ANNUAL YIELD AND SELECTED HYDROLOGIC DATA FOR THE ARKANSAS RIVER BASIN COMPACT, ARKANSAS-OKLAHOMA, 1994 WATER YEAR

by J.E. Porter

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CONVERSION FACTORS

Multiply	By	To obtain
inch (in)	25.4	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
acre	4,047	square meter
	0.004047	square kilometer
square mile (mi^2)	2.590	square kilometer
cubic foot (ft^3)	0.02832	cubic meter
acre-foot (acre-ft)	1,233	cubic meter
	1.233×10^{-6}	cubic kilometer
cubic foot per second (ft^3/s)	28.32	liter per second
	0.02832	cubic meter per second
ton per day (ton/d)	0.9072	megagram per day

Temperature in degrees Celsius (°C) can be converted to degrees Fahrenheit (°F) as follows:

$$°F = 1.8 \times °C + 32$$

ANNUAL YIELD AND SELECTED HYDROLOGIC DATA FOR THE ARKANSAS RIVER BASIN COMPACT, ARKANSAS-OKLAHOMA, 1994 WATER YEAR

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ABSTRACT

The computed annual yield and deficiency of the subbasins as defined in the Arkansas River Basin Compact, Arkansas-Oklahoma, are given in tables for the 1994 water year. Actual runoff from the subbasins and depletion caused by major reservoirs in the compact area also are given in tabular form. Monthly maximum, minimum, and mean discharges are shown for the 14 streamflow stations used in computing annual yield. Water-quality data are shown for 11 water-quality stations sampled in the Arkansas River Basin.

INTRODUCTION

In 1955, the Congress of the United States granted consent to Arkansas and Oklahoma to enter into a compact for the apportionment of the waters of the Arkansas River and its tributaries as they affect the two states. An Arkansas-Oklahoma Arkansas River Compact committee was created with a Federal Representative acting as chairman. After research and deliberate negotiations had been completed, both States approved the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972. To meet the requirements of the Compact, stateline yields of the Arkansas River Basin are determined at the end of each year.

This report was prepared by the U.S. Geological Survey in cooperation with the Arkansas River Basin Compact Commission, Arkansas-Oklahoma. Streamflow data and water-quality data were furnished by the U.S. Geological Survey. The U.S. Army Corps of Engineers, Tulsa District furnished data from the Webbers Falls, Tenkiller Ferry, Robert S. Kerr, Wister, and Fort Gibson Lakes.

PURPOSE AND SCOPE

The purpose of this report is to present the annual yields and deficiencies computed for the 1994 water year for subbasins in the Arkansas River Basin as defined in the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972. The report includes data from 14 streamflow stations and 11 water-quality stations sampled in the Arkansas River Basin during the 1994 water year. The area included in the Compact is shown on figure 1.

DEFINITION OF TERMS

The following terms used in this report are taken from Article II of the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972.

The term "Arkansas River Basin" means all of the drainage basin of the Arkansas River and its tributaries from a point immediately downstream from the confluence of the Neosho River with the Arkansas River (fig. 1) to a point immediately downstream from the confluence of Lee Creek with the Arkansas River, together with the drainage basin of Spavinaw Creek in Arkansas (fig. 1), but excludes that part of the drainage basin of the Canadian River upstream from Lake Eufaula Dam.

The term "Spavinaw Creek Subbasin" means the drainage area of Spavinaw Creek in the State of Arkansas.

The term "Illinois River Subbasin" means the drainage area of the Illinois River in the State of Arkansas.

The term "Lee Creek Subbasin" means the drainage area of Lee Creek in the State of Arkansas and in the State of Oklahoma.

The term "Poteau River Subbasin" means the drainage area of the Poteau River in the State of Arkansas.

The term "Arkansas River Subbasin" means all areas of the Arkansas River Basin except the four subbasins described previously.

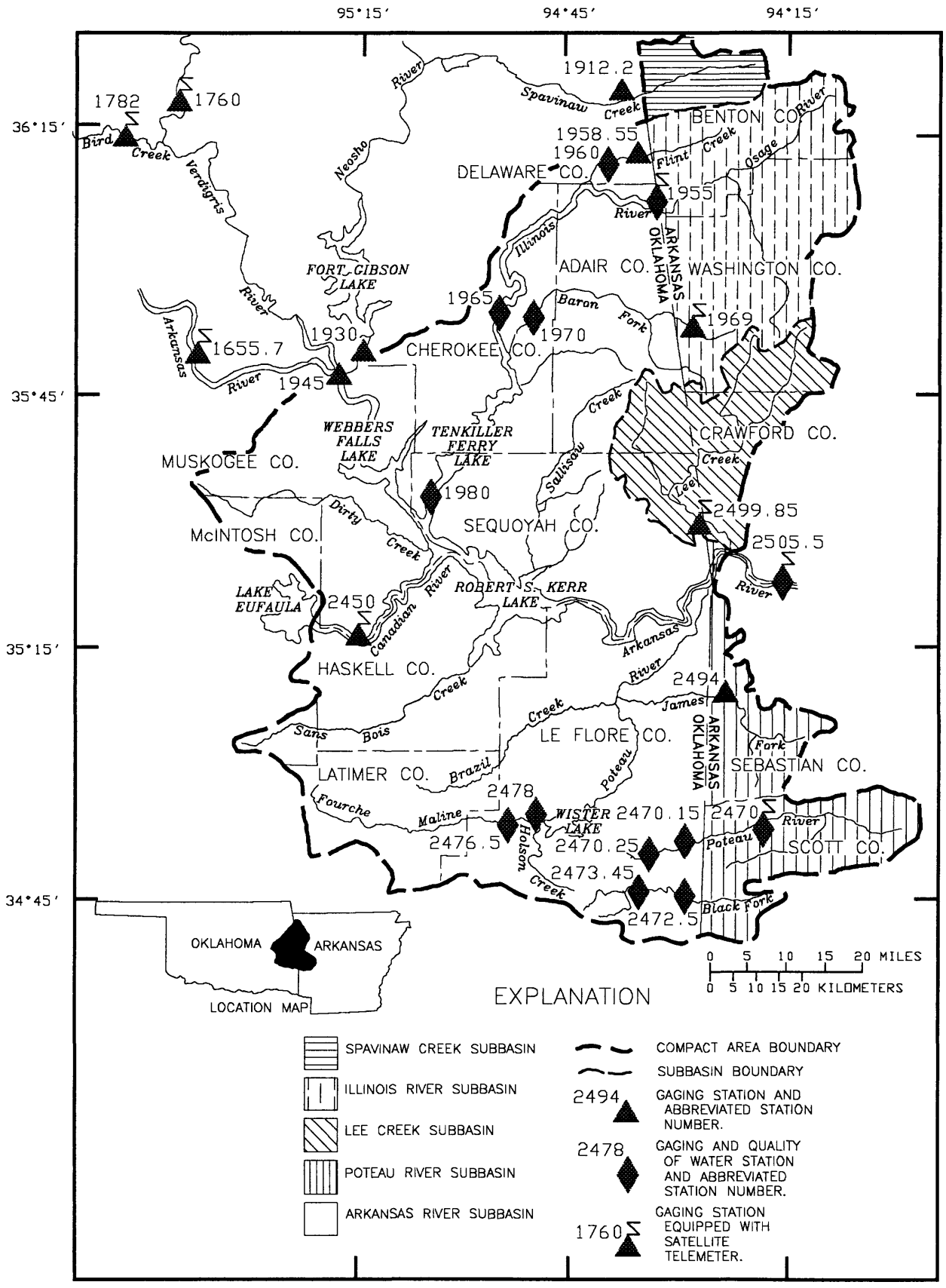

Figure 1. Arkansas-Oklahoma Arkansas River Basin Compact area and subbasins.

The term "water year" means a 12-month period beginning on October 1 and ending September 30.

The term "annual yield" means the computed annual gross runoff from any specified subbasin. The runoff would have passed any certain point on a stream and would have originated within any specified area under natural conditions without any manmade depletion or accretion during the water year.

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below.

Acre-foot is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, 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 present in the intestines 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 the organisms that produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal streptococcal bacteria also are present in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as grampositive, cocci bacteria that are capable of growth in brain-heart infusion broth. These bacteria also are defined as all the organisms that produce red or pink colonies within 48 hours at 35°C ± 0.5°C on KF-streptococcus agar (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

1028 Oklahoma District, Water Resources Division (WRD), U.S. Geological Survey
80513 Arkansas District, 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.

Cubic foot per second is the rate of discharge representing a volume of 1 cubic foot passing a specified point during 1 second.

Deficiency is the amount the actual runoff is less than the minimum required flow.

Depletion caused by major reservoirs is the difference between the inflow and outflow in the reservoirs.

Discharge is the volume of water 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 average of individual daily mean discharges during a specific period.

Dissolved refers to the material in a representative water sample that passes through a 0.45-micrometer 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 oxygen content of water in equilibrium with air is a function of atmospheric pressure and temperature and the dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant effect. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water of some streams.

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 upstream from the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas within the area, unless otherwise noted.

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 attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO_3$).

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

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

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).

Suspended-sediment discharge (tons/day) is the rate at which dry weight of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is computed by multiplying discharge by milligrams per liter by 0.0027.

Sodium-absorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Water varies, in respect to sodium hazard, from that which can be used for irrigation on almost all soils to that which generally is unsatisfactory for irrigation.

Specific conductance is a measure of the ability of 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 concentration 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 past the gage 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.

Tons per day is the quantity of 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 that the sample consists of a water-suspended-sediment mixture and that the analytical method determines all of the constituent in the sample.)

COMPUTATION OF ANNUAL YIELDS

The annual yield and deficiency (table 1) for each subbasin were computed as described in Appendix I to the Arkansas River Basin Compact Arkansas-Oklahoma, 1972, supplement No. 1. Actual runoff for the subbasins (table 2) was computed as described in the Compact except for the stations Arkansas River at Muskogee, which has been discontinued, Arkansas River at Van Buren, which has been moved 7.9 miles downstream, and Lee Creek near Van Buren, which has been moved 3.2 miles upstream to near Short, Oklahoma.

Table 1.--*Annual yield and deficiency for the subbasins for the 1994 water year, as defined in the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972*

[Flow in cubic feet per second]

Subbasin	Actual runoff from the subbasins	Total depletions or accretions (-)	Annual yield	[a]Percent depletion allowed	Minimum required flow	[b]Deficiency
Spavinaw Creek	164	[c]1.2	165	50	82	0
Illinois River	899	[c]518	1,417	60	567	0
Lee Creek (Okla.)	575	[c]12.0	587	100	0	0
Lee Creek (Ark.)	575	[c]0	575	100	0	0
Poteau River	672	[c]4.1	676	60	270	0
Arkansas River	4,844	[d]314	5,158	60	2,063	0

[a]Defined in the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972.
[b]The amount the actual runoff is less than the minimum required flow.
[c]Based on 1993 water year water-use data.
[d]Based on 1993 water-use data and 1994 direct diversions from lake storage.

Table 2.--*Actual runoff from the subbasins for the 1994 water year*

[In cubic feet per second; D.A. = drainage area; mi^2 = square mile; acre-ft = acre-feet]

Month	Spavinaw Creek [a]D.A. = 135 mi^2	Illinois River [b]D.A. = 744 mi^2	Lee Creek D.A. = 426 mi^2	Poteau River [c]D.A. = 536 mi^2	Arkansas River [d]D.A. = 4,591 mi^2
October	79.6	1,040	511	280	4,113
November	285	1,880	1,030	530	6,703
December	180	974	737	1,590	7,533
January	120	515	520	1,270	2,854
February	176	1,090	1,100	923	7,018
March	375	2,200	1,400	1,380	19,381
April	460	1,370	618	551	0
May	144	690	643	1,280	9,343
June	66.2	379	98.0	58.7	314
July	41.8	341	187	102	0
August	28.4	192	80.9	25.3	0
September	24.3	144	12.8	53.8	708
1994 water year	164	899	575	672	4,844
1994 water year (acre-ft)	120,000	651,000	417,000	487,000	3,509,000

[a]Includes 31 mi^2 ungaged.
[b]Includes 63 mi^2 ungaged.
[c]Includes 125 mi^2 ungaged.
[d]Computed by subtracting drainage area at Arkansas River at Muskogee, Canadian River near Whitefield, Illinois River Subbasin, Lee Creek Subbasin, and Poteau River Subbasin from drainage area at Arkansas River at James W. Trimble Dam near Van Buren, Arkansas.

Annual depletion caused by major reservoirs (table 3) was computed for the four major reservoirs in the basin as described in Appendix I to the Compact. Depletions caused by small reservoirs and minor diversions for municipal and agricultural use are considered by subbasins in table 1.

A compilation of the areas and capacities of lakes and ponds in Arkansas, updated in 1981, conducted by the Arkansas Soil and Water Conservation Commission was used to evaluate depletions caused by small reservoirs in the Poteau River, Lee Creek, Spavinaw Creek, and Illinois River subbasins. Analysis indicated that their impact on the depletions in any subbasin, except Illinois River, was probably insignificant. Information on depletions continue to be gathered in order to re-evaluate their present impact.

Streamflow data used in the computations are given in hydrologic station records (p. 8 to 54). The station description under "Remarks" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the actual discharge, "good" means within 10 percent, and "fair" means within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Table 3.--*Annual depletion caused by major reservoirs for the 1994 water year*

[acre-ft = acre-feet; ft^3/s = cubic feet per second]

Reservoir	Year-end contents (acre-ft)	Change in contents in water year (acre-ft)	[a]Precipitation on reservoir surface (inches)	[b]Evaporation from reservoir (inches)	[a]Diversions (acre-ft)	Depletion (acre-ft)	Depletion (ft^3/s)
Webbers Falls	163,700	-6,370	36.00	67.51	0	+10,430	+14.4
Tenkiller Ferry	641,800	-18,700	41.62	58.19	7,050	-750	-1.0
Robert S. Kerr	517,900	+22,000	42.66	60.06	0	+60,200	+83.1
Wister	60,100	-2,130	43.40	53.47	8,180	+10,400	+14.4

[a]From U.S. Corps of Engineers, Tulsa District.

[b]Adjusted for pan coefficient of 0.70 (from Wisler and Brater, 1949).

SELECTED REFERENCES

Arkansas River Compact Committee, 1972, Arkansas River Basin Compact Arkansas-Oklahoma, 1972, with Supplemental Interpretive Comments, Supplement No. 1: Austin, Texas, 31 p.

Arkansas Soil and Water Conservation Commission, 1981, Arkansas State Water Plan - Lakes of Arkansas, 157 p.

Wisler, C.D., and Brater, E.F., 1949, Hydrology: New York, John Wiley & Sons, Inc., 150 p.

HYDROLOGIC STATION RECORDS

07165570 ARKANSAS RIVER NEAR HASKELL, OKLAHOMA

LOCATION.--Lat 35°49'15", long 95°38'19", in SW1/4NW1/4, sec.32, T.16 N., R.16 E., Wagoner County, 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 mi^2, of which 12,541 mi^2 probably is noncontributing.

AVERAGE DISCHARGE.--22 years, 9,944ft^3/s.

EXTREMES.--June 1972 to current year: Maximum discharge, 259,000 ft^3/s Oct. 5, 1986; minimum daily, 87 ft^3/s Sept. 13, 1988.

REMARKS.--Records fair, except for 858 mi^2 intervening area. Flow regulated by Keystone Lake, 55.1 mi upstream. U.S. Army Corps of Engineers' Satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	92,280	5,480	800	2,977	183,000
November	88,600	9,200	850	2,953	175,700
December	84,400	5,070	1,110	2,723	167,400
January	84,964	5,510	984	2,741	168,500
February	109,520	11,700	1,050	3,911	217,200
March	179,150	16,300	1,280	5,779	355,300
April	381,770	26,200	1,410	12,730	757,200
May	788,000	64,200	8,250	25,420	1,563,000
June	216,670	17,200	1,520	7,222	429,800
July	114,704	9,660	710	3,700	227,500
August	123,670	7,910	840	3,989	245,300
September	54,027	4,400	695	1,801	107,200
Water year 1994	2,317,755	64,200	695	6,350	4,597,000

07176000 VERDIGRIS RIVER NEAR CLAREMORE, OKLAHOMA

LOCATION.--Lat 36°18'26", long 95°41'52", in NE1/4NW1/4, sec.15, T.21 N., R.15 E., Rogers County, 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 mi^2.

AVERAGE DISCHARGE.--27 years (water years 1936-62), 3,723 ft^3/s; 30 years (water years 1965-94), 4,498 ft^3/s.

EXTREMES.--October 1935 to current year: Maximum discharge, 182,000 ft^3/s May 21, 1943; no flow at times in 1936, 1939-40, 1956.

REMARKS.--Records fair. Flow regulated since May 1963 by Oologah Lake 14.3 mi upstream; some regulation by dams in Kansas since 1949 and by Hulah Lake since 1950. U.S. Army Corps of Engineers' satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	173,058	13,000	161	5,583	343,300
November	62,536	7,430	106	2,085	124,000
December	57,530	3,370	249	1,856	114,100
January	24,904	2,430	179	803	49,400
February	72,345	9,050	171	2,584	143,500
March	111,195	11,000	391	3,587	220,600
April	575,520	35,500	1,060	19,180	1,142,000
May	699,760	36,200	4,410	22,570	1,388,000
June	11,036	1,300	226	368	21,890
July	59,395	5,830	229	1,916	117,800
August	22,250	3,900	106	718	44,130
September	9,328	2,090	101	311	18,500
Water year 1994	1,878,857	36,200	101	5,148	3,727,000

07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OKLAHOMA

LOCATION.--Lat 36°13'23", long 95°49'09", in SE1/4SE1/4, sec.9, T.20 N., R.14 E., Tulsa County,, near left on 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 mi^2.

AVERAGE DISCHARGE.--6 years, 1,027 ft^3/s.

EXTREMES.--August 1988 to current year: Maximum discharge, 27,400 ft^3/s May 11, 1993, gage height, 33.22 ft; minimum daily discharge, 62 ft^3/s, Nov. 6, 1993.

REMARKS.--Records fair. Some regulation by Skiatook Lake (station 07177400). U.S. Geological Survey's satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	6,854	468	79	221	13,590
November	7,607	1,070	62	254	15,090
December	8,274	810	102	267	16,410
January	5,208	453	106	168	10,330
February	15,106	2,380	148	539	29,960
March	32,114	4,870	206	1,036	63,700
April	109,378	18,100	238	3,646	217,000
May	30,929	4,500	223	998	61,350
June	11,274	1,860	211	376	22,360
July	54,686	7,980	207	1,764	108,500
August	20,118	3,910	214	649	39,900
September	10,856	822	244	362	21,530
Water year 1994	312,404	18,100	62	856	619,700

07191220 SPAVINAW CREEK NEAR SYCAMORE, OKLAHOMA

LOCATION.--Lat 36°20'07", long 94°38'27", in NE1/4NW1/4, sec.4, T.21 N., R.25 E., Delaware County, 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 mi^2.

AVERAGE DISCHARGE.--33 years, 115 ft^3/s.

EXTREMES.--October 1961 to current year: Maximum discharge, 39,800 ft^3/s July 27, 1975; minimum, 1.2 ft^3/s Aug. 9, 1964.

REMARKS.--Records good.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	2,422	122	62	78.1	4,800
November	8,407	2,400	53	280	16,680
December	5,494	255	128	177	10,900
January	3,672	163	103	118	7,280
February	4,832	520	96	173	9,580
March	11,443	790	228	369	22,700
April	13,586	2,620	149	453	26,950
May	4,431	407	83	143	8,790
June	1,939	82	44	64.6	3,850
July	1,290	58	36	41.6	2,560
August	876	36	22	28.3	1,740
September	704	26	21	23.5	1,400
Water year 1994	59,096	2,620	21	162	117,200

07193000 FORT GIBSON LAKE NEAR FORT GIBSON, OKLAHOMA

LOCATION.--Lat 35°51'15", long 95°13'45", in sec.19, T.16 N., R.19 E., Cherokee County, at Fort Gibson Dam, 5 mi north of Fort Gibson, and at mile 7.7.

DRAINAGE AREA.--12,492 mi^2.

Monthly and yearly discharge

Month	Total (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	697,658	22,505	1,384,000
November	240,908	8,030	477,800
December	240,806	7,767	477,600
January	124,918	4,029	247,700
February	187,774	6,706	372,400
March	481,726	15,539	955,500
April	1,197,061	39,902	2,374,000
May	687,613	22,181	1,364,000
June	102,780	3,426	203,900
July	131,273	4,234	260,300
August	80,558	2,598	159,700
September	65,400	2,180	129,700
Water year 1994	4,238,475	11,612	8,406,600

07194500 ARKANSAS RIVER NEAR MUSKOGEE, OKLAHOMA

LOCATION.--Lat 35°46'10", long 95°17'55", in NW1/4, sec.21, T.15 N., R.19 E., Muskogee County, at bridge on U.S. Highway 62, 1.7 mi downstream from Neosho River, 3.5 mi northeast of Muskogee.

DRAINAGE AREA.--96,674 mi^2 of which 12,541 mi^2 probably is noncontributing.

REMARKS.--Gaging station discontinued Sept. 30, 1970, due to backwater conditions. Streamflow computed by combining flow at station 07165570 Arkansas River near Haskell, station 07176000 Verdigris River near Claremore, station 07178200 Bird Creek at State Highway 266 near Catoosa, station 07193000 Fort Gibson Lake Discharge near Fort Gibson, and estimating the flow for the ungaged intervening drainage area.

Monthly and yearly discharge

Month	Mean (ft^3/s)	Runoff (acre-feet)
October	31,500	1,937,000
November	13,568	807,400
December	12,870	791,400
January	7,902	485,900
February	14,265	792,200
March	26,949	1,657,000
April	78,996	4,701,000
May	72,134	4,435,000
June	11,756	699,500
July	13,329	819,600
August	8,586	527,900
September	5,008	298,000
Water year 1994	24,796	17,950,900

07195500 ILLINOIS RIVER NEAR WATTS, OKLAHOMA

LOCATION.--Lat 36°07'48", long 94°34'19", in NW1/4NE1/4, sec.18, T.19 N., R.26 E., Adair County, near right bank on downstream side 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 mi^2.

AVERAGE DISCHARGE.--39 years, 626 ft^3/s.

EXTREMES.--August 1955 to current year: Maximum discharge, 68,000 ft^3/s July 25, 1960; minimum, 8.6 ft^3/s Oct. 26, 1955, Sept. 19, Oct. 14, 1956.

REMARKS.--Records good. Since July 2, 1957, small diversion above station for municipal water supply for city of Siloam Springs, Arkansas. Satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	25,714	2,600	365	829	51,000
November	45,486	9,960	327	1,516	90,220
December	26,278	1,810	445	848	52,120
January	13,972	1,030	330	451	27,710
February	25,094	4,640	345	896	49,770
March	59,620	4,800	791	1,923	118,300
April	36,888	3,680	592	1,230	73,170
May	19,761	2,040	367	637	39,200
June	11,386	1,190	209	380	22,580
July	10,709	854	205	345	21,240
August	5,813	390	141	188	11,530
September	4,280	197	118	143	8,490
Water year 1994	285,001	9,960	118	781	565,300

ARKANSAS RIVER BASIN

07195500 ILLINOIS RIVER NEAR WATTS, OKLAHOMA

PERIOD OF RECORD.--October 1989 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidityunits; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; –, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT 1993											
21...	1315	1028	80020	2,210	281	7.6	16.5	–	9.5	99	--
NOV											
14...	1630	1028	80020	12,700	150	7.4	13.5	170	8.0	79	51
DEC											
15...	1430	1028	80020	1,130	230	7.6	8.0	6.6	11.2	97	100
FEB 1994											
16...	1615	1028	80020	359	291	8.2	8.0	–	12.4	106	--
APR											
06...	1030	1028	80020	2,460	200	7.5	9.5	34	9.2	82	86
JUNE											
29...	1730	1028	80020	202	299	8.2	28.5	4.0	7.8	103	120
AUG											
25	1630	1028	80020	180	318	7.9	25.5	6.7	8.3	103	120

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993										
21...	--	--	--	–	--	–	--	0	91	74
NOV										
14...	8	18	1.5	3.0	10	0.2	5.4	0	53	43
DEC										
15...	31	38	2.0	6.2	11	0.3	2.4	0	88	72
FEB 1994										
16...	--	--	--	–	–	–	--	0	121	99
APR										
06...	16	32	1.5	5.0	11	0.2	2.5	0	85	70
JUNE										
29...	9	46	1.8	10	15	0.4	3.3	0	138	113
AUG										
25	17	46	1.8	11	16	0.4	3.6	0	128	105

07195500 ILLINOIS RIVER NEAR WATTS, OKLAHOMA–CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)
OCT 1993										
21...	--	--	--	--	--	--	--	--	1.60	--
NOV										
14...	6.7	4.6	0.10	6.1	93	77	3,190	0.13	1.09	1.09
DEC										
15...	11	7.3	<0.10	7.4	126	128	384	0.17	2.20	--
FEB 1994										
16...	--	--	--	--	--	--	--	--	2.55	2.55
APR										
06...	7.5	6.2	<0.10	5.9	129	114	857	0.18	2.49	2.49
JUNE										
29...	9.7	12	0.20	10	175	169	95.4	0.24	1.70	--
AUG										
25	10	13	<0.10	8.8	170	164	82.6	0.23	1.40	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT 1993										
21...	<0.010	1.60	1.60	0.040	0.56	0.36	0.60	2.2	0.40	0.230
NOV										
14...	0.010	1.10	1.10	0.010	1.7	0.49	1.7	2.8	0.50	0.790
DEC										
15...	<0.010	2.20	2.20	0.030	0.27	--	0.30	2.5	<0.20	0.110
FEB 1994										
16...	0.050	2.60	2.60	0.020	--	--	<0.20	--	<0.20	0.090
APR										
06...	0.010	2.50	2.50	0.050	0.45	--	0.50	3.0	<0.20	0.270
JUNE										
29...	<0.010	1.70	1.70	0.020	0.18	--	0.20	1.9	<0.20	0.180
AUG										
25	<0.010	1.40	1.40	0.030	0.17	--	0.20	1.6	<0.20	0.170

07195500 ILLINOIS RIVER NEAR WATTS, OKLAHOMA—CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)
OCT 1993										
21 . . .	0.150	0.140	--	--	--	--	--	--	--	--
NOV										
14 . . .	0.250	0.240	<10	<1	28	<0.5	<1.0	<5	<3	<10
DEC										
15 . . .	0.060	0.090	20	<1	39	0.8	<1.0	<5	<3	<10
FEB 1994										
16 . . .	0.080	0.080	--	--	--	--	--	--	--	--
APR										
06 . . .	0.160	0.170	20	<1	36	<0.5	<1.0	<5	<3	<10
JUNE										
29 . . .	0.140	0.130	40	1	52	<0.5	1.0	<5	<3	<10
AUG										
25	0.150	0.120	40	1	51	<0.5	<1.0	<5	<3	<10

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 1993											
21 . . .	--	--	--	--	--	--	--	--	--	--	--
NOV											
14 . . .	180	<10	<4	44	<0.1	<10	<10	2.0	26	<6	5
DEC											
15 . . .	31	<10	<4	26	<0.1	<10	<10	<1.0	45	<6	6
FEB 1994											
16 . . .	--	--	--	--	--	--	--	--	--	--	--
APR											
06 . . .	45	<10	<4	13	<0.1	<10	<10	<1.0	37	<6	5
JUNE											
29 . . .	<3	<10	<4	68	<0.1	10	<10	<1.0	49	<6	<3
AUG											
25	7	<10	<4	72	<0.1	<10	<10	<1.0	50	<6	4

07195500 ILLINOIS RIVER NEAR WATTS, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PCB, TOTAL (UG/L) (39516)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	CHLORDYRIFOS TOTAL RECOVER (UG/L) (38932)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DEF, TOTAL (UG/L) (39040)	DIAZINON, TOTAL (UG/L) (39570)	DIELDRIN, TOTAL (UG/L) (39380)	DISYSTON, TOTAL (UG/L) (39011)
OCT 1993											
21...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
15...	--	--	--	--	--	--	--	--	--	--	--
FEB 1994											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	<0.1	<0.010	<0.1	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.010	<0.01
JUNE											
29...	<0.1	<0.010	<0.1	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.010	<0.01
AUG											
25	--	--	--	--	--	--	--	--	--	--	--

DATE	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, WATER UNFLTRD REC (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE, TOTAL (UG/L) (39340)	MALATHION, TOTAL (UG/L) (39530)	METHOXYCHLOR, TOTAL (UG/L) (39480)	METHYL PARATHION, TOTAL (UG/L) (39600)	MIREX, TOTAL (UG/L) (39755)	PARATHION, TOTAL (UG/L) (39540)
OCT 1993											
21...	--	--	--	--	--	--	--	--	--	--	--
NOV											
14...	--	--	--	--	--	--	--	--	--	--	--
DEC											
15...	--	--	--	--	--	--	--	--	--	--	--
FEB 1994											
16...	--	--	--	--	--	--	--	--	--	--	--
APR											
06...	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01
JUNE											
29...	<0.010	<0.010	<0.01	<0.010	<0.010	<0.010	<0.01	<0.01	<0.01	<0.01	<0.01
AUG											
25	--	--	--	--	--	--	--	--	--	--	--

DATE	PERTHANE, TOTAL (UG/L) (39034)	PHORATE, TOTAL (UG/L) (39023)	SILVEX, TOTAL (UG/L) (39760)	TOTAL TRITHION (UG/L) (39786)	TOXAPHENE, TOTAL (UG/L) (39400)	2,4-DP, TOTAL (UG/L) (82183)	2,4-D, TOTAL (UG/L) (39730)	2,4,5-T, TOTAL (UG/L) (39740)
OCT 1993								
21...	--	--	--	--	--	--	--	--
NOV								
14...	--	--	--	--	--	--	--	--
DEC								
15...	--	--	--	--	--	--	--	--
FEB 1994								
16...	--	--	--	--	--	--	--	--
APR								
06...	0.10	<0.01	<0.01	<0.01	<1	<0.01	0.12	<0.01
JUNE								
29...	0.10	<0.01	<0.01	<0.01	<1	<0.01	<0.01	<0.01
AUG								
25	--	--	--	--	--	--	--	--

07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLAHOMA

LOCATION.--Lat 36°12'58", long 94°36'15", in NE1/4NE1/4, sec.14, T.20 N., R.25 E., Delaware County, on left bank 180 ft downstream from county bridge, 2.5 mi from Arkansas-Oklahoma State line, northwest of Siloam Springs, Oklahoma.

DRAINAGE AREA.--59.8 mi^2.

AVERAGE DISCHARGE.--15 years, 50.1 ft^3/s.

EXTREMES.--June 1979 to current year: Maximum discharge, 6,650 ft^3/s May 3, 1990; minimum daily, 0.40 ft^3/s Aug. 7, 1980.

REMARKS.--Records good except for periods of estimated daily discharges, which are fair. Flow is partially regulated by Lake Siloam Springs, 4.5 mi upstream, and sewage discharge into Flint Creek from city of Gentry.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	1,016	45	28	32.8	2,020
November	4,455	1,400	27	148	8,840
December	1,850	100	37	59.7	3,670
January	1,047	44	27	33.8	2,080
February	1,360	146	24	48.6	2,700
March	4,270	266	67	138	8,470
April	3,624	395	64	121	7,190
May	1,967	136	38	63.5	3,900
June	896	44	21	29.9	1,780
July	570	34	12	18.4	1,130
August	394	21	9.1	12.7	781
September	560	22	16	18.7	1,110
Water year 1994	22,009	1,400	9.1	60.3	43,650

ILLINOIS RIVER BASIN

07196000 FLINT CREEK NEAR KANSAS, OKLAHOMA

LOCATION.--Lat 36°11'11", long 94°42'24", in SW1/4NW1/4, sec. 25, T.20 N., R.24 E., Deleware County, Hydrologic Unit 11110103, at U.S. Highway 412 bridge, 6.0 mi southeast of Kansas, and at mi 2.2.

DRAINAGE AREA.--110 mi^2.

PERIOD OF RECORD.--Water years 1955-61, 1963, 1975-80, July 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; MM, millimeter; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993												
21...	1200	1028	80020	70	278	7.6	16.0	8.6	89	0	122	100
DEC												
14...	1630	1028	80020	126	246	7.6	9.0	11.8	105	0	79	65
FEB 1994												
15...	1715	1028	80020	45	266	7.8	9.0	13.5	119	0	103	84
APR												
05...	1500	1028	80020	214	206	7.5	13.0	10.1	99	0	88	72
JUNE												
30...	1345	1028	80020	50	264	7.9	26.0	7.4	94	0	112	92
AUG												
15...	1200	1028	80020	25	284	8.0	23.0	10.0	119	0	108	88

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)
OCT 1992												
21...	2.40	--	<0.010	2.40	2.40	0.030	--	<0.20	<0.20	0.100	0.100	0.110
DEC												
14...	2.90	--	<0.010	2.90	2.90	0.010	--	<0.20	<0.20	0.110	0.080	0.100
FEB 1994												
15...	2.86	2.86	0.040	2.90	2.90	0.020	--	<0.20	<0.20	0.080	0.080	0.080
APR												
05...	2.40	--	<0.010	2.40	2.40	<0.010	--	<0.20	<0.20	0.080	0.060	0.060
JUNE												
30...	1.50	--	<0.010	1.50	1.50	0.020	0.18	<0.20	0.20	0.120	0.110	0.100
AUG												
15...	1.40	--	<0.010	1.40	1.40	0.030	--	<0.20	<0.20	0.080	0.080	0.090

ARKANSAS RIVER BASIN

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA

LOCATION.--Lat 35°55'22", long 94°55'24", in SE1/4NE1/4, 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.

DRAINAGE AREA.--959 mi^2.

PERIOD OF RECORD.--Water years 1960-61, 1975-79, 1989 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; ML, milliliter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 1993											
19...	1330	1028	80020	1,520	209	7.2	17.5	--	7.0	75	310
NOV											
23...	0900	1028	80020	1,700	205	7.6	11.5	--	9.6	90	81
DEC											
21...	0915	1028	80020	991	230	7.1	7.0	0.70	11.7	97	K11
JAN 1994											
25...	0915	1028	80020	485	254	8.0	8.0	--	11.6	99	K9
FEB											
24...	1000	1028	80020	4,540	166	7.2	7.5	31	10.4	88	520
MAR											
22...	1030	1028	80020	1,470	209	7.8	12.5	2.5	9.5	91	K24
APR											
26...	1230	1028	80020	1,050	220	8.6	19.0	--	10.4	115	34
MAY											
16...	1630	1028	80020	1,040	216	8.9	22.0	--	13.2	154	130
JUNE											
22...	1000	1028	80020	349	250	7.7	26.0	1.8	6.1	77	93
JULY											
27...	0900	1028	80020	700	259	7.9	22.0	--	8.1	94	220
AUG											
24...	1500	1028	80020	337	274	7.8	27.0	--	8.5	109	--
SEPT											
08...	0830	1028	80020	217	279	7.7	23.0	--	7.0	81	200

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT 1993											
19...	9.1	6.8	0.10	8.0	124	118	509	0.17	1.59	1.59	0.010
NOV											
23...	8.5	5.7	0.20	8.1	123	131	565	0.17	2.40	--	<0.010
DEC											
21...	9.3	7.0	<0.10	5.1	130	127	348	0.18	2.10	--	<0.010
JAN 1994											
25...	9.4	9.8	<0.10	2.1	145	140	190	0.20	2.19	2.19	0.010
FEB											
24...	8.6	5.8	<0.10	6.0	101	96	1,240	0.14	1.69	1.69	0.010
MAR											
22...	8.0	6.6	<0.10	6.3	125	121	496	0.17	2.59	2.59	0.010
APR											
26...	8.0	7.2	<0.10	2.3	124	115	352	0.17	1.60	--	<0.010
MAY											
16...	8.1	7.3	<0.10	3.0	121	107	340	0.16	1.10	--	<0.010
JUNE											
22...	8.4	9.0	<0.10	10	149	146	140	0.20	1.20	--	<0.010
JULY											
27...	9.6	12	<0.10	9.5	175	148	331	0.24	1.10	--	<0.010
AUG											
24...	9.7	13	<0.10	9.4	160	149	146	0.22	0.78	--	<0.010
SEPT											
08...	10	13	<0.10	9.8	164	155	96.1	0.22	0.66	--	<0.010

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA–CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993												
19...	650	84	8	31	1.7	5.3	12	0.3	2.7	0	93	77
NOV												
23...	960	87	0	32	1.7	4.7	10	0.2	2.9	0	115	94
DEC												
21...	K11	89	0	33	1.6	5.4	11	0.2	2.1	0	109	89
JAN 1994												
25...	K6	100	4	38	1.8	7.3	13	0.3	2.3	0	120	98
FEB												
24...	3,700	68	10	25	1.4	4.3	12	0.2	2.4	0	71	58
MAR												
22...	K56	92	15	34	1.6	4.7	10	0.2	2.3	0	93	76
APR												
26...	43	89	9	33	1.6	5.4	11	0.2	2.3	2	93	79
MAY												
16...	91	92	25	34	1.7	5.6	11	0.3	2.7	5	71	66
JUNE												
22...	100	100	2	39	1.8	7.0	12	0.3	2.8	0	126	103
JULY												
27...	290	100	1	38	1.8	9.0	16	0.4	2.8	0	123	101
AUG												
24...	--	110	16	41	2.0	9.7	16	0.4	3.4	0	115	94
SEPT												
08...	220	110	6	41	2.0	10	16	0.4	3.6	0	127	104

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA–CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT 1993									
19...	1.60	1.60	0.030	0.47	0.27	0.50	2.1	0.30	0.120
NOV									
23...	2.40	2.40	0.010	--	--	<0.20	--	<0.20	0.070
DEC									
21...	2.10	2.10	0.010	--	--	<0.20	--	<0.20	0.060
JAN 1994									
25...	2.20	2.20	0.020	--	--	<0.20	--	<0.20	<0.010
FEB									
24...	1.70	1.70	0.040	0.46	0.26	0.50	2.2	0.30	0.150
MAR									
22...	2.60	2.60	<0.010	--	--	<0.20	--	<0.20	0.070
APR									
26...	1.60	1.60	0.020	--	--	<0.20	--	<0.20	0.020
MAY									
16...	1.10	1.10	0.020	--	--	<0.20	--	<0.20	<0.010
JUNE									
22...	1.20	1.20	0.020	--	--	<0.20	--	<0.20	0.110
JULY									
27...	1.10	1.10	0.030	--	--	<0.20	--	<0.20	0.100
AUG									
24...	0.780	0.780	0.010	0.19	--	0.20	0.98	<0.20	0.100
SEPT									
08...	0.660	0.660	0.020	--	--	<0.20	--	<0.20	0.090

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR --OCTOBER 1993 TO SEPTEMBER 1994

DATE	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	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)
OCT 1993										
19...	0.110	0.100	<1	37	<0.5	--	<1.0	<5	<3	<10
NOV										
23...	0.060	0.070	--	--	--	--	--	--	--	--
DEC										
21...	0.040	0.050	<1	33	<0.5	10	<1.0	<5	<3	<10
JAN 1994										
25...	0.030	0.040	--	--	--	--	--	--	--	--
FEB										
24...	0.080	0.080	<1	29	<0.5	20	<1.0	<5	<3	<10
MAR										
22...	0.080	0.060	<1	32	<0.5	<10	<1.0	<5	<3	<10
APR										
26...	0.030	0.020	--	--	--	--	--	--	--	--
MAY										
16...	<0.010	0.010	--	--	--	--	--	--	--	--
JUN										
22...	0.080	0.090	<1	47	<0.5	30	2.0	<5	3	<10
JULY										
27...	0.090	0.100	--	--	--	--	--	--	--	--
AUG										
24...	0.100	0.060	2	49	<0.5	--	1.0	<5	<3	<10
SEPT										
08...	0.090	0.070	--	--	--	--	--	--	--	--

07196500 ILLINOIS RIVER NEAR TAHLEQUAH, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/l AS ZN) (01090)
OCT 1993											
19...	40	<10	<4	4	--	<10	<10	<1.0	41	<6	33
NOV											
23...	17	--	--	6	--	--	--	--	--	--	--
DEC											
21...	6	<10	<4	4	<0.1	<10	<10	<1.0	40	<6	<3
JAN 1994											
25...	<3	--	--	2	--	--	--	--	--	--	--
FEB											
24...	54	<10	<4	4	<0.1	<10	<10	1.0	33	<6	<3
MAR											
22...	15	<10	<4	3	<0.1	<10	<10	<1.0	42	<6	<3
APR											
26...	14	--	--	4	--	--	--	--	--	--	--
MAY											
16...	13	--	--	3	--	--	--	--	--	--	--
JUNE											
22...	19	<10	<4	6	<0.1	<10	<10	3.0	48	<6	4
JULY											
27...	17	--	--	6	--	--	--	--	--	--	--
AUG											
24...	<3	<10	<4	9	--	<10	<10	<1.0	50	<6	<3
SEPT											
08...	16	--	--	6	--	--	--	--	--	--	--

07196900 BARON FORK AT DUTCH MILLS, ARKANSAS

LOCATION.--Lat 35°52'48", long 94°29'11", on line between secs.21 and 22, T.14 N., R.33 W., Washington County, near right bank on downstream side of bridge on State Highway 59 at Dutch Mills, 2.2 mi downstream from Fly Creek, and 2.9 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--40.6 mi^2.

AVERAGE DISCHARGE.--36 years, 44.5 ft^3/s.

EXTREMES.--April 1958 to current year: Maximum discharge, 20,900 ft^3/s, Nov. 18, 1985; no flow at times.

REMARKS.--Records good.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	2,801	848	10	90.4	5,560
November	3,963	1,300	17	132	7,860
December	1,677	172	20	54.1	3,330
January	828	126	12	26.7	1,640
February	2,312	664	26	82.6	4,590
March	3,625	380	38	117	4,190
April	1,460	246	18	48.7	2,900
May	639.4	80	6.2	20.6	1,270
June	88.78	6.9	0.87	2.96	176
July	163.75	35	0.80	5.28	325
August	103.32	27	0.50	3.33	205
September	18.80	1.7	0.20	0.63	37
Water year 1994	17,680	1,300	0.20	48.4	35,070

ARKANSAS RIVER BASIN

07197000 BARON FORK AT ELDON, OKLAHOMA

LOCATION.--Lat 35°55'16", long 94°50'18", in NE1/4SE1/4, 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 mi^2.

PERIOD OF RECORD.--1948, 1958-60, 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data;K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITs) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1993										
20...	1000	1028	80020	1,530	184	7.4	17.5	--	8.4	90
NOV										
14	1330	1028	80020	8,370	120	7.5	12.0	190	8.8	84
DEC										
15...	1645	1028	80020	589	181	7.8	9.0	0.60	11.7	104
FEB 1994										
23...	1515	1028	80020	2,180	148	7.3	8.5	--	10.7	93
MAY										
11...	1430	1028	80020	241	[1]177	8.3	17.5	0.70	11.0	117
17	1530	1028	80020	186	180	8.3	22.0	--	10.4	121
JUNE										
29...	1030	1028	80020	54	192	7.4	24.0	0.30	7.7	93
AUG										
25...	1100	1028	80020	90	205	7.6	23.5	--	8.2	98
SEPT										
06...	1130	1028	80020	64	206	7.4	23.0	--	8.5	100

[1] Specific Conducatnce, lab (µS/cm)

07197000 BARON FORK AT ELDON, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR 1993 TO SEPTEMBER 1994

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)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM PER-CENT (00932)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993											
20...	--	--	--	--	--	--	--	--	0	85	70
NOV											
14	47	9	17	1.1	1.6	6	0.1	3.3	0	46	38
DEC											
15...	84	24	31	1.6	2.8	7	0.1	1.5	0	73	60
FEB 1994											
23...	--	--	--	--	--	--	--	--	0	64	53
MAY											
11...	78	13	29	1.4	2.5	6	0.1	1.6	0	80	66
17	81	0	30	1.4	2.5	6	0.1	1.7	0	103	85
JUNE											
29...	87	7	32	1.6	2.8	6	0.1	1.8	0	97	80
AUG											
25...	--	--	--	--	--	--	--	--	0	102	83
SEPT											
06...	94	3	35	1.7	3.1	6	0.1	2.1	0	111	91

07197000 BARON FORK AT ELDON, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT 1993											
20...	--	--	--	--	--	--	--	--	2.00	--	<0.010
NOV											
14	4.9	2.8	0.10	6.5	79	65	1,790	0.11	1.00	--	<0.010
DEC											
15...	7.0	3.7	<0.10	6.8	103	98	164	0.14	1.60	--	<0.010
FEB 1994											
23...	--	--	--	--	--	--	--	--	1.59	1.59	0.010
MAY											
11...	6.2	3.6	<0.10	5.8	101	94	65.7	0.14	0.900	--	<0.010
17	6.0	3.6	<0.10	6.1	101	106	50.7	0.14	0.880	--	<0.010
JUNE											
29...	5.3	3.8	0.20	9.4	112	108	16.3	0.15	0.680	--	<0.010
AUG											
25...	--	--	--	--	--	--	--	--	0.600	--	<0.010
SEPT											
06...	5.0	4.7	<0.10	9.8	126	118	21.8	0.17	0.480	--	<0.010

07197000 BARON FORK AT ELDON, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)
OCT 1993										
20...	2.00	2.00	0.020	0.28	--	0.30	2.3	<0.20	0.120	0.070
NOV										
14	1.00	1.00	0.010	0.79	0.19	0.80	1.8	0.20	0.320	0.100
DEC										
15...	1.60	1.60	0.020	--	--	<0.20	--	<0.20	0.040	0.020
FEB 1994										
23...	1.60	1.60	0.020	0.38	--	<0.20	2.0	<0.20	0.100	0.040
MAY										
11...	0.900	0.900	0.020	--	--	<0.20	--	<0.20	0.020	0.010
17	0.880	0.880	0.010	--	--	<0.20	--	<0.20	<0.100	<0.010
JUNE										
29...	0.680	0.680	0.020	--	--	<0.20	--	<0.20	0.030	0.020
AUG										
25...	0.500	0.500	0.020	--	--	<0.20	--	<0.20	0.020	0.020
SEPT										
06...	0.480	0.480	0.030	--	--	<0.20	--	<0.20	0.050	0.050

07197000 BARON FORK AT ELDON, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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)	BORON, DIS-SOLVED (UG/L AS B) (01020)	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 1993										
20...	0.060	--	--	--	--	--	--	--	--	--
NOV										
14	0.110	<1	21	<0.5	<10	<1.0	<5	<3	<10	75
DEC										
15...	0.020	<1	28	0.8	<10	<1.0	<5	<3	<10	8
FEB 1994										
23...	0.030	--	--	--	--	--	--	--	--	--
MAY										
11...	0.020	<1	28	<0.5	<10	<1.0	<5	<3	<10	4
17	<0.010	--	--	--	--	--	--	--	--	<3
JUNE										
29...	0.030	<1	34	<0.5	10	<1.0	<5	<3	<10	<3
AUG										
25...	0.010	--	--	--	--	--	--	--	--	--
SEPT										
06...	0.030	--	--	--	--	--	--	--	--	10

07197000 BARON FORK AT ELDON, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM, DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY, DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 1993										
20...	--	--	--	--	--	--	--	--	--	--
NOV										
14	10	<4	10	<0.1	<10	<10	2.0	24	<6	14
DEC										
15...	<10	<4	3	<0.1	<10	<10	<1.0	37	<6	<3
FEB 1994										
23...	--	--	--	--	--	--	--	--	--	--
MAY										
11...	<10	<4	4	<0.1	<10	<10	<1.0	36	<6	<3
17	--	--	3	--	--	--	--	--	--	--
JUNE										
29...	<10	<4	7	<0.1	<10	<10	<1.0	40	<6	<3
AUG										
25...	--	--	--	--	--	--	--	--	--	--
SEPT										
06...	--	--	4	--	--	--	--	--	--	--

ARKANSAS RIVER BASIN

07198000 ILLINOIS RIVER NEAR GORE, OKLAHOMA

PERIOD OF RECORD.--Water years 1948, 1952, 1954 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1947 to September 1948, October 1953 to September 1963.
WATER TEMPERATURE: October 1947 to September 1948, October 1953 to September 1963, October 1992 to September 1993.

REMARKS.--Samples were collected bimonthly and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field. Prior to October 1992 records of continuous water temperature were collected 4.2 mi upstream.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily 396 microsiemens, Aug. 12, 1956; minimum daily 123 microsiemens, July 14, 1957.
WATER TEMPERATURE: Maximum 24.0°C, Sept. 28-30, Oct. 1, 2, 1958, Aug. 29, 1993; minimum 4.5°C several days in winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum 24.0°C, Aug. 29; minimum 4.5°C, Feb. 13, 1993.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	HARDNESS TOTAL (MG/L AS CACO3) (00900)
OCT 1993											
18...	1345	1028	80020	3,860	178	7.1	20.5	--	4.3	49	--
DEC											
01...	1400	1028	80020	3,770	181	7.5	15.0	3.6	9.4	95	74
FEB 1994											
24...	1200	1028	80020	4,120	183	8.2	7.5	1.5	13.0	109	81
APR											
12...	1540	1028	80020	4,060	194	8.1	12.0	0.80	10.0	94	79
JUNE											
14...	0800	1028	80020	38	[1]279	7.6	15.0	0.60	7.0	70	94
AUG											
10...	0830	1028	80020	32	282	7.7	16.0	0.30	6.9	70	96

[1] Specific conductance, lab (µS/cm)

DATE	HARDNESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM PERCENT (00932)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)
OCT 1993											
18...	--	--	--	--	--	--	--	0	82	67	--
DEC											
01...	--	27	1.6	4.0	10	0.2	2.5	--	--	--	7.6
FEB 1994											
24...	9	30	1.5	3.9	9	0.2	2.4	0	88	72	7.3
APR											
12...	7	29	1.5	4.1	10	0.2	2.2	0	87	72	8.1
JUNE											
14...	17	34	2.2	15	25	0.7	2.3	0	94	77	8.0
AUG											
10...	17	35	2.1	14	24	0.6	2.3	0	96	79	7.8

07198000 ILLINOIS RIVER NEAR GORE, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT 1993										
18...	--	--	--	--	--	--	0.410	0.410	0.010	0.420
DEC										
01...	4.4	0.10	105	95	1,070	0.14	0.690	--	<0.010	0.690
FEB 1994										
24...	5.2	<0.10	98	97	1,090	0.13	0.840	--	<0.010	0.840
APR										
12...	5.9	<0.10	105	99	1,150	0.14	1.06	1.06	0.040	1.10
JUNE										
14...	24	<0.10	146	136	15.0	0.20	0.950	--	<0.010	0.950
AUG										
10...	26	<0.10	152	139	13.1	0.21	0.990	0.990	0.010	1.00

DATE	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)
OCT 1993									
18...	0.420	0.130	0.27	0.40	0.82	--	0.050	0.020	0.020
DEC									
01...	0.690	0.050	0.25	0.30	0.99	<0.20	0.030	0.020	0.020
FEB 1994									
24...	0.840	0.010	0.19	0.20	1.0	<0.20	<0.010	<0.010	<0.010
APR									
12...	1.10	0.100	0.10	0.20	1.3	<0.20	0.020	0.010	0.020
JUNE									
14...	0.950	0.040	--	<0.20	--	<0.20	0.040	0.010	0.010
AUG									
10...	1.00	0.040	0.26	0.30	1.3	<0.20	0.030	0.020	0.020

07245000 CANADIAN RIVER NEAR WHITEFIELD, OKLAHOMA

LOCATION.--Lat 35°15'50", long 95°14'21", in SE1/4SE1/4, sec.12, T.9 N., R.19 E., Haskell County, on left downstream bank at end of bridge, on State Highway 2, 0.8 mi north of Whitefield, 5.5 mi upstream from Taleka (Snake) Creek, 8.2 mi downstream from Eufaula Dam, and at mile 18.8.

DRAINAGE AREA.--47,576 mi^2, of which 9,700 mi^2 is probably noncontributing.

AVERAGE DISCHARGE.--25 years (water years 1939-63), 6,005 ft^3/s; 27 years (water years 1968-94), 6,757 ft^3/s.

EXTREMES.--July 1938 to current year: Maximum discharge, 281,000 ft^3/s May 10, 1943; minimum daily, 0.4 ft^3/s Oct. 8, 1956.

REMARKS.--Records fair. Prior to February 1964, occasional slight regulation by Conchas Lake in New Mexico and except for 54 mi^2 of intervening area, completely regulated thereafter by Eufaula Lake. Satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	104,957	10,800	466	3,386	208,200
November	120,565	12,500	113	4,019	239,100
December	166,023	20,300	177	5,356	329,300
January	77,167	7,800	126	2,489	153,100
February	118,820	19,400	223	4,244	235,700
March	580,260	42,800	5,270	18,720	1,151,000
April	104,061	6,870	701	3,469	206,400
May	422,281	32,800	911	13,620	837,600
June	107,519	12,800	657	3,584	213,300
July	34,012	3,880	171	1,097	67,460
August	63,156	4,570	174	2,037	125,300
September	37,059	3,270	151	1,235	73,510
Water year 1994	1,935,880	42,800	113	5,304	3,840,000

07247000 POTEAU RIVER AT CAUTHRON, ARKANSAS

LOCATION.--Lat 34°55'08", long 94°17'55", in NW1/4SW1/4, sec.16, T.3 N., R.31 W., Scott County, 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 mi^2.

AVERAGE DISCHARGE.--Prior to regulation, 35 years (water years 1940-74), 218 ft^3/s; 20 years (water years 1975-94) 244 ft^3/s.

EXTREMES.--February 1939 to current year: Maximum discharge, 32,200 ft^3/s May 20, 1960; no flow at times in most years.

REMARKS.--Records good. As of September 1974, flow from 92.2 mi^2 above this station is controlled by 16 floodwater-detention reservoirs with a total combined capacity of 39,082 acre-ft below the flood spillway crests, of which 33,524 acre-ft is flood-detention capacity, 2,100 acre-ft is water-supply storage, and 3,458 acre-ft is sediment-storage capacity.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	4,738.5	2,200	1.5	153	9,400
November	7,502.1	1,770	8.4	250	14,880
December	21,970	6,740	44	709	43,580
January	17,342	5,400	26	559	34,400
February	10,040	1,900	100	359	19,910
March	16,243	2,300	47	524	32,220
April	4,288	2,240	19	143	8,510
May	14,971	3,200	28	483	29,690
June	416.3	28	5.2	13.9	826
July	962.1	192	3.6	31.0	1,910
August	256.4	56	2.0	8.27	509
September	880.3	545	1.2	29.3	1,750
Water year 1994	99,610	6,740	1.2	273	197,600

POTEAU RIVER BASIN

07247000 POTEAU RIVER AT CAUTHRON, ARKANSAS

PERIOD OF RECORD.--Water years 1945-61, 1975-79, December 1991 to current year.

REMARKS.--Samples were collected on a six-week schedule and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
OCT 1993											
27...	0830	1028	80020	59	66	7.0	12.5	8.5	80	0	13
DEC											
14...	0845			740	61	6.8	8.0	9.4	82	0	15
JAN 1994											
12..	0915	1028	80020	85	93	6.6	5.5	12.6	100	0	21
FEB											
23...	1430	1028	80020	1,900	54	7.3	8.5	9.9	86	0	10
APR											
13...	1045	1028	80020	150	87	6.9	16.0	7.1	73	0	23
MAY											
11...	1250	1028	80020	240	63	7.2	20.5	7.4	84	0	18
JUNE											
29...	0830	1028	80020	5.0	110	7.2	30.0	4.8	66	0	26
AUG											
12...	0920	1028	80020	2.0	157	7.4	25.5	6.1	76	0	43
SEP											
14...	0835	1028	80020	3.0	68	7.0	24.5	5.2	63	0	24

07247000 POTEAU RIVER AT CAUTHRON, ARKANSAS–Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE SUSPENDED (T/DAY) (80155)
OCT 1993												
27...	11	0.230	0.230	0.230	0.040	0.36	0.40	0.63	0.170	0.140	11	1.8
DEC												
14...	12	0.180	0.180	0.180	0.080	0.42	0.50	0.68	0.160	0.100	22	44
JAN 1994												
12...	18	0.320	0.320	0.320	0.020	0.18	0.20	0.52	0.210	0.180	2	0.46
FEB												
23...	8	0.110	0.110	0.110	0.040	0.56	0.60	0.71	0.120	0.060	37	190
APR												
13...	19	0.170	0.170	0.170	0.080	0.72	0.80	0.97	0.230	0.170	23	9.3
MAY												
11...	15	0.098	0.098	0.098	0.030	0.37	0.40	0.50	0.100	0.070	16	10
JUNE												
29...	21	--	--	<0.050	0.020	0.48	0.50	0.50	0.110	0.050	8	0.11
AUG												
12...	35	--	--	<0.050	0.010	0.79	0.80	0.80	0.260	0.220	9	0.05
SEP												
14...	19	--	--	<0.050	0.020	0.78	0.80	0.80	0.200	0.110	15	0.12

POTEAU RIVER BASIN

07247015 POTEAU RIVER AT LOVING, OKLAHOMA

LOCATION.--Lat 34°52'47", long 94°29'02", in SW1/4NW1/4, 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 mi^2.

PERIOD OF RECORD.--Water years 1945-61, 1975-79, December 1991 to current year.

REMARKS.--Samples were collected on a six-week schedule and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data;K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)
OCT 1993										
20...	1600	84015	80020	3,800	[1]52	[2]6.7	--	--	--	--
27...	1410	1028	80020	85	63	7.0	14.0	12.2	119	0
DEC										
14...	1100	1028	80020	1,000	69	6.9	8.0	10.3	89	0
JAN 1994										
11...	1530	1028	80020	48	85	7.4	4.5	13.2	103	0
FEB										
22...	1400	1028	80020	1,400	70	6.8	11.5	10.0	94	0
22...	1720	1028	80020	2,520	66	6.7	11.0	9.1	85	0
22...	2315	1028	80020	3,290	63	6.8	10.0	9.1	83	0
23...	1100	1028	80020	1,920	56	7.1	9.5	9.8	87	0
24...	1430	1028	80020	939	54	7.0	8.0	10.4	89	0
25...	0745	1028	80020	714	58	6.8	7.5	10.4	88	0
APR										
13...	0845	1028	80020	332	68	7.0	15.0	8.0	81	0
MAY										
11...	1415	1028	80020	286	57	7.3	21.5	7.1	82	0
JUNE										
29...	0715	1028	80020	9.7	87	7.1	29.5	3.9	52	0
AUG										
12...	0800	1028	80020	3.3	113	7.3	25.5	4.6	57	0
SEPT										
14...	0715	1028	80020	1.3	96	7.1	23.5	4.2	50	0

[1] Specific conductance, lab (µS/cm).
[2] pH, lab (standard units).

07247015 POTEAU RIVER AT LOVING, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	NITROGEN, NITRATE TOTAL (MG/l AS N) (00620)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)
OCT 1993									
20...	--	--	--	--	--	--	0.70	0.70	0.70
27...	13	11	0.180	0.180	0.180	0.040	0.36	0.40	0.58
DEC									
14...	16	13	0.190	0.190	0.190	0.050	0.55	0.60	0.79
JAN 1994									
11...	30	24	--	--	<0.050	0.020	0.18	0.20	0.20
FEB									
22...	14	11	0.120	0.120	0.120	0.030	0.67	0.70	0.82
22...	13	11	0.140	0.140	0.140	0.040	0.96	1.0	1.1
22...	14	12	0.130	0.130	0.130	0.050	1.0	1.1	1.2
23...	13	10	0.240	0.240	0.240	0.100	0.90	1.0	1.2
24...	13	11	0.190	0.190	0.190	0.050	0.55	0.60	0.79
25...	10	8	0.110	0.110	0.110	0.030	0.47	0.50	0.61
APR									
13...	17	14	--	--	<0.050	0.020	0.38	0.40	0.40
MAY									
11...	13	11	0.120	0.120	0.120	0.030	0.37	0.40	0.52
JUNE									
29...	22	18	--	--	<0.050	0.070	0.43	0.50	0.50
AUG									
12...	32	21	--	--	<0.050	0.040	0.36	0.40	0.40
SEPT									
14...	29	24	0.087	0.087	0.087	0.040	0.56	0.60	0.69

07247015 POTEAU RIVER AT LOVING, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED/ SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 1993							
20...	0.60	0.230	0.060	--	--	--	--
27...	--	0.090	--	0.080	85	20	--
DEC							
14...	--	0.170	--	0.080	43	116	--
JAN 1994							
11...	--	0.060	--	0.020	8	1.0	--
FEB							
22...	--	0.190	--	0.030	80	302	85
22...	--	0.250	--	0.050	166	1,130	84
22...	--	0.390	--	0.100	228	2,030	92
23...	--	0.190	--	0.070	76	394	80
24...	--	0.090	--	0.040	22	56	--
25...	--	0.090	--	0.050	14	27	--
APR							
13...	--	0.100	--	0.040	34	30	--
MAY							
11...	--	0.090	--	0.040	20	15	--
JUNE							
29...	--	0.070	--	<0.010	12	0.31	--
AUG							
12...	--	0.050	--	0.030	9	0.08	--
SEPT							
14...	--	0.090	--	0.050	10	0.03	--

ARKANSAS RIVER BASIN

07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OKLAHOMA

LOCATION.--Lat 34°52'46", long 94°30'40", in NE1/4SW1/4, 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 mi^2.

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

REMARKS.--Samples were collected on a six-week schedule and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993												
27...		1028	80020	62	[1]33	6.9	13.5	12.8	123	0	7	6
DEC												
14...		1028	80020	325	28	6.6	8.0	10.8	94	0	7	6
JAN 1994												
12...		1028	80020	52	35	6.9	6.0	13.2	107	0	8	6
FEB												
22...		1028	80020	1,940	26	6.7	10.5	9.5	88	0	4	4
APR												
13...		1028	80020	221	42	6.7	16.0	9.8	102	0	7	6
29...		84015	80020	102	[1]41	7.1	20.0	6.8	76	0	11	9
29...		1028	80020	216	47	7.0	18.5	7.6	82	0	10	8
29...		1028	80020	237	47	7.0	17.5	7.6	81	0	13	11
30...		1028	80020	1,890	30	6.5	15.5	8.9	91	0	8	7
30...		1028	80020	1,240	30	6.5	15.0	8.9	90	0	8	7
MAY												
12...		1028	80020	149	29	7.1	19.0	7.6	84	0	6	5
JUNE												
29...		1028	80020	1.8	41	7.0	30.5	6.3	87	0	13	11
AUG												
11...		1028	80020	0.72	43	7.0	29.5	7.3	99	0	12	10
SEPT												
13...		1028	80020	0.32	50	7.5	28.5	7.2	96	0	19	16

[1] Specific conductance, lab (µS/cm).

07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE SUSPENDED (T/DAY) (80155)
OCT 1993											
27...	0.140	0.140	0.140	0.020	--	<0.20	--	0.010	0.020	8	1.3
DEC											
14...	0.073	0.073	0.073	0.050	0.15	0.20	0.27	0.030	0.030	6	5.3
JAN 1994											
12...	0.170	0.170	0.170	0.020	--	<0.20	--	0.010	<0.010	26	3.7
FEB											
22...	0.087	0.087	0.087	0.030	0.37	0.40	0.49	0.060	0.020	40	210
APR											
13...	0.087	0.087	0.087	0.040	0.36	0.40	0.49	0.030	<0.010	--	--
29...	0.180	0.180	0.180	0.100	0.50	0.60	0.78	0.060	0.030	6	1.7
29...	0.190	0.190	0.190	0.300	0.80	1.1	1.3	0.260	0.180	17	9.9
29...	0.130	0.130	0.130	0.170	0.53	0.70	0.83	0.190	0.100	21	13
30...	0.083	0.083	0.083	0.080	0.62	0.70	0.78	0.160	0.080	47	240
30...	0.084	0.084	0.084	0.070	0.63	0.70	0.78	0.120	0.050	29	97
MAY											
12...	0.077	0.077	0.077	0.020	--	<0.20	--	0.010	<0.010	59	24
JUNE											
29...	--	--	<0.050	0.050	0.45	0.50	0.50	0.040	<0.010	6	0.03
AUG											
11...	--	--	<0.050	0.020	0.38	0.40	0.40	<0.010	<0.010	5	0.01
SEPT											
13...	--	--	<0.050	0.020	0.48	0.50	0.50	0.020	0.010	3	0.00

ARKANSAS RIVER BASIN

07247345 BLACK FORK AT HODGEN, OKLAHOMA

LOCATION.--Lat 34°50'35", long 94°37'28", in SE1/4 SE1/4, sec. 01, T.4 N., R.25E., LeFlore County, Hydrologic Unit 11110105, at county road bridge .4 mi east of Hodgen, Oklahoma.

DRAINAGE AREA.--179 mi^2.

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 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
OCT 1993											
28...	1000	1028	80020	88	33	6.7	13.0	10.2	98	0	6
DEC											
14...	1410	1028	80020	528	34	7.0	8.0	10.8	92	0	6
JAN 1994											
11...	1330	1028	80020	48	41	7.0	5.5	12.2	96	0	10
FEB											
25...	0930	1028	80020	677	32	6.6	9.0	10.6	94	0	5
APR											
14...	1100	1028	80020	336	42	6.8	19.5	8.6	96	0	10
MAY											
19...	1115	1028	80020	94	41	7.1	23.0	8.6	102	0	10
JUNE											
30...	0705	1028	80020	5.9	59	7.1	29.5	6.3	85	0	13
AUG											
10...	1420	1028	80020	3.7	42	7.1	28.0	6.8	88	0	15
SEPT											
14...	1025	1028	80020	32	46	7.6	25.5	7.6	94	0	14

07247345 BLACK FORK AT HODGEN, OKLAHOMA–CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE SUSPENDED (T/DAY) (80155)
OCT 1993												
28...	5	0.140	0.140	0.140	0.020	0.18	0.20	0.34	0.040	<0.010	5	1.2
DEC												
14...	5	0.100	0.100	0.100	0.230	--	<0.20	--	0.020	<0.010	5	7.1
JAN 1994												
11...	8	0.076	0.076	0.076	0.030	--	<0.20	--	0.010	<0.010	5	0.65
FEB												
25...	4	0.096	0.096	0.096	0.010	--	<0.20	--	0.020	0.010	13	24
APR												
14...	8	0.120	0.120	0.120	0.040	0.36	0.40	0.52	0.080	0.020	13	12
MAY												
19...	8	0.056	0.056	0.056	0.020	--	<0.20	--	0.020	<0.010	--	--
JUNE												
30...	11	--	--	<0.050	0.050	0.55	0.60	0.60	0.050	<0.010	4	0.06
AUG												
10...	12	--	--	<0.050	0.010	0.29	0.30	0.30	0.030	<0.010	4	0.04
SEPT												
14...	12	--	--	<0.050	<0.010	0.40	0.40	0.40	0.040	<0.010	8	0.70

ARKANSAS RIVER BASIN

07247650 FOURCHE MALINE NEAR LEFLORE, OKLAHOMA

LOCATION.--Lat 34°55'11", long 94°56'43", in NE1/4SE1/4, sec.11, T.5 N., R.22 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge 1.6 mi east of LeFlore, Oklahoma.

DRAINAGE AREA.--270 mi^2.

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

REMARKS.--Samples were collected on a 6-week schedule, and specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANALYZING SAMPLE (CODE NUMBER) (00028)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CARBONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICARBONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)
OCT 1993												
26...		1028	80020	57	119	7.4	14.5	8.2	81	0	36	29
DEC												
13...		1028	80020	745	78	7.2	10.0	9.5	86	0	26	22
JAN 1994												
11...		1028	80020	28	131	7.4	5.0	11.8	91	0	32	26
FEB												
24...		1028	80020	2,480	59	7.0	8.0	9.6	82	0	11	9
APR												
12...		1028	80020	365	85	7.2	19.0	7.7	85	0	18	15
MAY												
18...		1028	80020	107	90	7.2	25.5	5.8	72	0	30	24
JUNE												
30...		1028	80020	3.0	165	7.4	29.5	3.7	50	0	47	39
AUG												
27...		1028	80020	9.7	219	7.6	24.5	5.2	63	0	92	75
SEPT												
14...		1028	80020	2.4	104	7.1	24.5	4.4	54	0	37	30

07247650 FOURCHE MALINE NEAR LEFLORE, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE SUS-PENDED (T/DAY) (80155)
OCT 1993											
26...	0.130	0.130	0.130	0.050	0.45	0.50	0.63	0.050	0.010	13	2.0
DEC											
13...	0.160	0.160	0.160	0.050	0.55	0.60	0.76	0.100	0.030	106	213
JAN 1994											
11...	0.099	0.099	0.099	0.050	0.35	0.40	0.50	0.030	<0.010	25	1.9
FEB											
24...	0.071	0.071	0.071	0.040	0.56	0.60	0.67	0.100	0.020	104	696
APR											
12...	0.096	0.096	0.096	0.030	0.57	0.60	0.70	0.090	0.020	60	59
MAY											
18...	0.220	0.220	0.220	0.040	0.36	0.40	0.62	0.050	0.030	27	7.8
JUNE											
30...	--	--	<0.050	0.040	0.46	0.50	0.50	0.040	<0.010	14	0.11
AUG											
27...	--	-	<0.050	0.040	0.46	0.50	0.50	0.040	0.050	16	0.39
SEPT											
14...	--	--	<0.050	0.040	0.56	0.60	0.60	0.070	0.040	19	0.12

ARKANSAS RIVER BASIN

07247800 HOLSON CREEK AT SUMMERFIELD, OKLAHOMA

LOCATION.--Lat 34°52'46", long 94°51'11", in SW1/4NW1/4, sec. 26, T.5 N., R.23 E., LeFlore County, Hydrologic Unit 11110105, at county road bridge, 1.4 mi east of Summerfield, Oklahoma.

DRAINAGE AREA.--71.6 mi^2.

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

REMARKS.--Samples were collected on a 6-week schedule.. Specific conductance, pH, water temperature, alkalinity, and dissolved oxygen were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

[Five-digit numbers in parentheses are STORET parameter codes used for computer storage of data; K, ;non-ideal count; US/CM, microsiemens per centimeter at 25 degrees Celsius; NTU, nephelometric turbidity units; MG/L, milligrams per liter; MM, millimeters; UM-MF, micrometer membrane filter; AC-FT, acre-feet, UG/L, micrograms per liter; T/DAY, tons per day; --, no data available]

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER) (00028)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	CAR-BONATE WATER DIS IT FIELD (MG/L AS CO3) (00452)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)
OCT 1993											
28...	0745	1028	80020	14	51	6.9	11.0	11.9	109	0	11
DEC											
15...	0840	1028	80020	75	49	7.5	8.0	10.6	89	0	7
JAN 1994											
11...	1030	1028	80020	10	45	6.9	5.5	12.6	99	0	10
FEB											
10...	0755	1028	80020	219	36	6.9	6.0	11.2	90	0	11
APR											
13...	1615	1028	80020	132	45	6.8	17.0	10.1	107	0	7
MAY											
19...	0900	1028	80020	28	41	7.1	20.0	7.6	84	0	9
JUNE											
30...	0905	1028	80020	1.2	58	7.1	29.5	4.6	62	0	16
AUG											
10...	1140	1028	80020	0.85	56	7.3	28.0	7.2	94	0	22
SEPT											
12...	1455	1028	80020	0.66	59	7.6	28.5	7.5	99	0	22

07247800 HOLSON CREEK AT SUMMERFIELD, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1993 TO SEPTEMBER 1994

DATE	ALKALINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE SUSPENDED (T/DAY) (80155)
OCT 1993												
28...	9	0.050	0.050	0.050	0.020	--	<0.20	--	0.090	<0.010	4	0.16
DEC												
15...	5	--	--	<0.050	0.020	0.18	0.20	0.20	0.020	<0.010	2	0.40
JAN 1994												
11...	8	0.059	0.059	0.059	0.020	--	<0.20	--	0.010	<0.010	3	0.08
FEB												
10...	9	--	--	<0.050	0.020	--	<0.20	--	0.010	<0.010	4	2.4
APR												
13...	6	--	--	<0.050	0.010	--	<0.20	--	0.030	<0.010	11	3.9
MAY												
19...	7	--	--	<0.050	<0.010	--	<0.20	--	<0.010	<0.010	5	0.37
JUNE												
30...	13	--	--	<0.050	0.030	0.27	0.30	0.30	<0.010	<0.010	2	0.01
AUG												
10...	18	--	--	<0.050	0.010	0.29	0.30	0.30	0.040	<0.010	4	0.01
SEPT												
12...	18	--	--	<0.050	0.020	0.38	0.40	0.40	0.030	0.010	3	0.01

07249400 JAMES FORK NEAR HACKETT, ARKANSAS

LOCATION.--Lat 35°09'45", long 94°04'25", in NW1/4NW1/4, sec.34, T.6 N., R.32 W., Sebastian County, near left bank on downstream side of bridge on State Highway 45, 1.7 mi south of Hackett, 2.0 mi downstream from Elder Branch, 2.0 mi upstream from small tributary, and 3.6 mi upstream from Arkansas-Oklahoma State line.

DRAINAGE AREA.--147 mi^2.

AVERAGE DISCHARGE.--36 years, 143 ft^3/s.

EXTREMES.--April 1958 to current year: Maximum discharge, 30,000 ft^3/s May 14, 1968; no flow at times.

REMARKS.--Records good.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	557.9	160	2.0	18.0	1,110
November	2,476	670	7.8	82.5	4,910
December	9,280	2,510	37	299	18,410
January	7,638	1,590	26	246	15,150
February	6,731	1,230	79	240	13,350
March	11,814	2,250	45	381	23,430
April	7,079	2,600	29	236	14,040
May	10,982	2,560	35	354	21,780
June	794.2	103	6.9	26.5	1,580
July	1,164	211	5.0	37.5	2,310
August	253.6	40	3.6	8.18	503
September	139.8	31	1.0	4.66	277
Water year 1994	58,909	2,600	1.0	161	116,800

07249985 LEE CREEK NEAR SHORT, OKLAHOMA

(Formerly published as 07250000 Lee Creek near Van Buren, Arkansas)

LOCATION.--Lat 35°29'40", long 94°26'58", in SE1/4, sec.21, T.12 N., R.27 E., Indian Meridian, Sequoyah County, Okla., on right bank 300 ft west of Arkansas-Oklahoma State line, 3.2 mi downstream from Webbers Creek, 6.8 mi no[2].

AVERAGE DISCHARGE.--50 years (1930-36, 1950-94), 528 ft^3/s.

EXTREMES.--September 1930 to June 1937, October 1950 to current year: Maximum discharge, 80,600 ft^3/s May 6, 1960; no flow at times.

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

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	15,642	2,870	38	505	31,030
November	30,547	6,810	85	1,018	60,590
December	22,503	2,290	100	726	44,630
January	15,864	3,180	120	512	31,470
February	30,374	6,100	290	1,085	60,250
March	42,880	4,180	344	1,383	85,050
April	18,302	3,810	206	610	36,300
May	19,666	2,360	102	634	39,010
June	2,954	511	13	98.5	5,860
July	5,777.2	1,520	7.6	186	11,460
August	2,457	313	21	79.3	4,870
September	336.9	27	3.8	11.2	668
Water year 1994	207,303	6,810	3.8	568	411,200

07250550 ARKANSAS RIVER AT JAMES W. TRIMBLE LOCK AND DAM NEAR VAN BUREN, ARKANSAS

LOCATION.--Lat 35°20'56", long 94°17'54", in sec.28, T.8 N., R.31 W., Sebastian County, in James W. Trimble Lock and Dam control house on right bank, and at mile 308.9.

DRAINAGE AREA.--150,547 mi^2, of which 22,241 mi^2 is probably noncontributing.

AVERAGE DISCHARGE.--Prior to regulation, 42 years (water year 1928-69) 30,220 ft^3/s; 25 years (water years 1970-94) 39,330 ft^3/s.

EXTREMES.--October 1927 to current year: Maximum discharge, 850,000 ft^3/s May 12, 1943; no flow Nov. 2, 1975, Feb. 1, 1981, Oct. 17, 1987, Dec. 9, 1989, Nov. 11-12, 1993, Jan. 9, 13, 1994.

REMARKS.--Records good except for discharges below 10,000 ft^3/s, which are fair. Prior to October 1969, published as 07250500 Arkansas River at Van Buren. Beginning Apr. 26, 1970, daily discharge computed from relation between discharge, head, and gate openings. Flow regulated by many locks, dams, and reservoirs upstream. Satellite telemeter at station.

Monthly and yearly discharge

Month	Total (ft^3/s)	Maximum daily (ft^3/s)	Minimum daily (ft^3/s)	Mean (ft^3/s)	Runoff (acre-feet)
October	1,265,800	108,000	4,460	40,830	2,511,000
November	831,991	75,800	0.00	27,730	1,650,000
December	900,757	52,600	417	29,060	1,787,000
January	481,990	48,200	0.00	15,550	956,000
February	801,810	86,800	330	28,640	1,590,000
March	2,170,800	118,000	26,700	70,030	4,306,000
April	2,498,200	134,000	14,700	83,270	4,955,000
May	3,029,000	149,000	25,800	97,710	6,008,000
June	485,787	37,900	47	16,190	963,600
July	458,853	36,600	673	14,800	910,100
August	321,233	20,300	78	10,360	637,200
September	214,861	16,700	68	7,162	426,200
Water year 1994	13,461,082	149,000	0.00	36,880	26,700,000

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