	8.5	8.0	8.2
18	8.0	7.6	7.8	8.9	8.1	8.5	9.1	8.3	8.8	8.7	8.1	8.3
19	7.7	7.6	7.6	9.0	8.1	8.6	8.9	8.1	8.6	8.7	8.1	8.4
20	8.0	7.6	7.8	8.9	8.1	8.6	8.8	8.3	8.5	8.7	8.0	8.3
21	7.8	7.6	7.7	8.9	7.9	8.4	---	---	---	8.7	7.9	8.4
22	7.9	7.6	7.7	8.6	7.5	7.6	---	---	---	8.8	8.0	8.4
23	8.0	7.5	7.6	7.5	7.4	7.5	---	---	---	8.8	7.9	8.4
24	8.6	7.9	8.2	8.7	7.4	7.9	---	---	---	8.7	7.6	8.2
25	8.6	8.1	8.4	8.9	7.8	8.0	9.3	8.5	8.9	7.9	7.7	7.9
26	8.4	8.2	8.3	9.1	8.2	8.6	9.2	8.5	8.9	8.1	7.7	7.9
27	8.3	7.9	8.0	9.0	7.8	8.1	9.0	8.3	8.7	8.2	7.9	8.0
28	8.2	7.9	8.2	8.7	7.8	8.0	---	---	---	8.3	8.0	8.1
29	8.3	7.7	7.9	9.1	7.9	8.2	---	---	---	8.6	8.1	8.2
30	8.0	7.8	7.9	8.7	7.6	8.1	---	---	---	8.8	8.2	8.4
31	---	---	---	9.2	8.0	8.7	---	---	---	---	---	---
MAX	8.8	8.4	8.6	9.2	8.5	8.7	---	---	---	---	---	---
MIN	7.7	7.5	7.6	7.5	7.2	7.5	---	---	---	---	---	---

ARKANSAS RIVER BASIN

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07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	22.5	16.8	19.5	17.3	14.0	15.7	12.5	8.6	10.6	12.0	8.7	10.4
2	23.4	17.3	20.0	14.7	11.0	12.8	15.3	11.5	13.3	13.1	10.7	11.8
3	22.3	17.8	19.8	14.3	9.7	12.0	15.1	11.7	13.2	12.7	9.7	11.1
4	20.9	15.4	18.1	16.5	11.0	13.7	12.6	11.1	11.8	9.7	6.1	7.5
5	22.9	16.2	19.2	19.4	13.6	16.3	11.1	7.7	9.2	7.3	4.7	6.1
6	23.5	18.1	20.5	21.1	16.2	18.4	8.8	5.9	7.4	9.2	4.8	6.8
7	22.3	17.4	19.8	21.6	16.9	19.0	9.8	6.2	8.0	9.1	5.6	7.4
8	23.7	19.3	20.9	20.4	16.9	18.5	12.2	8.3	10.2	9.8	8.8	9.2
9	25.0	20.1	22.2	19.7	15.5	17.4	12.3	9.3	11.1	10.8	7.9	9.2
10	26.0	19.7	22.7	20.7	15.8	18.1	9.3	7.5	8.2	10.5	7.1	8.8
11	26.1	20.2	23.1	21.1	15.7	18.4	8.8	7.3	8.0	11.0	7.3	9.1
12	26.1	20.7	23.2	21.3	16.4	18.8	11.0	8.8	9.7	11.6	8.0	9.7
13	25.8	20.6	23.0	21.4	16.8	18.9	10.7	7.5	9.0	10.6	8.1	9.3
14	24.0	19.4	21.7	21.0	16.9	18.8	9.7	7.3	8.4	9.1	6.4	7.8
15	24.1	18.9	21.3	19.3	15.1	17.2	8.6	5.3	7.0	11.0	6.3	8.6
16	21.4	17.7	19.6	19.0	14.0	16.6	8.8	5.9	7.3	12.3	10.3	11.4
17	17.7	13.5	15.1	19.1	15.3	17.1	10.1	7.2	8.6	12.0	10.9	11.5
18	17.8	13.7	15.2	19.3	14.9	17.0	10.8	7.8	9.2	11.3	9.3	10.3
19	17.2	12.3	14.7	17.4	14.2	15.9	8.8	7.4	8.2	12.6	9.8	10.8
20	18.1	12.1	15.0	16.4	11.7	14.0	8.8	6.2	7.4	9.9	6.3	8.3
21	20.0	13.4	16.5	16.7	11.7	14.2	8.9	5.8	7.1	9.2	6.2	7.7
22	20.3	15.1	17.6	17.6	14.9	16.1	9.3	5.7	7.3	10.7	6.8	8.6
23	18.7	14.3	16.4	15.9	11.8	13.9	10.1	6.1	8.0	11.4	7.8	9.2
24	17.8	12.4	15.0	13.2	9.8	11.5	10.7	7.4	8.8	8.3	5.4	7.1
25	17.9	12.9	15.4	13.0	8.2	10.7	10.6	6.5	8.6	8.2	5.3	6.8
26	20.6	13.8	17.0	13.7	8.5	11.0	11.5	8.3	9.6	6.5	4.1	5.0
27	19.9	15.5	17.6	15.2	10.1	12.5	10.0	7.3	8.5	4.1	2.2	3.1
28	21.1	16.2	18.4	14.9	11.2	13.0	11.0	6.0	8.3	5.2	2.7	3.8
29	21.7	17.0	19.1	14.2	10.4	12.2	12.0	7.6	9.9	6.8	2.3	4.3
30	18.8	15.2	16.4	12.8	9.3	10.9	12.6	9.5	11.0	7.2	2.6	4.7
31	15.6	14.7	15.1	---	---	---	12.0	8.5	10.3	8.3	3.9	6.1
MONTH	26.1	12.1	18.7	21.6	8.2	15.4	15.3	5.3	9.1	13.1	2.2	8.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	7.1	5.1	6.2	15.8	11.6	13.7	14.9	12.9	14.1	17.5	16.6	17.0
2	8.4	4.3	6.3	13.7	11.4	12.3	14.9	12.2	13.4	17.7	16.6	17.1
3	10.9	5.8	8.1	11.4	9.5	10.5	14.4	12.5	13.5	19.6	16.6	18.0
4	9.4	6.5	7.9	13.3	8.2	10.6	14.7	11.3	12.9	22.2	18.0	20.0
5	9.4	5.1	7.3	15.3	10.4	12.7	18.0	13.0	15.3	21.1	20.1	20.4
6	10.1	5.5	7.9	17.9	12.5	15.1	20.2	15.3	17.6	23.1	20.0	21.2
7	12.3	7.2	9.7	18.5	15.6	17.0	20.8	17.4	19.0	27.1	21.8	24.1
8	13.0	7.6	10.3	18.0	14.4	16.3	17.4	14.3	15.9	27.6	24.0	25.7
9	13.8	8.8	11.4	17.4	13.0	15.3	16.8	14.2	15.4	25.9	23.0	24.1
10	15.4	11.1	13.1	15.2	10.7	12.9	17.1	14.1	15.6	24.1	21.0	22.6
11	13.2	9.1	10.4	12.2	8.6	10.4	17.5	16.3	16.8	27.2	22.3	24.4
12	11.8	7.0	9.4	14.1	9.1	11.3	16.3	14.4	15.0	26.3	24.3	25.3
13	10.2	8.3	9.5	15.8	11.0	13.2	15.6	13.7	14.4	24.6	21.3	23.1
14	11.5	6.4	8.8	15.5	13.1	14.3	18.0	13.9	15.6	23.9	19.9	21.9
15	14.2	8.0	11.0	19.0	13.7	16.1	17.5	16.1	16.7	22.3	19.7	20.8
16	12.7	9.7	11.4	17.4	11.3	14.2	17.6	14.8	16.3	22.3	19.6	20.9
17	12.1	10.7	11.4	11.3	9.7	10.3	19.0	15.1	16.9	23.4	21.1	22.1
18	12.1	8.2	10.6	10.3	9.3	9.7	22.4	16.8	19.4	25.6	21.0	22.9
19	12.7	7.1	9.5	11.9	8.8	10.2	24.2	20.2	22.0	22.9	20.1	21.6
20	13.1	7.8	10.6	15.0	9.6	12.1	23.0	18.3	20.4	25.2	19.0	21.9
21	14.4	10.2	12.2	13.5	12.7	13.1	21.7	17.1	19.4	28.0	21.6	24.5
22	17.3	13.3	14.8	12.8	12.2	12.5	20.4	18.0	19.2	29.1	23.3	26.1
23	18.1	14.6	15.8	14.4	12.4	13.1	20.2	16.8	18.3	29.9	24.5	27.2
24	18.2	12.9	15.5	15.5	12.9	14.3	21.9	17.5	19.6	31.3	25.6	28.4
25	18.4	15.7	16.8	18.3	14.5	16.3	23.2	18.9	20.9	28.9	24.8	25.7
26	15.7	12.8	14.3	21.1	16.0	18.5	21.5	19.0	20.4	28.1	24.0	25.9
27	15.8	10.4	13.1	20.3	15.8	18.3	22.9	19.0	20.7	28.3	24.7	26.3
28	16.1	11.5	13.7	19.7	16.1	17.7	22.9	18.8	20.8	29.6	24.0	26.7
29	16.5	12.8	14.3	16.8	13.6	14.9	21.3	19.4	20.2	29.4	24.8	27.0
30	---	---	---	15.3	12.6	13.8	19.4	17.3	18.4	30.5	24.9	27.6
31	---	---	---	16.5	12.7	14.5	---	---	---	31.1	25.6	28.2
MONTH	18.4	4.3	11.1	21.1	8.2	13.7	24.2	11.3	17.5	31.3	16.6	23.5

07241550 NORTH CANADIAN RIVER NEAR HARRAH, OK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30.6	25.9	28.1	29.4	25.7	27.4	32.1	25.6	28.6	32.1	25.1	28.4
2	28.4	25.1	26.3	28.6	25.3	27.2	32.4	26.1	29.1	33.0	25.8	29.0
3	25.1	23.6	24.1	27.8	24.8	26.1	31.9	26.5	29.2	33.6	25.9	29.3
4	27.5	23.8	25.2	29.9	26.8	28.1	32.4	26.5	29.3	31.9	26.1	28.5
5	27.6	23.6	25.7	30.1	26.7	28.4	32.0	25.7	28.8	31.2	25.4	27.9
6	26.7	22.5	24.6	31.4	27.0	29.0	32.7	25.8	28.9	30.2	23.6	26.6
7	27.2	22.5	24.7	32.1	27.9	29.9	33.2	26.6	29.3	30.5	23.2	26.7
8	27.8	22.6	25.1	32.5	28.5	30.4	33.3	25.9	29.0	31.3	24.0	27.2
9	27.2	23.9	25.5	32.3	28.5	30.3	33.7	26.3	29.5	30.7	24.0	26.9
10	25.8	24.1	24.6	31.9	27.4	29.7	34.4	27.6	30.5	31.4	24.1	27.3
11	27.6	23.2	24.9	32.6	28.0	30.2	34.5	27.8	31.0	31.5	24.7	27.6
12	29.7	24.9	27.0	31.8	28.9	30.3	34.6	28.2	31.2	31.3	25.0	27.6
13	30.1	25.7	27.8	33.0	28.8	30.8	33.6	27.7	30.5	31.3	24.0	27.4
14	28.8	24.3	26.5	33.2	28.0	30.6	31.9	25.7	28.7	31.7	24.2	27.3
15	29.5	24.3	26.8	34.1	28.4	31.2	32.8	25.4	28.9	28.1	22.0	24.9
16	27.5	23.4	25.5	33.9	28.9	31.4	33.2	26.8	29.8	27.4	19.9	23.5
17	23.4	19.0	21.0	31.4	27.7	29.5	32.7	26.3	29.4	27.3	19.9	23.3
18	20.6	18.9	19.6	30.9	26.7	28.6	32.2	25.6	28.9	26.3	19.4	22.6
19	23.2	20.4	21.8	32.9	26.7	29.7	31.6	25.9	28.5	25.4	18.5	21.8
20	26.1	22.4	24.1	31.1	27.3	29.4	31.0	23.9	27.3	24.7	19.1	21.5
21	25.6	23.3	24.4	31.1	24.9	28.0	31.7	24.2	27.7	25.1	17.6	21.2
22	27.5	22.4	24.5	29.0	24.8	27.0	32.3	25.2	28.5	29.1	21.5	24.7
23	29.5	25.0	27.0	28.1	23.9	25.6	32.8	26.2	29.2	27.6	21.3	24.7
24	30.5	26.2	28.2	30.1	24.1	26.9	32.8	26.3	29.3	21.3	17.3	18.8
25	29.2	26.4	27.4	29.3	24.1	26.7	32.7	25.9	29.1	18.6	14.6	16.6
26	27.1	24.6	26.0	31.1	24.4	27.6	32.5	25.9	29.0	21.7	14.8	18.0
27	26.2	24.8	25.4	29.1	24.3	26.0	32.3	25.1	28.5	23.6	16.1	19.6
28	25.3	24.4	24.9	29.5	23.3	25.9	32.3	25.2	28.6	24.8	17.5	21.0
29	25.1	23.1	24.2	30.8	26.2	28.2	33.1	25.9	29.2	24.6	18.3	21.3
30	26.9	23.7	25.2	30.8	25.7	28.1	31.8	26.2	29.0	23.7	18.1	20.8
31	---	---	---	31.2	25.5	28.2	30.8	25.6	28.2	---	---	---
MONTH	30.6	18.9	25.2	34.1	23.3	28.6	34.6	23.9	29.1	33.6	14.6	24.4

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

[illegible]

ARKANSAS RIVER BASIN

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OK

LOCATION.--Lat 35°15'56", long 96°12'21", in NE 1/4 SW 1/4 sec.12, T.9 N., R.10 E., Hughes County, Hydrologic Unit 11100302, on left downstream side of bridge on U.S. Highway 75, 2.3 mi upstream from Wewoka Creek, 2.5 mi northeast of Wetumka, and at mile 84.4.

DRAINAGE AREA.--14,290 mi² of which 4,899 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 977: 1942. WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 678.28 ft above sea level. Prior to Jan. 19, 1939, nonrecording gage at site 500 ft upstream and at datum 5.00 ft higher. Jan. 20, 1939, to Feb. 23, 1985, recording gage 500 ft upstream at datum 5.00 ft higher. Prior to Aug. 8, 1991, at same site and at datum 5.00 ft higher.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Some regulation by Lake Overholser (station 07240500) and other dams upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in October 1923 reached a stage of 26.9 ft, from information provided by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e256	e434	e234	e367	e411	e651	e1440	8630	e650	2160	e404	e213
2	e263	e308	e241	e367	e390	e843	e1590	5490	e589	1800	e386	e178
3	e241	e234	401	e360	e331	e923	e1730	5160	712	1550	e373	e169
4	e256	e196	700	e375	e289	e982	e2350	3360	e2670	1660	e356	e165
5	e248	e167	e531	e360	e299	e897	e1910	1890	e2030	2370	e330	e213
6	e241	e152	e353	e360	e310	e779	1580	e1740	1400	1560	e321	e169
7	e241	e152	e308	e300	e294	e673	1240	1570	e1010	1300	e317	e182
8	e263	e152	e286	e271	e299	e609	1020	e1510	e716	1130	e299	e182
9	e308	e167	e1860	e241	e283	e598	951	e1550	e647	1040	e308	e182
10	e263	e234	e1640	e234	e278	e827	969	e1330	e601	996	e295	e195
11	e241	e144	e1750	e300	e305	e1040	1040	e1210	e647	931	e286	e182
12	e234	e159	1430	e360	e294	e1160	1120	e1140	e800	881	e282	e187
13	e219	e174	e1000	e390	e305	e1050	e1060	e991	e739	851	e304	e200
14	e226	e241	e792	e367	e267	e913	e1040	e927	e647	840	e369	e191
15	e211	e219	e658	e338	e262	e875	e1030	e712	e636	836	e321	e174
16	e226	e189	515	e315	e246	e865	e1080	e674	e578	820	e300	e165
17	e204	e167	e442	e294	e219	e993	e1060	e766	e1010	775	e295	e178
18	e219	e144	e390	e267	600	e1050	e1050	e805	e3030	738	e291	e191
19	e204	e152	e382	e257	e251	e1360	e1030	e597	e3440	653	e299	e165
20	e219	e152	e382	e246	e225	e1150	e827	e635	e2440	594	e291	e174
21	e201	e181	e360	e225	e278	e900	e770	e558	e1600	623	e286	e169
22	e211	e189	e360	e225	e230	1580	e876	e620	2190	1300	e282	e169
23	e211	e293	e353	e235	760	e1780	e856	e589	1610	1220	e278	e174
24	e211	e196	e353	e219	e486	e2020	e996	e496	1180	1110	e256	e208
25	e211	e167	e345	e225	e801	e2710	e974	e550	999	979	e243	e628
26	e204	e167	e345	e225	e561	e2380	e953	1010	4210	1070	e234	e500
27	e204	e181	332	e273	e475	2030	e960	2410	3810	909	e230	e293
28	e196	e271	e315	e331	626	1310	1310	1880	3720	819	e230	200
29	e204	e263	e300	451	e502	e1120	e1130	1120	5460	759	e230	304
30	e1000	e256	e293	425	---	e1360	e1110	e843	2680	752	e239	163
31	e702	---	e360	e379	---	e1290	---	e735	---	e473	e234	---
TOTAL	8338	6101	18011	9582	10877	36718	35052	51498	52451	33499	9169	6463
MEAN	269	203	581	309	375	1184	1168	1661	1748	1081	296	215
MAX	1000	434	1860	451	801	2710	2350	8630	5460	2370	404	628
MIN	196	144	234	219	219	598	770	496	578	473	230	163
AC-FT	16540	12100	35720	19010	21570	72830	69530	102100	104000	66450	18190	12820

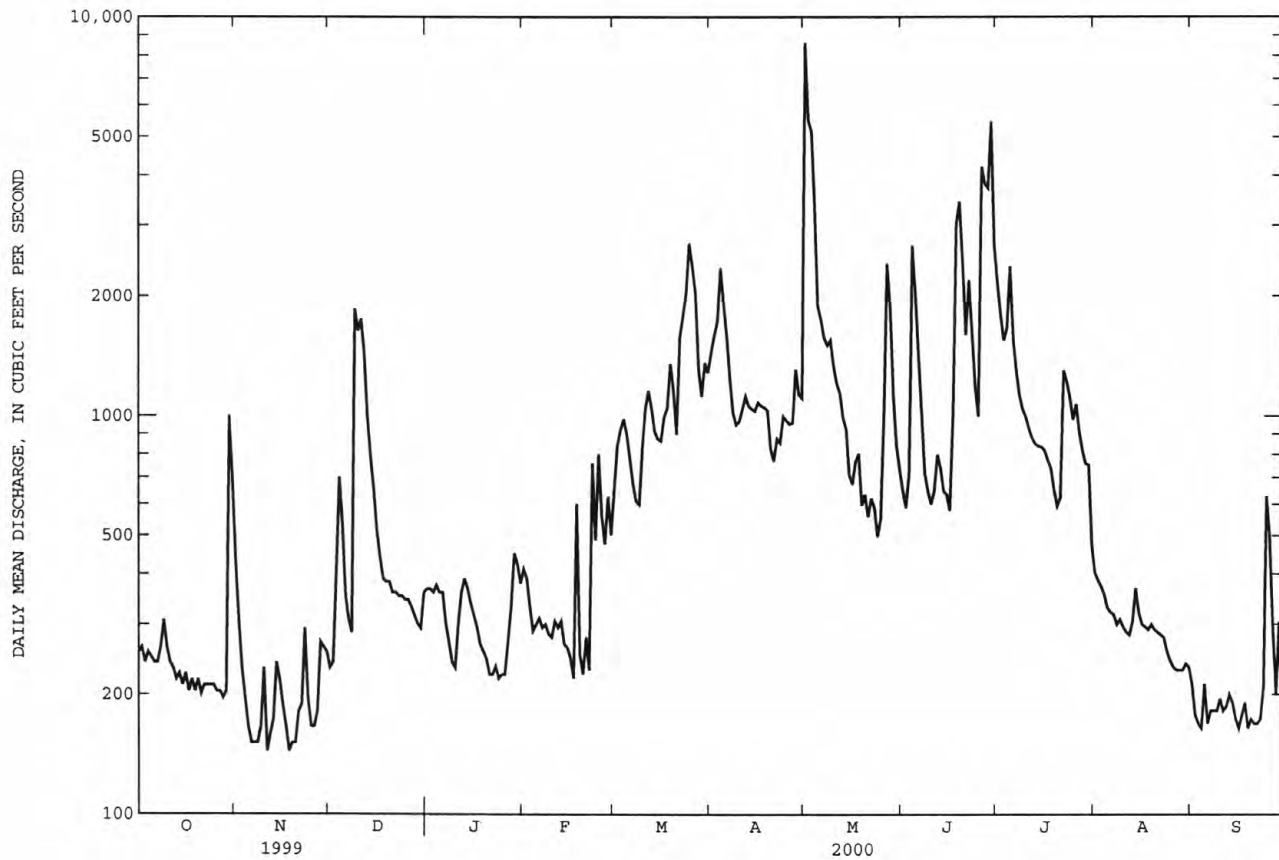
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 2000, BY WATER YEAR (WY)

	MEAN	697	662	505	457	607	892	1180	1758	1590	688	384	475
MAX	4914	4580	3225	2825	3037	5684	6643	6989	6081	3230	2667	3894	
(WY)	1987	1942	1993	1998	1985	1990	1945	1993	1957	1951	1950	1950	
MIN	4.25	16.7	43.8	44.3	56.6	43.5	72.8	85.3	73.4	42.5	8.71	.000	
(WY)	1957	1955	1955	1940	1957	1940	1955	1940	1953	1954	1956	1954	

e Estimated

07242000 NORTH CANADIAN RIVER NEAR WETUMKA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1938 - 2000	
ANNUAL TOTAL	453569		277759		825	
ANNUAL MEAN	1243		759		2229	1993
HIGHEST ANNUAL MEAN					156	1956
LOWEST ANNUAL MEAN					55800	Apr 15 1945
HIGHEST DAILY MEAN	22900	Apr 27	8630	May 1	.00	Aug 27 1954
LOWEST DAILY MEAN	144	Nov 11	144	Nov 11, 18	.00	Aug 27 1954
ANNUAL SEVEN-DAY MINIMUM	166	Nov 6	166	Nov 6	66000	Apr 15 1945
INSTANTANEOUS PEAK FLOW			11400	May 1	26.40	Apr 15 1945
INSTANTANEOUS PEAK STAGE			14.78	May 1		
ANNUAL RUNOFF (AC-FT)	899700		550900		597300	
10 PERCENT EXCEEDS	2380		1590		1880	
50 PERCENT EXCEEDS	725		390		314	
90 PERCENT EXCEEDS	223		190		70	

^aNo flow Aug. 27 to Oct. 11, 1954, Aug. 25 to Oct. 22, 1956.

ARKANSAS RIVER BASIN

07242380 DEEP FORK NEAR WARWICK, OK

LOCATION.--Lat 35°40'51", long 97°00'29", NW 1/4 NE 1/4 sec. 20, T.14 N., R.3 E., Lincoln County, Hydrologic Unit 11100303, on left downstream abutment on U.S. Highway 66, 0.5 mi southwest of Warwick, and at mile 190.9.

DRAINAGE AREA.--532 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 823.05 ft above sea level.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Considerable regulation by Arcadia Lake (station 07242340), 22.9 miles upstream, since November 1986. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e22	35	31	37	112	87	33	3050	e22	330	e26	11
2	e22	27	33	39	e105	215	49	411	e23	389	27	11
3	e22	e26	39	41	103	118	41	175	40	482	28	11
4	e22	e25	e45	39	65	67	35	127	27	349	27	10
5	e22	e24	109	36	35	49	31	356	29	310	25	9.9
6	e22	e24	41	34	35	72	134	267	78	260	23	10
7	e22	28	34	35	33	149	127	133	76	120	21	11
8	e22	30	127	40	34	86	32	105	75	25	20	11
9	e22	32	464	42	e33	109	27	135	36	e24	19	11
10	e22	33	334	39	33	42	28	210	e25	e23	19	11
11	e22	34	337	36	31	39	28	322	30	e20	18	11
12	e22	35	317	36	31	36	30	361	e25	e21	17	11
13	e22	37	135	34	31	34	32	e330	e23	e20	17	10
14	e22	37	e60	e34	31	31	30	323	e23	e21	16	11
15	e22	34	45	34	31	33	28	e315	e23	e21	15	11
16	e22	36	42	35	29	31	49	307	e25	e22	15	10
17	e22	38	42	36	e34	41	39	238	316	e21	14	11
18	e22	37	41	35	30	52	33	109	176	e22	13	11
19	22	33	44	33	30	e54	34	e25	64	e21	14	11
20	e22	31	42	33	30	57	e26	e23	183	e21	13	10
21	e22	31	40	33	e30	151	e24	e25	520	28	12	11
22	e22	31	40	34	e47	124	e23	31	315	551	12	13
23	e23	31	41	33	123	96	e22	27	98	100	12	12
24	e23	31	39	34	e160	64	e22	30	182	48	12	20
25	e23	31	40	34	213	47	e21	39	181	141	13	17
26	e23	31	39	e33	92	41	e20	39	503	132	12	12
27	e23	e32	37	33	46	e70	e21	37	112	76	12	12
28	e23	33	37	49	40	148	e20	e25	109	35	11	12
29	e26	31	36	35	39	147	e23	e23	115	e30	11	13
30	90	31	37	39	---	e70	1590	e23	76	e28	11	14
31	61	---	37	54	---	58	---	e22	---	e27	11	---
TOTAL	799	949	2785	1139	1686	2418	2652	7643	3530	3718	516	349.9
MEAN	25.8	31.6	89.8	36.7	58.1	78.0	88.4	247	118	120	16.6	11.7
MAX	90	38	464	54	213	215	1590	3050	520	551	28	20
MIN	22	24	31	33	29	31	20	22	22	20	11	9.9
AC-FT	1580	1880	5520	2260	3340	4800	5260	15160	7000	7370	1020	694

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2000, BY WATER YEAR (WY)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	144	205	200	163	176	408	471	651	592	216	151	230	
MAX	591	539	683	699	516	1249	1435	2494	2978	738	630	1527	
(WY)	1998	1997	1993	1998	1993	1998	1990	1993	1995	1995	1989	1989	
MIN	25.8	31.6	60.7	36.7	47.0	59.3	88.4	56.3	70.5	31.2	16.6	11.7	
(WY)	2000	2000	1989	2000	1996	1991	2000	1996	1988	1990	2000	2000	

e Estimated

ARKANSAS RIVER BASIN

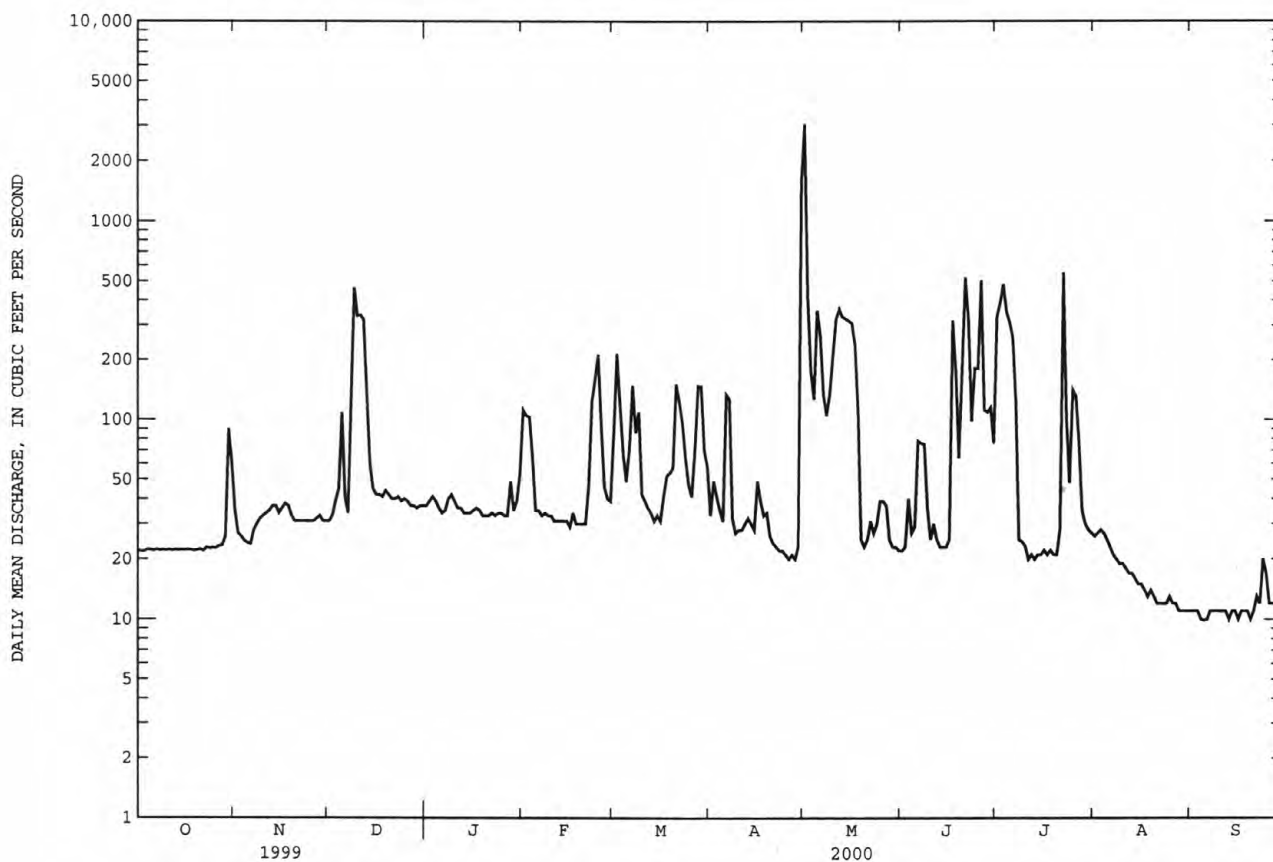
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07242380 DEEP FORK NEAR WARWICK, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1988 - 2000	
ANNUAL TOTAL	82278		28184.9		301	
ANNUAL MEAN	225		77.0		574	
HIGHEST ANNUAL MEAN					77.0	
LOWEST ANNUAL MEAN					19000	
HIGHEST DAILY MEAN	8190	Apr 25	3050	May 1	19000	May 9 1993
LOWEST DAILY MEAN	22	Aug 29	9.9	Sep 5	^a 3.9	Dec 13 1987
ANNUAL SEVEN-DAY MINIMUM	22	Aug 29	11	Aug 31	8.2	Sep 15 1997
INSTANTANEOUS PEAK FLOW			9970	Apr 30	34600	Jun 9 1995
INSTANTANEOUS PEAK STAGE			15.57	Apr 30	^b 21.28	Jun 9 1995
ANNUAL RUNOFF (AC-FT)	163200		55900		217800	
10 PERCENT EXCEEDS	506		154		665	
50 PERCENT EXCEEDS	53		33		86	
90 PERCENT EXCEEDS	23		13		26	

^aMinimum daily discharge for period of record, .05 ft³/s Aug. 23, 1987.

^bMaximum gage height for period of record, 22.05 ft, Oct. 21, 1983.



ARKANSAS RIVER BASIN

07243500 DEEP FORK NEAR BEGGS, OK

LOCATION.--Lat 35°40'26", long 96°04'06", NW 1/4 SW 1/4 sec.20, T.14 N., R.12 E., Okmulgee County, Hydrologic Unit 11100303, near right downstream abutment of county road bridge, 3.0 mi upstream from Adams Creek, 4.0 mi south of Beggs, 8.0 mi downstream from Flat Rock (Checkerboard) Creek, and at mile 85.0.

DRAINAGE AREA.--2,018 mi².

PERIOD OF RECORD.--September 1938 to current year.

REVISED RECORDS.--WSP 957: 1941. WSP 1117: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 632.55 ft above sea level. Prior to Aug. 29, 1939, nonrecording gage at site 450 ft downstream at same datum. Aug. 29, 1939, to June 22, 1953, nonrecording gage at present site and datum. June 23, 1953, to July 15, 1981, recording gage at present site and datum. July 16, 1981, to May 3, 1989, recording gage at site 1,000 ft downstream and at same datum.

REMARKS.--Records poor Oct. 1 to June 30 due to lack of measurements and funding; records fair July 1 to Sept. 30. Some regulation by Arcadia Lake (station 07242340) since November 1986. U.S. Army Corps of Engineers' satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	74	e73	e96	e845	e370	e260	3090	475	4920	202	18
2	53	144	e68	e95	e740	e330	e1500	3940	311	4160	166	17
3	46	181	e602	e94	e600	e600	e1400	4040	229	2240	138	16
4	41	129	e475	e93	e475	e620	e1200	3890	194	1620	120	15
5	41	88	e280	e92	e360	e610	e990	3860	173	1370	108	14
6	37	65	e130	e91	e290	e580	e620	5140	163	1140	97	14
7	36	53	e104	e91	e260	e510	e400	6080	170	897	87	13
8	35	46	e92	e90	e231	e800	e320	4550	154	761	79	13
9	34	42	e86	e89	e210	e770	e300	2170	140	609	71	13
10	33	41	e730	e88	e192	e690	e280	1590	173	438	64	13
11	33	40	e650	e350	e180	e560	e250	1190	195	296	58	13
12	34	40	e550	e630	e172	e350	e600	996	245	213	54	12
13	33	40	e465	e570	e165	e230	e560	746	190	172	50	11
14	31	40	e360	e430	e160	e180	e510	759	150	148	46	11
15	32	41	e200	e310	e155	e160	e480	692	217	133	43	10
16	32	41	e165	e230	e150	e150	e450	617	258	122	40	11
17	30	41	e145	e180	e400	e140	e600	573	386	113	39	11
18	29	41	e134	e170	e930	e600	e560	557	1230	102	36	11
19	27	e110	e127	e154	e900	e470	e510	547	1360	93	35	9.8
20	27	e98	e122	e145	e840	e380	e2900	462	1320	87	34	9.6
21	27	e75	e120	e139	e710	e300	e2800	317	1540	98	33	9.0
22	28	e58	e113	e130	e540	e500	e2700	215	3490	490	31	9.7
23	26	e200	e111	e123	e1000	e1600	e2600	160	3370	1320	30	12
24	26	e190	e110	e120	e960	e1500	e3150	142	2690	1470	29	23
25	28	e180	e107	e117	e930	e1350	e3000	2470	2390	1420	27	24
26	31	e150	e106	e116	e900	e1000	e2700	3700	3320	731	26	35
27	33	e125	e104	e114	e840	e640	e2400	4110	4450	449	25	35
28	34	e100	e103	e112	e710	e440	e2100	3660	4900	483	22	37
29	34	e86	e101	e111	e540	e340	e1800	2010	5290	411	21	43
30	41	e80	e100	e110	---	e310	e3400	1110	5220	289	20	43
31	49	---	e99	e320	---	e300	---	735	---	241	19	---
TOTAL	1082	2639	6732	5600	15385	17380	41340	64118	44393	27036	1850	526.1
MEAN	34.9	88.0	217	181	531	561	1378	2068	1480	872	59.7	17.5
MAX	61	200	730	630	1000	1600	3400	6080	5290	4920	202	43
MIN	26	40	68	88	150	140	250	142	140	87	19	9.0
AC-FT	2150	5230	13350	11110	30520	34470	82000	127200	88050	53630	3670	1040

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	MEAN	727	773	564	437	674	1230	1575	2377	1920	619	247	368
MAX	5464	8391	4797	3749	4388	8895	9520	12470	8994	3950	2416	1947	
(WY)	1942	1975	1993	1985	1985	1990	1945	1943	1974	1950	1992	1989	
MIN	.000	.000	.51	7.74	20.3	9.65	37.0	120	59.0	5.67	3.31	.000	
(WY)	1955	1955	1955	1940	1957	1940	1955	1996	1953	1954	1954	1956	

e Estimated

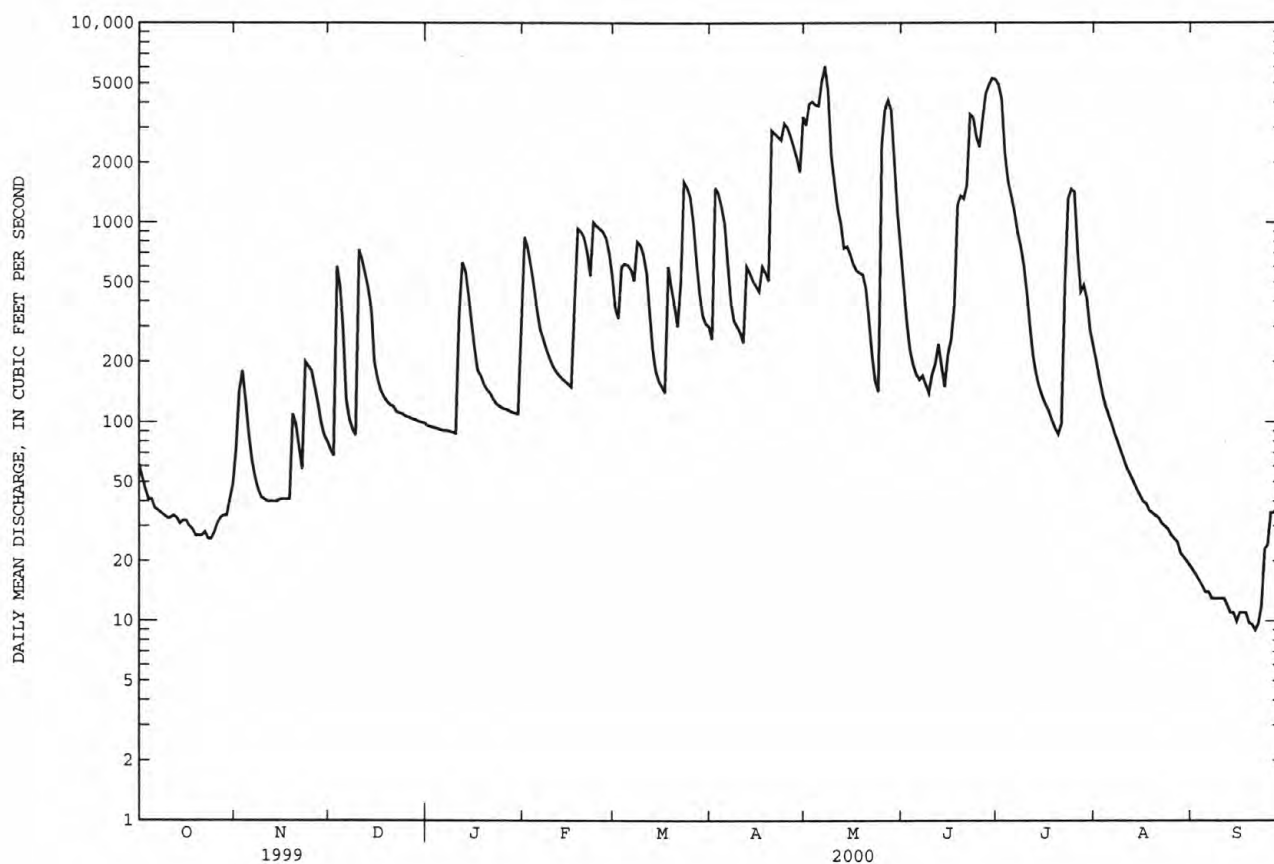
ARKANSAS RIVER BASIN

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07243500 DEEP FORK NEAR BEGGS, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1939 - 2000	
ANNUAL TOTAL	508480		228081.1		959	
ANNUAL MEAN	1393		623		2645	
HIGHEST ANNUAL MEAN					114	
LOWEST ANNUAL MEAN					1993	
HIGHEST DAILY MEAN	19000	Apr 29	6080	May 7	55600	May 11 1943
LOWEST DAILY MEAN	26	Oct 23	9.0	Sep 21	^a .00	Sep 20 1939
ANNUAL SEVEN-DAY MINIMUM	27	Oct 19	10	Sep 16	.00	Sep 29 1939
INSTANTANEOUS PEAK FLOW			6390	May 7	66800	May 11 1943
INSTANTANEOUS PEAK STAGE			18.85	May 7	34.55	May 11 1943
ANNUAL RUNOFF (AC-FT)	1009000		452400		694800	
10 PERCENT EXCEEDS	4780		1860		2680	
50 PERCENT EXCEEDS	247		170		174	
90 PERCENT EXCEEDS	38		27		20	

^aAt times in 1939, 1954, 1956.



ARKANSAS RIVER BASIN

07244100 COAL CREEK NEAR HENRYETTA, OK

LOCATION.--Lat 35°27'10", long 95°57'20", in NE 1/4 SW 1/4 sec.5, T.11 N., R.13 E., Okmulgee County, Hydrologic Unit 11100303, at downstream right abutment of abandoned railroad bridge at edge of Dewar, .4 mi downstream from an unnamed tributary, 2 mi northeast of Henryetta, and at mile 12.1.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--22.3 mi².

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

GAGE.--Water-stage recorder. Datum of gage is 621.01 ft above sea level.

REMARKS.--Records fair. Low flows regulated by releases of effluent from the City of Henryetta treatment plant .5 mi upstream. U.S. Geological Survey satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	e2.0	e3.3	e2.4	14	8.7	15	327	.74	6.7	.53	.62
2	.50	e1.3	e3.5	e2.3	13	11	31	30	.55	4.4	.39	.61
3	.75	e1.0	6.6	167	17	36	14	13	.64	2.1	.31	.51
4	1.7	e.90	81	38	18	20	8.5	7.2	.63	1.2	.28	.63
5	1.9	e.85	e40	25	12	13	6.0	4.6	.45	.73	.23	.72
6	1.5	e.79	e30	19	9.6	10	5.0	595	.36	.55	.26	.55
7	.76	e.72	e20	14	8.3	8.8	4.1	64	.32	.46	.25	.74
8	.58	e.68	e18	15	6.8	40	2.9	19	.35	.37	.25	.70
9	.64	e.64	33	16	5.9	17	2.5	57	1.2	.34	.26	.93
10	.58	e.60	14	13	4.8	11	2.6	25	1.7	.28	.24	e2.0
11	.78	e.56	e10	10	3.8	9.0	3.4	11	3.2	.27	.23	e1.7
12	.69	e.54	e8.0	9.1	3.6	7.2	3.6	6.8	3.4	.23	.23	e1.5
13	.52	e.50	e7.0	8.3	3.3	5.9	4.0	4.1	3.1	.22	.30	e1.2
14	.33	e.47	e6.5	7.2	3.1	5.0	4.7	1.8	3.7	.19	.39	e1.0
15	.30	e.45	e6.0	6.4	2.9	4.9	5.6	1.1	3.7	.19	.50	e.94
16	.33	e.42	e5.5	6.4	3.1	4.5	9.0	.90	3.2	.19	.64	e.86
17	.33	e.38	e5.1	5.8	4.5	4.4	14	.94	8.6	.18	.68	e.80
18	.31	e.35	e4.8	5.8	8.8	5.6	21	.81	7.5	.18	2.5	e.74
19	.39	e.32	e4.4	5.3	6.0	6.6	23	.57	3.2	.18	1.7	e.66
20	.40	e.31	e4.2	4.7	4.5	5.8	23	.78	2.2	.19	1.6	e.58
21	.41	e.30	3.9	4.5	3.9	4.9	7.5	.79	394	2.9	1.7	e.52
22	.48	11	e3.8	4.2	6.3	73	3.9	.72	104	16	1.6	e.48
23	.54	11	e3.6	4.0	296	44	7.1	.70	21	3.4	1.6	e.46
24	.54	e7.0	e3.5	3.7	35	38	13	1.1	7.9	.66	1.4	e2.0
25	.68	e5.0	e3.4	3.4	126	19	5.0	16	4.3	.44	1.3	e1.2
26	.67	e4.5	e3.2	3.3	44	13	3.2	13	200	.71	1.2	e.94
27	.75	e4.3	e3.1	4.1	22	10	5.8	263	34	35	.81	e.74
28	.96	e4.1	e3.0	5.0	16	7.8	6.8	24	71	8.1	.77	e.68
29	1.1	e3.9	e2.9	7.0	13	6.0	15	7.4	37	3.2	.95	e.62
30	4.1	e3.5	e2.7	8.2	---	4.9	31	3.4	13	1.1	.67	e.58
31	6.2	---	e2.6	8.9	---	4.2	---	1.2	---	.60	.54	---
TOTAL	30.17	68.38	346.6	437.0	715.2	459.2	301.2	1501.91	934.94	91.26	24.31	26.21
MEAN	.97	2.28	11.2	14.1	24.7	14.8	10.0	48.4	31.2	2.94	.78	.87
MAX	6.2	11	81	167	296	73	31	595	394	35	2.5	2.0
MIN	.30	.30	2.6	2.3	2.9	4.2	2.5	.57	.32	.18	.23	.46
AC-FT	60	136	687	867	1420	911	597	2980	1850	181	48	52

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2000, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000
MEAN	18.0	19.1	28.0	36.5	29.4
MAX	50.0	30.2	64.7	105	48.3
(WY)	1999	1997	1998	1998	1997
MIN	.97	2.28	7.28	2.86	11.7
(WY)	2000	2000	1997	1997	2000

e Estimated

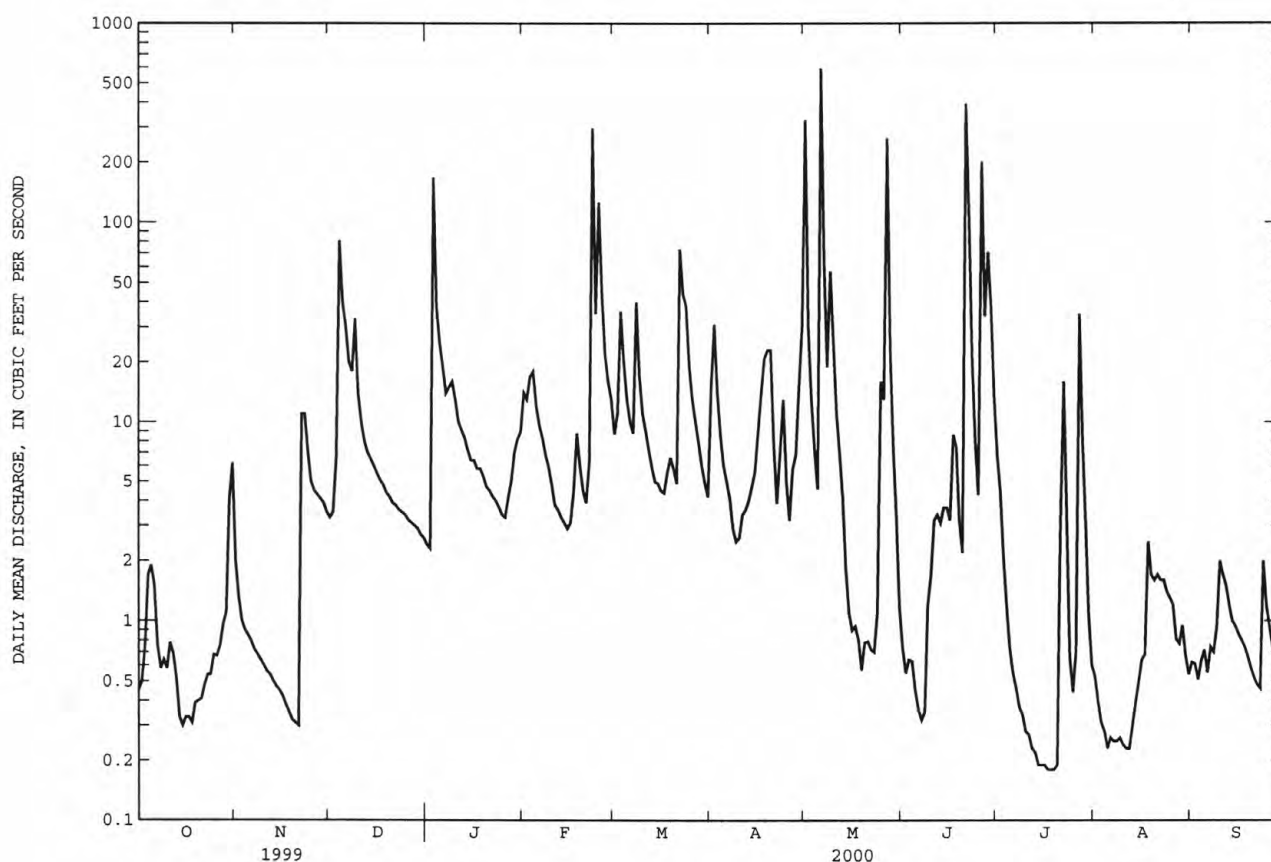
ARKANSAS RIVER BASIN

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07244100 COAL CREEK NEAR HENRYETTA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1996 - 2000
ANNUAL TOTAL	9191.38	4936.38	
ANNUAL MEAN	25.2	13.5	22.1
HIGHEST ANNUAL MEAN			32.9
LOWEST ANNUAL MEAN			13.5
HIGHEST DAILY MEAN	910 May 4	595 May 6	910 May 4 1999
LOWEST DAILY MEAN	.30 Oct 15	^a .18 Jul 17	^a .18 Jul 17 2000
ANNUAL SEVEN-DAY MINIMUM	.34 Oct 14	.19 Jul 14	.19 Jul 14 2000
INSTANTANEOUS PEAK FLOW		1560 May 6	2370 May 4 1999
INSTANTANEOUS PEAK STAGE		19.54 May 6	23.15 May 4 1999
ANNUAL RUNOFF (AC-FT)	18230	9790	16030
10 PERCENT EXCEEDS	41	21	34
50 PERCENT EXCEEDS	5.3	3.4	4.6
90 PERCENT EXCEEDS	.59	.38	1.0

^aAlso occurred July 18, 19.



ARKANSAS RIVER BASIN

07244100 COAL CREEK NEAR HENRYETTA, OK --Continued

WATER QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1996 to current year.

INSTRUMENTATION.--Water temperature recorder provides continuous readings.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum, 33.0°C, July 3, 1996; minimum, -0.5°C, Jan. 3, 4, 9, 1999.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 32.1°C, July 16; minimum, 1.8°C, Jan. 27.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	19.4	16.3	17.9	17.6	15.4	16.8	11.0	9.2	9.9	9.7	7.5	8.5
2	20.7	17.4	19.0	15.4	12.3	13.7	11.5	10.8	11.1	11.8	9.6	11.0
3	20.5	18.1	19.3	12.7	10.4	11.7	13.0	11.5	12.4	11.0	7.8	8.8
4	19.0	16.5	17.6	14.2	10.9	12.5	14.6	12.6	13.3	8.9	6.4	7.7
5	18.1	14.7	16.5	16.4	13.1	14.4	13.0	10.2	11.7	7.9	5.6	6.6
6	19.2	16.0	17.6	17.9	15.3	16.3	11.2	8.9	10.0	7.8	5.7	6.5
7	19.1	16.4	17.9	17.7	15.7	16.6	10.3	8.7	9.7	8.1	4.9	6.3
8	20.9	18.7	19.6	17.7	16.1	16.8	12.6	9.3	11.0	8.5	7.1	7.8
9	21.8	19.4	20.5	17.4	15.8	16.6	12.6	10.4	11.5	9.4	6.9	8.1
10	21.3	19.0	20.3	17.3	15.9	16.6	10.9	9.3	10.0	8.9	6.3	7.7
11	21.5	18.6	20.1	17.0	15.3	16.0	10.2	8.6	9.5	8.9	6.2	7.5
12	21.3	18.6	20.0	16.6	15.2	15.8	9.9	8.4	9.1	10.9	6.7	8.6
13	21.3	18.7	19.9	16.4	15.3	15.9	10.2	7.9	8.9	10.0	7.6	8.4
14	20.7	18.5	19.6	16.5	15.6	16.1	10.2	7.3	8.7	8.3	6.0	7.1
15	21.3	19.3	20.2	16.4	14.6	15.3	8.8	6.7	7.8	10.4	6.8	8.2
16	21.3	20.0	20.7	14.6	13.1	13.7	8.5	6.0	7.2	12.0	9.9	10.8
17	20.0	16.2	17.9	14.1	13.1	13.6	9.2	7.2	8.2	13.0	11.1	12.0
18	16.2	14.4	15.1	15.0	14.0	14.5	9.1	7.5	8.1	12.6	10.5	11.1
19	14.4	12.6	13.6	15.8	14.9	15.4	9.0	6.4	7.5	11.5	10.1	10.7
20	14.0	12.1	13.0	14.9	12.9	13.5	8.9	6.2	7.1	10.6	7.1	8.1
21	14.6	12.9	13.5	13.0	12.3	12.7	6.3	4.7	5.6	8.3	6.0	7.2
22	15.5	13.8	14.5	16.9	13.0	14.3	7.0	4.5	5.7	10.3	8.3	9.2
23	15.4	13.4	14.1	16.6	14.1	15.5	6.7	4.8	5.8	10.1	8.1	9.0
24	13.9	11.5	12.5	14.1	12.4	13.3	7.3	5.9	6.5	8.7	5.8	6.7
25	13.8	11.5	12.3	12.9	11.0	11.9	7.0	5.0	6.1	6.3	5.3	5.8
26	13.8	12.6	13.1	11.8	9.9	10.8	8.1	6.2	7.1	5.5	4.3	4.9
27	14.5	13.6	13.9	12.9	10.9	11.8	7.0	5.5	6.4	4.4	1.8	3.3
28	15.3	14.5	14.8	12.9	11.1	12.0	7.1	4.8	5.9	5.0	1.9	3.8
29	16.6	15.2	15.9	12.5	11.1	11.7	8.2	6.3	7.2	6.0	3.8	4.8
30	17.5	16.6	17.0	11.4	9.3	10.1	9.6	8.1	8.7	6.2	3.0	4.5
31	17.5	16.6	17.1	---	---	---	9.0	7.9	8.5	7.5	2.5	4.9
MONTH	21.8	11.5	16.9	17.9	9.3	14.2	14.6	4.5	8.6	13.0	1.8	7.6

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY				MARCH			APRIL			MAY		
1	5.7	3.3	4.4	15.7	11.9	13.6	15.4	13.2	14.1	18.4	17.2	17.8
2	6.2	2.0	4.2	13.4	11.2	12.5	14.8	12.7	13.6	20.1	17.0	18.5
3	7.4	3.5	5.2	11.6	10.0	10.8	14.6	12.8	13.6	20.2	18.0	19.1
4	6.9	3.8	5.1	12.7	9.0	10.7	16.7	11.2	13.5	21.4	18.2	19.8
5	6.9	2.9	4.9	13.6	9.4	11.4	19.2	12.7	15.3	20.7	19.3	19.9
6	8.0	4.0	5.7	16.1	11.5	13.6	21.0	14.9	17.4	19.7	16.6	18.7
7	9.0	5.0	7.0	17.4	14.0	15.5	21.4	17.0	18.7	21.8	19.2	20.3
8	9.6	5.5	7.2	16.3	14.1	15.3	18.3	12.9	15.5	23.8	21.0	22.3
9	11.2	7.0	8.7	16.4	13.5	14.8	17.8	12.4	15.0	23.3	20.7	21.7
10	12.3	9.6	11.0	14.4	11.3	12.8	17.3	14.0	15.7	22.0	19.3	20.8
11	11.5	8.6	9.4	13.8	10.0	11.4	16.9	15.5	16.1	23.7	20.9	22.1
12	9.4	7.4	8.3	14.3	8.9	11.2	15.5	14.0	14.5	24.6	22.3	23.4
13	11.5	8.9	10.0	15.3	9.8	12.2	17.4	13.5	15.2	24.2	20.8	22.0
14	10.1	7.1	8.8	16.3	11.8	13.6	18.9	14.4	16.4	23.5	18.6	20.8
15	11.9	7.6	9.6	17.5	12.7	14.8	18.1	15.6	16.9	21.1	19.0	20.1
16	11.6	9.0	10.0	14.9	11.6	13.4	18.6	15.8	17.2	20.7	19.4	20.1
17	10.5	9.4	9.8	11.6	11.0	11.2	18.9	14.1	16.6	23.1	20.2	21.5
18	10.8	8.5	9.8	11.9	10.7	11.3	21.7	16.5	18.9	24.0	21.1	22.4
19	10.6	7.6	8.9	11.6	9.8	10.7	22.1	19.8	21.0	22.7	19.3	20.8
20	11.3	7.0	9.0	15.5	8.4	11.5	22.0	17.9	19.6	22.8	18.8	20.8
21	11.9	9.9	10.8	13.7	11.9	12.7	21.4	16.8	18.8	24.1	19.4	21.8
22	14.1	10.7	12.2	12.8	11.4	12.3	20.4	15.9	18.2	25.8	21.7	23.7
23	13.6	12.2	12.9	14.6	12.6	13.6	20.3	17.3	18.5	27.5	23.2	25.4
24	14.7	12.5	13.6	16.6	13.2	14.9	21.4	17.1	18.8	28.0	24.3	26.3
25	15.5	14.1	14.7	18.9	14.7	16.7	21.8	17.4	19.3	27.3	23.2	24.6
26	14.9	13.1	14.1	19.6	16.1	17.7	20.2	16.9	18.5	24.9	23.2	24.3
27	14.5	11.8	13.2	19.8	15.5	17.4	21.3	16.3	18.9	24.6	21.7	22.7
28	14.9	11.6	13.0	19.9	15.7	17.2	20.7	16.8	18.7	25.4	22.6	23.9
29	15.7	12.6	13.8	16.8	14.7	15.7	19.8	17.3	18.6	27.2	23.0	24.9
30	---	---	---	15.7	13.9	14.6	19.9	17.3	19.0	28.9	24.2	26.1
31	---	---	---	17.4	12.4	14.7	---	---	---	29.3	25.0	26.9
MONTH	15.7	2.0	9.5	19.9	8.4	13.5	22.1	11.2	17.1	29.3	16.6	22.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE				JULY			AUGUST			SEPTEMBER		
1	29.5	25.2	27.1	27.8	24.1	25.9	28.7	24.1	26.3	30.0	26.4	28.2
2	27.6	24.9	25.8	28.0	25.7	26.7	28.8	24.5	26.6	30.3	26.2	28.3
3	25.3	23.7	24.4	29.4	25.9	27.5	29.2	25.6	27.4	30.2	26.3	28.4
4	25.4	23.3	24.3	30.3	26.0	27.8	30.4	26.4	28.3	28.9	26.8	27.9
5	25.4	22.4	23.9	30.6	25.9	27.9	30.5	27.0	28.7	28.2	25.8	27.1
6	24.7	20.3	22.7	30.6	26.1	28.3	31.2	26.7	28.8	27.9	24.5	26.2
7	25.1	21.0	23.1	30.4	26.4	28.4	30.6	27.6	28.9	27.6	24.0	25.8
8	25.5	21.0	23.4	30.5	26.6	28.7	31.1	26.7	28.9	27.6	24.0	25.8
9	25.2	23.1	24.2	31.1	27.0	29.1	31.5	27.3	29.2	27.2	25.0	26.0
10	24.4	23.5	24.1	31.3	27.3	29.2	31.5	27.2	29.3	28.6	25.0	26.7
11	24.3	22.7	23.5	31.0	27.4	29.2	31.7	27.5	29.5	29.3	26.2	27.7
12	27.7	23.0	25.0	31.3	27.9	29.6	31.4	27.7	29.5	28.2	26.2	27.0
13	28.4	24.3	26.4	32.1	28.2	29.9	30.6	26.9	28.8	27.5	24.6	26.0
14	27.3	23.6	24.8	31.3	26.7	29.0	30.3	26.0	28.1	28.0	24.6	26.3
15	27.4	21.8	24.4	31.7	27.0	29.3	30.1	25.8	28.0	27.0	24.2	25.4
16	26.6	24.6	25.6	32.1	28.0	29.8	31.1	26.8	28.9	24.3	21.0	22.7
17	24.8	21.6	22.9	30.1	27.7	28.5	31.4	27.2	29.2	22.7	19.9	21.5
18	23.2	22.0	22.6	30.1	26.3	28.0	29.7	26.1	28.1	22.4	19.7	21.2
19	25.1	22.0	23.4	31.9	26.9	29.3	28.8	25.6	27.2	23.3	20.3	21.7
20	27.3	23.5	25.2	30.1	26.1	28.0	29.3	25.4	27.4	24.3	21.8	22.7
21	26.6	21.0	23.2	29.6	24.0	26.4	29.4	25.3	27.4	22.5	20.1	21.3
22	24.3	21.2	22.7	27.3	23.5	25.8	30.2	26.2	28.1	24.8	21.4	22.8
23	26.7	23.7	25.1	27.6	24.7	25.7	30.5	26.9	28.7	26.8	24.2	25.2
24	28.1	25.1	26.5	28.6	23.6	25.8	30.6	27.1	28.9	25.0	20.0	22.1
25	27.3	25.9	26.6	26.7	23.8	25.1	30.5	26.6	28.6	20.8	18.1	19.0
26	26.6	22.8	24.6	28.1	23.3	25.7	29.9	27.0	28.5	19.3	15.9	17.9
27	25.4	24.2	24.8	27.6	23.0	24.8	30.7	26.7	28.7	19.9	16.3	18.1
28	25.1	23.6	24.2	26.3	23.2	24.7	30.7	26.8	28.7	20.3	17.0	18.7
29	24.5	23.1	23.8	27.0	24.3	25.4	30.4	26.4	28.4	20.4	17.5	19.0
30	25.7	22.6	24.3	27.9	24.1	25.7	29.9	25.9	28.0	20.6	18.1	19.3
31	---	---	---	28.0	24.2	25.9	29.9	25.9	28.0	---	---	---
MONTH	29.5	20.3	24.4	32.1	23.0	27.5	31.7	24.1	28.4	30.3	15.9	23.9
YEAR	32.1	1.8	17.8									

ARKANSAS RIVER BASIN

07245000 CANADIAN RIVER NEAR WHITEFIELD, OK

LOCATION.--Lat 35°15'50", long 95°14'21", in SE 1/4 SE 1/4 sec.12, T.9 N., R.19 E., Haskell County, Hydrologic Unit 11090204, on right downstream bank at end of bridge on State Highway 2, 0.8 mi north of Whitefield, 5.5 mi upstream from Taloka (Snake) Creek, 8.2 mi downstream from Eufaula Dam, and at mile 18.8.

DRAINAGE AREA.--47,576 mi², of which 9,700 mi² is probably noncontributing.

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

REVISED RECORDS.--WSP 1177: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 473.16 ft above sea level. Prior to Jan. 11, 1939, nonrecording gage and Jan. 11, 1939 to Dec. 10, 1941, June 12, 1947 to Sept. 30, 1948, water-stage recorder, all at site 2.1 mi downstream at datum 2.20 ft higher. Dec. 11, 1941 to June 1, 1947, and Oct. 1, 1948 to Sept. 30, 1978, water-stage recorder at site 400 ft upstream and at datum 5.00 ft higher. Oct. 1, 1978 to July 26, 1983, water-stage recorder at site 400 ft upstream at same datum.

REMARKS.--No estimated daily discharge. Records good. Prior to February 1964, occasional slight regulation by Conchas Lake in New Mexico and, except for 54 mi² of intervening area, completely regulated thereafter by Eufaula Lake (station 07244800). U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1898, that of May 10, 1943, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	517	1640	388	5410	431	5140	5160	5780	14400	5470	3830
2	59	1990	1320	215	3500	345	8690	16700	5800	14300	5440	4580
3	57	5430	764	436	3020	593	9580	22600	3140	14400	5780	3590
4	53	4820	236	3210	3120	295	9270	23300	4160	14200	5200	5250
5	51	1070	205	2680	1960	215	10800	23500	2250	13900	4290	4890
6	50	173	181	2670	1280	202	9220	13300	3490	14400	3920	4150
7	50	255	1090	1580	2300	185	9190	1150	3230	14400	5620	3070
8	52	1110	547	555	2430	180	6250	7910	2960	14200	5810	3350
9	52	670	465	243	2270	172	6530	22600	1930	14500	5690	1420
10	52	1790	876	863	1450	179	6720	26600	917	14500	6140	1280
11	781	1150	240	1030	1840	226	6880	26600	627	14600	6360	5540
12	2420	1400	343	2090	933	172	4090	24200	5180	14600	4110	4830
13	3050	388	760	991	274	754	2920	20800	6950	14600	3370	4710
14	1950	125	893	1750	1460	214	2270	20700	6610	13900	6020	4100
15	2730	127	631	299	1960	162	940	17600	7440	13200	6220	3480
16	540	260	582	240	1310	158	714	7030	10600	13200	8120	670
17	86	800	784	1120	1490	150	6020	5180	8450	13200	6500	88
18	3230	3320	302	1670	1790	192	6180	5400	5410	13200	3950	1260
19	4260	989	257	1720	772	167	6320	4590	8020	13000	908	2330
20	3590	306	852	1960	281	1130	2110	5340	6620	5230	406	2130
21	4690	143	1510	2950	598	2130	5100	4880	5030	2130	3430	2450
22	921	281	920	836	281	1040	1330	4780	3680	1290	3780	4190
23	491	833	689	260	274	205	290	4880	13200	2170	4750	3270
24	88	1540	561	1510	872	285	5970	3670	13200	3640	4750	821
25	4190	944	231	2330	1280	576	10300	4970	13200	4580	4280	2860
26	4600	1110	197	2250	685	158	8500	4920	7740	4190	3700	2030
27	2760	753	816	2350	229	2860	8750	6000	4830	4060	3080	630
28	3640	741	751	1740	723	3110	3790	6690	13600	4700	4540	132
29	1350	975	235	598	1010	3790	1340	5640	13200	3620	5500	1220
30	694	2080	200	254	---	4370	179	4710	13700	4240	4630	770
31	118	---	193	3280	---	3920	---	5120	---	5240	4240	---
TOTAL	46723	36090	19271	44068	44802	28566	165383	356520	200944	311790	146004	82921
MEAN	1507	1203	622	1422	1545	921	5513	11500	6698	10060	4710	2764
MAX	4690	5430	1640	3280	5410	4370	10800	26600	13700	14600	8120	5540
MIN	50	125	181	215	229	150	179	1150	627	1290	406	88
AC-FT	92680	71580	38220	87410	88860	56660	328000	707200	398600	618400	289600	164500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2000, BY WATER YEAR (WY)

	MEAN	2889	5618	6830	6380	6198	9342	9347	13460	11070	5258	3669	2582
MAX	13100	21930	29600	32030	19480	30340	37980	64970	35550	15630	20050	13910	
(WY)	1987	1975	1993	1998	1993	1985	1990	1990	1982	1999	1992	1992	
MIN	241	248	247	119	127	129	81.5	148	600	259	692	558	
(WY)	1979	1983	1981	1981	1981	1981	1981	1981	1988	1988	1985	1985	

ARKANSAS RIVER BASIN

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07245000 CANADIAN RIVER NEAR WHITEFIELD, OK--Continued

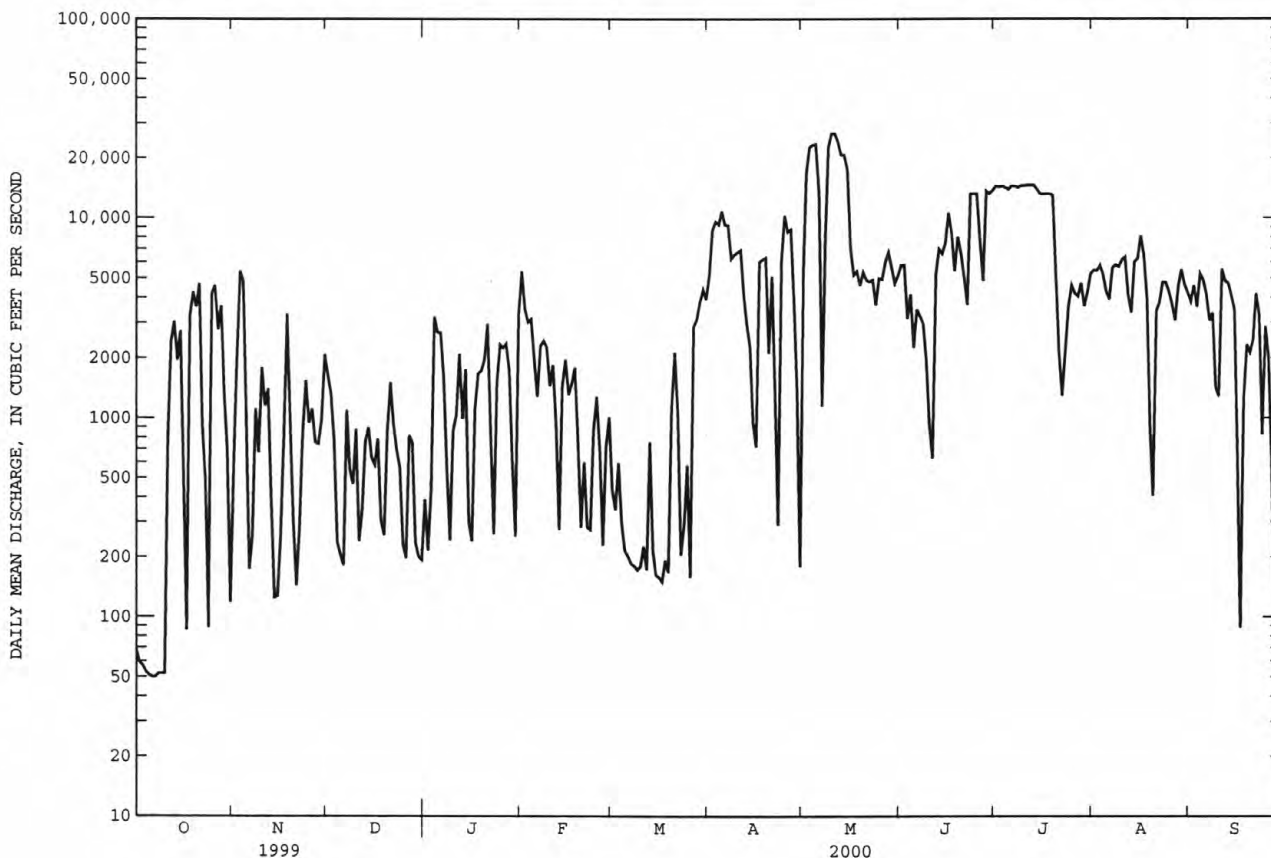
SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1968 - 2000	
ANNUAL TOTAL	3050991		1483082		^a 6890	
ANNUAL MEAN	8359		4052		15200	
HIGHEST ANNUAL MEAN					1012	
LOWEST ANNUAL MEAN					1981	
HIGHEST DAILY MEAN	36300	May 15	26600	May 10	226000	May 5 1990
LOWEST DAILY MEAN	50	Oct 6	50	Oct 6, 7	^b 17	Dec 1 1980
ANNUAL SEVEN-DAY MINIMUM	51	Oct 4	51	Oct 4	39	Oct 7 1985
INSTANTANEOUS PEAK FLOW			26900	May 12	^c 241000	May 3 1990
INSTANTANEOUS PEAK STAGE			11.05	May 12	^d 25.32	May 3 1990
ANNUAL RUNOFF (AC-FT)	6052000		2942000		4991000	
10 PERCENT EXCEEDS	23400		13100		17000	
50 PERCENT EXCEEDS	4720		2330		3750	
90 PERCENT EXCEEDS	280		204		154	

^aPrior to regulation, water years 1939-63, 6,005 ft³/s.

^bMinimum daily discharge for period of record was 0.4 ft³/s, Oct. 8, 1956.

^cMaximum discharge for period of record 281,000 ft³/s, May 10, 1943.

^dMaximum gage height for period of record 25.5 ft, May 10, 1943.



ARKANSAS RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON, AR

LOCATION.--Lat 34°55'08", long 94°17'55", NW 1/4 SW 1/4 sec.16, T.3 N., R.31 W., Scott County, Hydrologic Unit 11110105, on right bank at downstream side of highway bridge at Cauthron, 2.9 mi downstream from Cross Creek, 7.8 mi downstream from Jones Creek, and at mile 109.0.

DRAINAGE AREA.--203 mi².

PERIOD OF RECORD.--February 1939 to current year.

REVISED RECORDS.--WSP 1037: 1939(M). WRD Ark. 1970: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 569.53 ft above sea level. Prior to May 2, 1939, nonrecording gage at present site and datum. Satellite data collection platform installed September 13, 1991.

REMARKS.--No estimated daily discharges. Records good. As of September 1974, flow from 92.2 mi² upstream from this station is controlled by 16 floodwater-detention reservoirs that have a total combined capacity of 39,082 acre-ft below the flood spillway crests, of which 33,524 acre-ft are flood detention capacity, 2,100 acre-ft are water-supply storage, and 3,458 acre-feet are sediment storage capacity.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1935 reached a stage of 27.4 ft, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	13	45	15	30	198	52	29	67	158	4.5	4.1
2	2.5	12	40	15	48	162	99	44	45	123	4.2	4.2
3	2.8	8.5	97	20	67	405	123	108	41	93	3.8	4.2
4	2.8	6.4	80	96	72	296	90	568	308	71	3.8	4.1
5	2.8	5.7	115	62	73	206	66	220	805	e50	4.1	3.8
6	2.7	4.9	47	45	58	164	53	187	260	e40	4.0	3.4
7	2.5	5.7	18	38	51	136	45	181	160	e35	3.9	3.1
8	3.4	5.2	11	39	46	115	36	136	110	e30	3.8	3.1
9	5.8	5.8	17	72	42	96	29	99	75	e40	3.6	2.8
10	9.6	10	223	73	38	107	23	75	63	e30	3.5	2.9
11	5.1	13	78	61	34	341	1530	58	80	e30	3.3	3.5
12	3.8	14	3990	50	32	205	1500	45	82	e20	3.4	4.0
13	3.0	14	1480	43	30	154	714	38	67	e20	3.3	4.3
14	2.6	15	906	37	26	129	444	31	55	e10	4.6	3.9
15	2.7	18	546	31	23	110	328	21	238	e10	4.1	3.8
16	2.9	21	303	29	22	95	258	16	167	e8.0	3.5	3.8
17	2.9	23	214	26	21	83	207	28	261	e7.0	3.2	3.5
18	2.8	22	168	25	35	80	167	25	491	e6.0	2.7	3.4
19	3.3	21	136	25	89	90	139	408	256	4.9	2.6	3.2
20	3.6	21	108	23	65	77	114	163	602	4.5	3.6	3.0
21	3.3	24	85	20	50	68	91	88	2620	5.3	5.0	2.8
22	3.1	28	69	18	44	66	72	55	2610	10	7.0	3.0
23	4.0	39	56	16	44	59	66	69	1150	11	6.1	3.1
24	3.9	64	47	15	50	54	86	51	803	8.4	6.1	6.8
25	3.6	64	40	14	57	49	69	30	514	6.4	7.4	32
26	3.7	58	34	14	1240	47	53	23	333	5.0	6.1	13
27	3.7	65	28	16	792	147	43	283	249	4.5	5.5	6.2
28	3.7	62	27	21	399	106	36	1120	219	4.2	5.2	3.7
29	4.9	59	24	22	254	77	30	354	646	4.3	5.4	2.6
30	8.5	52	20	22	---	76	25	182	251	4.3	5.1	2.2
31	7.2	---	18	24	---	64	---	106	---	4.2	4.5	---
TOTAL	119.8	774.2	9070	1027	3832	4062	6588	4841	13628	858.0	136.9	147.5
MEAN	3.86	25.8	293	33.1	132	131	220	156	454	27.7	4.42	4.92
MAX	9.6	65	3990	96	1240	405	1530	1120	2620	158	7.4	32
MIN	2.5	4.9	11	14	21	47	23	16	41	4.2	2.6	2.2
AC-FT	238	1540	17990	2040	7600	8060	13070	9600	27030	1700	272	293

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2000, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	110	287	358	292	367	417	340	469	223	60.0	20.0	22.8														
MAX	1423	1900	1078	1075	1246	849	1092	2080	846	314	93.7	166														
(WY)	1985	1997	1983	1998	1989	1975	1991	1990	1986	1981	1996	1996														
MIN	.015	2.09	2.02	14.1	35.6	59.9	42.5	13.6	2.36	.41	.81	.19														
(WY)	1979	1996	1990	1981	1996	1986	1976	1977	1988	1980	1976	1980														

e Estimated

ARKANSAS RIVER BASIN

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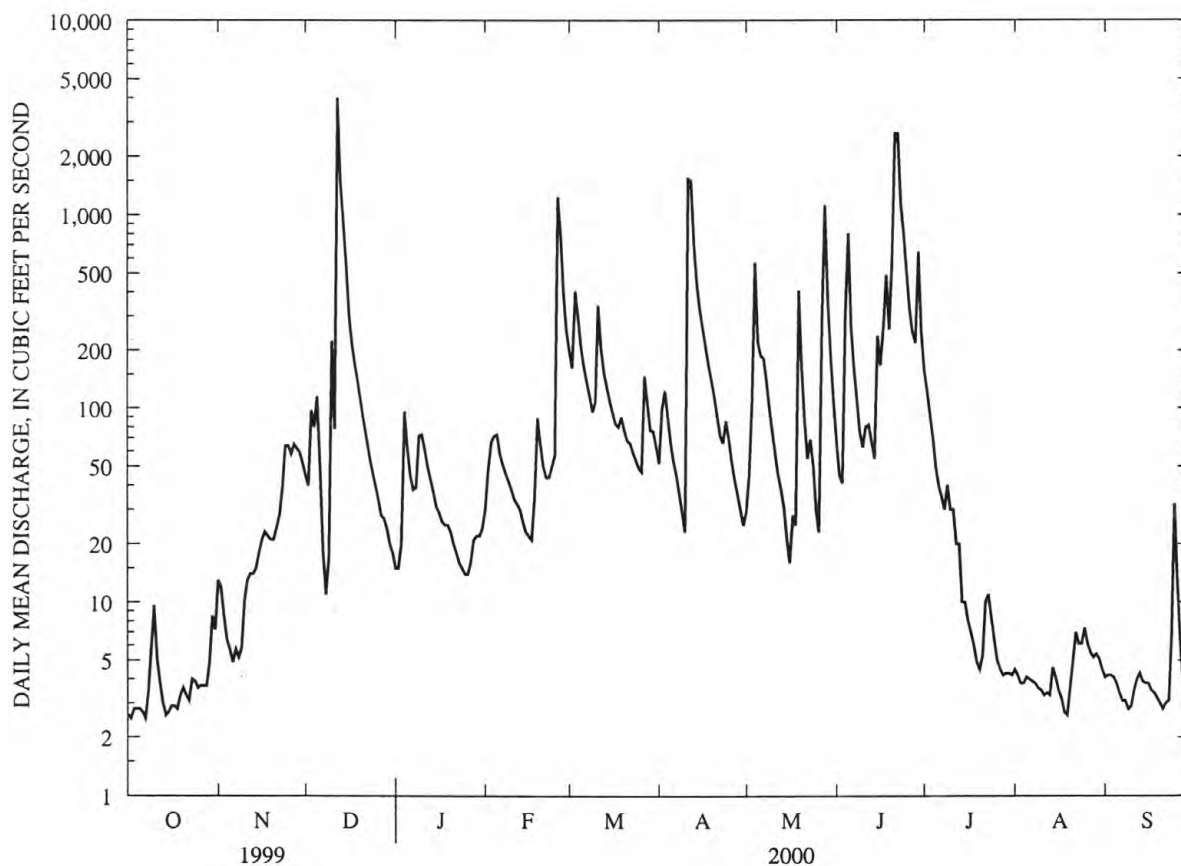
07247000 POTEAU RIVER AT CAUTHRON, AR--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1975 - 2000	
ANNUAL TOTAL	78269.5		45084.4		^a 247	
ANNUAL MEAN	214		123		432	
HIGHEST ANNUAL MEAN					48.7	
LOWEST ANNUAL MEAN					16900	
HIGHEST DAILY MEAN	3990	Dec 12	3990	Dec 12		May 3 1990
LOWEST DAILY MEAN	2.3	Aug 19	2.2	Sep 30		Aug 30 1976
ANNUAL SEVEN-DAY MINIMUM	2.4	Aug 17	2.7	Oct 1		Oct 7 1978
INSTANTANEOUS PEAK FLOW			6650	Jun 21	^b 24000	May 3 1990
INSTANTANEOUS PEAK STAGE			14.63	Jun 21	^c 22.17	May 3 1990
INSTANTANEOUS LOW FLOW			1.9	Sep 21		at times
ANNUAL RUNOFF (AC-FT)	155200		89420		178600	
10 PERCENT EXCEEDS	574		255		601	
50 PERCENT EXCEEDS	48		32		52	
90 PERCENT EXCEEDS	3.0		3.5		1.8	

^aPrior to regulation, water years 1940-74, 218 ft³/s.

^bMaximum discharge for period of record, 32,200 ft³/s May 20, 1960.

^cMaximum gage height for period of record, 23.76 ft May 20, 1960.



ARKANSAS RIVER BASIN

07247015 POTEAU RIVER NEAR LOVING, OK

LOCATION.--Lat 34°52'47", long 94°29'02", in SW 1/4 NW 1/4 sec.29, T.5 N., R.27 E., LeFlore County, Hydrologic Unit 11110105, on right downstream bank of county road bridge, 0.6 mi northwest of Loving, 1.0 mi above Loving Creek, and at mile 93.6.

DRAINAGE AREA.--269 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1992, to current year.

REVISED RECORDS.--OK-2000-1: 1999.

GAGE.--Water-stage recorder. Datum of gage is 507.76 ft above sea level.

REMARKS.--Records poor. Some regulation by small flood-retarding structures. U.S. Geological Survey's satellite telemeter at station.

REVISIONS.--Revised daily discharges for water year 1999. These figures supersede those published in the report for 1999.

DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE	DATE	DISCHARGE
Aug. 4	5.2	Aug 14	3.8	Aug 24	1.8	Sep 3	2.0	Sep 13	4.8	Sep 23	.85
Aug 5	4.8	Aug 15	2.9	Aug 25	1.4	Sep 4	2.5	Sep 14	3.1	Sep 24	.70
Aug 6	4.8	Aug 16	2.8	Aug 26	1.1	Sep 5	3.1	Sep 15	2.3	Sep 25	.60
Aug 7	4.7	Aug 17	2.8	Aug 27	1.7	Sep 6	3.2	Sep 16	1.7	Sep 26	.44
Aug 8	4.5	Aug 18	2.7	Aug 28	1.7	Sep 7	4.5	Sep 17	1.4	Sep 27	.44
Aug 9	4.7	Aug 19	3.2	Aug 29	1.3	Sep 8	6.4	Sep 18	1.2	Sep 28	.57
Aug 10	4.7	Aug 20	2.8	Aug 30	1.5	Sep 9	6.1	Sep 19	.95	Sep 29	.43
Aug 11	4.6	Aug 21	2.0	Aug 31	1.5	Sep 10	6.0	Sep 20	.84	Sep 30	.30
Aug 12	4.4	Aug 22	2.0	Sep 1	1.7	Sep 11	6.5	Sep 21	.78		
Aug 13	4.1	Aug 23	2.0	Sep 2	1.6	Sep 12	7.0	Sep 22	.79		

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	12	7.0	25	29	251	82	61	89	239	e11	2.1
2	.14	9.0	3.6	25	33	209	85	66	66	191	e12	2.1
3	.42	20	13	40	46	327	163	152	68	160	e12	2.1
4	.65	23	79	58	61	406	145	621	136	131	e11	2.0
5	1.1	18	69	89	67	273	107	343	906	105	e10	2.0
6	1.6	13	97	60	65	216	83	246	339	84	e10	1.8
7	1.6	11	34	48	54	183	69	234	200	67	e9.4	1.5
8	6.3	9.4	16	47	49	157	58	195	e178	57	e8.6	.99
9	5.6	7.4	11	48	45	135	48	150	e153	51	8.0	.81
10	3.1	12	113	71	42	134	41	114	e143	e43	8.1	.59
11	2.5	12	134	68	40	348	987	88	e120	e32	7.7	.29
12	8.0	11	3740	57	36	308	2750	70	231	e25	6.7	.18
13	7.1	9.7	2930	49	35	220	919	59	131	21	5.2	.21
14	3.9	9.0	1000	42	33	185	592	49	167	e18	5.9	.20
15	2.6	8.4	640	39	30	160	442	43	322	e15	6.4	.08
16	1.7	8.3	381	35	29	139	352	36	262	e13	6.6	.03
17	1.3	8.9	269	33	35	120	287	32	234	e11	6.7	.08
18	1.1	8.1	208	32	53	108	235	37	703	e9.2	6.5	.10
19	1.1	7.9	171	30	75	115	198	203	437	e8.3	6.5	.14
20	1.1	8.5	138	30	95	113	167	259	614	e7.6	6.3	.08
21	1.5	9.1	109	29	67	96	140	132	2810	e31	5.7	.00
22	1.8	11	86	27	55	90	112	82	4720	e34	5.1	.00
23	2.7	30	70	26	53	85	99	e71	1350	e30	4.7	.24
24	3.2	30	59	24	52	78	111	e60	818	e21	4.3	4.2
25	3.7	11	50	23	54	71	110	e73	564	e16	3.7	e4.0
26	3.9	8.5	43	23	887	66	85	e63	401	e14	3.3	29
27	3.8	12	38	24	987	93	69	e52	319	e13	2.8	26
28	4.4	9.2	34	26	507	181	59	e1050	291	e12	2.5	13
29	5.3	8.6	31	26	330	117	53	e630	523	e12	2.2	7.1
30	8.4	9.2	30	27	---	104	47	e310	363	e11	2.0	4.1
31	14	---	27	27	---	93	---	140	---	e11	2.0	---
TOTAL	103.99	365.2	10630.6	1208	3944	5181	8695	5721	17658	1493.1	202.9	105.02
MEAN	3.35	12.2	343	39.0	136	167	290	185	589	48.2	6.55	3.50
MAX	14	30	3740	89	987	406	2750	1050	4720	239	12	29
MIN	.14	7.4	3.6	23	29	66	41	32	66	7.6	2.0	.00
AC-FT	206	724	21090	2400	7820	10280	17250	11350	35020	2960	402	208

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	105	532	548	544	427	481	358	433	260	48.3	13.3	46.4						
MAX	408	2217	800	1289	1172	907	627	1001	600	183	66.1	190						
(WY)	1999	1997	1994	1998	1997	1998	1996	1999	1992	1999	1996	1996						
MIN	3.35	3.25	47.6	39.0	34.1	167	64.4	24.8	12.6	3.73	3.34	2.43						
(WY)	2000	1996	1996	2000	1996	2000	1992	1997	1994	1998	1999	1999						

e Estimated

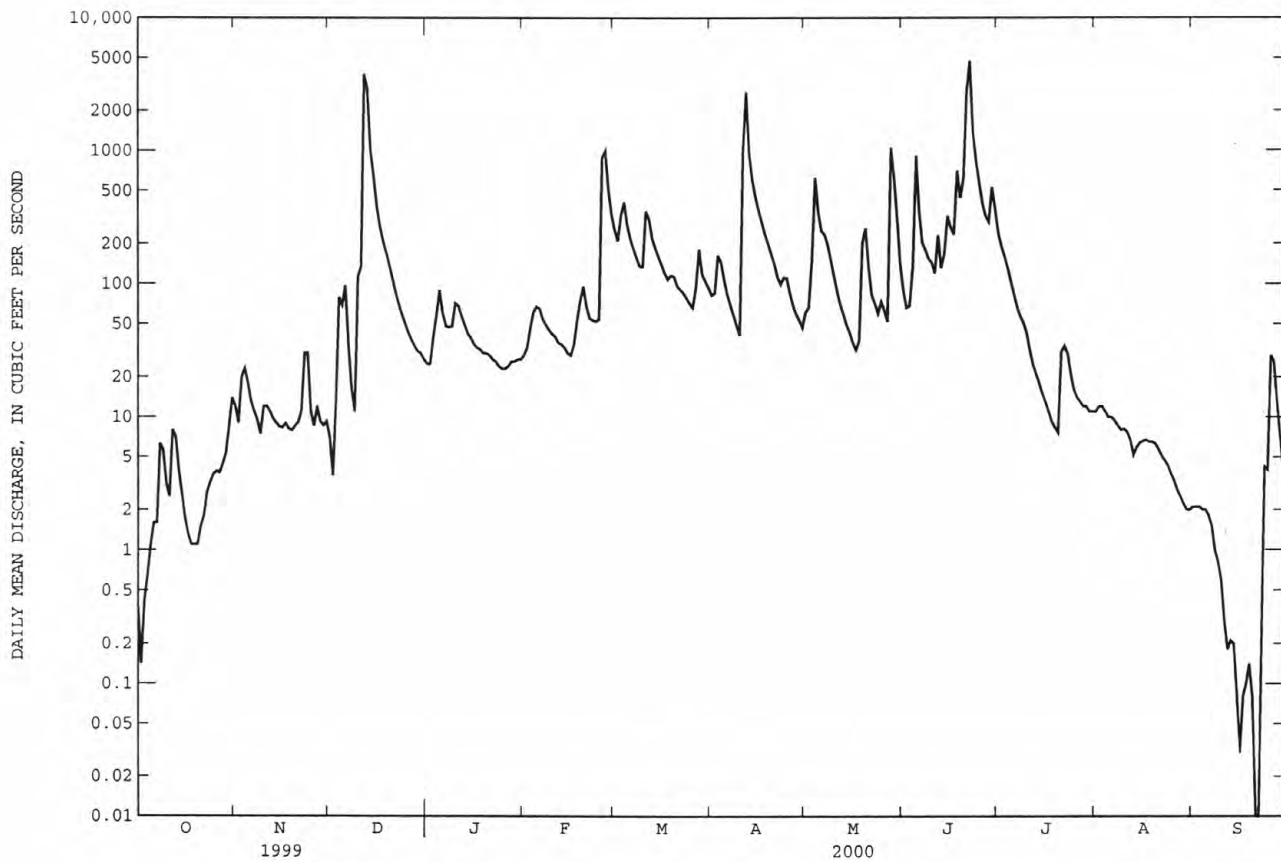
ARKANSAS RIVER BASIN

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07247015 POTEAU RIVER NEAR LOVING, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	106061.68	55307.81	
ANNUAL MEAN	291	151	318
HIGHEST ANNUAL MEAN			469
LOWEST ANNUAL MEAN			139
HIGHEST DAILY MEAN	4460 May 23	4720 Jun 22	12500 Nov 25 1996
LOWEST DAILY MEAN	.14 Oct 2	^a .00 Sep 21	^a .00 Sep 21 2000
ANNUAL SEVEN-DAY MINIMUM	.38 Sep 27	.06 Sep 16	.06 Sep 16 2000
INSTANTANEOUS PEAK FLOW		7050 Jun 22	13200 Nov 25 1996
INSTANTANEOUS PEAK STAGE		23.15 Jun 22	28.66 Nov 25 1996
ANNUAL RUNOFF (AC-FT)	210400	109700	230200
10 PERCENT EXCEEDS	792	320	734
50 PERCENT EXCEEDS	70	38	64
90 PERCENT EXCEEDS	1.7	2.1	3.6

^aAlso occurred Sept. 22.



ARKANSAS RIVER BASIN

07247015 POTEAU RIVER AT LOVING, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	BARO-	OXYGEN,	PH	SPE-	TEMPER-	SAMPLE
		ANA- LYZING SAMPLE (CODE NUMBER) (00028)	COL- LECTING SAMPLE (CODE NUMBER) (00027)		CHARGE, INST. CUBIC FEET PER SECOND (00061)	METRIC PRES- SURE (MM OF HG) (00025)		WATER WHOLE FIELD (STAND- ARD UNITS) (00400)			
JUL											
13...	1106	1028	1028	8.98	21	758	5.4	7.0	73	30.0	10.0
13...	1109	1028	1028	8.98	21	758	5.5	6.9	73	30.0	20.0
13...	1112	1028	1028	8.98	21	758	5.5	6.9	73	30.0	30.0
13...	1115	1028	1028	8.98	21	758	5.2	6.9	74	30.0	40.0
13...	1117	1028	1028	8.98	21	758	5.7	7.0	74	30.0	50.0
13...	1119	1028	1028	8.98	21	758	5.2	6.9	74	30.0	60.0
13...	1122	1028	1028	8.98	21	758	5.4	7.1	74	30.0	70.0
13...	1125	1028	1028	8.98	21	758	5.1	7.0	74	30.0	80.0
13...	1128	1028	1028	8.98	21	758	5.2	7.1	74	30.0	90.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
OCT											
07...	0910	80020	1028	8.78	1.4	755	66	6.5	7.2	100	17.0
DEC											
14...	1315	80020	1028	12.39	959	748	92	10.4	6.8	52	16.5
FEB											
09...	0835	80020	1028	9.20	45	764	90	11.1	7.3	159	4.0
APR											
18...	1505	80020	1028	10.07	229	750	97	9.0	7.5	66	29.5
JUN											
29...	0730	80020	1028	10.82	425	758	72	5.9	7.1	59	19.5
AUG											
16...	0855	80020	1028	8.69	6.2	762	50	4.0	7.3	95	26.0
DATE	TEMPER- ATURE WATER (DEG C) (00010)	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)	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 CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)
OCT											
07...	15.5	23	--	2.83	3.75	3.5	.9	10.3	45	30	37
DEC											
14...	9.0	13	5	2.24	1.84	2.1	.4	3.7	34	8	10
FEB											
09...	6.5	27	9	5.14	3.45	3.6	1	17.1	54	18	22
APR											
18...	18.0	15	5	2.64	2.08	1.8	.7	6.0	43	11	13
JUN											
29...	25.0	15	1	2.61	2.09	2.1	.6	5.1	38	14	17
AUG											
16...	27.0	24	--	3.72	3.64	3.0	.6	7.2	36	30	36

ARKANSAS RIVER BASIN

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07247015 POTEAU RIVER AT LOVING, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	CAR- BONATE WATER DIS IT FIELD	CHLO- RIDE, DIS- SOLVED	SULFATE DIS- SOLVED	NITRO- GEN, AM- MONIA + ORGANIC TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	PHOS- PHATE, ORTHO, DIS- SOLVED
	MG/L AS CO3 (00452)	(MG/L AS CL) (00940)	(MG/L AS SO4) (00945)	(MG/L AS N) (00625)	(MG/L AS N) (00608)	(MG/L AS N) (00600)	(MG/L AS NH4) (71846)	(MG/L AS N) (00631)	(MG/L AS N) (00613)	(MG/L AS N) (00605)	(MG/L AS PO4) (00660)
OCT 07...	0	7.5	7.1	.46	.033	.53	.04	.065	<.010	.43	.064
DEC 14...	0	3.5	5.6	.61	.047	1.2	.06	.556	<.010	.57	.166
FEB 09...	0	13.5	20.0	.41	<.020	1.1	--	.639	<.010	--	1.02
APR 18...	0	5.1	8.2	.40	<.020	.57	--	.166	<.010	--	.248
JUN 29...	0	3.8	5.7	.48	<.020	.76	--	.281	<.010	--	.218
AUG 16...	0	5.8	6.2	.74	.036	.79	.05	.052	<.010	.70	.113
DATE	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	PHOS- PHORUS TOTAL	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	TUR- BID- ITY	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M.	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
	(MG/L AS P) (00666)	(MG/L AS P) (00671)	(MG/L AS P) (00665)	(MG/L) (00530)	(70303)	(70302)	(70300)	(70301)	(00076)	(UG/L) (32218)	(COL / 100 ML) (31633)
OCT 07...	.054	.021	.052	5	.08	.23	62	53	2.2	3.00	72
DEC 14...	.075	.054	.177	42	.06	114	44	27	30	3.00	3800
FEB 09...	.360	.334	.430	6	.13	11.3	93	78	3.5	2.00	37
APR 18...	.088	.081	.142	13	.06	26.6	43	33	15	2.00	K32
JUN 29...	.090	.071	.138	32	.06	53.9	47	31	2.0	5.00	1300
AUG 16...	.053	.037	.101	12	.09	1.05	63	48	6.1	6.00	26
DATE	COLI- FORM, FECAL, 0.7 UM-MF	STREP- TOCOCCI FECAL, KF AGAR	CHLORO- HPYLL A PHYTO- PLANK- TON	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR.	CHLORO- PHYLL B PHYTO- PLANK- TON, UNCORR.	CHLORO- PHYLL C PHYTO- PLANK- TON, UNCORR.	MANGA- NESE, DIS- SOLVED	SEDI- MENT, SUS- PENDE	SEDI- MENT, DIS- CHARGE, SUS- PENDE	SED. SUSP. SIEVE DIAM. % FINER THAN	
	(COLS./ 100 ML) (31625)	PER 100 ML) (31673)	ACID M. (UG/L) (32211)	(UG/L) (32230)	(UG/L) (32231)	(UG/L) (32232)	(UG/L AS MN) (01056)	(MG/L) (80154)	(T/DAY) (80155)	.062 MM (70331)	
OCT 07...	96	130	<1.00	1.00	<1.00	<1.00	38	9	.03	94	
DEC 14...	6300	5800	1.00	3.00	<1.00	<1.00	43	46	119	92	
FEB 09...	54	53	4.00	5.00	<1.00	<1.00	15	20	2.4	93	
APR 18...	62	100	3.00	5.00	<1.00	<1.00	32	22	14	93	
JUN 29...	2100	K62000	3.00	6.00	<1.00	<1.00	14	34	39	94	
AUG 16...	28	180	<1.00	4.00	<1.00	<1.00	9	123	2.1	29	

ARKANSAS RIVER BASIN

07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OK

LOCATION.--Lat 34°46'25", long 94°30'43", NE 1/4 SW 1/4 sec. 31, T.4 N., R.27 E., LeFlore County, Hydrologic Unit 11110105, on downstream side of bridge pier of county road bridge, 2.2 mi above Haw Creek, 5.0 mi north of Page, and at mile 24.6.

DRAINAGE AREA.--74.4 mi².

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR OK-96-1: 1993(M), 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 684.00 ft above sea level, from topographic map.

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 5,000 ft³/s:

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 12	0700	5,220	12.20	Jun 21	1530	8,630	14.56

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.65	20	29	61	32	365	107	123	e6.0	e.00
2	.00	.00	.79	20	41	47	65	234	84	103	e5.0	e.00
3	.00	.00	132	41	52	89	50	184	138	81	e4.0	e.00
4	.00	.00	54	53	64	70	38	160	451	67	e3.0	e.00
5	.00	.00	109	37	65	55	32	136	678	54	e2.0	e.00
6	.00	.00	42	33	63	46	27	136	299	46	e1.0	e.00
7	.00	.00	20	31	60	38	23	123	195	37	e.90	e.00
8	.00	.00	11	38	57	33	18	99	142	e34	e.80	e.00
9	.00	.00	103	53	56	27	14	86	112	e30	e.70	e.00
10	.00	.00	226	50	57	46	12	81	278	e27	e.60	e.00
11	.00	.00	124	45	56	103	293	70	467	e26	e.50	e.00
12	.00	.00	3530	43	52	72	513	62	493	e20	e.20	.00
13	.00	.00	952	40	50	60	359	56	289	17	e.08	e.00
14	.00	.00	431	35	47	49	257	48	219	e16	.02	e.00
15	.00	.00	247	32	43	40	200	43	406	e16	.00	e.00
16	.00	.00	156	32	41	34	162	40	248	e15	e.00	e.00
17	.00	.00	109	32	65	27	133	40	684	e15	e.00	e.00
18	.00	.00	94	31	125	26	111	109	896	e14	e.00	e.00
19	.00	.00	78	29	120	24	96	826	947	e14	e.00	e.00
20	.00	.00	64	27	99	20	84	292	1150	e13	e.00	e.00
21	.00	.00	53	24	88	19	71	185	3250	e13	e.00	e.00
22	.00	.00	46	23	79	21	64	134	1590	e12	e.00	e.00
23	.00	.16	41	23	90	17	65	102	665	e12	e.00	.04
24	.00	2.4	37	22	89	16	260	80	379	e11	e.00	.67
25	.00	1.9	33	20	108	14	151	68	250	e11	e.00	.01
26	.00	.66	30	19	e121	17	116	63	195	e10	e.00	.00
27	.00	.40	28	23	190	202	101	406	160	e10	e.00	.00
28	.00	.31	26	26	160	91	86	1120	348	e9.5	e.00	.00
29	.00	.40	24	23	84	65	74	351	320	e9.0	e.00	.00
30	.00	.60	23	22	---	47	66	203	168	e8.0	e.00	.00
31	.00	---	21	24	---	36	---	140	---	e7.0	e.00	---
TOTAL	0.00	6.83	6845.44	971	2251	1512	3573	6042	15608	880.5	24.80	0.72
MEAN	.000	.23	221	31.3	77.6	48.8	119	195	520	28.4	.80	.024
MAX	.00	2.4	3530	53	190	202	513	1120	3250	123	6.0	.67
MIN	.00	.00	.65	19	29	14	12	40	84	7.0	.00	.00
AC-FT	.00	14	13580	1930	4460	3000	7090	11980	30960	1750	49	1.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2000, BY WATER YEAR (WY)

	111	260	281	301	222	219	196	232	122	24.1	7.79	51.4
MEAN	491	1215	489	594	613	405	401	553	520	77.4	36.2	378
MAX	1999	1997	1993	1998	1997	1998	1993	1993	2000	1996	1996	1992
(WY)	.000	.23	24.0	31.3	30.2	48.8	87.8	37.4	16.0	.46	.000	.000
MIN	2000	2000	1996	2000	1996	2000	1998	1997	1994	1998	1998	1995
(WY)												

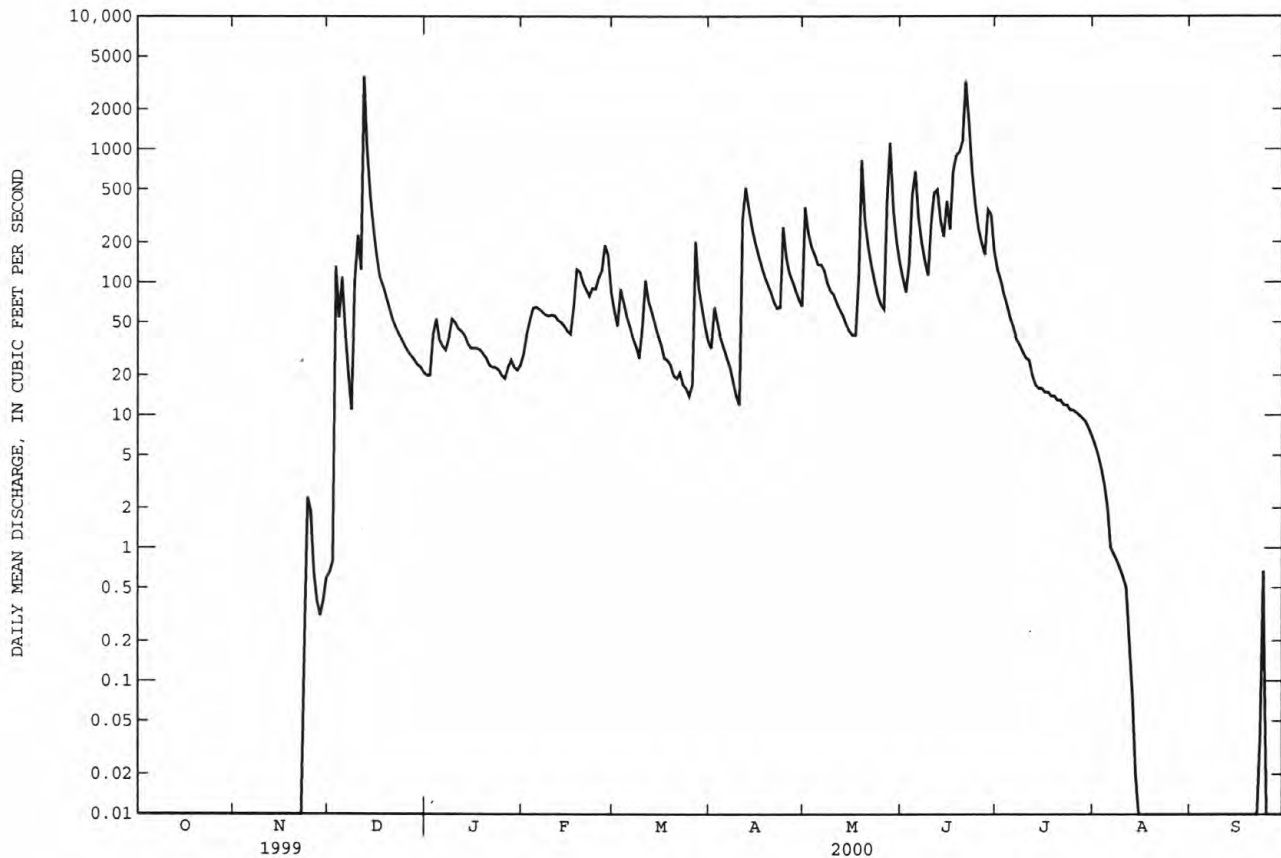
e Estimated

ARKANSAS RIVER BASIN

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07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1992 - 2000
ANNUAL TOTAL	54345.91	37715.29	
ANNUAL MEAN	149	103	169
HIGHEST ANNUAL MEAN			246
LOWEST ANNUAL MEAN			66.9
HIGHEST DAILY MEAN	3530 Dec 12	3530 Dec 12	9640 Nov 24 1996
LOWEST DAILY MEAN	.00 Aug 14	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Aug 14	.00 Oct 1	.00 Sep 20 1994
INSTANTANEOUS PEAK FLOW		8630 Jun 21	22100 Oct 6 1998
INSTANTANEOUS PEAK STAGE		14.56 Jun 21	20.53 Oct 6 1998
ANNUAL RUNOFF (AC-FT)	107800	74810	122700
10 PERCENT EXCEEDS	388	228	352
50 PERCENT EXCEEDS	52	28	48
90 PERCENT EXCEEDS	.00	.00	.14



ARKANSAS RIVER BASIN

07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1991 to current year.

REMARKS.--Samples were collected periodically and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field. No flow Oct. 7, Aug. 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)
JUL											
13...	1200	1028	1028	4.16	37	755	6.4	7.3	43	30.5	3.0
13...	1202	1028	1028	4.16	37	755	6.2	7.3	43	30.0	6.0
13...	1204	1028	1028	4.16	37	755	6.2	7.3	42	30.0	9.0
13...	1206	1028	1028	4.16	37	755	5.9	7.3	42	30.0	12.0
13...	1208	1028	1028	4.16	37	755	6.2	7.3	43	30.0	15.0
13...	1210	1028	1028	4.16	37	755	6.2	7.3	43	30.0	18.0
13...	1212	1028	1028	4.16	37	755	6.2	7.3	43	30.0	21.0
13...	1214	1028	1028	4.16	37	755	6.3	7.3	43	30.0	24.0
13...	1216	1028	1028	4.16	37	755	6.2	7.3	43	30.0	27.0
13...	1218	1028	1028	4.16	37	755	6.2	7.3	44	30.0	30.0

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)
DEC										
15...	1225	80020	1028	5.52	242	755	105	12.0	6.3	14.5
FEB										
09...	1010	80020	1028	4.61	55	757	92	11.2	6.6	20.0
APR										
20...	0805	80020	1028	4.78	85	752	76	6.9	6.7	15.5
JUN										
28...	1225	80020	1028	5.08	142	751	84	6.9	7.0	28.5

DATE	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DIS- SOLV 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)
DEC											
15...	9.0	7	4	1.16	1.02	.8	.3	2.1	36	3	4
FEB											
09...	6.5	8	3	1.29	1.08	.6	.4	2.8	42	5	6
APR											
20...	19.5	7	0	1.15	1.02	.7	.4	2.6	41	6	8
JUN											
28...	24.5	8	--	1.24	1.09	.8	.4	2.4	38	14	17

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	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, TOTAL (MG/L AS N) (00600)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)
DEC										
15...	0	2.4	3.4	.14	<.020	.63	.490	<.010	.034	<.050
FEB										
09...	0	3.0	3.9	.31	<.020	.42	.109	<.010	--	<.050
APR										
20...	0	2.5	3.0	.18	<.020	.24	.054	<.010	.113	<.050
JUN										
28...	0	2.2	2.6	.23	<.020	.41	.179	<.010	--	<.050

ARKANSAS RIVER BASIN

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07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
DEC 15...	.011	<.050	2	.04	17.6	27	15	6.5	<1.00	81
FEB 09...	<.010	<.050	7	.04	4.45	30	16	5.1	1.00	22
APR 20...	.037	<.050	2	.03	5.51	24	15	4.0	2.00	31
JUN 28...	<.010	<.050	<10	.04	11.1	29	19	1.4	<1.00	K22
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 15...	110	400	<1.00	<1.00	<1.00	<1.00	6	9	5.9	88
FEB 09...	30	68	<1.00	<1.00	<1.00	<1.00	6	14	2.1	75
APR 20...	36	75	<1.00	1.00	<1.00	<1.00	10	7	1.6	81
JUN 28...	42	48	<1.00	<1.00	<1.00	<1.00	9	13	5.0	85

ARKANSAS RIVER BASIN

07247345 BLACK FORK AT HODGEN, OK

LOCATION.--Lat 34°50'35", long 94°37'28", in SE 1/4 SE 1/4, sec. 01, T.4 N., R.25 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge 0.4 mi east of Hodgen, OK.

DRAINAGE AREA.--179 mi².

PERIOD OF RECORD.--December 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	BARO-	OXYGEN,	PH	SPE-	TEMPER-	SAMPLE
		ANA- LYZING SAMPLE (CODE NUMBER) (00028)	COL- LECTING SAMPLE (CODE NUMBER) (00027)		CHARGE, INST. CUBIC FEET PER SECOND (00061)	METRIC PRES- SURE (MM OF HG) (00025)		WATER WHOLE FIELD (STAND- ARD UNITS) (00400)			
JUL											
14...	1050	1028	1028	9.48	23	759	6.6	7.0	46	30.5	3.0
14...	1052	1028	1028	9.48	23	759	6.7	7.0	45	30.5	5.0
14...	1054	1028	1028	9.48	23	759	6.7	7.0	46	30.5	7.0
14...	1056	1028	1028	9.48	23	759	6.6	7.0	46	30.5	9.0
14...	1058	1028	1028	9.48	23	759	6.7	7.0	46	30.5	11.0
14...	1100	1028	1028	9.48	23	759	6.7	7.0	47	30.5	13.0
14...	1102	1028	1028	9.48	23	759	6.7	7.0	47	30.5	15.0
14...	1104	1028	1028	9.48	23	759	6.7	7.0	47	30.5	17.0
14...	1106	1028	1028	9.48	23	759	6.6	7.0	47	30.5	19.0
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	
OCT											
06...	1025	80020	1028	8.96	.11	760	54	5.0	6.9	52	18.0
DEC											
16...	0825	80020	1028	10.06	270	758	76	9.0	6.4	33	-2.0
FEB											
09...	1140	80020	1028	9.77	87	761	93	11.1	6.7	42	20.0
APR											
19...	1325	80020	1028	9.78	166	750	98	8.8	6.8	34	31.0
JUN											
29...	1020	80020	1028	11.14	1090	758	90	7.5	7.2	32	23.0
AUG											
15...	0945	80020	1028	9.31	.11	759	50	3.8	6.8	52	29.0
DATE	TEMPER- ATURE WATER (DEG C) (00010)	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)	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)
OCT											
06...	19.0	15	--	2.35	2.24	1.4	.4	3.8	33	21	25
DEC											
16...	8.0	9	5	1.55	1.26	.9	.5	3.2	40	4	5
FEB											
09...	7.5	11	2	1.92	1.46	.8	.4	3.3	38	9	11
APR											
19...	20.0	9	--	1.45	1.21	.8	.4	3.0	40	10	12
JUN											
29...	24.0	8	1	1.45	1.18	.9	.4	2.5	36	7	9
AUG											
15...	29.0	14	--	2.25	2.10	1.2	.4	3.8	34	17	21

ARKANSAS RIVER BASIN

359

07247345 BLACK FORK AT HODGEN, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	CAR- BONATE WATER DIS IT FIELD	CHLO- RIDE, DIS- SOLVED	SULFATE DIS- SOLVED	NITRO- GEN, AM- MONIA + ORGANIC TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	PHOS- PHATE, ORTHO, DIS- SOLVED
DATE	MG/L AS CO3 (00452)	(MG/L AS CL) AS CL) (00940)	(MG/L AS SO4) AS SO4) (00945)	(MG/L AS N) AS N) (00625)	(MG/L AS N) AS N) (00608)	(MG/L AS N) AS N) (00600)	(MG/L AS NH4) AS NH4) (71846)	(MG/L AS N) AS N) (00631)	(MG/L AS N) AS N) (00613)	(MG/L AS N) AS N) (00605)	(MG/L AS PO4) AS PO4) (00660)
OCT 06...	0	2.9	2.6	.34	.023	--	.03	<.050	<.010	.31	--
DEC 16...	0	2.7	3.8	.17	.020	.69	.03	.514	<.010	.15	1.12
FEB 09...	0	3.5	4.6	.17	<.020	.26	--	.093	<.010	--	.261
APR 19...	0	2.7	4.2	.22	<.020	.27	--	.053	<.010	--	--
JUN 29...	0	2.0	3.0	.31	<.020	.46	--	.153	<.010	--	--
AUG 15...	0	3.5	3.2	.47	<.020	--	--	<.050	<.010	--	--
	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	PHOS- PHORUS TOTAL	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	TUR- BID- ITY (NTU)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M.	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML)
DATE	(MG/L AS P) (00666)	(MG/L AS P) (00671)	(MG/L AS P) (00665)	(MG/L) (00530)	(70303)	(70302)	(70300)	(70301)	(00076)	(UG/L) (32218)	(31633)
OCT 06...	E.032	<.010	E.036	5	.05	.01	37	28	2.1	9.00	K19
DEC 16...	.411	.365	<.050	2	.04	21.9	30	19	8.0	<1.00	100
FEB 09...	.095	.085	.105	4	.05	8.72	37	21	5.4	1.00	K3
APR 19...	<.050	<.010	<.050	3	.04	12.1	27	19	6.5	<1.00	K13
JUN 29...	<.050	<.010	E.046	16	.04	97.1	33	16	3.0	2.00	570
AUG 15...	<.050	<.010	E.041	<10	.05	.01	37	26	3.5	5.00	K2
	COLI- FORM, FECAL, 0.7 UM-MF	STREP- TOCOCCI FECAL, KF AGAR	CHLORO- PHYLL A PHYTO- PLANK- TON	CHLORO- PHYLL A PHYTO- PLANK- TON	CHLORO- PHYLL B PHYTO- PLANK- TON	CHLORO- PHYLL C PHYTO- PLANK- TON	MANGA- NESE, DIS- SOLVED	SEDI- MENT, SUS- PENDE	SEDI- MENT, DIS- CHARGE, SUS- PENDE	SED. SUSP. SIEVE DIAM. % FINER THAN	
DATE	(COLS./ 100 ML) (31625)	(COLS. PER 100 ML) (31673)	ACID M. (UG/L) (32211)	UNCORR. (UG/L) (32230)	UNCORR. (UG/L) (32231)	UNCORR. (UG/L) (32232)	(UG/L AS MN) (01056)	(MG/L) (80154)	(T/DAY) (80155)	.062 MM (70331)	
OCT 06...	57	67	<1.00	5.00	<1.00	<1.00	54	13	.00	78	
DEC 16...	240	420	<1.00	<1.00	<1.00	<1.00	6	10	7.3	86	
FEB 09...	K4	K4	<1.00	<1.00	<1.00	<1.00	6	10	2.4	82	
APR 19...	21	23	<1.00	<1.00	<1.00	<1.00	18	12	5.4	60	
JUN 29...	700	1500	<1.00	<1.00	<1.00	<1.00	8	26	77	85	
AUG 15...	K9	25	5.00	8.00	<1.00	<1.00	<2	8	.00	100	

ARKANSAS RIVER BASIN

07247500 FOURCHE MALINE NEAR RED OAK, OK

LOCATION.--Lat 34°54'45", long 95°09'20", in NW 1/4 NW 1/4 sec.13, T.5 N., R.20 E., Latimer County, Hydrologic Unit 11110105, on downstream side of left abutment of county road bridge, 0.1 mi downstream from Little Fourche Maline, 5.0 mi southwest of Red Oak, and at mile 41.2.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--October 1938 to April 1991, October 1991 to current year.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1631: 1940.

GAGE.--Water-stage recorder. Datum of gage is 540.80 ft above sea level. Prior to April 25, 1939, nonrecording gage at same site and datum.

REMARKS.--Records good. Some regulation by several flood-retarding structures. U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1935 reached a stage of 25.4 ft, from floodmarks.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s:

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 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	4.0	1.1	25	11	31	37	588	4.7	92	2.0	e.00
2	.92	2.4	.98	15	17	33	39	621	4.2	61	2.1	e.00
3	.92	1.6	6.9	52	32	85	39	287	8.0	44	2.1	e.00
4	.69	1.1	43	131	41	124	42	227	66	31	2.1	e.00
5	.49	.83	51	82	45	101	42	186	65	21	2.0	e.00
6	.28	.49	57	60	39	81	42	259	41	14	1.8	e.00
7	.01	.34	32	46	32	64	34	308	24	9.9	1.6	e.00
8	.00	.22	13	43	25	54	27	207	13	7.9	1.4	e.00
9	.00	.18	9.6	48	21	44	21	158	7.8	6.3	1.3	e.00
10	.00	.12	7.9	54	19	38	18	165	8.7	5.2	e1.2	e.00
11	.00	.13	15	46	15	38	88	137	21	4.3	e1.1	e.00
12	.00	.18	400	39	13	35	256	112	12	3.6	e.82	.00
13	.00	.22	552	32	11	33	201	92	7.1	2.8	e.66	e.00
14	.00	.24	261	27	9.7	30	158	74	19	2.8	e.51	e.00
15	.00	.33	123	23	8.3	29	123	58	37	3.0	.31	e.00
16	.00	.36	96	21	7.9	31	101	48	40	2.7	e.29	e.00
17	.00	29	78	20	7.4	29	83	41	45	2.4	e.22	e.00
18	.00	47	56	19	9.5	28	66	35	137	2.4	e.19	e.00
19	.00	36	43	18	8.3	26	51	28	381	2.1	e.14	e.00
20	.00	14	36	21	9.2	23	42	22	334	1.7	e.11	e.00
21	.00	6.1	30	18	11	26	30	17	728	3.9	e.07	e.00
22	.00	4.4	23	17	16	27	21	14	673	86	e.05	e.00
23	.00	41	19	17	24	25	73	11	328	31	e.04	1.0
24	.00	98	15	15	53	24	462	8.8	232	10	e.02	2.3
25	.00	33	11	13	67	25	208	7.2	126	6.0	e.01	10
26	.00	11	9.5	17	65	22	130	5.8	69	6.5	e.00	26
27	.00	3.6	8.2	29	51	23	102	4.9	53	4.4	e.00	17
28	.00	1.3	7.4	27	43	30	97	5.5	227	3.2	e.00	15
29	.00	1.7	6.9	16	37	37	80	5.8	258	2.5	e.00	8.5
30	.00	1.5	7.0	11	---	36	64	5.1	147	2.2	e.00	5.1
31	2.5	---	34	9.9	---	34	---	4.9	---	1.8	e.00	---
TOTAL	6.91	340.34	2053.48	1011.9	748.3	1266	2777	3743.0	4116.5	477.6	22.14	84.90
MEAN	.22	11.3	66.2	32.6	25.8	40.8	92.6	121	137	15.4	.71	2.83
MAX	2.5	98	552	131	67	124	462	621	728	92	2.1	26
MIN	.00	.12	.98	9.9	7.4	22	18	4.9	4.2	1.7	.00	.00
AC-FT	14	675	4070	2010	1480	2510	5510	7420	8170	947	44	168

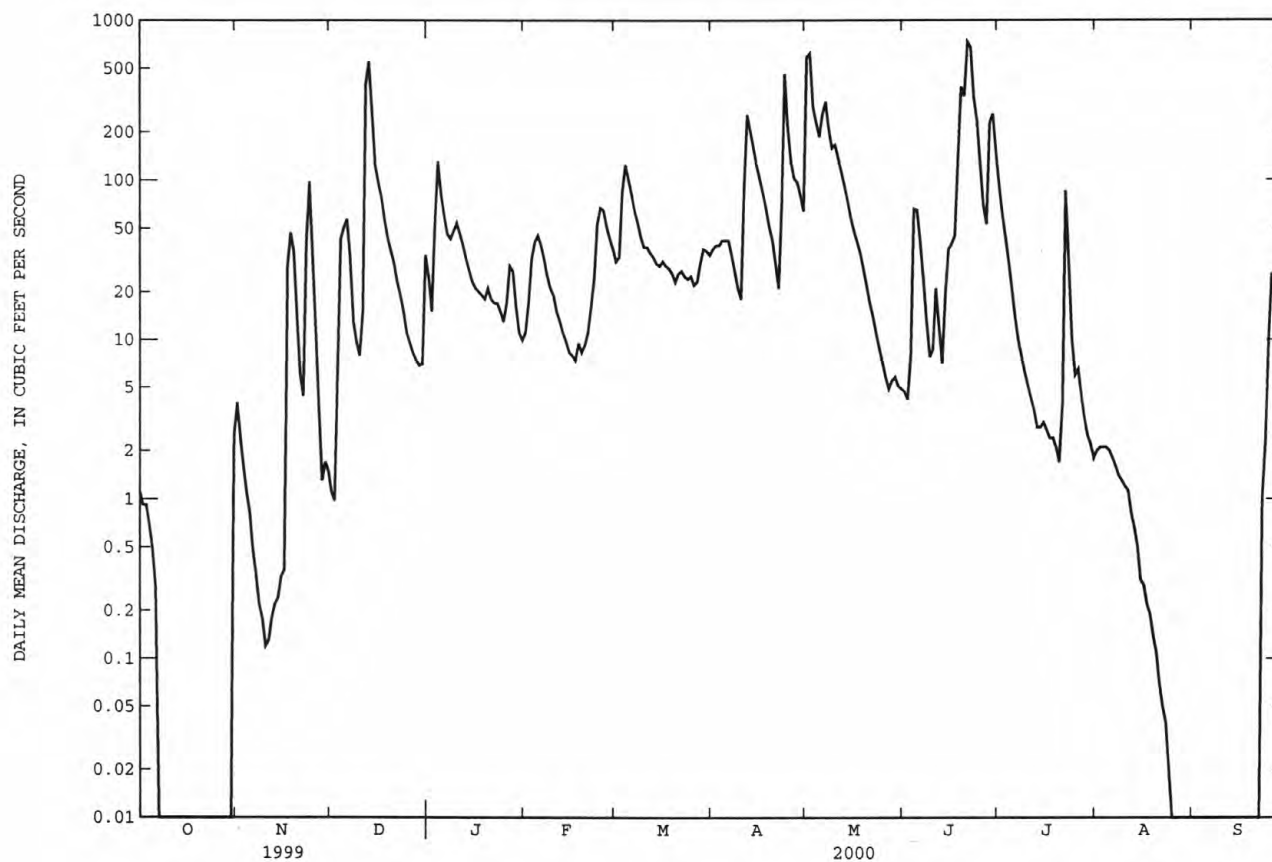
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2000, BY WATER YEAR (WY)

	73.0	127	137	110	180	225	265	120	55.0	16.8	45.6
MEAN	73.0	127	137	110	180	225	265	120	55.0	16.8	45.6
MAX	675	811	726	762	715	1100	1224	1377	695	847	547
(WY)	1971	1986	1972	1998	1945	1945	1957	1960	1945	1950	1950
MIN	.000	.000	.000	.000	1.75	2.42	18.6	8.85	.91	.042	.000
(WY)	1939	1957	1964	1964	1967	1967	1950	1988	1963	1955	1943

e Estimated

07247500 FOURCHE MALINE NEAR RED OAK, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1939 - 2000
ANNUAL TOTAL	58316.23	16648.07	
ANNUAL MEAN	160	45.5	136
HIGHEST ANNUAL MEAN			317 1945
LOWEST ANNUAL MEAN			18.3 1956
HIGHEST DAILY MEAN	1650 May 5	728 Jun 21	18900 May 19 1960
LOWEST DAILY MEAN	.00 Oct 8	.00 at times	.00 at times
ANNUAL SEVEN-DAY MINIMUM	.00 Oct 8	.00 Oct 8	.00 Oct 1 1938
INSTANTANEOUS PEAK FLOW		1410 Jun 21	^a 41500 May 19 1960
INSTANTANEOUS PEAK STAGE		11.10 Jun 21	^b 24.79 May 19 1960
ANNUAL RUNOFF (AC-FT)	115700	33020	98200
10 PERCENT EXCEEDS	548	105	314
50 PERCENT EXCEEDS	34	15	18
90 PERCENT EXCEEDS	.22	.00	.25

^aFrom rating curve extended above 25,000 ft³/s.^bFrom floodmark.

ARKANSAS RIVER BASIN

07247650 FOURCHE MALINE NEAR LEFLORE, OK

LOCATION.--Lat 34°55'11", long 94°56'43", in NE 1/4 SE 1/4, sec. 11, T.5 N., R.22 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge 1.6 mi east of Leflore, OK.

DRAINAGE AREA.--270 mi².

PERIOD OF RECORD.--December 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	BARO-	OXYGEN,	PH	SPE-	TEMPER-	SAMPLE
		ANALYZING	COLLECTING		CHARGE,	METRIC		WATER			
		SAMPLE	SAMPLE	HEIGHT	INST.	PRES-	DIS-	WHOLE	CON-	ATURE	ATION,
		(CODE	(CODE	(FEET)	CUBIC	SURE	SOLVED	FIELD	DUCT-	WATER	CROSS
		(NUMBER)	(NUMBER)	(FEET)	FEET	(MM	(MG/L)	(STAND-	ANCE	(DEG C)	SECTION
		(00028)	(00027)	(00065)	PER	OF	(00300)	ARD	(US/CM)	(00010)	(FT FM
					SECOND	HG)		UNITS)			L BANK)
					(00061)	(00025)		(00400)	(00095)		(00009)
JUL											
14...	0818	1028	1028	8.40	7.8	759	4.5	7.3	117	28.0	2.0
14...	0820	1028	1028	8.40	7.8	759	4.5	7.3	118	28.0	4.0
14...	0822	1028	1028	8.40	7.8	759	4.8	7.3	118	28.0	6.0
14...	0823	1028	1028	8.40	7.8	759	4.7	7.3	118	28.0	8.0
14...	0825	1028	1028	8.40	7.8	759	4.7	7.3	118	28.0	10.0
14...	0827	1028	1028	8.40	7.8	759	4.7	7.3	118	28.0	12.0
14...	0828	1028	1028	8.40	7.8	759	4.7	7.3	119	28.0	14.0
14...	0830	1028	1028	8.40	7.8	759	4.7	7.3	119	28.0	16.0
DATE	TIME	AGENCY	AGENCY	GAGE	DIS-	BARO-	OXYGEN,	PH	SPE-	TEMPER-	
		ANALYZING	COLLECTING	HEIGHT	CHARGE,	METRIC	DIS-	WATER	CIFIC	ATURE	
		SAMPLE	SAMPLE	(FEET)	INST.	PRES-	SOLVED	WHOLE	CON-		
		(CODE	(CODE	(FEET)	CUBIC	SURE	(PER-	FIELD	DUCT-	AIR	
		(NUMBER)	(NUMBER)	(00065)	FEET	(MM	CENT	(STAND-	ANCE	(DEG C)	
		(00028)	(00027)	(00065)	PER	OF	SATUR-	ARD	(US/CM)	(00020)	
					SECOND	HG)	ATION)	UNITS)	(00095)		
OCT											
06...	0845	80020	1028	7.93	.45	762	61	6.0	7.5	179	9.0
DEC											
15...	1105	80020	1028	9.98	291	757	77	8.9	7.1	81	12.5
FEB											
10...	1015	80020	1028	8.95	38	750	95	10.8	7.2	135	23.0
APR											
19...	0825	80020	1028	9.54	110	750	90	8.1	7.0	131	24.0
JUN											
28...	0940	80020	1028	9.41	94	754	74	6.0	7.3	70	29.0
AUG											
15...	0855	80020	1028	7.87	.47	760	37	3.0	7.5	114	23.5
DATE	TEMPER-	HARD-	HARD-	CALCIUM	MAGNE-	POTAS-	SODIUM	SODIUM,	ALKA-	BICAR-	
	ATURE	NESS	NESS	DIS-	SIUM,	SIUM,	AD-	DIS-	LINITY	BONATE	
	WATER	TOTAL	NONCARB	SOLVED	DIS-	DIS-	SORP-	SOLVED	WAT DIS	WATER	
	(DEG C)	(MG/L	DISSOLV	(MG/L	SOLVED	SOLVED	TION	(MG/L	TOT IT	DIS IT	
	(00010)	AS	FLD. AS	(MG/L	(MG/L	(MG/L	RATIO	AS NA)	FIELD	FIELD	
	(00010)	CACO3)	CACO3	AS CA)	AS MG)	AS K)	(00931)	(00930)	SODIUM	MG/L AS	MG/L AS
		(00900)	(00904)	(00915)	(00925)	(00935)		(00932)	PERCENT	CACO3	HCO3
									(39086)	(00453)	
OCT											
06...	16.0	47	--	8.63	6.11	2.8	1	17.8	43	53	65
DEC											
15...	9.0	23	8	5.27	2.45	1.9	.5	5.3	31	14	18
FEB											
10...	9.0	33	9	7.48	3.59	1.5	.9	11.4	41	24	30
APR											
19...	19.5	--	--	--	--	--	--	--	--	27	32
JUN											
28...	25.5	20	4	4.39	2.22	1.6	.5	4.9	33	16	20
AUG											
15...	26.5	33	--	6.19	4.34	3.0	.6	7.6	31	40	49

07247650 FOURCHE MALINE NEAR LEFLORE, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

	CAR- BONATE WATER DIS IT FIELD	CHLO- RIDE, DIS- SOLVED	SULFATE DIS- SOLVED	NITRO- GEN,AM- MONIA + ORGANIC TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, TOTAL	NITRO- GEN, AMMONIA DIS- SOLVED	NITRO- GEN, NO2+NO3 DIS- SOLVED	NITRO- GEN, NITRITE DIS- SOLVED	NITRO- GEN, ORGANIC TOTAL	PHOS- PHATE, ORTHO, DIS- SOLVED
DATE	MG/L AS CO3 (00452)	(MG/L AS CL) (00940)	(MG/L AS SO4) (00945)	(MG/L AS N) (00625)	(MG/L AS N) (00608)	(MG/L AS N) (00600)	(MG/L AS NH4) (71846)	(MG/L AS N) (00631)	(MG/L AS N) (00613)	(MG/L AS N) (00605)	(MG/L AS PO4) (00660)
OCT 06...	0	10.8	18.6	.52	<.020	--	--	<.050	<.010	--	--
DEC 15...	0	4.8	9.6	.52	.043	.84	.06	.313	<.010	.48	--
FEB 10...	0	7.9	19.9	.43	<.020	.71	--	.282	<.010	--	--
APR 19...	0	--	--	.45	.041	.83	.05	.382	<.010	.41	--
JUN 28...	0	3.2	7.3	.46	<.020	.66	--	.197	<.010	--	.037
AUG 15...	0	5.4	8.2	.67	.043	--	.06	<.050	<.010	.62	.080
	PHOS- PHORUS DIS- SOLVED	PHOS- PHORUS ORTHO, DIS- SOLVED	PHOS- PHORUS TOTAL	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED	TUR- BID- ITY	PHEO- PHYTO- PLANK- TON, ACID M.	E. COLI WATER WHOLE TOTAL UREASE
DATE	(MG/L AS P) (00666)	(MG/L AS P) (00671)	(MG/L AS P) (00665)	(MG/L) (00530)	(70303)	(70302)	(70300)	(70301)	(00076)	(UG/L) (32218)	(COL / 100 ML) (31633)
OCT 06...	<.050	<.010	E.042	16	.14	.13	104	97	16	5.00	31
DEC 15...	<.050	<.010	.112	46	.08	47.1	60	40	46	4.00	700
FEB 10...	<.050	<.010	E.033	14	.12	8.61	85	68	17	3.00	K11
APR 19...	<.050	<.010	.061	--	--	--	--	--	--	2.00	64
JUN 28...	<.050	.012	.072	35	.08	15.0	59	35	15	2.00	K26
AUG 15...	<.050	.026	.079	21	.10	.09	73	59	22	4.00	K11
	COLI- FORM, FECAL, 0.7 UM-MF	STREP- TOCOCCHI FECAL, KF AGAR	CHLORO- HPYLL A PHYTO- PLANK- TON	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR.	CHLORO- PHYLL B PHYTO- PLANK- TON, UNCORR.	CHLORO- PHYLL C PHYTO- PLANK- TON, UNCORR.	MANGA- NESE, DIS- SOLVED	SEDI- MENT, SUS- PENDE	SEDI- MENT, DIS- CHARGE, SUS- PENDE	SED. SUSP. SIEVE DIAM. % FINER	
DATE	(COLS. / 100 ML) (31625)	(COLS. PER 100 ML) (31673)	ACID M. (UG/L) (32211)	UNCORR. (UG/L) (32230)	UNCORR. (UG/L) (32231)	UNCORR. (UG/L) (32232)	(UG/L AS MN) (01056)	(MG/L) (80154)	(T/DAY) (80155)	THAN .062 MM (70331)	
OCT 06...	27	34	<1.00	3.00	<1.00	<1.00	83	34	.04	97	
DEC 15...	1400	2400	<1.00	<1.00	<1.00	<1.00	63	61	48	97	
FEB 10...	K13	K26	2.00	4.00	<1.00	<1.00	34	21	2.1	100	
APR 19...	80	150	<1.00	2.00	<1.00	<1.00	--	45	13	96	
JUN 28...	120	200	<1.00	1.00	<1.00	<1.00	79	48	12	56	
AUG 15...	K20	220	<1.00	1.00	<1.00	<1.00	187	26	.03	100	

ARKANSAS RIVER BASIN

07247800 HOLSON CREEK AT SUMMERFIELD, OK

LOCATION.--Lat 34°52'46", long 94°51'11", in SW 1/4 NW 1/4, sec. 26, T.5 N., R.23 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge, 1.4 mi east of Summerfield, OK.

DRAINAGE AREA.--71.6 mi².

PERIOD OF RECORD.--December 1991 to current year.

REMARKS.--Samples were collected periodically. Specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field. No flow Oct. 6, Aug. 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	GAGE HEIGHT (FEET)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK)
JUL											
14...	0923	1028	1028	21.80	4.8	759	5.9	6.9	53	28.2	20.0
14...	0925	1028	1028	21.80	4.8	759	5.8	6.9	52	28.2	18.0
14...	0927	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	16.0
14...	0929	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	14.0
14...	0930	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	12.0
14...	0932	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	10.0
14...	0934	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	8.0
14...	0936	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	6.0
14...	0938	1028	1028	21.80	4.8	759	5.7	6.9	53	28.2	4.0

DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	AGENCY COL- LECTING SAMPLE (CODE NUMBER)	GAGE HEIGHT (FEET)	DIS- CHARGE, INST. CUBIC FEET PER SECOND	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	PH WATER WHOLE FIELD (STAND- ARD UNITS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE AIR (DEG C)
DEC										
15...	0840	80020	1028	20.98	54	757	87	10.1	6.7	2.3
FEB										
10...	0825	80020	1028	21.45	18	750	96	10.7	6.7	17.0
APR										
19...	0955	80020	1028	21.25	35	750	89	8.1	6.7	24.4
JUN										
28...	0745	80020	1028	21.06	44	753	107	8.9	7.1	26.0

DATE	TEMPER- ATURE WATER (DEG C)	HARD- NESS TOTAL (MG/L AS CACO3)	HARD- NESS NONCARB DIS- SOLV FLD. AS CACO3 (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	SODIUM AD- SORP- TION RATIO	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM PERCENT	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
DEC											
15...	8.5	11	7	1.65	1.57	.9	.5	3.4	39	3	4
FEB											
10...	10.0	12	4	1.83	1.76	.7	.5	3.9	40	7	9
APR											
19...	19.1	15	8	2.66	2.09	.9	.7	6.1	45	7	9
JUN											
28...	24.2	10	--	1.65	1.49	.9	.5	4.0	43	--	--

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE DIS- SOLVED (MG/L AS SO4)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)	PHOS- PHORUS DIS- SOLVED (MG/L AS P)
DEC										
15...	0	4.2	5.2	.70	<.020	1.0	.302	<.010	.031	<.050
FEB										
10...	0	5.6	5.8	.14	<.020	.19	.055	<.010	.049	<.050
APR										
19...	0	4.0	6.2	.12	<.020	--	<.050	<.010	--	<.050
JUN										
28...	--	2.5	4.9	.17	<.020	.27	.099	<.010	.055	<.050

ARKANSAS RIVER BASIN

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07247800 HOLSON CREEK AT SUMMERFIELD, OK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

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, PENDE (MG/L) (00530)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)
DEC 15...	.010	<.050	2	.05	5.11	35	20	9.6	<1.00	52
FEB 10...	.016	<.050	7	.05	1.85	38	24	5.3	1.00	K10
APR 19...	<.010	<.050	3	.04	2.63	28	26	6.7	<1.00	40
JUN 28...	.018	<.050	<10	--	--	35	--	4.0	<1.00	K44
DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 15...	150	610	<1.00	<1.00	<1.00	<1.00	5	8	1.2	87
FEB 10...	K6	35	<1.00	<1.00	<1.00	<1.00	7	10	.49	80
APR 19...	52	62	<1.00	<1.00	<1.00	<1.00	32	8	.75	94
JUN 28...	77	130	<1.00	<1.00	<1.00	<1.00	11	14	1.7	94

ARKANSAS RIVER BASIN

07249413 POTEAU RIVER NEAR PANAMA, OK

LOCATION.--Lat 35°09'56", long 94°39'10", in SE 1/4, SE 1/4 sec.15, T.8 N., R.25 E., LeFlore County, Hydrologic Unit 11110105, on left pier of county bridge, 1.5 mi east of Panama, OK, .8 mi downstream from James Fork Creek, and at mile 26.4.

DRAINAGE AREA.--1,767 mi².

PERIOD OF RECORD.--October 1989 to December 1990, May 1992 to current year.

GAGE.--Water-stage recorder. Datum of gage is 387.961 ft above sea level. Prior to December 1990, at site .4 mi upstream at datum 5.00 ft higher.

REMARKS.--No estimated daily discharge. Records good. Flow partially regulated by Wister Reservoir 34.5 mi upstream. U.S. Army Corps of Engineers' satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1935 reached a stage of 44.6 ft (HWM) at datum then in use, from information by U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	68	16	166	160	1360	717	497	1170	5880	51	39
2	14	18	15	162	169	2090	526	1100	1140	5920	50	39
3	16	16	32	514	179	2260	469	1630	555	5830	51	41
4	16	18	46	1490	184	1290	791	1860	521	5660	53	42
5	17	16	56	619	181	947	1270	1770	980	5510	51	41
6	17	20	86	391	182	913	1260	2570	2120	4340	49	38
7	16	21	62	316	181	1360	645	5480	2200	2360	47	38
8	23	20	44	288	179	1400	513	2620	2060	769	46	38
9	34	19	39	283	176	1360	415	2160	822	238	44	39
10	17	20	37	281	172	664	398	2500	201	190	44	40
11	16	22	41	260	171	457	392	2710	174	138	44	39
12	16	19	1220	238	166	476	2250	2630	203	101	44	37
13	15	17	3050	223	162	478	2200	2460	1120	95	43	92
14	19	18	1010	338	156	459	3030	2410	1400	82	42	226
15	24	17	533	402	227	833	3210	2320	2910	77	41	93
16	33	18	307	396	280	889	3110	1690	2090	74	41	75
17	35	20	2320	393	296	874	3030	742	1760	67	41	65
18	40	21	3030	388	381	530	2920	486	3390	63	42	49
19	54	21	2980	380	285	422	2130	417	2150	61	43	37
20	78	18	2920	368	229	415	1230	327	4100	59	43	35
21	88	15	2870	363	198	413	1020	174	5490	62	43	40
22	97	15	2340	359	187	409	475	143	11900	81	44	42
23	109	30	750	351	183	428	345	133	8130	88	42	48
24	117	96	237	346	241	444	389	633	5110	166	41	140
25	131	41	217	344	311	451	550	1130	4970	117	42	149
26	135	31	201	340	368	458	873	1070	4690	87	42	80
27	120	26	190	226	466	647	887	402	4500	75	43	61
28	102	23	184	166	450	1060	856	355	4770	66	42	54
29	78	20	179	159	1180	1040	593	202	5850	61	41	51
30	61	17	175	156	---	909	444	143	5880	70	40	50
31	109	---	171	155	---	927	---	887	---	80	39	---
TOTAL	1661	741	25358	10861	7700	26663	36938	43651	92356	38467	1369	1858
MEAN	53.6	24.7	818	350	266	860	1231	1408	3079	1241	44.2	61.9
MAX	135	96	3050	1490	1180	2260	3210	5480	11900	5920	53	226
MIN	14	15	15	155	156	409	345	133	174	59	39	35
AC-FT	3290	1470	50300	21540	15270	52890	73270	86580	183200	76300	2720	3690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2000, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
MEAN	750	2354	3446	3743	3594	3946	3716	4691	2723	739	243	598
MAX	3519	9861	8135	10930	7467	8242	8000	16670	5531	3155	818	2678
(WY)	1999	1997	1997	1998	1990	1997	1990	1990	1990	1999	1992	1992
MIN	15.0	11.5	10.4	350	262	860	1231	403	180	55.4	24.6	57.3
(WY)	1990	1990	1990	2000	1996	2000	2000	1997	1994	1998	1998	1994

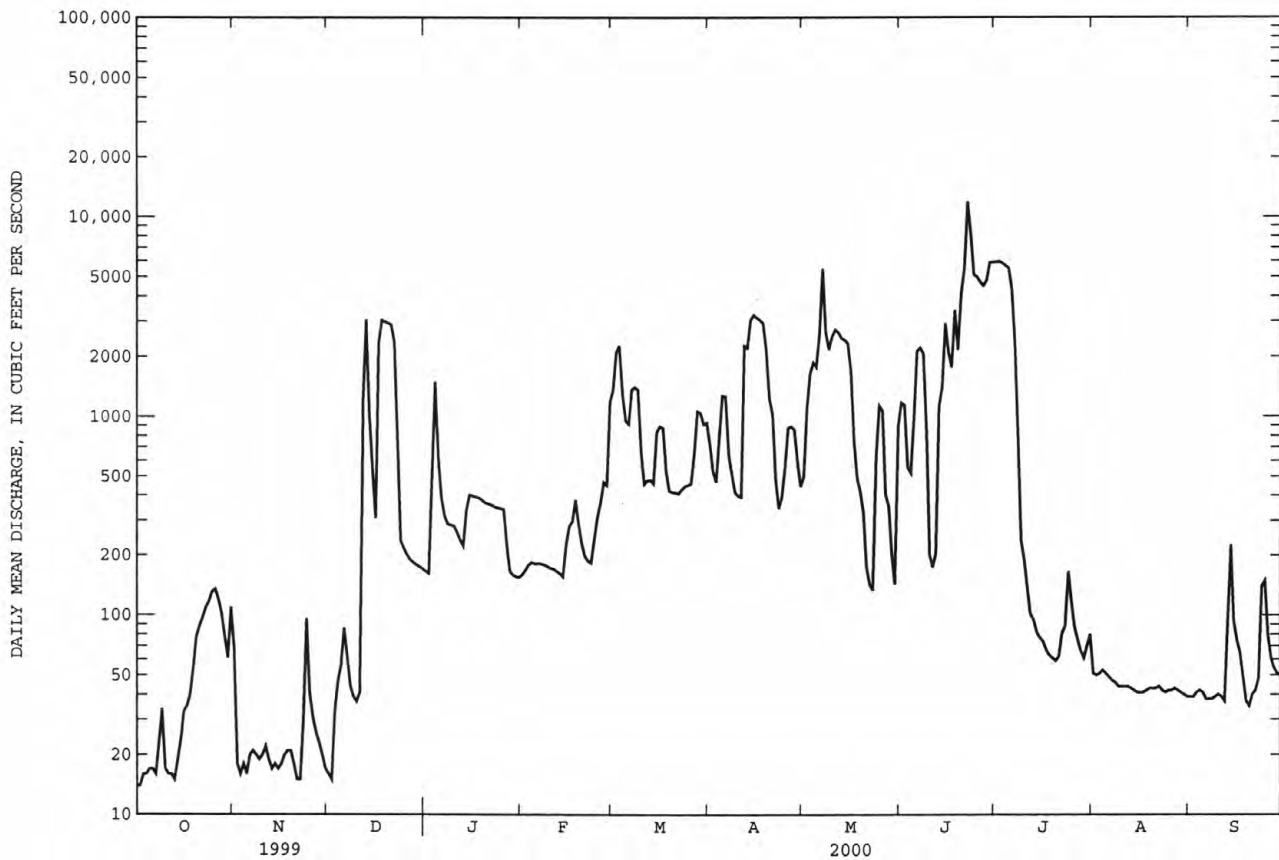
ARKANSAS RIVER BASIN

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07249413 POTEAU RIVER NEAR PANAMA, OK--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1989 - 2000	
ANNUAL TOTAL	814634		287623		2560	
ANNUAL MEAN	2232		786		3907	1990
HIGHEST ANNUAL MEAN					786	2000
LOWEST ANNUAL MEAN					67000	May 3 1990
HIGHEST DAILY MEAN	19300	Jul 1	11900	Jun 22	6.8	Dec 4 1989
LOWEST DAILY MEAN	14	Sep 30	14	Oct 1, 2	7.4	Dec 2 1989
ANNUAL SEVEN-DAY MINIMUM	15	Sep 29	16	Oct 1	74600	May 3 1990
INSTANTANEOUS PEAK FLOW			12400	Jun 22	^a 46.59	May 3 1990
INSTANTANEOUS PEAK STAGE			30.71	Jun 22	1855000	
ANNUAL RUNOFF (AC-FT)	1616000		570500		7230	
10 PERCENT EXCEEDS	5880		2420		779	
50 PERCENT EXCEEDS	867		186		33	
90 PERCENT EXCEEDS	21		22			

^aAt present datum.



ARKANSAS RIVER BASIN

07249455 ARKANSAS RIVER NEAR FORT SMITH, AR

LOCATION.--Lat 35°23'30", long 94°25'56", in NW 1/4, SW 1/4 sec.08, T.8 N., R.32 E., Sebastian County, Hydrologic Unit 11110104, at U.S. Highway 64 bridge at Aklahoma and Arkansas state line, .7 mi downstream from Poteau River, 6.6 mi upstream from Lee Creek, 8.0 mi upstream from Arkansas River at Van Buren, and at mile 324.5.

DRAINAGE AREA.--149,977 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year, some data collected prior to period of record, and are available in the district office.

GAGE.--Water-stage recorder. Datum of gage is 380.24 ft above sea level. Auxiliary water-stage recorder 8.0 mi downstream.

REMARKS.--Records poor. Flow regulated by Lock and Dam 12 upstream and Lock and Dam 13 downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8860	e5030	e2850	e11200	e13600	e36300	78500	e26700	e50400	116000	35400	e11000
2	e8080	e4490	e3410	e8790	e21400	e41300	73600	51000	e43600	118000	e35200	e5980
3	e9940	e6670	e6380	e18600	e23000	e47200	62700	e53900	e41000	120000	e39800	e8650
4	e7480	e2860	e15600	e26000	e11000	e62700	67800	44700	e27600	117000	21300	8750
5	e14900	e8850	e23400	e10800	e8330	e66800	71900	e47300	e26700	120000	e29000	e8830
6	e13900	e2970	e17300	e17300	e8880	e53200	69600	55800	e25900	112000	e20900	e7460
7	e11900	e3190	10200	e11000	e12500	e48700	69100	122000	e11500	102000	e21900	e8310
8	e10500	e2750	e21400	e14300	e11600	e61500	63800	91300	e16400	76100	e24800	17500
9	e13600	e2910	e20300	e13000	5380	e63600	49200	62000	e26800	67900	e25800	e9880
10	e14800	e2180	e30100	e9230	e5240	56900	36900	78800	e14300	e55500	22600	e8290
11	e12300	e2500	52900	e7320	e12800	e50600	e42300	104000	e14900	57500	16300	e9230
12	e6130	e3340	79500	e7880	e9240	e32500	e42300	102000	e22200	51100	e8210	e9230
13	e8080	2850	61300	e11900	12500	e27900	e42800	98200	e17200	e54400	6150	e8260
14	e8230	e4330	67200	e9340	e5090	e29200	e42800	96600	e25900	48800	12000	e8930
15	e5580	e3730	71600	e12300	2290	e16600	e40100	92200	40300	e32300	13400	e14500
16	e14500	e2300	56200	e12400	e9240	e26000	35100	77300	42400	e41700	e15800	e7870
17	e5890	4770	50700	e14200	e14600	e28400	e20000	72900	47300	e40700	e16900	e1840
18	e3220	e3730	e41400	e17500	e12400	50600	e17100	65600	e78900	e43500	19700	e9420
19	e4490	e3180	e34000	e10800	e1700	e55900	e29000	47100	e64200	e38400	e7080	e10400
20	e9950	e1220	30700	e13500	e3870	e53800	23800	e33000	53000	e10600	e2930	e9420
21	e12700	1510	e31500	e20900	e6250	e54400	e13000	e23300	e104000	e33700	e12300	e4560
22	e6450	e3640	e28300	e19000	e10400	e55800	e13500	e27800	e160000	e37000	e9440	e8640
23	e5910	e8550	e17800	e15400	e20600	e61700	e7450	e25900	e112000	e37100	11200	e11400
24	e2880	e7280	e11400	e10500	e22200	e71200	e21100	e4570	e113000	e26600	5470	e4180
25	e2280	e5110	e6160	e13700	e36600	67300	e17600	e10400	e114000	e30700	7020	e4760
26	e7720	e2890	e6340	e23200	e34900	67300	e18700	e36700	e117000	e34200	e7260	e2730
27	e10500	e2500	e6430	e19600	e34000	68900	e23000	e61000	e115000	e28100	5250	e7260
28	e9680	e2200	6860	e20000	e28900	84600	e24900	e72400	e110000	e35500	e13800	e5470
29	e10400	e7980	e15100	e18800	e25500	79800	e10000	e37500	e116000	e38500	e13100	e3600
30	e10900	e2560	e13000	e14100	---	75200	e5960	e37300	117000	e55000	e10100	e1370
31	e10900	---	e11100	e8020	---	79800	---	e48300	---	e47600	12000	---
TOTAL	282650	118070	850430	440580	424010	1675700	1133610	1807570	1868500	1827500	502110	237720
MEAN	9118	3936	27430	14210	14620	54050	37790	58310	62280	58950	16200	7924
MAX	14900	8850	79500	26000	36600	84600	78500	122000	160000	120000	39800	17500
MIN	2280	1220	2850	7320	1700	16600	5960	4570	11500	10600	2930	1370
AC-FT	560600	234200	1687000	873900	841000	3324000	2249000	3585000	3706000	3625000	995900	471500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2000, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	37230	39990	41810	54690	38260	76020	71360	75490	60900	54990	19390	11420
MAX	78990	104200	53480	128800	59710	94770	95150	149800	124800	102200	32240	17250
(WY)	1999	1999	1999	1998	1999	1998	1998	1999	1999	1999	1997	1997
MIN	9118	3936	27430	14210	14620	54050	37790	34300	15460	14950	10360	7924
(WY)	2000	2000	2000	2000	2000	2000	2000	1997	1998	1998	1998	2000

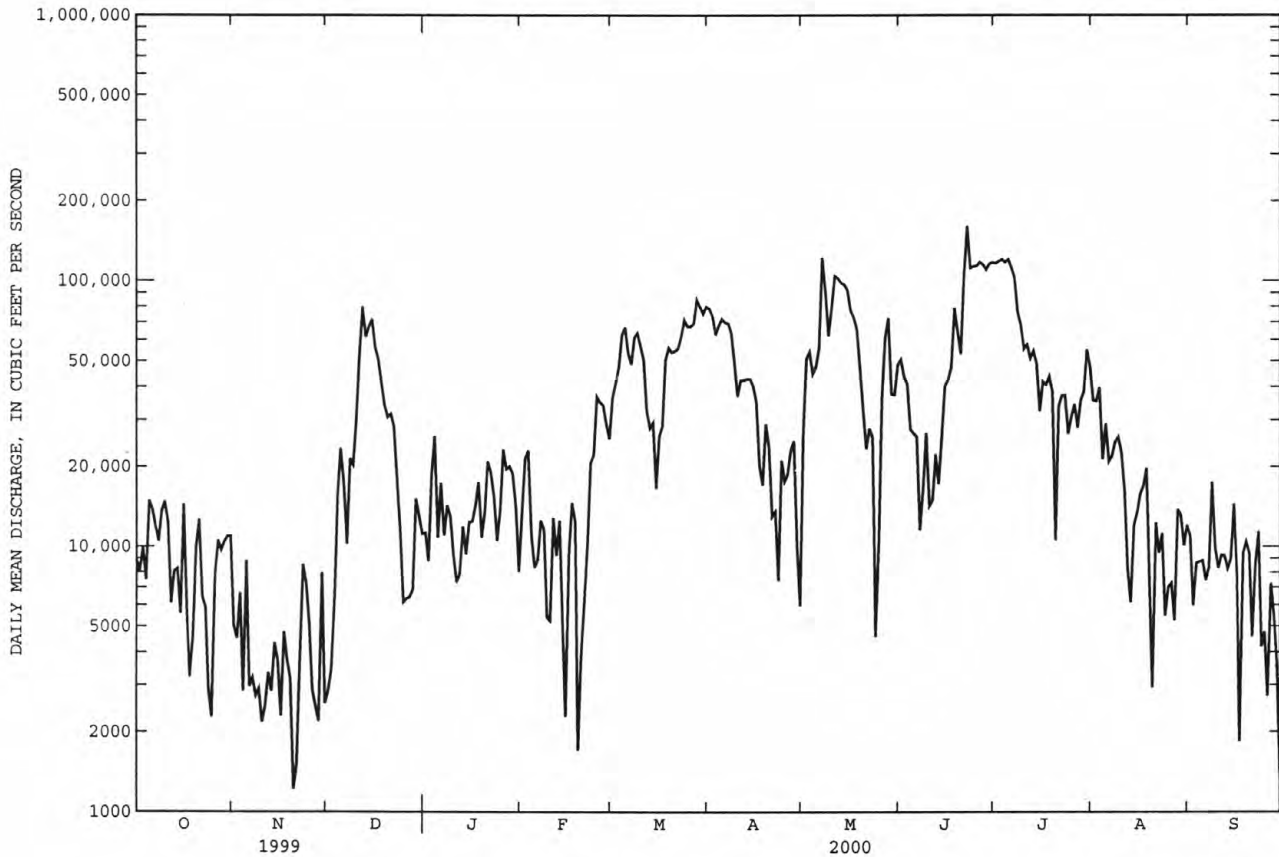
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ARKANSAS RIVER BASIN

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07249455 ARKANSAS RIVER NEAR FORT SMITH, AR--Continued

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1997 - 2000	
ANNUAL TOTAL	20912490		11168450		50060	
ANNUAL MEAN	57290		30510		73680	1999
HIGHEST ANNUAL MEAN					30510	2000
LOWEST ANNUAL MEAN					198000	Jan 5 1998
HIGHEST DAILY MEAN	166000	May 18	160000	Jun 22	45	Sep 10 1998
LOWEST DAILY MEAN	1220	Nov 20	1220	Nov 20	1430	Sep 7 1998
ANNUAL SEVEN-DAY MINIMUM	2820	Nov 7	2820	Nov 7	206000	Jan 5 1998
INSTANTANEOUS PEAK FLOW			168000	Jun 22	25.82	Jan 5 1998
INSTANTANEOUS PEAK STAGE			23.06	Jun 22		
ANNUAL RUNOFF (AC-FT)	41480000		22150000		36270000	
10 PERCENT EXCEEDS	144000		72600		126000	
50 PERCENT EXCEEDS	31000		17600		32700	
90 PERCENT EXCEEDS	5770		4490		7160	



ARKANSAS RIVER BASIN

07249455 ARKANSAS RIVER AT FORT SMITH, AR--Continued

WATER-QUALITY RECORDS

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

		AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)		
APR													
18...	1140	1028	1028	11.92	8200	760	9.4	7.8	570	17.0	200		
18...	1143	1028	1028	11.92	8200	760	10.1	7.8	600	17.0	300		
18...	1148	1028	1028	11.92	8200	760	10.0	7.9	630	16.5	400		
18...	1152	1028	1028	11.92	8200	760	10.1	8.0	710	16.5	500		
18...	1155	1028	1028	11.92	8200	760	10.2	8.0	720	17.0	600		
18...	1200	1028	1028	11.92	8200	760	10.0	8.1	685	16.5	700		
18...	1203	1028	1028	11.92	8200	760	10.2	8.1	675	16.5	800		
18...	1208	1028	1028	11.92	8200	760	10.2	8.0	655	16.5	900		
DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	GAGE HEIGHT (FEET) (00065)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (MG/L) (00301)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)		
OCT													
05...	1115	80020	1028	11.32	E9000	765	89	8.3	8.3	795	16.5	19.0	
DEC													
14...	1020	80020	1028	14.10	67000	752	97	10.8	8.0	746	9.0	10.0	
FEB													
08...	1330	80020	1028	12.00	53000	766	121	14.7	7.5	908	14.5	7.0	
APR													
18...	1100	80020	1028	11.92	8200	760	105	10.2	8.2	661	23.0	16.5	
JUN													
27...	1230	80020	1028	17.32	114000	760	88	7.1	8.1	366	28.5	26.0	
AUG													
14...	1115	80020	1028	11.53	E5000	759	129	9.5	8.3	684	31.5	31.0	
DATE	TIME	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)	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- LITY 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)
OCT													
05...	200	65	54.3	14.5	4.7	3	81.5	47	130	159	0	110	
DEC													
14...	150	55	42.7	11.6	4.3	3	80.8	52	99	121	0	115	
FEB													
08...	180	61	50.1	14.0	3.9	3	97.5	53	122	149	0	142	
APR													
18...	130	3	36.1	10.5	3.7	3	70.9	53	130	159	0	104	
JUN													
27...	110	27	30.9	6.86	3.6	1	29.1	37	79	96	0	37.5	
AUG													
14...	170	52	47.4	12.3	4.2	2	63.9	44	117	143	0	93.4	
DATE	TIME	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)	
OCT													
05...	91.3	.64	<.020	--	--	--	--	--	<.050	--	<.010	--	
DEC													
14...	73.6	.73	.055	.413	1.2	.07	1.83	.424	.036	.011	.68		
FEB													
08...	88.9	.61	<.020	--	1.1	--	--	.478	--	<.010	--		
APR													
18...	66.8	.95	.035	--	1.4	.05	--	.426	--	<.010	.92		
JUN													
27...	37.8	.66	.053	--	.96	.07	--	.294	--	<.010	.61		
AUG													
14...	74.4	.51	<.020	--	--	--	--	<.050	--	<.010	--		

ARKANSAS RIVER BASIN

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07249455 ARKANSAS RIVER AT FORT SMITH, AR--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS P04) (00660)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	TUR- BID- ITY (NTU) (00076)	PHEO- PHYTIN PHYTO- PLANK- TON, ACID M. (UG/L) (32218)
OCT 05...	--	E.032	<.010	.077	22	.61	--	446	435	14	25.0
DEC 14...	.126	.052	.041	.138	46	.56	74200	410	390	35	5.00
FEB 08...	.107	E.043	.035	.084	14	.69	72400	506	472	8.2	7.00
APR 18...	.126	.055	.041	.124	39	.50	8170	369	372	25	4.00
JUN 27...	--	E.041	<.010	.124	54	.29	66500	216	194	4.0	6.00
AUG 14...	.098	E.033	.032	.073	<10	.52	--	384	366	1.2	8.00
DATE	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CHLORO- HPYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	CHLORO- PHYLL A PHYTO- PLANK- TON UNCORR. (UG/L) (32230)	CHLORO- PHYLL B PHYTO- PLANK- TON UNCORR. (UG/L) (32231)	CHLORO- PHYLL C PHYTO- PLANK- TON UNCORR. (UG/L) (32232)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 05...	K4	48	K6	2.00	17.0	<1.00	1.00	E2	72	--	96
DEC 14...	54	120	150	<1.00	4.00	<1.00	<1.00	4	106	19200	97
FEB 08...	K8	K18	K8	13.0	18.0	<1.00	<1.00	E2	135	19300	51
APR 18...	K20	K26	K9	12.0	15.0	<1.00	<1.00	7	91	2010	96
JUN 27...	96	40	400	7.00	11.0	<1.00	<1.00	4	87	26800	91
AUG 14...	K3	K3	20	25.0	31.0	<1.00	<1.00	<2	78	--	97

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Crest-stage partial record stations

The following table contains peaks for a crest-stage station. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. The date of the peak is not always certain, but is determined by nearby continuous-record stations, weather records or local inquiry. On this particular station, peaks through July were in an earth channel. Peaks from October 1995 will be from a concrete-lined channel.

Station number	Station name	Location	Drainage Area (mi ²)	Period of Record	Peaks	
					Date	Gage height (ft)
07178007	Bell Creek at Tulsa, OK	Lat 36°06'20", long 95°52'46" in SE 1/4, SW 1/4, sec.24, T.19N, R.13E, Tulsa County, Hydrologic Unit 11070107, at downstream webwall of two-barrel culvert on State Highway 51, 800 ft west northwest of 41st Street overpass and at mile 0.5. Datum of gage is 650.00 ft mean sea level.	1.03	1996-2000	12-04-99	9.47
					05-06-00	10.76
					05-26-00	8.93
					06-14-00	9.73
					06-21-00	8.72
					07-21-00	10.46
					07-27-00	8.95
07178018	Mill Creek at Tulsa, OK	Lat 36°08'52", long 95°52'27" in SW 1/4, SE 1/4, sec.1, T.19N, R.13E, Tulsa County, Hydrologic Unit 11070107, at right downstream webwall of three-barrel culvert on 11th Street, .3 mi west of Mingo Road and .2 mi upstream from Mingo Creek. Datum of gage is 607.22 ft mean sea level.	4.76	1994-2000	05-06-00	6.94
					07-21-00	6.80
07178025	Cooley Creek abv. 115th E. Ave. at Tulsa, OK	Lat 36°09'48", long 95°50'54" in SW 1/4, SW 1/4, sec.32, T.20N, R.13E, Tulsa County, Hydrologic Unit 11070107, at downstream webwall of four-barrel culvert, approx. .2 mi north on Garnett from Admiral/Garnett intersection. Datum of gage is 630.62 ft mean sea level.	5.86	1996-2000	05-06-00	1.91
					06-26-00	1.20
					07-21-00	1.44
07178027	Cooley Creek at Hwy. 169 at Tulsa OK	Lat 36°09'43", long 95°51'37" in NE 1/4, NW 1/4, sec.06, T.19N, R.14E, Tulsa County, Hydrologic Unit 11070107, at upstream webwall of three-barrel culvert on U.S. Highway 169 and 600 ft north of Admiral Rd. and Hwy. 169 bridge crossing. Datum of gage is 614.978 ft mean sea level.	6.14	1996-2000	10-30-99	2.89
					12-04-99	3.79
					03-02-00	3.29
					05-06-00	5.47
					06-26-00	3.04
					07-21-00	4.64
					09-24-00	3.16

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN						
07159639	Bluff Creek above Bethany and Warr Acres Sewage Treatment Plant near Edmond, OK.	Lat 35°40'02", long 97°35'45", in NE 1/4, NW 1/4, sec.26, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, at county road bridge 0.4 mi upstream of Deer Creek and 0.6 mi west of State Highway 74.		1986 1993-2000	05-22-00 06-15-00 07-24-00 08-10-00 09-14-00	32 13 16 3.1 1.3
07159643	Deer Creek below Bluff Creek at Oklahoma City, OK.	Lat 35°40'56", long 97°35'26", in NE 1/4, NW 1/4, sec.23, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, 0.3 mi upstream of County Road and 0.5 mi downstream of confluence of Bluff Creek.		1993-2000	05-31-00 06-16-00 07-26-00 08-10-00 09-14-00	16 19 28 11 5.4
07159650	Deer Creek at Oklahoma City, OK.	Lat 35°41'24", long 97°35'06", in SW 1/4, NW 1/4, sec.13, T.14 N., R.4 W., Oklahoma County, Hydrologic Unit 11050002, at bridge on 220th St., 0.4 mi east of State Highway 74.		1993-2000	05-26-00 06-16-00 07-25-00 08-30-00 09-19-00	40 26 62 14 14
07159730	Chisholm Creek at Edmond, OK.	Lat 35°38'03", long 97°31'56", in SE 1/4, SE 1/4, sec.17, T.14 N., R.3 W., Oklahoma County, Hydrologic Unit 11050002, at bridge on 206th St., 0.2 mi west of Western Avenue, 1.8 mi south of Logan County line.		1993-2000	05-26-00 06-15-00 07-25-00 08-25-00	13 4.6 11 .04
07159735	Chisholm Creek near Edmond, OK.	Lat 35°43'32", long 97°31'37", in NW 1/4, NW 1/4, sec.4, T.14 N., R.3 W., Oklahoma County, Hydrologic Unit 11050002, at bridge on County Road, 0.2 mi east of Western Avenue on the Logan and Oklahoma County lines.		1993-2000	05-23-00 06-14-00 07-27-00 08-25-00 09-19-00	17 11 9.6 4.5 2.6
07185090	Tar Creek near Commerce, OK.	Lat 36°56'06", long 94°51'11", in SW 1/4, SW 1/4, sec.6, T.29 N., R.22 E., Ottawa County, Hydrologic Unit 11070206, at U.S. Highway 69 bridge, 1.0 mi east of Commerce, OK.		1999-2000	03-15-00 04-12-00 05-16-00 06-22-00 07-12-00 08-08-00	24 14 16 341 4.0 3.8
07185095	Tar Creek at 22nd Street Bridge at Miami, OK.	Lat 36°54'00", long 94°52'05", in NW 1/4, NE 1/4, sec.19, T.28 N., R.23 E., Ottawa County, Hydrologic Unit 11070206, at 22nd Street bridge in Miami, OK.	44.7	1988-92 1999-2000	03-15-00 04-12-00 05-17-00 07-12-00 08-08-00	39 25 16 5.7 4.9
07188005	Beaver Creek near Quapaw, OK.	Lat 36°56'02", long 94°45'14", in NE 1/4, SE 1/4, sec.6, T.28 N., R.24 E., Ottawa County, Hydrologic Unit 11070207, at bridge in Quapaw Tribal Pow Wow grounds, 2.6 mi southeast of Quapaw, OK.		1999-2000	03-14-00 04-11-00 05-17-00 06-20-00 07-11-00 08-08-00	4.4 8.2 3.8 22 4.0 1.1

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the state.

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN						
07188007	Beaver Creek above Spring River near Quapaw, OK.	Lat 36°56'02", long 94°45'14", in NE 1/4, SE 1/4, sec.6, T.28 N., R.24 E., Ottawa County, Hydrologic Unit 11070207, at county road bridge, 2.7 mi southeast of Quapaw, Ok.		1999-2000	03-14-00 04-13-00 05-17-00 06-20-00 07-11-00 08-07-00	4.6 3.3 5.4 26 3.8 1.9
07194830	Illinois River near Pedro, Ar.	Lat 36°10'32", long 94°23'30", in NE 1/4, SE 1/4, sec.4 T.17 N., R.32 W., Benton County, Hydrologic Unit 11110103, at county road bridge, 0.9mi northeast of Pedro, Ar.		1996-2000	10-20-99 12-01-99 02-16-00 04-18-00 07-19-00 08-17-00	31 40 43 121 113 52
07195610	Illinois River above Flint Creek near Flint, Ok.	Lat 36°10'26", long 94°43'14", in NE 1/4 NW 1/4, sec. 35, T.20 N., R.24 E., Delaware County, Hydrologic Unit 11110103, at Fiddlers Bend, 100 ft upstream from Flint Creek, and 1.4 mi southwest of Flint, Ok.		1996-2000	07-25-00 08-29-00 09-20-00	411 158 145
07196040	Illinois River below Flint Creek near Flint, Ok.	Lat 36°10'25", long 94°43'22", in NW 1/4 NW 1/4, sec. 35, T.20 N., R.24 E., Delaware County, Hydrologic Unit 11110103, 0.2 mi below Flint Creek, 1.4 mi southwest of Flint, Ok.		1996-2000	07-25-00 08-29-00 09-20-00	497 183 173
07196090	Illinois River at Chewey, Ok.	Lat 36°06'15", long 94°46'57", in SE 1/4 SE 1/4, sec. 19, T.19 N., R.24 E., Adair County, Hydrologic Unit 11110103, at Hampton Bridge, 0.85 mi west of Chewey, Ok.		1996-2000	10-20-99 12-01-99 12-11-99 02-16-00 04-12-00 05-07-00 06-18-00 06-22-00 08-16-00 09-26-00	194 203 886 231 1400 3340 16800 34700 251 840
07196190	Illinois River near Scraper, Ok.	Lat 35°05'40", long 94°49'47", in SW 1/4 SW 1/4, sec. 26, T.19 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10 at Round Hollow Public Access Area, 1.2 mi northeast of Scraper, Ok.		1996-2000	07-26-00 08-16-00 09-14-00	514 261 308

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

Miscellaneous Sites

Discharge measurements in the following table were made at special study and miscellaneous sites throughout the state.

Station number	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					Date	Discharge (ft ³ /s)
ARKANSAS RIVER BASIN						
07196400	Illinois River at No Head Hollow near Tahlequah, Ok.	Lat 35°58'02", long 94°54'39", in SW 1/4 NE 1/4, sec. 12, T.17 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10 at No Head Hollow Public Use Area, 5.7 mi northeast of Tahlequah, Ok.		1996-2000	07-26-00 08-31-00 09-19-00	514 197 160
07196490	Illinois River near Briggs, Ok.	Lat 35°56'34", long 94°54'57", in NE 1/4, NW 1/4, sec.24 T.17 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to State Highway 10, 0.1 mi downstream of Echota Public Use Area, 4.6 mi northwest of Briggs, ok.		1996-2000	07-25-00 08-30-00 09-19-00	579 185 168
07196520	Illinois River near Park Hill, OK.	Lat 35°51'11", long 94°54'55", in NE 1/4, NW 1/4, sec.24 T.16 N., R.22 E., Cherokee County, Hydrologic Unit 11110103, adjacent to unimproved road, 0.2 mi upstream from Barron Fork, 2.4mi southeast of Park Hill, Ok.		1996-2000	07-26-00 08-30-00 09-19-00	597 186 180
07197080	Baron Fork at Welling, OK.	Lat 35°52'08", long 94°53'52", in NE 1/4, NE 1/4, sec.18 T.16 N., R.23 E., Cherokee County, Hydrologic Unit 11110103, at county road bridge, 0.3mi south of Welling, Ok.		1996-2000	10-19-99 12-01-99 02-15-00 04-18-00 07-26-00 09-30-00	32 49 70 202 167 34
07247345	Black Fork at Hodgen, OK.	Lat 34°50'35", long 94°37'28", in SE 1/4, SE 1/4, sec.1 T.4 N., R.25 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge .4 mi east of Hodgen.	179	1992-2000	10-06-99 02-09-00 04-19-00 06-29-00 07-14-00 08-15-00	.11 87 166 1090 23 .11
07247650	Fourche Maline near Leflore, OK.	Lat 34°55'11", long 94°56'43", in NE 1/4, SE 1/4, sec.11 T.5 N., R.22 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge 1.6 mi east of LeFlore.	270	1992-2000	10-06-99 12-15-99 02-10-00 04-19-00 06-28-00 07-14-00 08-15-00	.45 291 38 110 94 7.8 .47
07247800	Holson Creek at Summerfield, OK.	Lat 34°52'46", long 94°51'11", n SW 1/4, NW 1/4, sec.26 T.5 N., R.23 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge 1.4 mi east of Summerfield.	71.6	1992-2000	12-05-99 02-10-00 04-19-00 06-28-00 07-14-00	54 18 35 44 4.8

ARKANSAS RIVER BASIN

ANALYSIS OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

The U.S. Geological Survey sampled ten wells and eight surface water sites within the Iowa tribal jurisdiction as a reconnaissance investigation of the effects of oil drilling, agriculture, and natural metals contamination. In addition, Iowa tribal staff requested analysis to determine the occurrence of pesticides in surface and ground water within the tribal jurisdiction.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

STATION	NUMBER	STATION	NAME	DATE	TIME	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS- SOLVED (MG/L) (00300)				
07160600			Cimarron River at Coyle, OK	07-20-00	1430	80020	519	7.7				
07161005			Unnamed Pond ner Perkins, OK	07-18-00	1000	80020	--	.2				
07161300			Headquarters Creek near Carney, OK	07-18-00	1400	80020	.87	6.8				
07161330			Headquarters Creek near Tryon, OK	07-17-00	1115	80020	.47	4.6				
07161360			Headquarters Creek near Chandler, OK	07-18-00	1545	80020	.06	5.2				
07161450			Cimarron River near Ripley, OK	07-20-00	1030	80020	556	5.8				
07242360			Deep Fork at Luther, OK	07-24-00	0930	80020	22	6.1				
07242530			Deep Fork near Chandler, OK	07-24-00	1230	80020	110	6.5				
35434109659570115N	03E 33	CCB 1		07-19-00	1530	80020	--	.5				
35445409707300115N	02E 30	AAB 1		07-19-00	1700	80020	--	4.8				
35550209701250117N	03E 30	CCA 1		07-17-00	0955	80020	--	3.7				
35551209701000117N	03E 30	DAA 1		07-19-00	0915	80020	--	5.7				
35554109702450117N	02E 24	CDC 1		07-19-00	1015	80020	--	1.4				
35561209659210117N	03E 21	ABC 1		07-19-00	1300	80020	--	5.8				
35565609657500117N	03E 15	DAA 1		07-19-00	1145	80020	--	3.3				
35571209657460117N	03E 14	BBC 1		07-17-00	1445	80020	--	5.0				
35572509656560117N	03E 11	DDC 1		07-17-00	1330	80020	--	6.2				
35572909658260117N	03E 10	DCC 1		07-18-00	1300	80020	--	1.5				
DATE	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	2,4,5-T DIS- SOLVED (UG/L) (39742)	2,4-D, DIS- SOLVED (UG/L) (39732)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	3HYDRXY CARBO- FURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ACIFL- UORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)
07-20-00	8.4	5660	26.9	1470	<.050	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-18-00	7.2	273	26.8	14.8	<.050	<.04	<.11	<.10	<.003	<.23	<.002	<.09
07-18-00	7.3	545	28.1	27.8	<.050	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-17-00	7.4	544	27.1	18.8	.144	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-18-00	7.9	512	26.9	21.4	<.050	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-20-00	7.9	4990	28.6	1360	<.050	<.04	<.11	<.10	<.003	<.28	<.002	<.09
07-24-00	7.9	570	25.4	49.6	2.16	<.04	.54	<.10	<.003	<1.19	<.002	<.09
07-24-00	8.0	380	27.0	31.1	.235	<.04	.24	<.10	<.003	<.21	<.002	<.09
07-19-00	7.1	1080	17.3	220	.634	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-19-00	8.7	990	19.7	18.5	.088	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-17-00	6.3	294	19.8	8.0	19.6	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-19-00	7.4	655	26.6	27.0	.793	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-19-00	9.0	659	19.4	15.8	.331	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-19-00	6.8	326	19.2	10.6	2.09	<.04	<.11	<.10	<.003	<.11	<.002	<.09
07-19-00	7.0	615	23.8	19.0	12.6	<.04	<.11	<.10	.142	<.11	.110	<.09
07-17-00	6.7	334	21.3	2.8	.536	<.04	<.11	<.12	<.003	<.11	<.002	<.09
07-17-00	7.3	442	28.2	7.3	4.80	<.04	<.11	<.10	<.003	<.22	<.002	<.09
07-18-00	7.2	2400	--	654	.825	<.04	<.11	<.10	<.003	<.11	<.002	<.09

ANALYSIS OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	ALDI- CARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICA- RB SUL- FOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	ALDI- CARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	BDMC, SURROG, WATER, UNFLTRD REC PERCENT (99835)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	BENTA- ZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)	BRO- MACIL, WATER, DISS, REC (UG/L) (04029)	BRO- MOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)
07-20-00	<.002	<.12	<.02	<.21	<.002	.038	77	<.002	<.04	<.10	<.04	<.002
07-18-00	<.002	<.86	<.38	<.21	<.002	.008	70	<.002	<.04	<.23	<.04	<.002
07-18-00	<.002	<.10	<.15	<.21	<.002	.008	71	<.002	<.04	<.06	<.04	<.002
07-17-00	<.002	<.10	<.19	<.60	<.002	.010	77	<.002	<.04	<.06	<.04	<.002
07-18-00	<.002	<.10	<.02	<.21	<.002	.006	70	<.002	<.04	<.06	<.04	<.002
07-20-00	<.002	<.10	<.11	<.21	<.002	.037	78	<.002	<.04	<.14	<.04	<.002
07-24-00	<.002	<.10	<.27	<.32	<.002	.022	73	<.002	<.04	<.63	<.04	<.002
07-24-00	<.002	<.10	<.02	<.22	<.002	.028	74	<.002	<.04	<.23	<.04	<.002
07-19-00	<.002	<.10	<.02	<.21	<.002	.012	76	<.002	<.04	<.06	<.04	<.002
07-19-00	<.002	<.10	<.02	<.21	<.002	<.001	66	<.002	<.04	<.06	<.04	<.002
07-17-00	<.002	<.10	<.02	<.60	<.002	<.001	83	<.002	<.04	<.06	<.04	<.002
07-19-00	<.002	<.10	<.13	<.21	<.002	.006	79	<.002	<.04	<.06	<.04	<.002
07-19-00	<.002	<.10	<.02	<.21	<.002	<.001	56	<.002	<.04	<.06	<.04	<.002
07-19-00	<.002	<.10	<.02	<.21	<.002	<.001	77	<.002	<.04	<.06	<.04	<.002
07-19-00	.110	<.10	<.14	<.21	.113	.098	75	.068	<.04	<.06	<.04	.121
07-17-00	<.002	<.10	<.02	<.60	<.002	<.001	87	<.002	<.04	<.06	<.04	<.002
07-17-00	<.002	<.10	<.02	<.21	<.002	<.001	82	<.002	<.04	<.06	<.04	<.002
07-18-00	<.002	<.10	<.02	<.21	<.002	<.001	72	<.002	<.04	<.06	<.04	<.002
DATE	CAR- BARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CAR- BARYL WATER FLTRD GF 0.7U GF, REC (UG/L) (82680)	CARBO- FURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	CARBO- FURAN, WATER FLTRD GF 0.7U GF, REC (UG/L) (82674)	CHLOR- AMBN, METHYL ESTER WATER FLTRD (UG/L) (61188)	CHLORO- THALO- NIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CLOPYR- ALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DACTHAL MONO- ACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DCPA WATER FLTRD GF 0.7U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)
07-20-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	E.012
07-18-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-18-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	E.008
07-17-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	E.014
07-18-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-20-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	E.012
07-24-00	.13	E.19	<.29	<.003	<.14	<.48	.007	<.23	<.004	<.04	<.002	E.014
07-24-00	E.06	E.072	<.29	<.003	<.14	<.48	.007	<.23	<.004	<.04	<.002	E.012
07-19-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-19-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-17-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-19-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	E.007
07-19-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-19-00	<.07	E.082	<.29	E.090	<.14	<.48	.090	<.23	.091	<.04	.097	E.071
07-17-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-17-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
07-18-00	<.07	<.003	<.29	<.003	<.14	<.48	<.004	<.23	<.004	<.04	<.002	<.002
DATE	DIAZ- INON D10 SRG WAT FLT GF, REC PERCENT (91063)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DICHLO- BENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	DICHLOR PROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	DISUL- FOTON WATER FLTRD 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 GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)
07-20-00	120	<.002	<.04	<.07	<.03	<.001	<.06	<.017	E.04	<.42	<.002	<.004
07-18-00	114	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-18-00	102	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-17-00	122	E.003	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-18-00	97	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-20-00	109	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-24-00	116	.804	<.04	.15	<.03	<.001	<.06	<.017	1.32	<.42	<.002	<.004
07-24-00	106	.503	<.04	<.07	<.03	<.001	<.06	<.017	.89	<.42	<.002	<.004
07-19-00	95	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-19-00	104	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-17-00	115	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-19-00	101	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-19-00	109	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-19-00	102	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-19-00	98	.111	<.04	<.07	<.03	.138	<.06	E.052	<.06	<.42	.125	.079
07-17-00	121	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-17-00	119	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004
07-18-00	96	<.002	<.04	<.07	<.03	<.001	<.06	<.017	<.06	<.42	<.002	<.004

ARKANSAS RIVER BASIN

ANALYSIS OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	ETHO- PROP WATER, FLTRD, 0.7 U GF, REC (UG/L) (82672)	FEN- URON, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49297)	FLUO- METURON, WATER, FLTRD, 0.7 U GF, 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 DIS- SOLVED (UG/L) (39341)	LIN- URON WATER, FLTRD, 0.7 U GF, REC (UG/L) (38478)	LIN- URON WATER, FLTRD, 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	MCPA, WATER, FLTRD, 0.7 U GF, REC (UG/L) (38482)	MCPB, WATER, FLTRD, 0.7 U GF, REC (UG/L) (38487)	METHIO- CARB, WATER, FLTRD, 0.7 U GF, REC (UG/L) (38501)
07-20-00	<.003	<.22	<.06	<.003	93	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-18-00	<.003	<.07	<.06	<.003	95	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-18-00	<.003	<.07	<.06	<.003	87	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-17-00	<.003	<.07	<.06	<.003	115	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-18-00	<.003	<.07	<.06	<.003	84	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-20-00	<.003	<.70	<.06	<.003	94	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-24-00	<.003	<.17	<.06	<.003	113	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-24-00	<.003	<.07	<.06	<.003	105	<.004	<.09	<.002	.007	<.17	<.13	<.03
07-19-00	<.003	<.07	<.06	<.003	82	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-19-00	<.003	<.07	<.06	<.003	90	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-17-00	<.003	<.07	<.06	<.003	100	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-19-00	<.003	<.52	<.06	<.003	92	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-19-00	<.003	<.07	<.06	<.003	99	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-19-00	<.003	<.07	<.06	<.003	86	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-19-00	.097	<.07	<.06	.115	91	.110	<.09	.101	.091	<.17	<.13	<.03
07-17-00	<.003	<.07	<.06	<.003	111	<.004	<.09	<.002	<.005	<.17	<.13	<.16
07-17-00	<.003	<.07	<.06	<.003	108	<.004	<.09	<.002	<.005	<.17	<.13	<.03
07-18-00	<.003	<.07	<.06	<.003	90	<.004	<.09	<.002	<.005	<.17	<.13	<.03
DATE	METH- OMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	NEB- URON, WATER, FLTRD, 0.7 U GF, REC (UG/L) (49294)	NORFLUR AZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	ORY- ZALIN, 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)
07-20-00	<.19	<.010	<.006	.005	<.004	<.004	<.003	<.07	<.04	<.31	<.13	<.006
07-18-00	<.86	<.050	<.006	<.010	<.004	<.004	<.003	<.07	<.20	<.31	<.02	<.006
07-18-00	<.89	<.001	<.006	.006	<.004	<.004	<.003	<.07	<.12	<.31	<.17	<.006
07-17-00	<.02	<.001	<.006	.006	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-18-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.15	<.31	<.38	<.006
07-20-00	<.02	<.001	<.006	.005	<.004	<.004	<.003	<.07	<.04	<.31	<.12	<.006
07-24-00	<.11	<.001	<.006	E.002	<.004	<.004	<.003	<.07	<.56	<.31	<.33	<.006
07-24-00	<.57	<.001	<.006	E.003	<.004	<.004	<.003	<.07	<.16	<.31	<.19	<.006
07-19-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-19-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-17-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-19-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-19-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-19-00	<.02	E.037	.081	.108	.095	.111	.110	<.07	<.04	<.31	<.02	.071
07-17-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.95	<.04	<.32	<.02	<.006
07-17-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
07-18-00	<.02	<.001	<.006	<.002	<.004	<.004	<.003	<.07	<.04	<.31	<.02	<.006
DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PIC- LORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRO- PHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)
07-20-00	<.004	<.004	<.004	<.005	<.002	<.15	E.004	<.003	<.007	<.004	<.013	<.17
07-18-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-18-00	<.004	<.004	<.004	<.005	<.002	<.10	<.018	<.003	<.007	<.004	<.013	<.04
07-17-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-18-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-20-00	<.004	<.004	<.004	<.005	<.002	<.12	E.006	<.003	<.007	<.004	<.013	<.14
07-24-00	<.004	<.004	<.004	<.005	<.002	<.19	E.013	<.003	<.007	<.004	<.013	<.04
07-24-00	<.004	<.004	<.004	<.005	<.002	<.13	E.006	<.003	<.007	<.004	<.013	<.04
07-19-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-19-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-17-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-19-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-19-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-19-00	.072	.116	.087	.043	.098	<.05	.106	.095	.112	.086	.094	<.04
07-17-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-17-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04
07-18-00	<.004	<.004	<.004	<.005	<.002	<.05	<.018	<.003	<.007	<.004	<.013	<.04

ANALYSIS OF SAMPLES COLLECTED AT MISCELLANEOUS SITES--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000

DATE	PRO- POXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	SILVEX, DIS- SOLVED (UG/L) (39762)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- CLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	URANIUM NATURAL DIS- SOLVED (UG/L AS U) (22703)
07-20-00	<.08	<.06	.009	<.010	<.007	<.013	<.002	<.001	<.25	<.002	7
07-18-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	<1
07-18-00	<.08	<.06	<.005	.012	<.007	<.013	<.002	<.001	<.25	<.002	4
07-17-00	<.08	<.06	<.005	.020	<.007	<.013	<.002	<.001	<.25	<.002	4
07-18-00	<.08	<.06	<.005	E.006	<.007	<.013	<.002	<.001	<.25	<.002	2
07-20-00	<.08	<.06	.009	<.010	<.007	<.013	<.002	<.001	<.25	<.002	6
07-24-00	<.08	<.06	.046	<.010	<.007	<.013	<.002	<.001	<.25	<.002	2
07-24-00	<.08	<.06	.020	<.010	<.007	<.013	<.002	<.001	<.25	<.002	2
07-19-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	1
07-19-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	38
07-17-00	<.08	<.06	<.005	E.003	<.007	<.013	<.002	<.001	<.25	<.002	1
07-19-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	8
07-19-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	35
07-19-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	<1
07-19-00	<.08	<.06	.091	.098	E.084	.083	.104	.114	<.25	.071	11
07-17-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	<1
07-17-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	1
07-18-00	<.08	<.06	<.005	<.010	<.007	<.013	<.002	<.001	<.25	<.002	11

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
<i>Length</i>		
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
<i>Area</i>		
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
<i>Volume</i>		
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
<i>Flow</i>		
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
<i>Mass</i>		
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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