

ANNUAL YIELD AND SELECTED HYDROLOGIC DATA FOR THE ARKANSAS RIVER BASIN COMPACT, ARKANSAS-OKLAHOMA, 1996 WATER YEAR

by J.E. Porter

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CONVERSION FACTORS

<u>Multiply</u>	<u>By</u>	<u>To obtain</u>
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
acre	4,047	square meter (m ²)
	0.004047	square kilometer (km ²)
square mile (mi ²)	2.590	square kilometer (km ²)
cubic foot (ft ³)	0.02832	cubic meter (m ³)
acre-foot (acre-ft)	1,233	cubic meter (m ³)
	1.233x10 ⁻⁶	cubic kilometer (km ³)
cubic foot per second (ft ³ /s)	28.32	liter per second (L/s)
	0.02832	cubic meter per second (m ³ /s)
ton per day (ton/d)	0.9072	megagram per day (Mg/d)

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

$$^{\circ}\text{F} = 1.8 \times ^{\circ}\text{C} + 32$$

ABBREVIATIONS

AC-FT	Acre-foot
ACID M.	Acidification method
CHLOR-A	Chlorophyll a
CHROMO FLUOROM	Chromatographic/fluorometric
COLS./100ML	Number of colonies per 100 milliliters
DEG. C	Degrees Celsius
DIS IT	Dissolved incremental titration
E.	Escherichia
FLTRD (other abbreviations sometimes used)	Filtered
Ft	Feet
FT FM L BANK	Feet from left bank
INST	Instantaneous
K	Non-ideal count
MG/L	Milligrams per liter
MM of Hg	Millimeters of mercury
μ	Micron
μG/L	Micrograms per liter
ML	Milliliters
MM	Millimeters
NTU	Nephelometric turbidity units
SED.	Sediment
SUSP.	Suspended
T/DAY	Tons per day
TOT IT	Total incremental titration
UM-MF	Micron membrane filter
UNCORR.	Uncorrected
US/CM	Microsiemens per centimeter at 25 degrees Celsius
WAT DIS	Water dissolved
<	Less than
>	Greater than
-- or ---	No data available
%	Percent

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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 1996 water year. Actual runoff from the subbasins and depletion caused by major reservoirs in the compact area also are given in tabular form. Computed monthly mean discharges are shown for the 21 streamflow stations in the Arkansas River Basin. Water-quality data are shown for 16 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, State-line 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 Compact Commission, Arkansas-Oklahoma. Streamflow data and water-quality data were collected by the U.S. Geological Survey in cooperation with the Arkansas Soil and Water Conservation Commission and the Oklahoma Water Resources Board. 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 1996 water year and to present the water quality data for subbasins in the Arkansas River Basin as defined in the Arkansas River Compact. The report includes data from 21 streamflow stations and 16 water-quality stations sampled in the Arkansas River Basin during the 1996 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.

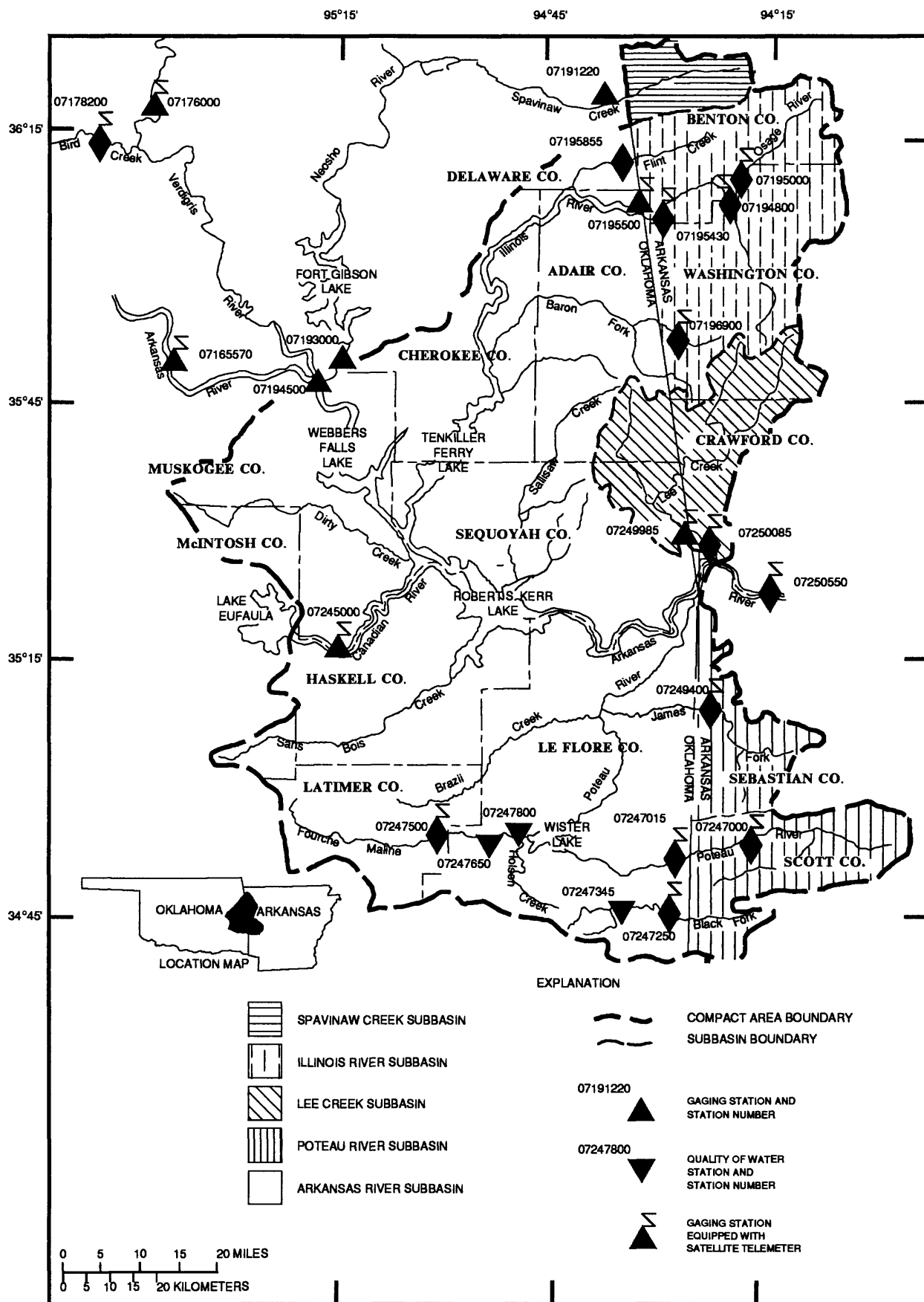


Figure 1.--Arkansas-Oklahoma Arkansas River Basin Compact area and subbasins.

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.

***Escherichia coli* (*E. coli*)** are present in the digestive tract of warm-blooded animals. In the laboratory, *E. coli* are defined as all organisms that produce orange/yellow colonies when incubated for two hours at $35^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ and transferred to $44.5^{\circ} \pm 0.2^{\circ}$ for 22-24 hours on mTEC agar (nutrient medium for *E. coli* growth), and stained with phenol red solution. Their concentrations are expressed as number of colonies per 100 mL of sample.

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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 also are present in intestines of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, 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 $35^{\circ}\text{C} \pm 0.5^{\circ}\text{C}$ 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 is the difference between the inflow and outflow caused by major 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 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-micron 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.

STORET parameter codes are codes assigned to specific hydrologic measurement types and constituents for computer storage of data. These five-digit codes (shown in parentheses) are included with the water-quality information in the Hydrologic Station Records section.

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 defined by the Arkansas River Compact Committee (1972). Actual runoff for the subbasins (table 2) was computed as defined by the Committee 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 1996 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	49.3	1.0	50.3	50	25	0
Illinois River	515	^c 495	1,010	60	404	0
Lee Creek	363	^c 25.1	388	100	0	0
Poteau River	343	^c 2.1	345	60	138	0
Arkansas River	1,049	^d 450	1,500	60	600	0

^aDefined in the Arkansas River Basin Compact, Arkansas-Oklahoma, 1972.

^bThe amount the actual runoff is less than the minimum required flow.

^cBased on 1995 water year water-use data

^dBased on 1995 water-use data and 1996 direct diversions from lake storage

Table 2.--Actual runoff from the subbasins for the 1996 water year
[In cubic feet per second; D.A. = drainage area; mi² = 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	31.1	207	136	5.79	0
November	33.8	201	34.1	11.1	0
December	40.5	324	260	98.8	0
January	66.2	861	839	402	2,561
February	41.9	280	149	102	0
March	58.1	269	273	342	944
April	93.2	1,320	1,600	1,430	9,232
May	72.9	973	473	201	3,776
June	50.0	300	136	530	0
July	24.3	200	85.2	310	1,084
August	14.9	131	68.2	218	112
September	66.2	1,130	311	489	141
1996 water year	49.3	515	363	343	1,049
1996 water year (acre-ft)	35,700	373,000	263,000	248,000	760,000

^aIncludes 31 mi² ungaged.

^bIncludes 63 mi² ungaged.

^cIncludes 125 mi² ungaged.

^dComputed 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 defined by the Arkansas River Compact Committee (1972). 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 (Arkansas Soil and Water Conservation Commission, 1981) 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 continues to be gathered in order to re-evaluate their present impact.

Streamflow data used in the computations are given in hydrologic station records (p. 9 to 62). 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 1996 water year
[acre-ft = acre-feet; ft³/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	171,700	+2,714	33.74	66.20	0	+19,670	+27.2
Tenkiller Ferry	724,600	+67,960	36.52	57.15	6,390	+86,230	+119
Robert S. Kerr	525,700	+2,160	42.38	60.03	0	+40,560	+56.0
Wister	94,042	+46,840	45.28	53.39	9,310	+59,770	+82.5

^aFrom U.S. Army Corps of Engineers, Tulsa District.

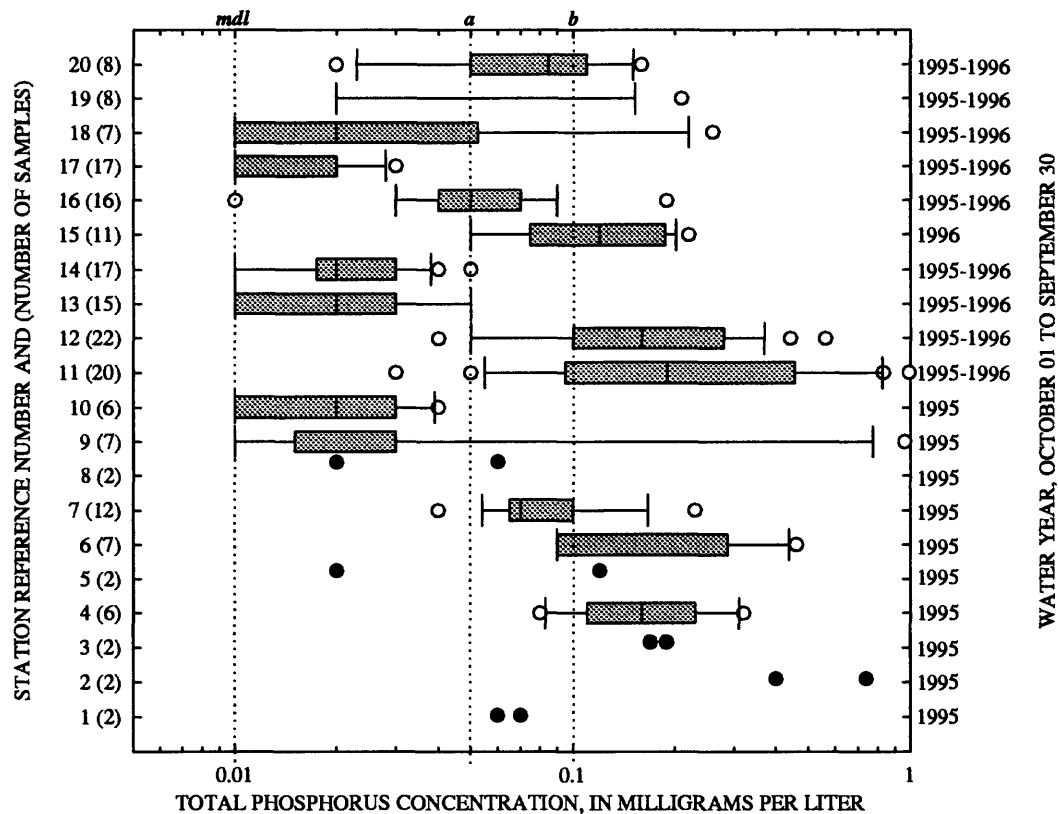
^bAdjusted for pan coefficient of 0.70 (from Wisler and Brater, 1949).

WATER QUALITY

In October 1984, the USGS began publishing water-quality data for the Arkansas-Oklahoma Compact. These data are collected to monitor the water quality in the Arkansas-Oklahoma Compact area. Over the past 7 years, nutrients, major ions, and sediment data have been collected. Observed concentrations of these constituents are indications of general water quality in the subject area subbasins. In freshwater, phosphorus is often the nutrient responsible for accelerated eutrophication (fig. 2). To control eutrophication, the Environmental Protection Agency makes the following recommendations:

- A) Total phosphates should not exceed 0.05 mg/L (as phosphorus) in a stream at a point where it enters a lake or reservoir, and
- B) Total phosphorus should not exceed 0.1 mg/L in streams that do not discharge directly into lakes or reservoirs.

Water-quality data collected at stations in the compact area in the 1996 water year are shown in tables in the Hydrologic Station Records section of this report.



EXPLANATION

- | | |
|---|---|
| 1 07194800, Illinois River at Savoy, Ark. | 2 07195000, Osage Creek near Elm Springs, Ark. |
| 3 07195000, Illinois River South of Siloam Springs, Ark. | 4 07195500, Illinois River near Watts, Okla. |
| 5 07195855, Flint Creek near West Siloam Springs, Ark. | 6 07196000, Flint Creek near Kansas, Okla. |
| 7 07196500, Illinois River near Tahlequah, Okla. | 8 07196900, Baron Fork at Dutch Mills, Ark. |
| 9 07197000, Baron Fork at Eldon, Okla. | 10 07198000, Illinois River near Gore, Okla. |
| 11 07247000, Poteau River at Cauthron, Ark. | 12 07247015, Poteau River at Loving, Okla. |
| 13 07247250, Black Fork below Big Creek near Page, Okla. | 14 07247345, Black Fork at Hodgen, Okla. |
| 15 07247500, Fourche Maline near Red Oak, Okla. | 16 07247650, Fourche Maline near Leflore, Okla. |
| 17 07247800, Holson Creek at Summerfield, Okla. | 18 07249400, James Fork near Hackett, Ark. |
| 19 07250085, Lee Creek at Lee Creek Reservoir, near Van Buren, Ark. | 20 07250550, Arkansas River at James W. Trimble Lock and Dam near Van Buren, Ark. |

a maximum U.S. Environmental Protection Agency recommended level in a stream at a point where it enters a lake or reservoir

b maximum U.S. Environmental Protection Agency recommended level in streams that do not discharge directly into lakes or reservoirs

mdl method detection limit

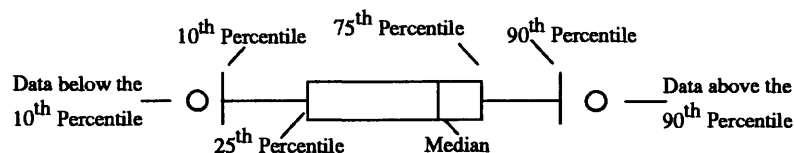


Figure 2. Statistical distribution of total phosphorus concentrations at 20 sites in the Arkansas-Oklahoma Arkansas River Basin Compact area in water years 1995 and 1996.

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

ARKANSAS RIVER SUBBASIN

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 mi², of which 12,541 mi² probably is noncontributing.

AVERAGE DISCHARGE.--24 years, 10,120 ft³/s.

EXTREMES.--June 1972 to current year: Maximum discharge 259,000 ft³/s Oct. 5, 1986; minimum daily 87 ft³/s Sept. 13, 1988.

REMARKS.--Records fair. Flow regulated by Keystone Lake, 55.1 mi 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	144,510	8,170	2,060	4,662	286,600
November	112,910	5,260	1,800	3,764	224,000
December	122,790	5,950	1,810	3,961	243,600
January	122,400	66,520	1,680	3,948	242,800
February	126,664	8,310	894	4,368	251,200
March	103,640	9,680	1,500	3,353	206,200
April	58,930	3,250	1,100	1,964	116,900
May	81,240	5,000	1,150	2,621	161,100
June	195,930	13,100	2,250	6,531	388,600
July	104,390	5,850	1,620	3,367	207,100
August	342,800	15,600	1,920	11,060	679,900
September	338,130	35,400	4,040	11,270	670,700
Water year 1996	1,854,634	35,400	894	5,067	3,679,000

ARKANSAS RIVER SUBBASIN

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 mi².

AVERAGE DISCHARGE.--27 years (water years 1936-62), 3,723 ft³/s; 32 years (water years 1965-96), 4,489 ft³/s.

EXTREMES.--October 1935 to current year: Maximum discharge 182,000 ft³/s May 21, 1943; no flow at times in 1936, 1939-40, 1956.

REMARKS.--Records good. 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. 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	3,061	219	71	98.7	6,070
November	2,200	80	68	73.3	4,360
December	2,809	190	68	90.6	5,570
January	2,499	101	68	80.6	4,960
February	2,084	87	62	71.9	4,130
March	2,589	405	53	83.5	5,140
April	4,535	1,060	63	151	9,000
May	21,170	9,590	43	683	41,990
June	7,144	539	57	238	14,170
July	4,659	466	50	150	9,240
August	3,395	297	70	110	6,730
September	29,404	9,950	59	980	58,320
Water year 1996	85,549	9,950	43	234	169,700

ARKANSAS RIVER SUBBASIN

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 bank 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 mi².

AVERAGE DISCHARGE.--8 years, 1,062 ft³/s.

EXTREMES.--August 1988 to current year: Maximum discharge 27,400 ft³/s May 11, 1993, gage height, 33.22 ft; minimum daily discharge 62 ft³/s Nov. 6, 1993.

REMARKS.--Water-discharge records fair. Some regulation by Skiatook Lake (station 07177400). 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	7,851	809	103	253	15,570
November	3,269	165	86	109	6,480
December	5,141	463	86	166	10,200
January	4,435	271	124	143	8,800
February	3,161	174	86	109	6,270
March	4,631	556	78	149	9,190
April	8,639	1,280	145	288	17,140
May	7,077	594	179	228	14,040
June	11,464	1,820	209	382	22,740
July	8,552	1,270	69	276	16,960
August	9,841	594	271	317	19,520
September	27,517	9,450	274	917	54,580
Water year 1996	101,578	9,450	69	278	201,500

ARKANSAS RIVER SUBBASIN
07178200 BIRD CREEK AT STATE HIGHWAY 266 NEAR CATOOSA, OKLAHOMA--CONTINUED
WATER-QUALITY RECORDS

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

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°C, Aug. 1, 1993, July 22, 1996; minimum 1.5°C, Dec. 23, 1989, Jan. 20, 1993, Feb. 4, 1996.

DISSOLVED OXYGEN: Maximum, 14.4 mg/L, Jan. 20, 1992; minimum 1.9 mg/L, July 24, 1996.

EXTREMES FOR CURRENT YEAR.--

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

pH: Maximum recorded (more than 20 percent missing record), 8.2 units, Feb. 16; minimum recorded, 7.0 units, Aug. 24.

WATER TEMPERATURE: Maximum, 32.0°C, July 22; minimum 1.5°C, Feb. 4.

DISSOLVED OXYGEN: Maximum recorded (more than 20 percent missing record), 13.1 mg/L, Jan. 24, but may have been higher Jan. 25-Feb. 22 when probe failed; minimum recorded, 1.9 mg/L, July 24.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	457	347	383	664	538	587	576	566	572	563	550	558
2	419	237	366	676	561	633	573	561	567	556	543	551
3	512	263	351	597	558	574	576	560	569	584	543	565
4	502	394	414	594	510	568	570	556	563	574	564	569
5	429	394	408	527	505	517	562	549	557	633	564	593
6	418	390	405	528	502	519	566	554	561	660	625	647
7	418	393	410	541	516	532	576	558	568	685	639	664
8	418	377	397	547	538	543	576	553	571	695	607	670
9	407	378	396	551	529	543	558	535	547	607	575	586
10	396	373	388	555	533	547	542	477	528	601	575	591
11	395	368	385	549	525	536	477	403	447	592	577	588
12	384	360	373	563	530	553	449	417	435	595	575	588
13	408	367	379	531	512	525	441	415	432	592	573	584
14	421	391	409	530	499	517	448	430	439	598	572	588
15	408	366	389	544	494	529	480	446	462	600	580	593
16	388	360	378	541	512	530	496	468	486	605	591	600
17	405	379	385	556	518	542	500	456	480	605	593	599
18	454	405	439	562	530	549	484	336	459	616	525	566
19	467	430	455	550	535	543	412	309	350	553	530	543
20	483	413	455	555	532	545	456	412	437	563	542	555
21	477	409	451	565	550	558	571	424	472	580	544	565
22	482	428	458	560	553	557	734	571	660	578	545	569
23	481	434	463	563	550	558	649	587	604	659	577	624
24	504	454	486	570	554	562	596	569	587	674	622	663
25	510	473	496	560	546	551	576	563	571	622	570	596
26	512	487	505	561	549	555	572	562	568	646	563	607
27	533	495	519	561	550	556	569	558	566	680	616	630
28	519	491	512	565	557	562	567	555	562	631	614	623
29	538	498	525	567	558	564	567	551	560	684	614	635
30	554	517	540	575	562	570	561	547	556	710	613	660
31	552	529	545	---	---	---	566	548	560	663	613	638
MONTH	554	237	434	676	494	551	734	309	526	710	525	600
	FEBRUARY			MARCH			APRIL			MAY		
1	676	598	630	618	609	614	703	441	585	542	499	524
2	640	583	602	620	598	613	1420	723	1100	542	465	512
3	696	587	630	632	606	620	1000	826	860	518	452	494
4	692	601	630	616	594	609	931	701	812	485	430	466
5	611	567	590	612	585	591	701	610	656	472	417	451
6	577	558	564	616	575	591	610	565	591	512	149	328
7	629	568	602	633	602	619	580	570	574	414	245	352
8	764	629	709	631	612	624	590	560	577	445	403	424
9	725	678	690	617	599	610	560	478	518	445	402	435
10	734	630	689	610	586	600	510	471	496	454	411	437
11	647	626	636	604	578	594	523	466	494	421	347	375
12	647	615	631	644	492	577	523	455	495	440	399	417
13	625	608	618	518	450	491	512	444	484	459	418	435
14	624	601	617	505	465	483	513	434	483	469	416	449
15	629	612	620	508	474	498	502	434	478	457	416	440
16	629	605	615	552	474	512	491	445	475	465	424	450
17	607	594	602	632	552	614	580	490	520	465	423	453
18	604	587	598	693	377	553	601	532	576	464	412	443
19	608	583	598	492	387	455	532	440	491	462	400	438
20	615	596	606	540	492	528	485	417	459	501	420	459
21	---	---	---	606	527	580	483	415	455	503	457	492
22	---	---	---	591	559	580	661	223	349	492	392	459
23	---	---	---	619	572	604	959	223	480	439	395	422
24	---	---	---	622	569	604	790	555	683	429	386	413
25	---	---	---	586	497	536	686	543	619	433	377	417
26	---	---	---	580	504	561	674	518	577	424	357	399
27	---	---	---	592	477	575	538	484	505	403	150	274
28	---	---	---	508	283	373	569	536	549	349	233	298
29	---	---	---	509	404	461	580	535	560	672	339	447
30	---	---	---	567	509	549	557	500	534	745	487	652
31	---	---	---	602	336	468	---	---	---	503	419	465
MONTH	---	---	---	693	283	558	1420	223	568	745	149	436

ARKANSAS RIVER SUBBASIN

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

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	516	48	247	406	358	389	429	326	373	371	315	348
2	787	292	425	418	357	398	429	359	390	361	316	340
3	355	209	301	417	357	394	394	347	373	351	317	335
4	408	297	355	405	332	378	393	347	371	351	317	331
5	462	350	404	392	332	362	381	323	352	352	295	332
6	462	386	429	379	320	360	369	334	354	365	296	331
7	461	386	427	379	319	354	379	322	356	343	298	320
8	447	385	424	378	319	360	379	322	363	356	287	327
9	460	384	422	388	329	371	367	332	353	358	310	337
10	434	260	401	400	353	382	400	354	367	358	312	347
11	433	296	410	483	282	374	422	331	365	359	313	344
12	444	383	420	377	282	320	434	330	358	361	326	347
13	444	382	423	389	318	363	432	341	372	373	350	362
14	443	382	430	389	318	363	466	352	400	362	327	352
15	454	380	418	366	306	339	397	340	365	387	200	324
16	429	319	398	408	366	386	386	339	359	330	211	284
17	440	281	391	389	366	380	385	328	350	402	307	350
18	488	366	405	389	354	381	372	316	347	426	355	404
19	500	98	277	390	354	382	395	271	327	416	369	395
20	719	268	426	390	354	378	395	292	340	418	358	386
21	365	267	323	390	355	374	416	326	375	407	336	377
22	424	327	357	449	355	405	448	392	413	384	325	358
23	436	399	420	472	224	297	516	369	399	381	336	360
24	435	266	404	353	294	332	391	358	379	381	338	368
25	447	266	345	458	318	404	391	324	355	381	334	365
26	446	337	408	434	329	371	412	357	368	---	---	---
27	433	360	401	410	375	392	423	367	402	---	---	---
28	408	324	384	410	373	394	400	345	376	---	---	---
29	407	347	386	397	362	380	379	346	365	---	---	---
30	419	346	390	373	152	241	369	336	361	---	---	---
31	---	---	---	337	209	260	369	326	354	---	---	---
MONTH	787	48	388	483	152	363	516	271	367	---	---	---

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	7.7	7.3	7.5
3	---	---	---	---	---	---	---	---	---	7.8	7.7	7.7
4	---	---	---	---	---	---	---	---	---	7.7	7.5	7.6
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	7.6	7.6	7.6	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	7.6	7.5	7.6	---	---	---
10	---	---	---	---	---	---	7.6	7.4	7.5	---	---	---
11	---	---	---	7.6	7.4	7.5	7.8	7.4	7.6	---	---	---
12	---	---	---	7.6	7.4	7.5	7.7	7.6	7.6	7.6	7.3	7.5
13	---	---	---	---	---	---	7.6	7.5	7.6	7.6	7.3	7.5
14	---	---	---	---	---	---	7.6	7.5	7.6	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	7.3	7.2	7.2	---	---	---
17	---	---	---	---	---	---	7.5	7.2	7.4	---	---	---
18	---	---	---	---	---	---	7.5	7.4	7.4	---	---	---
19	---	---	---	---	---	---	7.6	7.5	7.5	---	---	---
20	---	---	---	---	---	---	7.5	7.5	7.5	---	---	---
21	7.7	7.5	7.6	7.6	7.4	7.5	7.5	7.4	7.5	---	---	---
22	7.8	7.5	7.6	7.6	7.3	7.5	7.6	7.5	7.6	---	---	---
23	7.8	7.4	7.7	---	---	---	7.7	7.6	7.6	---	---	---
24	---	---	---	---	---	---	7.7	7.5	7.6	8.0	7.5	7.8
25	---	---	---	---	---	---	---	---	---	---	---	---
26	7.7	7.5	7.6	---	---	---	---	---	---	7.9	7.6	7.8
27	---	---	---	---	---	---	---	---	---	7.9	7.7	7.8
28	---	---	---	---	---	---	---	---	---	7.9	7.6	7.8
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	7.5	7.3	7.4	---	---	---
31	---	---	---	---	---	---	7.5	7.4	7.4	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---

ARKANSAS RIVER SUBBASIN

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

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
FEBRUARY				MARCH			APRIL			MAY		
1	---	---	---	8.0	7.5	7.8	---	---	---	---	---	---
2	---	---	---	8.1	7.9	8.0	8.0	7.8	7.8	---	---	---
3	---	---	---	8.1	7.9	8.0	8.1	7.7	7.9	---	---	---
4	7.8	7.4	7.7	8.1	8.0	8.0	8.1	7.7	7.8	---	---	---
5	7.9	7.3	7.7	8.1	8.0	8.0	7.9	7.6	7.7	---	---	---
6	8.0	7.8	7.8	8.0	7.9	7.9	7.8	7.6	7.7	---	---	---
7	8.0	7.8	7.9	8.0	7.9	8.0	7.9	7.7	7.8	---	---	---
8	8.0	7.8	7.9	8.0	7.9	8.0	8.0	7.9	7.9	---	---	---
9	7.9	7.8	7.8	8.0	7.8	7.9	8.0	7.8	7.9	---	---	---
10	7.9	7.7	7.8	7.9	7.8	7.8	7.9	7.7	7.8	---	---	---
11	7.9	7.8	7.8	7.8	7.7	7.8	7.8	7.6	7.7	---	---	---
12	7.9	7.8	7.9	7.9	7.7	7.9	---	---	---	---	---	---
13	7.9	7.7	7.8	7.9	7.6	7.8	7.6	7.3	7.5	---	---	---
14	8.0	7.8	7.9	---	---	---	7.8	7.6	7.7	---	---	---
15	8.1	7.8	7.9	---	---	---	7.9	7.7	7.8	---	---	---
16	8.2	7.9	8.0	---	---	---	---	---	---	---	---	---
17	8.1	7.9	7.9	---	---	---	---	---	---	---	---	---
18	8.0	7.7	7.8	---	---	---	7.9	7.5	7.7	---	---	---
19	8.0	7.7	7.8	---	---	---	8.1	7.6	7.7	---	---	---
20	7.8	7.5	7.7	---	---	---	7.9	7.5	7.6	---	---	---
21	8.1	7.7	7.9	---	---	---	7.7	7.4	7.6	7.8	7.6	7.7
22	8.0	7.6	7.7	---	---	---	7.8	7.6	7.7	7.7	7.5	7.6
23	7.7	7.6	7.7	---	---	---	7.8	7.6	7.7	7.8	7.5	7.7
24	7.7	7.6	7.7	---	---	---	7.8	7.6	7.7	7.8	7.6	7.7
25	7.7	7.6	7.7	---	---	---	7.7	7.6	7.7	7.7	7.5	7.6
26	7.8	7.6	7.7	---	---	---	7.8	7.7	7.7	7.7	7.5	7.6
27	7.7	7.7	7.7	---	---	---	7.7	7.7	7.7	7.8	7.4	7.7
28	7.8	7.7	7.7	---	---	---	7.8	7.6	7.7	---	---	---
29	7.9	7.6	7.8	---	---	---	7.7	7.5	7.5	7.5	7.2	7.3
30	---	---	---	---	---	---	---	---	---	7.5	7.2	7.3
31	---	---	---	---	---	---	---	---	---	7.6	7.3	7.5
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
JUNE				JULY			AUGUST			SEPTEMBER		
1	7.8	7.3	7.5	7.6	7.1	7.5	7.3	7.2	7.3	7.4	7.2	7.3
2	---	---	---	7.4	7.2	7.2	7.4	7.2	7.3	7.5	7.3	7.4
3	7.4	7.3	7.3	7.3	7.1	7.2	7.4	7.2	7.4	7.4	7.3	7.4
4	7.4	7.3	7.4	7.3	7.1	7.2	7.5	7.1	7.4	7.4	7.3	7.4
5	7.4	7.3	7.4	7.3	7.1	7.2	7.6	7.3	7.5	7.4	7.3	7.3
6	7.4	7.3	7.3	7.6	7.2	7.5	7.6	7.3	7.5	7.4	7.3	7.3
7	7.4	7.2	7.4	7.7	7.3	7.5	7.5	7.3	7.4	7.4	7.3	7.3
8	7.4	7.2	7.4	7.6	7.4	7.4	7.5	7.3	7.5	7.4	7.3	7.4
9	7.5	7.2	7.4	7.7	7.4	7.5	7.5	7.2	7.3	7.4	7.3	7.3
10	7.8	7.3	7.6	7.7	7.4	7.6	7.4	7.3	7.3	7.5	7.3	7.3
11	7.9	7.7	7.8	---	---	---	7.4	7.3	7.3	7.5	7.4	7.5
12	7.9	7.7	7.8	---	---	---	7.4	7.2	7.3	7.6	7.4	7.5
13	7.9	7.6	7.6	---	---	---	7.4	7.3	7.3	7.6	7.4	7.5
14	7.7	7.4	7.5	---	---	---	7.4	7.2	7.3	7.6	7.4	7.4
15	---	---	---	---	---	---	7.4	7.3	7.3	7.7	7.4	7.4
16	---	---	---	7.8	7.6	7.6	7.4	7.3	7.4	---	---	---
17	7.6	7.3	7.5	7.9	7.6	7.8	7.4	7.3	7.3	7.4	7.4	7.4
18	7.6	7.4	7.5	7.8	7.4	7.5	7.4	7.2	7.3	7.4	7.3	7.4
19	7.7	7.2	7.4	---	---	---	7.4	7.2	7.3	7.5	7.4	7.5
20	7.4	7.2	7.3	---	---	---	7.3	7.2	7.3	7.5	7.4	7.4
21	7.4	7.3	7.3	---	---	---	7.4	7.2	7.3	7.5	7.5	7.5
22	7.4	7.3	7.3	7.7	7.5	7.6	7.4	7.1	7.3	7.5	7.5	7.5
23	7.3	7.2	7.3	7.9	7.3	7.5	7.3	7.1	7.2	7.6	7.5	7.5
24	7.3	7.2	7.3	7.5	7.3	7.4	7.2	7.0	7.1	7.5	7.2	7.4
25	7.3	7.2	7.2	7.6	7.3	7.4	7.3	7.1	7.2	---	---	---
26	7.3	7.2	7.2	7.6	7.5	7.5	7.3	7.1	7.3	---	---	---
27	7.4	7.3	7.4	7.6	7.5	7.5	7.3	7.2	7.2	---	---	---
28	7.6	7.3	7.4	7.6	7.3	7.6	7.3	7.2	7.2	---	---	---
29	7.6	7.4	7.5	7.6	7.4	7.5	7.3	7.2	7.3	---	---	---
30	7.6	7.5	7.6	7.6	7.4	7.5	7.3	7.2	7.3	---	---	---
31	---	---	---	7.4	7.2	7.3	7.4	7.2	7.3	---	---	---
MAX	---	---	---	---	---	---	7.6	7.3	7.5	---	---	---
MIN	---	---	---	---	---	---	7.2	7.0	7.1	---	---	---

ARKANSAS RIVER SUBBASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	22.5	20.5	22.0	17.5	16.0	17.0	12.0	10.5	11.5	7.5	6.5	7.0
2	22.5	18.5	20.5	17.5	14.5	16.5	13.0	11.5	12.5	7.0	6.0	6.5
3	20.0	18.5	19.5	14.5	13.0	14.0	13.5	12.5	13.0	6.5	5.0	6.0
4	20.5	18.0	19.5	13.5	12.5	13.0	13.0	11.5	12.0	6.5	5.0	6.0
5	20.5	19.5	19.5	14.0	12.0	13.5	12.0	11.0	11.5	6.5	5.0	6.0
6	20.0	18.5	19.0	14.5	13.0	14.0	11.5	10.5	11.0	5.5	4.0	5.0
7	19.5	18.0	18.5	15.0	14.0	14.5	10.5	9.5	10.0	4.5	3.0	4.0
8	19.5	18.0	18.5	14.5	13.5	14.0	10.0	9.0	9.5	4.5	2.5	3.5
9	20.0	18.5	19.0	14.0	12.5	13.5	9.0	5.5	6.5	6.0	3.5	5.0
10	21.0	19.5	20.0	15.5	13.5	15.0	6.0	5.0	5.5	6.5	5.0	5.5
11	21.5	20.0	21.0	15.0	11.0	13.5	7.0	4.5	6.0	7.0	5.0	6.0
12	22.0	20.5	21.0	12.0	11.0	11.5	7.5	6.0	6.5	7.0	5.5	6.0
13	22.0	20.5	21.0	13.0	11.5	12.5	8.5	7.5	8.0	7.0	5.5	6.5
14	21.5	19.5	20.0	13.0	12.0	12.5	9.0	8.0	8.5	8.0	6.0	7.0
15	20.0	19.0	19.5	13.0	11.5	12.5	9.5	8.5	9.0	8.0	7.0	7.5
16	20.0	19.0	19.5	12.5	11.5	12.5	10.5	9.0	10.0	9.0	7.0	8.0
17	20.0	19.0	19.5	14.0	11.5	13.0	11.0	9.5	10.0	10.5	8.5	9.5
18	20.0	19.5	19.5	14.5	12.0	13.0	---	---	---	10.0	6.0	8.0
19	20.5	19.5	20.0	13.0	12.0	12.5	7.5	7.0	7.0	6.0	4.0	5.0
20	19.5	18.0	19.0	14.0	12.0	13.0	7.5	6.5	7.0	5.5	4.0	5.0
21	18.0	17.0	17.5	13.5	12.5	13.0	7.5	6.5	7.0	6.5	5.0	6.0
22	18.5	16.5	17.5	13.5	12.0	13.0	7.5	6.0	7.0	6.5	5.0	6.0
23	18.5	17.5	18.5	13.5	12.5	13.0	7.0	5.5	6.5	6.5	5.0	6.5
24	18.5	17.0	17.5	12.5	11.5	12.0	6.5	5.5	6.0	5.5	4.5	5.0
25	17.0	16.5	17.0	12.5	10.5	11.5	6.5	5.0	6.0	6.5	4.5	5.5
26	17.5	16.5	17.0	13.5	11.5	12.5	6.0	5.0	5.5	7.0	4.5	6.0
27	18.5	17.0	18.0	13.5	12.5	13.0	7.0	5.0	6.0	6.0	4.5	5.5
28	17.5	16.5	17.0	13.0	10.5	11.5	7.0	5.5	6.5	6.5	4.5	5.5
29	16.5	16.0	16.5	10.5	9.0	10.0	6.5	5.5	6.0	6.5	5.5	6.0
30	16.5	15.5	16.0	11.0	9.0	10.0	7.0	5.5	6.0	5.5	4.0	5.0
31	16.5	16.0	16.0	---	---	---	7.0	6.0	6.5	4.0	2.5	3.5
MONTH	22.5	15.5	18.9	17.5	9.0	13.0	---	---	---	10.5	2.5	5.9
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	2.5	3.0	9.0	8.0	8.5	13.5	11.5	12.0	18.5	17.0	18.0
2	3.5	2.5	3.0	10.0	8.5	9.0	15.0	13.0	14.0	18.5	17.5	18.0
3	3.0	2.0	2.5	10.5	9.0	9.5	16.0	15.0	15.5	19.5	18.5	19.0
4	3.0	1.5	2.5	11.0	9.0	10.0	16.0	15.5	16.0	21.0	19.5	20.0
5	4.0	2.5	3.5	12.5	10.5	11.5	15.5	13.0	14.5	21.5	20.5	21.0
6	4.5	3.5	4.0	12.5	9.5	11.0	14.0	12.5	13.5	21.5	20.0	21.0
7	5.0	3.5	4.5	9.5	7.5	8.5	14.5	13.5	14.0	21.5	21.0	21.5
8	6.0	5.0	5.5	7.5	6.5	7.0	14.5	13.5	14.0	23.0	21.5	22.0
9	7.5	5.5	6.5	7.5	5.5	6.5	15.0	14.0	14.5	23.0	22.0	22.5
10	8.5	6.0	7.5	9.0	6.5	8.0	16.0	15.0	15.5	22.5	21.0	21.5
11	8.5	7.0	8.0	10.0	8.0	9.0	17.5	16.0	16.5	21.0	19.5	20.0
12	8.0	6.5	7.0	10.5	9.0	9.5	17.5	16.0	17.0	19.5	19.0	19.5
13	8.5	7.5	8.0	12.0	9.5	11.0	16.5	14.5	15.5	19.0	18.0	18.5
14	9.5	7.5	8.5	12.5	11.5	12.0	17.0	16.5	17.0	18.5	17.5	18.0
15	9.5	8.5	9.0	13.0	11.5	12.5	16.5	15.0	15.5	21.0	18.5	19.5
16	8.5	7.0	8.0	14.5	12.5	13.5	16.5	15.0	15.5	22.5	21.0	21.5
17	8.5	6.5	7.5	15.0	14.0	14.5	17.5	16.5	17.0	23.5	22.0	23.0
18	9.0	7.0	8.0	14.0	11.5	13.0	18.5	17.5	18.0	24.5	23.0	24.0
19	9.5	7.5	8.5	11.5	10.5	11.0	19.0	18.0	18.5	24.5	24.0	24.0
20	11.0	9.0	10.5	11.0	10.5	10.5	19.0	18.5	19.0	24.5	23.5	24.0
21	12.0	10.0	11.0	12.0	10.5	11.0	18.5	17.5	18.0	25.0	23.5	24.0
22	12.5	10.5	11.5	13.0	11.0	12.0	18.0	14.0	17.0	25.0	24.0	24.5
23	13.5	12.0	12.5	14.0	11.5	13.0	17.0	13.5	15.0	25.5	24.5	25.0
24	12.5	11.5	12.0	14.5	13.0	14.0	17.5	15.5	16.5	26.0	25.5	25.5
25	12.5	11.0	12.0	13.5	11.0	12.0	18.5	16.5	17.5	26.0	25.0	26.0
26	15.0	12.5	13.5	12.0	10.5	11.0	19.5	17.0	18.0	26.5	25.5	26.0
27	14.5	13.0	14.5	11.5	10.5	11.5	19.5	18.0	18.5	25.5	19.5	23.0
28	13.0	10.0	11.5	10.5	7.0	8.5	19.5	18.5	19.0	24.0	21.5	22.5
29	10.0	8.5	9.5	10.5	9.0	9.5	18.5	16.5	17.0	23.0	22.0	22.5
30	---	---	---	12.0	10.5	11.5	17.5	16.0	16.5	22.5	21.5	22.0
31	---	---	---	13.0	10.0	11.5	---	---	---	22.0	21.5	22.0
MONTH	15.0	1.5	8.0	15.0	5.5	10.7	19.5	11.5	16.2	26.5	17.0	21.9

ARKANSAS RIVER SUBBASIN

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

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.5	17.0	19.5	30.0	29.0	29.5	28.5	27.0	27.5	27.0	26.0	26.5
2	21.5	19.0	20.0	30.5	29.0	30.0	29.0	27.0	28.0	26.5	25.5	26.0
3	22.0	20.0	21.0	30.5	29.5	30.0	29.5	28.0	29.0	26.5	25.5	26.0
4	22.5	20.5	21.5	30.5	28.0	29.5	30.0	28.0	29.0	27.0	25.5	26.5
5	26.0	21.5	24.0	29.0	27.0	28.0	30.5	29.0	29.5	27.0	25.5	26.5
6	26.0	25.0	25.5	29.5	28.5	29.0	30.5	29.5	30.0	27.5	26.5	27.0
7	25.5	24.0	24.5	29.5	28.5	29.5	31.0	30.0	30.5	27.5	26.5	27.0
8	24.5	23.0	23.5	30.0	28.5	29.0	31.0	29.5	30.5	27.5	26.5	26.5
9	24.0	22.5	23.5	29.0	27.0	28.0	30.5	29.0	29.5	27.0	25.5	26.5
10	24.0	21.5	23.0	27.0	25.5	26.0	29.5	27.5	28.5	27.0	25.5	26.0
11	24.0	22.5	23.0	25.5	22.5	23.5	28.0	26.0	27.0	26.5	25.5	26.0
12	25.0	23.5	24.0	24.0	22.5	23.5	27.5	26.0	27.0	26.5	25.5	26.0
13	26.0	24.0	25.0	25.0	24.0	24.0	28.0	26.0	27.0	26.5	24.5	25.0
14	26.5	25.0	26.0	26.5	25.0	25.5	28.0	26.0	27.5	25.0	23.5	24.0
15	26.5	26.0	26.5	27.5	25.5	26.0	28.5	27.0	28.0	23.5	21.5	23.0
16	27.5	26.0	26.5	28.5	26.5	27.0	29.0	27.5	28.0	23.0	21.5	22.0
17	28.5	26.5	27.5	29.0	27.5	28.5	29.0	28.0	28.5	22.5	21.5	22.0
18	29.0	27.0	28.0	30.0	28.0	29.0	29.0	27.5	28.5	22.5	21.5	22.0
19	29.0	24.0	26.0	30.5	29.0	30.0	29.5	27.5	28.5	23.5	21.5	21.0
20	28.5	24.5	27.0	31.0	30.0	30.5	30.0	28.0	29.0	22.0	20.5	21.0
21	29.0	24.5	26.5	31.5	30.0	31.0	30.0	28.0	29.0	22.5	20.5	21.5
22	28.5	26.5	27.5	32.0	30.0	31.0	30.0	28.5	29.0	22.5	21.5	22.0
23	29.0	27.0	28.0	30.5	25.0	28.0	29.5	27.5	28.5	23.0	22.0	22.5
24	29.0	26.0	27.5	30.5	28.0	29.5	29.0	28.0	28.5	23.0	22.0	22.5
25	28.5	26.5	27.5	30.0	28.0	29.0	29.0	27.0	28.0	23.0	21.5	22.5
26	28.5	26.5	27.0	30.0	28.0	28.5	28.5	27.0	27.5	---	---	---
27	28.5	27.5	28.0	29.0	27.0	28.0	27.5	26.5	27.0	---	---	---
28	29.0	27.5	28.5	29.5	28.0	29.0	27.5	26.0	26.5	---	---	---
29	29.0	28.0	28.5	29.5	28.0	29.0	28.0	26.5	27.5	---	---	---
30	29.5	28.5	29.0	28.0	24.5	26.5	28.0	27.0	27.5	---	---	---
31	---	---	---	28.5	25.5	27.0	28.0	27.0	27.0	---	---	---
MONTH	29.5	17.0	25.4	32.0	22.5	28.1	31.0	26.0	28.3	---	---	---

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.3	6.7	7.0	---	---	---	8.2	7.6	8.0	---	---	---
2	7.7	7.1	7.3	---	---	---	8.2	7.5	7.8	---	---	---
3	7.8	7.4	7.6	---	---	---	8.0	7.5	7.8	---	---	---
4	7.7	7.2	7.5	---	---	---	8.4	7.5	7.9	11.3	10.5	10.6
5	7.9	7.4	7.6	---	---	---	8.4	7.6	8.0	10.6	9.9	10.1
6	8.2	7.7	7.9	---	---	---	8.2	7.6	7.8	10.4	10.0	10.2
7	8.5	7.8	8.1	8.7	8.0	8.3	8.4	7.7	8.0	10.7	10.2	10.4
8	8.6	7.9	8.3	8.7	8.0	8.2	8.3	7.8	8.1	11.0	10.2	10.5
9	8.6	7.9	8.3	9.3	7.7	8.2	10.0	8.2	9.2	10.6	9.7	10.1
10	8.6	7.7	8.2	8.0	7.1	7.6	10.3	9.8	10.0	10.1	9.3	9.7
11	8.4	7.5	7.9	7.9	7.0	7.3	10.6	9.7	10.1	9.8	9.3	9.5
12	8.0	7.3	7.7	8.0	7.6	7.8	10.0	9.5	9.7	---	---	---
13	7.8	7.1	7.4	8.0	7.4	7.7	9.7	9.3	9.5	---	---	---
14	7.8	7.1	7.5	7.8	6.9	7.4	9.5	8.8	9.2	---	---	---
15	7.8	7.3	7.5	---	---	---	9.3	8.1	8.6	---	---	---
16	7.7	7.1	7.4	---	---	---	8.3	7.9	8.1	11.4	10.8	11.1
17	7.5	6.9	7.1	---	---	---	8.5	8.0	8.2	---	---	---
18	7.2	6.9	7.1	---	---	---	8.5	7.5	7.8	---	---	---
19	7.1	6.5	6.8	---	---	---	---	---	---	---	---	---
20	7.1	6.5	6.8	---	---	---	---	---	---	---	---	---
21	7.5	6.8	7.2	8.6	7.5	8.2	---	---	---	---	---	---
22	7.7	7.1	7.4	8.1	7.3	7.8	---	---	---	---	---	---
23	7.5	6.7	7.2	7.9	7.1	7.5	---	---	---	---	---	---
24	7.5	6.7	7.1	8.2	7.0	7.7	---	---	---	13.1	12.7	12.9
25	7.6	7.1	7.3	8.6	7.8	8.2	---	---	---	---	---	---
26	7.5	6.9	7.2	8.2	7.5	7.9	---	---	---	---	---	---
27	---	---	---	7.9	7.1	7.5	---	---	---	---	---	---
28	---	---	---	8.3	7.1	7.7	---	---	---	---	---	---
29	---	---	---	8.9	8.0	8.5	---	---	---	---	---	---
30	---	---	---	8.6	8.0	8.4	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

ARKANSAS RIVER SUBBASIN

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

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	9.5	8.7	9.1	10.1	8.5	9.4	8.9	8.5	8.7
2	---	---	---	9.4	8.6	9.0	9.2	7.8	8.2	9.0	8.5	8.7
3	---	---	---	9.6	8.6	9.0	7.9	7.3	7.6	8.7	8.2	8.4
4	---	---	---	9.5	8.5	9.1	7.5	7.1	7.3	8.5	8.2	8.3
5	---	---	---	9.8	8.5	9.0	7.5	7.2	7.3	8.4	8.0	8.1
6	---	---	---	8.5	7.6	8.2	8.3	7.5	7.9	8.3	5.2	7.4
7	---	---	---	9.3	7.7	8.6	8.6	8.0	8.2	7.6	7.1	7.3
8	---	---	---	10.0	9.2	9.6	8.8	8.4	8.6	7.6	7.2	7.4
9	---	---	---	10.2	9.5	9.9	8.8	8.3	8.5	7.5	7.0	7.2
10	---	---	---	10.2	9.2	9.8	8.6	7.9	8.2	7.1	6.0	6.6
11	---	---	---	10.1	9.3	9.7	8.2	7.8	8.0	6.1	5.9	6.0
12	---	---	---	10.1	9.6	9.8	8.1	7.5	7.7	---	---	---
13	---	---	---	10.1	9.1	9.5	8.3	7.7	7.9	---	---	---
14	---	---	---	9.7	8.5	8.9	8.5	8.1	8.2	---	---	---
15	---	---	---	8.9	8.3	8.6	8.6	8.2	8.4	---	---	---
16	---	---	---	8.8	8.3	8.5	8.7	8.1	8.4	---	---	---
17	---	---	---	8.6	7.7	8.1	8.3	8.0	8.1	---	---	---
18	---	---	---	8.4	6.8	7.9	8.1	7.7	7.9	---	---	---
19	---	---	---	8.4	8.0	8.2	8.0	7.7	7.8	---	---	---
20	---	---	---	9.2	8.4	8.9	8.0	7.6	7.7	---	---	---
21	---	---	---	9.3	8.3	9.0	7.9	7.2	7.6	6.0	5.5	5.8
22	---	---	---	9.4	8.4	9.0	7.7	6.2	7.1	---	---	---
23	8.4	7.2	8.1	9.5	8.6	9.2	8.0	7.0	7.6	---	---	---
24	9.3	7.3	8.3	9.1	8.0	8.6	7.7	7.6	7.7	---	---	---
25	8.9	7.3	8.3	8.6	7.7	8.1	7.7	7.6	7.6	---	---	---
26	8.2	6.7	7.6	9.4	8.3	9.1	7.8	7.6	7.6	---	---	---
27	7.6	6.4	6.9	9.7	9.1	9.4	7.9	7.7	7.7	---	---	---
28	8.9	6.4	7.7	10.4	9.2	10.0	7.9	7.6	7.7	---	---	---
29	9.9	8.2	9.1	9.8	9.5	9.6	8.6	7.8	8.1	---	---	---
30	---	---	---	9.6	8.8	9.3	8.8	8.5	8.6	---	---	---
31	---	---	---	10.1	8.5	9.3	---	---	---	---	---	---
MONTH	---	---	---	10.4	6.8	9.0	10.1	6.2	8.0	---	---	---
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	8.2	6.6	7.4	5.7	5.0	5.3	7.0	6.1	6.5
2	---	---	---	8.0	6.3	7.1	6.3	5.3	5.6	7.0	6.2	6.7
3	---	---	---	7.8	6.0	7.1	6.3	5.2	5.7	7.0	6.1	6.5
4	---	---	---	7.8	5.8	6.5	7.0	5.6	6.2	6.8	6.0	6.4
5	5.9	5.3	5.6	7.5	6.5	7.0	7.0	5.6	6.3	6.8	5.9	6.4
6	5.8	4.8	5.3	7.7	6.3	7.0	6.9	5.4	6.2	6.8	5.7	6.3
7	6.6	5.2	5.7	7.8	6.2	7.0	6.7	5.2	6.0	6.7	5.7	6.2
8	7.3	6.0	6.5	7.6	6.2	6.9	6.8	5.3	6.1	6.6	5.8	6.2
9	8.1	6.7	7.2	7.3	5.9	6.5	6.6	5.1	5.7	6.8	5.9	6.4
10	8.6	7.1	7.8	7.4	6.5	6.8	6.2	4.9	5.4	6.9	5.8	6.4
11	8.7	7.0	7.9	7.5	6.4	6.9	6.1	4.7	5.3	7.1	6.1	6.7
12	8.7	6.7	7.8	7.7	7.2	7.4	6.8	5.0	5.8	7.2	6.2	6.7
13	8.5	6.5	7.6	7.7	7.0	7.3	6.8	5.8	6.3	7.2	6.4	6.9
14	8.2	5.9	7.1	7.8	6.9	7.4	7.1	5.7	6.4	7.2	6.3	6.7
15	7.6	5.4	6.7	7.8	6.6	7.3	7.1	5.6	6.4	6.8	6.2	6.5
16	7.7	5.6	6.8	7.8	6.2	6.8	7.2	6.0	6.7	6.6	6.0	6.4
17	7.7	5.4	6.5	7.5	5.4	6.5	7.2	5.7	6.3	7.0	6.5	6.8
18	7.2	5.0	6.3	8.2	5.8	6.8	7.0	5.6	6.3	7.2	6.7	6.9
19	7.0	2.4	4.8	---	---	---	7.2	5.7	6.5	7.3	6.8	7.1
20	5.5	4.3	4.7	---	---	---	6.6	5.7	6.1	7.2	6.0	6.9
21	5.8	4.9	5.4	---	---	---	6.9	5.6	6.2	7.5	6.9	7.2
22	5.4	5.0	5.1	7.7	5.4	6.0	6.9	5.7	6.3	7.6	7.0	7.3
23	5.9	5.3	5.5	5.9	2.9	4.1	6.6	5.3	6.0	7.6	6.9	7.2
24	6.7	4.0	5.6	4.9	1.9	3.6	6.5	5.1	5.7	7.4	6.9	7.1
25	5.8	4.0	4.8	6.2	3.0	4.8	7.5	5.7	6.5	7.4	6.5	6.8
26	6.3	4.4	5.2	6.2	5.1	5.6	7.3	5.5	6.2	---	---	---
27	7.4	6.0	6.5	6.6	5.3	5.8	6.8	5.3	6.1	---	---	---
28	7.5	6.4	7.0	6.6	5.4	6.1	6.8	5.8	6.3	---	---	---
29	8.2	6.4	7.2	6.6	5.2	5.7	6.7	5.7	6.2	---	---	---
30	8.3	6.8	7.6	5.9	4.5	5.2	6.8	5.8	6.3	---	---	---
31	---	---	---	5.9	4.9	5.2	7.0	6.1	6.6	---	---	---
MONTH	---	---	---	---	---	---	7.5	4.7	6.1	---	---	---

SPAVINAW CREEK SUBBASIN

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 mi².

AVERAGE DISCHARGE.--35 years, 114 ft³/s.

EXTREMES.--October 1961 to current year: Maximum discharge 39,800 ft³/s July 27, 1975; minimum 1.2 ft³/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	968	36	26	31.2	1,920
November	999	37	29	33.3	1,980
December	1,253	92	27	40.4	2,490
January	2,039	170	33	65.8	4,040
February	1,191	64	32	41.1	2,360
March	1,767	237	30	57.0	3,500
April	2,737	170	54	91.2	5,430
May	2,228	238	41	71.9	4,420
June	1,478	89	30	49.6	28930
July	748	29	16	24.1	1,480
August	445	24	11	14.4	883
September	1952.7	529	9.4	65.1	3,870
Water year 1996	17,805.7	529	9.4	48.6	35,320

ARKANSAS RIVER SUBBASIN

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 mi².

Monthly and yearly discharge

Month	Total (ft ³ /s)	Mean (ft ³ /s)	Runoff (acre-feet)
October	13,050	421	25,880
November	3,811	127	7,560
December	6,069	196	12,040
January	53,782	1,735	106,700
February	23,290	803	46,200
March	17,950	579	35,600
April	67,734	2,258	134,400
May	210,692	6,797	417,900
June	198,496	6,617	393,200
July	96,649	3,118	191,700
August	100,497	3,242	199,300
September	35,989	2,866	170,600
Water year 1996	878,009	2,399	1,741,000

ARKANSAS RIVER SUBBASIN

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 mi² of which 12,541 mi² 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	5,682	349,400
November	4,180	248,700
December	4,575	281,300
January	6,046	371,800
February	5,459	314,000
March	4,314	265,300
April	4,940	284,000
May	10,554	648,300
June	14,143	841,600
July	7,179	441,400
August	15,040	924,800
September	16,923	1,007,000
Water year 1996	8,249	5,888,000

ILLINOIS RIVER SUBBASIN

07194800 ILLINOIS RIVER AT SAVOY, ARKANSAS

LOCATION.--Lat 36°06'11", long 94°20'39", in NW1/4SE1/4 sec.36, T.17 N., R.32 W., Washington County, Hydrologic Unit 11110103, on left bank at downstream side of State Highway 16 bridge, at Savoy.

DRAINAGE AREA.--167 mi².

AVERAGE DISCHARGE.--3 years (water years 1980, 86, 96) 106 ft³/s.

EXTREMES.--April 1979 to December 1981, October 1985 to September 1986, August to September 1995: maximum discharge 9,530 ft³/s Nov. 19, 1985; minimum 1.6 ft³/s Aug. 11, 1980.

REMARKS.--Water-discharge 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	399	26	10	12.9	791
November	453	22	12	15.1	899
December	1,370	323	15	42.2	2,590
January	5,365	1,310	29	173	10,640
February	1,189	65	28	41.0	2,360
March	1,384	247	20	44.6	2,750
April	11,537	3,090	54	385	22,880
May	8,481	2,710	39	274	16,820
June	1,358	167	17	45.3	2,690
July	838	179	11	27.0	1,660
August	358.3	24	7.8	11.6	711
September	7562.3	2,800	6.3	252	15,000
Water year 1996	40,231.6	3,090	6.3	110	79,800

ILLINOIS RIVER SUBBASIN

07194800 ILLINOIS RIVER AT SAVOY, ARKANSAS--CONTINUED

PERIOD OF RECORD.--April 1974 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 04...	1430	80513	80513	13	305	8.5	726	19.0	8.5
JAN 24...	1530	80513	80513	280	180	8.3	738	4.5	12.5

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, 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 04...	1430	96	460	180	200	30	1.1	99
JAN 24...	1530	101	760	>1200	>1200	40	30	94

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
JAN 31...	1002	80513	80513	60.0	0.30	0.30	70
JAN 31...	1003	80513	80513	60.0	0.30	0.30	--
JAN 31...	1004	80513	80513	60.0	0.30	0.30	--
JAN 31...	1005	80513	80513	60.0	0.40	0.40	--
JAN 31...	1006	80513	80513	60.0	0.30	0.30	--
JAN 31...	1007	80513	80513	60.0	0.50	0.50	--
JAN 31...	1008	80513	80513	60.0	0.50	0.50	--
JAN 31...	1009	80513	80513	60.0	0.60	0.60	--
JAN 31...	1010	80513	80513	60.0	0.40	0.40	--
JAN 31...	1011	80513	80513	60.0	0.40	0.40	--

DATE	TIME	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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (MG/L) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
JAN 31...	1002	245	8.0	1.0	15.0	109	742
JAN 31...	1003	246	8.0	1.0	12.1	87	742
JAN 31...	1004	244	7.8	1.0	12.1	87	742
JAN 31...	1005	245	7.8	1.0	12.3	89	742
JAN 31...	1006	245	7.8	1.0	12.2	89	742
JAN 31...	1007	245	7.8	1.0	12.5	91	742
JAN 31...	1008	245	7.8	1.0	12.3	90	742
JAN 31...	1009	245	7.8	1.0	12.5	91	742
JAN 31...	1010	245	7.8	1.0	12.4	90	742
JAN 31...	1011	245	7.8	1.5	12.7	92	742

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR 12...	1230	80513	80513	15	278	7.8	734	9.0	14.1
MAY 21...	1130	80513	80513	88	272	8.2	732	21.0	8.2
JUL 24...	0845	80513	80513	13	270	>8.4	734	25.5	5.3
AUG 29...	0900	80513	80513	19	282	8.0	737	23.5	6.2

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 12...	1230	127	K4	K17	K7	32	1.3	79
MAY 21...	1130	96	470	540	K170	97	23	43
JUL 24...	0845	67	200	190	1400	40	1.4	91
AUG 29...	0900	76	130	100	530	36	1.8	97

ILLINOIS RIVER SUBBASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS, ARKANSAS

LOCATION.--Lat 36°13'19", long 94°17'18", in SW1/4NE1/4 sec.21, T.18 N., R.31 W., Benton County, Hydrologic Unit 11110103, on left bank 0.7 mi downstream from Little Osage Creek, and 3.2 mi northwest of Elm Springs.

DRAINAGE AREA.--130 mi².

AVERAGE DISCHARGE.--25 years (water years 1951-75, 1996), 115 ft³/s.

EXTREMES.--October 1950 to September 1975, July to September 1995: maximum discharge 22,500 ft³/s May 19, 1961; minimum 4.7 ft³/s Sept. 4-6, 1954.

REMARKS.--Water-discharge records good. Low flow slightly regulated by operation of small lake at Cave Springs, and northwest Arkansas sewage treatment plant. 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	2,445	138	60	78.9	4,850
November	2,272	134	55	75.7	4,510
December	2,896	392	51	93.4	5,740
January	4,545	867	71	147	9,020
February	2,587	114	64	89.2	5,130
March	2,493	165	48	80.4	4,940
April	3,515	430	49	117	6,970
May	3,342	280	65	108	6,630
June	3,039	233	71	101	6,030
July	2,035	98	43	65.6	4,040
August	1,558	69	36	50.3	3,090
September	4,774	2,380	35	159	9,470
Water year 1996	35,501	2,380	35	97.0	70,420

ILLINOIS RIVER SUBBASIN

07195000 OSAGE CREEK NEAR ELM SPRINGS, ARKANSAS--CONTINUED

PERIOD OF RECORD.--April 1974 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 04...	1330	80513	80513	98	380	8.5	726	17.5	9.7
JAN 24...	1400	80513	80513	160	320	8.6	744	7.5	11.8

		OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DATE	TIME							
OCT 04...	1330	107	320	70	160	38	10	99
JAN 24...	1400	101	K39	70	K67	46	20	91

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
JAN 31...	1129	80513	80513	50.0	0.10	0.10	110
31...	1130	80513	80513	50.0	0.10	0.10	--
31...	1131	80513	80513	50.0	0.10	0.10	--
31...	1132	80513	80513	50.0	0.20	0.20	--
31...	1133	80513	80513	50.0	0.20	0.20	--
31...	1134	80513	80513	50.0	0.40	0.40	--
31...	1135	80513	80513	50.0	0.30	0.30	--
31...	1136	80513	80513	50.0	0.30	0.30	--
31...	1137	80513	80513	50.0	0.10	0.10	--
31...	1138	80513	80513	50.0	0.10	0.10	--

DATE	TIME	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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
JAN 31...	1129	389	8.6	2.0	14.5	107	742
31...	1130	389	8.5	2.0	11.8	87	742
31...	1131	388	8.3	2.0	10.8	81	742
31...	1132	388	8.2	2.0	11.9	89	742
31...	1133	388	8.2	2.0	12.4	92	742
31...	1134	388	8.1	2.0	12.5	93	742
31...	1135	387	8.2	2.0	12.6	94	742
31...	1136	388	8.2	2.0	12.7	95	742
31...	1137	388	8.2	2.0	12.4	93	742
31...	1138	387	8.2	2.0	12.9	96	742

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR 12...	1345	80513	80513	57	370	8.5	732	11.5	11.3
MAY 21...	1245	80513	80513	62	406	8.4	732	21.5	7.4
JUL 23...	1300	80513	80513	45	405	8.7	735	25.5	7.2
AUG 28...	1300	80513	80513	46	432	8.7	736	23.5	8.9

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 12...	1345	108	K35	K60	K36	43	6.6	91
MAY 21...	1245	87	490	160	200	59	9.9	94
JUL 23...	1300	92	340	310	390	36	4.4	87
AUG 28...	1300	109	250	190	520	43	5.3	98

ILLINOIS RIVER SUBBASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS, ARKANSAS

LOCATION.--Lat 36°06'31", long 94°32'00", in SE1/4NE1/4 sec.31, T.17 N., R.33 W., Benton County, Hydrologic Unit 11110103, at bridge on State Highway 59, 5.0 mi south of Siloam Springs, and 0.6 mi downstream from mouth of Cincinnati Creek.

DRAINAGE AREA.--575 mi².

EXTREMES.--July 1995 to current year: maximum discharge 27,900 ft³/s Sept. 27, 1996; gage height 18.19 ft; minimum 78 ft³/s Sept. 11, 1996.

REMARKS.--Water-discharge 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	5,412	310	142	175	10,730
November	4,977	226	141	166	9,870
December	7,770	862	138	251	15,410
January	18,110	3,680	218	584	35,920
February	7,030	338	191	242	13,940
March	6,955	677	157	224	13,800
April	27,486	6,650	275	916	54,520
May	23,255	7,110	192	750	46,130
June	6,781	606	134	226	13,450
July	4,728	323	106	153	9,380
August	3,872	188	99	125	7,680
September	26,616	13,500	92	887	52,790
Water year 1996	142,992	13,500	92	391	283,600

ILLINOIS RIVER SUBBASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS, ARKANSAS--CONTINUED

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	AGENCY LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 05...	1030	80513	81213	225	312	8.1	728	17.0	7.7	83
JAN 24...	1115	80513	81213	720	298	8.0	740	5.5	11.2	91

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	STREP-TOCOCCHI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)
OCT 05...	1030	87	58	94	120	44	1.9	13	19
JAN 24...	1115	K180	370	3300	110	40	2.1	7.2	12

DATE	TIME	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE, # FINER THAN .062 MM (70331)
OCT 05...	1030	0.5	4.4	12	15	194	28	17
JAN 24...	1115	0.3	3.0	13	9.6	166	30	58

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	STREAM WIDTH (FT) (00004)	SAM-PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOCATION, TOTAL (FEET) (81903)	SAMPLE LOCATION, CROSS SECTION (FT FW L BANK) (00009)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)
JAN 31...	0838	80513	80513	100	2.00	4.00	5.00	350
JAN 31...	0839	80513	80513	100	2.00	4.00	15.0	---
JAN 31...	0841	80513	80513	100	1.50	3.00	25.0	---
JAN 31...	0842	80513	80513	100	1.50	3.00	35.0	---
JAN 31...	0843	80513	80513	100	1.50	3.00	45.0	---
JAN 31...	0845	80513	80513	100	1.50	3.00	55.0	---
JAN 31...	0846	80513	80513	100	1.50	3.00	65.0	---
JAN 31...	0847	80513	80513	100	1.00	2.00	75.0	---
JAN 31...	0848	80513	80513	100	1.50	3.00	85.0	---
JAN 31...	0849	80513	80513	100	0.50	1.00	95.0	---

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	BARO-METRIC PRES-SURE (MM OF HG) (00025)
JAN 31...	0838	292	5.3	3.0	12.1	92	742
JAN 31...	0839	292	5.9	3.0	12.6	96	742
JAN 31...	0841	292	6.5	3.0	12.1	92	742
JAN 31...	0842	292	6.7	3.0	12.4	95	742
JAN 31...	0843	292	6.8	3.0	12.1	92	742
JAN 31...	0845	292	7.1	3.0	12.2	93	742
JAN 31...	0846	292	7.2	3.0	12.1	92	742
JAN 31...	0847	292	7.3	3.0	12.1	92	742
JAN 31...	0848	293	7.4	3.0	12.1	92	742
JAN 31...	0849	294	7.4	2.5	11.9	91	742

DATE	TIME	AGENCY COL-LECTING SAMPLE (CODE NUMBER)	AGENCY ANA-LYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR 13...	1000	80513	81213	130	338	7.5	733	9.5	10.3	93
MAY 22...	0930	80513	81213	390	301	7.9	735	21.0	6.6	77
JUL 24...	1100	80513	81213	117	340	8.7	737	27.0	6.4	83
AUG 29...	1000	80513	81213	130	356	8.7	740	24.0	6.1	75

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL /100 ML) (31633)	STREP-TOCOCCHI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)
MAR 13...	1000	K17	K27	K60	130	48	1.9	15	20
MAY 22...	0930	210	140	240	120	44	1.9	8.9	14
JUL 24...	1100	56	K38	62	130	49	1.9	17	21
AUG 29...	1000	74	64	190	130	49	2.0	21	25

ILLINOIS RIVER SUBBASIN

07195430 ILLINOIS RIVER SOUTH OF SILOAM SPRINGS, ARKANSAS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 13...	1000	0.6	3.3	14	17	188	19	6.7	69
MAY 22...	0930	0.4	3.3	10	11	184	38	40	85
JUL 24...	1100	0.6	4.5	13	18	198	37	12	83
AUG 29...	1000	0.8	4.8	20	22	210	39	14	96

ILLINOIS RIVER SUBBASIN

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 mi².

AVERAGE DISCHARGE.--41 years, 627 ft³/s.

EXTREMES.--August 1955 to current year: Maximum discharge 68,000 ft³/s July 25, 1960; minimum 8.6 ft³/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	5,824	297	152	188	11,550
November	5,439	233	162	181	10,790
December	8,212	987	151	265	16,290
January	19,255	3,270	224	621	38,190
February	7,092	347	193	245	14,070
March	7,358	883	156	237	14,590
April	30,797	7,180	286	1,027	61,090
May	26,643	7,320	255	859	52,850
June	8,346	778	167	278	16,550
July	5,194	303	113	168	10,300
August	3,918	179	100	126	7,770
September	25,653	11,900	89	855	50,880
Water year 1996	153,731	11,900	89	420	304,900

ILLINOIS RIVER SUBBASIN

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 mi².

AVERAGE DISCHARGE.--17 years, 49.5 ft³/s.

EXTREMES.--June 1979 to current year: Maximum discharge 6,650 ft³/s May 3, 1990; minimum daily 0.40 ft³/s Aug. 7, 1980.

REMARKS.--Water-discharge records good except periods of estimated daily discharges, which are poor. 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	400	23	10	12.9	793
November	591	25	16	19.7	1,170
December	567	28	15	18.3	1,120
January	873	60	16	28.2	1,730
February	639	26	19	22.0	1,270
March	525	40	12	16.9	1,040
April	753	56	16	25.1	1,490
May	940	93	15	30.3	1,860
June	599.1	44	8.9	20.0	1,190
July	231.0	17	4.0	7.45	458
August	189.1	16	4.0	6.10	375
September	967.2	446	5.0	32.2	1,920
Water year 1996	7,274.4	446	4.0	19.9	14,430

ILLINOIS RIVER SUBBASIN

07195855 FLINT CREEK NEAR WEST SILOAM SPRINGS, OKLAHOMA--CONTINUED

PERIOD OF RECORD.--June to September 1979, October 1991 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	BARO- METRIC PRES- SURE OF HG (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 04...	1130	80513	80513	16	280	7.9	729	17.5	7.3
JAN 24...	1230	80513	80513	13	260	8.9	739	5.5	12.3

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
OCT 04...	1130	80	70	K22	170	17	0.73	92
JAN 24...	1230	101	K28	K31	K34	13	0.46	76

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL FEET PER SECOND (00061)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
JAN 30...	1606	80513	80513	30.0	0.20	0.20	20
JAN 30...	1607	80513	80513	30.0	0.30	0.30	--
JAN 30...	1608	80513	80513	30.0	0.20	0.20	--
JAN 30...	1609	80513	80513	30.0	0.40	0.40	--
JAN 30...	1610	80513	80513	30.0	0.50	0.50	--
JAN 30...	1611	80513	80513	30.0	0.60	0.60	--
JAN 30...	1612	80513	80513	30.0	0.40	0.40	--
JAN 30...	1613	80513	80513	30.0	0.30	0.30	--
JAN 30...	1614	80513	80513	30.0	0.40	0.40	--
JAN 30...	1615	80513	80513	30.0	0.30	0.30	--

DATE	TIME	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)	BARO- METRIC PRES- SURE OF HG (00025)
JAN 30...	1606	264	8.2	4.0	13.8	106	755
JAN 30...	1607	263	8.1	4.0	12.7	98	755
JAN 30...	1608	263	8.1	4.0	12.2	94	755
JAN 30...	1609	264	8.1	4.0	11.6	90	755
JAN 30...	1610	264	8.0	4.0	12.5	96	755
JAN 30...	1611	263	8.0	4.0	12.0	93	755
JAN 30...	1612	262	8.0	4.0	12.0	93	755
JAN 30...	1613	263	8.0	4.0	11.7	90	755
JAN 30...	1614	262	8.0	4.0	10.6	82	755
JAN 30...	1615	262	8.0	4.0	11.0	85	755

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)	BARO- METRIC PRES- SURE OF HG (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR 12...	1100	80513	80513	13	280	7.6	736	9.5	11.6
MAY 21...	1030	80513	80513	21	266	8.5	734	21.0	7.1
JUL 23...	1100	80513	80513	4.5	332	8.6	737	25.0	6.5
AUG 28...	1200	80513	80513	15	282	8.0	740	23.5	6.9

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
MAR 12...	1100	105	62	39	K20	46	1.6	78
MAY 21...	1030	83	210	240	170	43	2.4	79
JUL 23...	1100	81	210	140	230	31	0.38	75
AUG 28...	1200	84	240	190	730	29	1.2	95

ILLINOIS RIVER SUBBASIN

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 mi².

AVERAGE DISCHARGE.--38 years, 44.9 ft³/s.

EXTREMES.--April 1958 to current year: Maximum discharge 20,900 ft³/s Nov. 18, 1985; no flow at times.

REMARKS.--Water-discharge 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	234.48	49	0.26	7.56	465
November	170.25	19	.00	5.67	338
December	702.5	164	4.5	22.7	1,390
January	2,907	1,330	15	93.8	5,770
February	359.5	26	6.5	12.4	713
March	434.9	111	4.8	14.0	863
April	3,823	1,770	16	127	7,580
May	1,826.7	504	9.7	58.9	3,620
June	304.9	45	2.2	10.2	605
July	465.4	195	1.2	15.0	923
August	110.33	32	.18	3.56	219
September	3,373.11	2,870	.24	112	6,690
Water year 1996	14,712.07	2,870	.00	40.2	29,180

ILLINOIS RIVER SUBBASIN

07196900 BARON FORK AT DUTCH MILLS, ARKANSAS--CONTINUED

PERIOD OF RECORD.--October 1960 to September 1961, October 1968 to current year.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT 04...	1000	80513	80513	12	310	8.0	728	16.0	7.1
JAN 24...	0950	80513	80513	74	252	7.7	738	2.5	10.3

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCOCI 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)
OCT 04...	1000	75	>1400	1000	1000	23	0.75	100
JAN 24...	0950	78	240	540	3400	18	3.6	85

DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	SAMPLE AT- TION, CROSS SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)
JAN 30...	1422	80513	80513	50.0	0.0	0.0	2.50	35
30...	1423	80513	80513	50.0	0.0	0.0	7.50	--
30...	1424	80513	80513	50.0	0.0	0.0	12.5	--
30...	1425	80513	80513	50.0	0.0	0.0	17.5	--
30...	1426	80513	80513	50.0	0.0	0.0	22.5	--
30...	1427	80513	80513	50.0	0.0	0.0	27.5	--
30...	1428	80513	80513	50.0	0.20	0.20	32.5	--
30...	1429	80513	80513	50.0	0.50	1.00	37.5	--
30...	1430	80513	80513	50.0	0.50	1.00	42.5	--
30...	1431	80513	80513	50.0	0.50	1.00	47.5	--

DATE	TIME	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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
JAN 30...	1422	289	8.0	5.0	13.3	104	755
30...	1423	272	8.0	5.0	12.6	99	755
30...	1424	288	8.0	5.0	12.4	97	755
30...	1425	288	8.0	5.0	12.1	95	755
30...	1426	287	8.0	5.0	12.0	95	755
30...	1427	287	8.0	5.0	12.1	95	755
30...	1428	288	8.0	5.0	12.3	97	755
30...	1429	288	8.0	5.0	12.3	97	755
30...	1430	289	8.0	5.0	12.3	97	755
30...	1431	288	8.0	5.0	12.5	98	755

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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAR 12...	0950	80513	80513	6.0	320	7.5	736	9.0	12.3
MAY 21...	0915	80513	80513	26	312	8.1	732	21.0	7.1
JUL 23...	1000	80513	80513	4.0	310	8.3	736	26.5	5.2
AUG 28...	1015	80513	80513	11	370	8.4	737	23.0	5.9

DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCOCI 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)
MAR 12...	0950	110	K29	K20	K13	35	0.57	87
MAY 21...	0915	83	660	1100	210	47	3.3	71
JUL 23...	1000	68	K2100	K3100	K750	31	0.33	94
AUG 28...	1015	71	980	510	1400	--	--	--

ARKANSAS RIVER SUBBASIN

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 mi², of which 9,700 mi² is probably noncontributing.

AVERAGE DISCHARGE.--25 years (water years 1939-63), 6,005 ft³/s; 29 years (water years 1968-96), 6,779 ft³/s.

EXTREMES.--July 1938 to current year: Maximum discharge 281,000 ft³/s May 10, 1943; minimum daily 0.4 ft³/s Oct. 8, 1956.

REMARKS.--Records fair. 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. 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	83,376	9,860	118	2,690	165,400
November	24,496	2,490	104	817	48,950
December	21,763	1,920	71	702	43,170
January	50,549	3,970	83	1,631	100,300
February	40,924	2,940	93	1,411	81,170
March	46,746	3,900	64	1,508	92,720
April	239,953	28,500	53	7,998	475,900
May	181,440	18,100	350	5,853	359,900
June	98,794	7,070	153	3,293	196,000
July	165,902	12,700	168	5,352	329,100
August	177,658	12,800	324	5,731	352,400
September	95,869	12,600	341	3,196	190,200
Water year 1996	1,227,470	28,500	53	3,354	2,435,000

POTEAU RIVER SUBBASIN

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 mi².

AVERAGE DISCHARGE.--Prior to regulation, 35 years (water years 1940-74), 218 ft³/s; 22 years (water years 1975-96) 243 ft³/s.

EXTREMES.--February 1939 to current year: Maximum discharge 32,200 ft³/s May 20, 1960; no flow at times in most years.

REMARKS.--Water-discharge records good, except estimated daily discharges, which are fair. As of September 1974, flow from 92.2 mi² 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. 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	22.84	2.8	0.14	0.74	45
November	62.6	2.7	1.6	2.09	124
December	1,067.4	441	1.8	34.4	2,120
January	4,163.8	722	1.8	134	8,260
February	1,032	107	11	35.6	2,050
March	4,401	655	17	142	8,730
April	15,773	3,840	92	526	31,290
May	2,532	300	12	81.7	5,020
June	8,665	1,050	15	289	17,190
July	3,895	543	17	126	7,730
August	2,903.9	929	4.0	93.7	5,760
September	4,965.5	2,020	1.0	166	9,850
Water year 1996	49,484.04	3,840	0.14	135	98,150

POTEAU RIVER SUBBASIN

07247000 POTEAU RIVER AT CAUTHERON, ARKANSAS--CONTINUED

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
JUN											
14...	0800	20.0	22.5	750	1028	1028	356	5.06	62	5.2	7.0
14...	0804	30.0	22.5	750	1028	1028	356	5.06	60	5.5	6.9
14...	0810	40.0	22.5	750	1028	1028	356	5.06	60	5.6	6.9
14...	0815	50.0	22.5	750	1028	1028	356	5.06	60	5.6	6.9
14...	0819	60.0	22.5	750	1028	1028	356	5.06	60	5.6	6.9
14...	0823	70.0	22.5	750	1028	1028	356	5.06	60	5.8	6.8
14...	0829	80.0	23.0	750	1028	1028	356	5.06	60	6.2	6.9
14...	0832	90.0	22.5	750	1028	1028	356	5.06	63	6.2	6.8
14...	0836	100	23.0	750	1028	1028	356	5.06	60	6.2	6.9
14...	0840	110	23.0	750	1028	1028	356	5.06	63	6.0	7.0

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 AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)
NOV									
29...	0805	1028	80020	2.2	210	7.7	-2.0	7.0	761
JAN									
11...	0755	1028	80020	41	106	7.1	8.5	2.5	752
FEB									
20...	0740	1028	80020	12	111	7.6	6.5	9.0	748
MAR									
28...	0920	1028	80020	500	86	7.0	9.0	10.0	754
APR									
22...	1600	1028	80020	6680	*57	7.3	15.5	17.5	748
22...	1910	1028	80020	7430	49	7.0	16.0	16.0	749
22...	2200	1028	80020	7450	49	7.1	14.5	15.5	751
23...	0940	1028	80020	2150	53	6.7	12.5	15.5	761
23...	1445	1028	80020	1630	53	6.7	23.0	16.5	758
MAY									
22...	1440	1028	80020	18	83	7.0	23.5	25.5	746
JUN									
27...	0745	1028	80020	665	103	7.0	24.0	25.5	753

*laboratory value instead of field value

DATE	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)
NOV									
29...	8.0	66	52	0	43	--	--	<0.050	<0.015
JAN									
11...	12.1	90	14	0	12	1.10	1.10	1.10	0.040
FEB									
20...	12.2	108	21	0	17	0.690	0.690	0.690	<0.015
MAR									
28...	8.2	74	12	0	10	0.180	0.180	0.180	0.040
APR									
22...	7.2	77	12	0	10	0.190	0.190	0.190	0.130
22...	7.2	74	10	0	8	0.160	0.160	0.160	0.100
22...	7.5	76	10	0	8	0.110	0.110	0.110	0.090
23...	8.6	86	11	0	9	0.100	0.100	0.100	0.050
23...	8.5	87	13	0	10	0.100	0.100	0.100	0.050
MAY									
22...	6.3	79	20	0	17	0.070	0.070	0.070	0.060
JUN									
27...	4.6	57	23	0	19	0.670	0.670	0.670	0.110

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00665)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00660)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
NOV									
29...	--	0.70	0.70	0.70	0.170	0.080	0.25	5	0.03
JAN									
11...	0.05	0.56	0.60	1.7	0.360	0.310	0.95	8	0.92
FEB									
20...	--	0.80	0.80	1.5	0.670	0.450	1.4	12	0.38
MAR									
28...	0.05	0.66	0.70	0.88	0.200	0.130	0.40	47	64
APR									
22...	0.17	2.2	2.3	2.5	0.990	0.080	0.25	658	11900
22...	0.13	1.9	2.0	2.2	0.830	0.100	0.31	652	13100
22...	0.12	1.2	1.3	1.4	0.550	0.130	0.40	432	8690
23...	0.06	1.0	1.1	1.2	0.290	0.110	0.34	125	726
23...	0.06	0.75	0.80	0.90	0.210	0.090	0.28	88	387
MAY									
22...	0.08	0.64	0.70	0.77	0.230	0.160	0.49	21	1.0
JUN									
27...	0.14	1.3	1.4	2.1	0.820	0.550	1.7	117	210

POTEAU RIVER SUBBASIN

07247000 POTEAU RIVER AT CAUTHRON, ARKANSAS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 11...	1030	80513	81213	0.80	308	8.5	752	18.5	9.5
DEC 13...	1300	80513	81213	3.8	220	8.4	742	7.0	10.6
		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)
OCT 11...	1030	140	K36	120	26	3.7	4.1	48	69
DEC 13...	1300	160	160	K26	25	4.1	3.7	26	59
		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, DIS- SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 11...	1030	4	16	25	49	210	32	0.07	92
DEC 13...	1300	2	11	13	24	133	4	0.04	35
		AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FT) (81903)	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	
JAN 29...	1423	80513	80513	100	0.0	0.0	5.00	130	
29...	1424	80513	80513	100	0.0	0.0	15.0	--	
29...	1425	80513	80513	100	0.0	0.0	25.0	--	
29...	1427	80513	80513	100	0.30	0.30	35.0	--	
29...	1428	80513	80513	100	0.50	0.50	45.0	--	
29...	1429	80513	80513	100	0.50	1.00	55.0	--	
29...	1430	80513	80513	100	0.50	0.50	65.0	--	
29...	1431	80513	80513	100	0.50	0.50	75.0	--	
29...	1432	80513	80513	100	0.20	0.20	85.0	--	
29...	1433	80513	80513	100	0.0	0.0	95.0	--	
		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)		
JAN 29...	1423	69	6.9	6.0	11.9	97	750		
29...	1424	69	6.8	6.0	11.9	97	750		
29...	1425	66	6.7	6.0	12.1	98	750		
29...	1427	69	6.7	6.0	12.0	98	750		
29...	1428	69	6.8	6.0	12.1	99	750		
29...	1429	69	6.9	6.0	12.2	99	750		
29...	1430	69	6.7	6.0	12.1	98	750		
29...	1431	69	6.7	6.0	12.2	99	750		
29...	1432	70	6.7	6.0	12.1	98	750		
29...	1433	70	6.7	6.0	12.2	99	750		
		AGENCY COL- LECTING SAMPLE (CODE NUMBER)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
MAR 19...	1210	80513	81213	410	128	7.5	749	10.0	8.6
MAY 29...	1030	80513	81213	39	126	9.0	746	25.0	5.2
JUL 31...	1000	80513	81213	350	110	7.1	749	25.0	4.1
SEP 04...	1130	80513	81213	9.0	80	7.0	746	24.5	4.5
		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)
MAR 19...	1210	>1200	>1200	>2000	26	5.1	3.1	9.0	39
MAY 29...	1030	K36	K20	96	21	3.5	2.9	9.0	43
JUL 31...	1000	K1400	>1600	K5600	16	3.2	2.0	7.6	41
SEP 04...	1130	70	K39	160	20	3.7	2.6	5.3	30

POTEAU RIVER SUBBASIN
07247000 POTEAU RIVER AT CAUTHERON, ARKANSAS--CONTINUED
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SEDI- MENT, CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 19...	1210	0.8	4.3	14	10	84	128	142	85
MAY 29...	1030	0.9	3.8	8.5	8.4	68	32	3.4	86
JUL 31...	1000	0.8	5.6	7.5	8.5	76	90	85	87
SEP 04...	1130	0.5	5.3	6.8	4.6	68	29	0.70	95

POTEAU RIVER SUBBASIN

07247015 POTEAU RIVER NEAR 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 mi².

AVERAGE DISCHARGE.--4 years, 306 ft³/s.

EXTREMES.--April 1992 to current year: Maximum discharge 8,540 ft³/s Jan. 14, 1995; minimum daily 0.36 ft³/s September 21, 1994.

REMARKS.--Water-discharge records poor. Some regulation by small flood-retarding structures. 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	122.2	13	1.2	3.94	242
November	97.4	5.1	2.1	3.25	193
December	1,475.5	437	2.4	47.6	2,930
January	4,615	835	15	149	9,150
February	990	89	17	34.1	1,960
March	5,270	843	24	170	10,450
April	18,804	4,760	58	627	37,300
May	2,971	340	19	95.8	5,890
June	6,228	873	13	208	12,350
July	2,387.3	485	5.5	77.0	4,740
August	2,048.5	554	5.3	66.1	4,060
September	5,686.8	2,980	6.3	190	11,280
Water year 1996	50,695.7	4,760	1.2	139	100,600

POTEAU RIVER SUBBASIN

07247015 POTEAU RIVER AT LOVING, OKLAHOMA--CONTINUED

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE OF HG (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
JUN											
14...	0930	10.0	23.5	751	1028	1028	286	10.45	53	5.6	6.6
14...	0935	20.0	23.5	751	1028	1028	286	10.45	52	5.6	6.6
14...	0940	30.0	23.5	751	1028	1028	286	10.45	52	5.8	6.7
14...	0944	40.0	23.5	751	1028	1028	286	10.45	52	5.8	6.6
14...	0950	50.0	23.5	751	1028	1028	286	10.45	52	5.8	6.7
14...	0955	60.0	23.5	751	1028	1028	286	10.45	52	5.6	6.7
14...	1003	70.0	23.5	751	1028	1028	286	10.45	52	5.6	6.7
14...	1010	80.0	23.5	751	1028	1028	286	10.45	54	5.4	6.7

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 AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE OF HG (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED SATUR- ATION (00301)
NOV												
29...	1420	1028	80020	3.0	186	7.4	10.0	8.5	--	758	7.2	62
JAN												
11...	1530	1028	80020	55	101	7.3	12.0	4.0	--	752	13.0	100
FEB												
21...	0735	1028	80020	17	102	7.2	7.0	8.5	--	750	10.7	93
MAR												
28...	1030	1028	80020	836	76	7.0	9.0	9.5	--	756	8.7	76
APR												
22...	1500	1028	80020	6450	*44	6.8	--	--	--	--	--	--
22...	1715	1028	80020	6890	43	6.6	16.5	16.0	--	749	6.7	69
23...	0540	1028	80020	7020	48	7.1	8.0	14.0	--	760	7.0	68
23...	1040	1028	80020	5720	49	6.4	17.0	15.5	--	762	7.6	76
23...	1550	1028	80020	3250	51	6.6	15.5	16.5	--	759	8.1	84
MAY												
22...	1525	1028	80020	81	87	7.3	27.0	26.0	--	745	5.0	63
JUN												
27...	0855	1028	80020	300	96	6.9	24.5	28.0	--	754	4.4	57
JUL												
16...	1250	1028	80020	136	67	7.2	31.0	26.0	--	750	5.8	73
SEP												
06...	0810	1028	80020	11	80	7.2	19.0	25.0	7.8	751	5.0	61

*laboratory value instead of field value

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE FECAL, TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOC- CI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
NOV											
29...	--	--	--	--	--	--	--	--	--	--	64
JAN											
11...	--	--	--	--	--	--	--	--	--	--	17
FEB											
21...	--	--	--	--	--	--	--	--	--	--	18
MAR											
28...	--	--	--	--	--	--	--	--	--	--	11
APR											
22...	--	--	--	--	--	--	--	--	--	--	18
22...	--	--	--	--	--	--	--	--	--	--	10
23...	--	--	--	--	--	--	--	--	--	--	10
23...	--	--	--	--	--	--	--	--	--	--	9
23...	--	--	--	--	--	--	--	--	--	--	11
MAY											
22...	--	--	--	--	--	--	--	--	--	--	21
JUN											
27...	--	--	--	--	--	--	--	--	--	--	23
JUL											
16...	200	170	500	17	2	3.0	2.2	4.7	33	0.5	18
SEP											
06...	88	K13	450	19	2	3.1	2.8	4.8	29	0.5	21

POTEAU RIVER SUBBASIN
07247015 POTEAU RIVER AT LOVING, OKLAHOMA--CONTINUED
WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
NOV 29...	0	52	--	--	--	--	--	--	--	--	--	--
JAN 11...	0	14	--	--	--	--	--	--	--	0.610	--	--
FEB 21...	0	14	--	--	--	--	--	--	--	0.220	--	--
MAR 28...	0	9	--	--	--	--	--	--	--	0.190	--	--
APR 22...	0	15	--	--	--	--	--	--	--	0.150	--	--
22...	0	8	--	--	--	--	--	--	--	0.140	--	--
23...	0	7	--	--	--	--	--	--	--	0.170	--	--
23...	0	7	--	--	--	--	--	--	--	0.150	--	--
23...	0	9	--	--	--	--	--	--	--	0.180	--	--
MAY 22...	0	17	--	--	--	--	--	--	--	0.130	--	--
JUN 27...	0	19	--	--	--	--	--	--	--	0.110	--	--
JUL 16...	0	14	7.4	3.2	50	34	0.07	18.4	25	0.240	0.240	1.1
SEP 06...	0	17	6.7	4.9	58	40	0.08	1.72	11	0.290	0.290	1.3

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 DIS- SOLVED (MG/L AS P) (00666)
NOV 29...	--	--	--	<0.050	<0.015	--	0.70	0.70	0.70	0.190	--
JAN 11...	--	--	0.610	0.610	0.030	0.04	0.57	0.60	1.2	0.210	--
FEB 21...	--	--	0.220	0.220	<0.015	--	0.60	0.60	0.82	0.300	--
MAR 28...	--	--	0.190	0.190	0.050	0.06	0.95	1.0	1.2	0.280	--
APR 22...	--	--	0.150	0.150	0.070	0.09	1.8	1.9	2.1	0.560	--
22...	--	--	0.140	0.140	0.070	0.09	0.83	0.90	1.0	0.170	--
23...	--	--	0.170	0.170	0.080	0.10	0.92	1.0	1.2	0.230	--
23...	--	--	0.150	0.150	0.060	0.08	1.2	1.3	1.5	0.340	--
23...	--	--	0.180	0.180	0.050	0.06	1.0	1.1	1.3	0.300	--
MAY 22...	--	--	0.130	0.130	0.050	0.06	0.45	0.50	0.63	0.150	--
JUN 27...	--	--	0.110	0.110	0.160	0.21	1.8	2.0	2.1	0.440	--
JUL 16...	0.020	0.07	0.260	0.260	0.100	0.13	0.70	0.80	1.1	0.180	0.070
SEP 06...	0.010	0.03	0.300	0.300	0.050	0.06	0.55	0.60	0.90	0.150	0.120

DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	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 0.62 MM (70331)	CHLORO- PHYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	PHEO- PHYTTIN PHYTO- PLANK- TON ACID M. (UG/L) (32218)	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)
NOV 29...	0.010	0.03	--	4	0.03	--	--	--	--	--	--
JAN 11...	0.150	0.46	--	12	1.8	--	--	--	--	--	--
FEB 21...	0.140	0.43	--	15	0.69	--	--	--	--	--	--
MAR 28...	0.130	0.40	--	162	365	--	--	--	--	--	--
APR 22...	0.060	0.18	--	589	10300	--	--	--	--	--	--
22...	0.060	0.18	--	426	7920	--	--	--	--	--	--
23...	0.110	0.34	--	308	5840	--	--	--	--	--	--
23...	0.110	0.34	--	164	2530	--	--	--	--	--	--
23...	0.090	0.28	--	143	1250	--	--	--	--	--	--
MAY 22...	0.060	0.18	--	26	5.7	--	--	--	--	--	--
JUN 27...	0.100	0.31	--	134	109	--	--	--	--	--	--
JUL 16...	0.120	0.37	51	40	15	62	<1.00	<1.00	<1.00	<1.00	<1.00
SEP 06...	0.140	0.43	68	27	0.80	86	6.00	<1.00	6.00	<1.00	<1.00

POTEAU RIVER SUBBASIN

07247250 BLACK FORK BELOW BIG CREEK NEAR PAGE, OKLAHOMA

LOCATION.--Lat 34°46'25", long 94°30'43", 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 mi².

AVERAGE DISCHARGE.--4 years, 168 ft³/s.

EXTREMES.--March 1992 to current year: Maximum discharge 19,600 ft³/s Nov. 5, 1994; no flow at times.

REMARKS.--Water-discharge 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	43.70	12	0.02	1.41	87
November	30.98	2.5	.39	1.03	61
December	744.94	197	.38	24.0	1,480
January	5,024	639	15	162	9,970
February	875	67	15	30.2	1,740
March	3,140	720	18	101	6,230
April	6,179	1,030	60	206	12,260
May	2,721	467	10	87.8	5,400
June	745.3	138	2.4	24.8	1,480
July	2,399.59	725	.67	77.4	4,760
August	1,123.7	158	5.0	36.2	2,230
September	1,448.3	434	2.4	48.3	2,870
Water year 1996	24,475.51	1,030	0.02	66.9	48,550

POTEAU RIVER SUBBASIN

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

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)		
JUN													
14...	1048	6.00	26.0	745	1028	1028	14	4.17	31	6.8	6.9		
14...	1053	9.00	26.0	745	1028	1028	14	4.17	31	6.6	6.9		
14...	1057	12.0	26.0	745	1028	1028	14	4.17	31	7.0	6.9		
14...	1102	15.0	26.0	745	1028	1028	14	4.17	31	7.0	6.9		
14...	1108	18.0	26.0	745	1028	1028	14	4.17	31	7.0	6.9		
14...	1113	21.0	26.0	745	1028	1028	14	4.17	31	6.7	6.9		
14...	1118	24.0	26.0	745	1028	1028	14	4.17	31	6.7	6.9		
14...	1123	27.0	26.0	745	1028	1028	14	4.17	31	6.6	6.9		
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 AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
NOV													
30...	0755	1028	80020	0.39	55	7.0	-1.0	5.5	--	755	10.3	82	
JAN													
12...	0740	1028	80020	130	37	6.8	-1.0	4.5	--	755	11.8	92	
FEB													
21...	0900	1028	80020	20	39	6.6	14.5	10.5	--	746	10.7	98	
MAR													
28...	1155	1028	80020	941	34	6.6	8.0	8.5	--	750	7.8	68	
MAY													
23...	0735	1028	80020	45	32	6.9	26.5	24.0	--	740	6.1	74	
JUN													
27...	1000	1028	80020	2.3	42	6.7	31.0	27.5	--	749	5.5	71	
JUL													
17...	1415	1028	80020	87	32	6.8	34.0	27.5	--	747	7.3	95	
SEP													
05...	0750	1028	80020	5.3	39	7.1	22.0	23.5	1.6	748	6.2	74	
DATE		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCEI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L) AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L) AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L) AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	
NOV													
30...	--	--	--	--	--	--	--	--	--	--	--	20	
JAN													
12...	--	--	--	--	--	--	--	--	--	--	--	5	
FEB													
21...	--	--	--	--	--	--	--	--	--	--	--	8	
MAR													
28...	--	--	--	--	--	--	--	--	--	--	--	5	
MAY													
23...	--	--	--	--	--	--	--	--	--	--	--	8	
JUN													
27...	--	--	--	--	--	--	--	--	--	--	--	14	
JUL													
17...	93	40	140	7	1	1.2	0.98	2.6	39	0.4	1.3	7	
SEP													
05...	90	30	K2300	10	0	1.6	1.4	2.8	35	0.4	1.4	13	
DATE		CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L) AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L) AS NO3) (71851)
NOV													
30...	0	16	--	--	--	--	--	--	--	--	--	--	--
JAN													
12...	0	4	--	--	--	--	--	--	--	--	0.290	--	--
FEB													
21...	0	6	--	--	--	--	--	--	--	--	0.170	--	--
MAR													
28...	0	3	--	--	--	--	--	--	--	--	0.150	--	--
MAY													
23...	0	6	--	--	--	--	--	--	--	--	0.070	--	--
JUN													
27...	0	12	--	--	--	--	--	--	--	--	0.080	--	--
JUL													
17...	0	6	3.4	2.3	30	16	0.04	7.05	8	0.170	0.170	0.75	--
SEP													
05...	0	11	2.5	2.8	29	19	0.04	0.41	4	0.060	--	--	--

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 DIS- SOLVED (MG/L AS P) (00666)
NOV 30...	--	--	--	<0.050	<0.015	--	0.30	0.30	0.30	0.050	--
JAN 12...	--	--	0.290	0.290	<0.015	--	0.30	0.30	0.59	0.010	--
FEB 21...	--	--	0.170	0.170	<0.015	--	0.20	0.20	0.37	0.030	--
MAR 28...	--	--	0.150	0.150	0.020	0.03	0.48	0.50	0.65	0.050	--
MAY 23...	--	--	0.070	0.070	0.040	0.05	0.16	0.20	0.27	0.030	--
JUN 27...	--	--	0.080	0.080	0.070	0.09	0.33	0.40	0.48	0.010	--
JUL 17...	0.010	0.03	0.180	0.180	0.090	0.12	0.41	0.50	0.68	0.010	<0.010
SEP 05...	<0.010	--	0.060	0.060	0.030	0.04	0.27	0.30	0.36	0.020	0.020
DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	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)	CHLORO- PHYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	PHEO- PHYTTIN PHYTO- PLANK- TON ACID M. (UG/L) (32218)	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)
NOV 30...	<0.010	--	--	9	0.01	--	--	--	--	--	--
JAN 12...	<0.010	--	--	1	0.46	--	--	--	--	--	--
FEB 21...	<0.010	--	--	5	0.26	--	--	--	--	--	--
MAR 28...	0.030	0.09	--	34	86	--	--	--	--	--	--
MAY 23...	<0.010	--	--	8	0.95	--	--	--	--	--	--
JUN 27...	0.010	0.03	--	5	0.03	--	--	--	--	--	--
JUL 17...	<0.010	--	14	15	3.5	85	<1.00	<1.00	<1.00	<1.00	
<1.00											
SEP 05...	0.020	0.06	20	18	0.26	81	<1.00	4.00	3.00	<1.00	
<1.00											

POTEAU RIVER SUBBASIN

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 0.4 mi east of Hodgen, Oklahoma.

DRAINAGE AREA.--179 mi².

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (000009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
JUN											
13...	1235	6.00	26.5	748	1028	1028	38	9.53	40	7.4	7.2
13...	1239	11.0	26.5	748	1028	1028	38	9.53	40	7.5	7.2
13...	1243	16.0	26.0	748	1028	1028	38	9.53	40	7.4	7.2
13...	1247	21.0	26.0	748	1028	1028	38	9.53	40	7.3	7.1
13...	1253	26.0	26.5	748	1028	1028	38	9.53	40	7.3	7.1
13...	1259	31.0	26.5	748	1028	1028	38	9.53	40	7.3	7.1
13...	1305	36.0	26.5	748	1028	1028	38	9.53	40	7.4	7.1
13...	1309	41.0	27.5	748	1028	1028	38	9.53	41	7.1	7.2

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 AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV												
28...	1520	1028	80020	1.3	*63	7.8	3.5	10.5	--	760	8.4	76
JAN												
12...	0910	1028	80020	176	45	6.8	3.5	4.5	--	761	12.6	98
FEB												
21...	1010	1028	80020	29	46	6.6	21.5	12.0	--	749	10.7	101
MAR												
29...	1100	1028	80020	931	*47	6.9	14.5	11.5	--	755	10.3	96
MAY												
22...	1300	1028	80020	225	38	7.5	21.5	25.0	--	749	7.4	91
JUN												
25...	1230	1028	80020	7.4	44	7.3	32.0	31.0	--	749	6.5	89
JUL												
18...	0820	1028	80020	106	34	6.6	27.0	28.0	--	753	7.4	96
SEP												
05...	1030	1028	80020	15	45	7.2	30.0	26.0	2.5	752	7.6	95

*laboratory value instead of field value

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOC FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM SUM OF 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 PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)
NOV												
28...	--	--	--	--	--	--	--	--	--	--	--	22
JAN												
12...	--	--	--	--	--	--	--	--	--	--	--	6
FEB												
21...	--	--	--	--	--	--	--	--	--	--	--	10
MAR												
29...	--	--	--	--	--	--	--	--	--	--	--	6
MAY												
22...	--	--	--	--	--	--	--	--	--	--	--	10
JUN												
25...	--	--	--	--	--	--	--	--	--	--	--	15
JUL												
18...	96	44	210	9	3	1.5	1.2	2.5	34	0.4	1.4	7
SEP												
05...	69	K2	K7	11	0	1.4	1.8	3.5	37	0.5	1.5	15

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINIT WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
NOV												
28...	0	18	--	--	--	--	--	--	--	--	--	--
JAN												
12...	0	5	--	--	--	--	--	--	--	0.310	--	--
FEB												
21...	0	8	--	--	--	--	--	--	--	0.080	--	--
MAR												
29...	0	5	--	--	--	--	--	--	--	0.150	--	--
MAY												
22...	0	8	--	--	--	--	--	--	--	0.060	--	--
JUN												
25...	0	12	--	--	--	--	--	--	--	0.060	--	--
JUL												
18...	0	5	3.7	1.9	31	17	0.04	8.87	8	0.160	0.160	0.71
SEP												
05...	0	12	3.7	3.0	25	22	0.03	1.0	6	--	--	--

POTEAU RIVER SUBBASIN
07247345 BLACK FORK AT HODGEN, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 DIS- SOLVED (MG/L AS P) (00666)
NOV 28...	--	--	--	<0.050	<0.015	--	0.40	0.40	0.40	<0.010	--
JAN 12...	--	--	0.310	0.310	<0.015	--	0.40	0.40	0.71	0.040	--
FEB 21...	--	--	0.080	0.080	<0.015	--	0.30	0.30	0.38	<0.010	--
MAR 29...	--	--	0.150	0.150	0.030	0.04	0.47	0.50	0.65	0.020	--
MAY 22...	--	--	0.060	0.060	0.060	0.08	0.24	0.30	0.36	0.030	--
JUN 25...	--	--	0.060	0.060	0.050	0.06	0.45	0.50	0.56	0.030	--
JUL 18...	0.020	0.07	0.180	0.180	0.130	0.17	0.27	0.40	0.58	0.030	<0.010
SEP 05...	<0.010	--	--	<0.050	0.020	0.03	0.28	0.30	0.30	0.030	0.030
DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	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)	CHLORO- PHYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	PHEO- PHYTTIN PHYTO- PLANK- TON ACID M. (UG/L) (32218)	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)
NOV 28...	<0.010	--	--	2	0.01	--	--	--	--	--	--
JAN 12...	<0.010	--	--	7	3.3	--	--	--	--	--	--
FEB 21...	<0.010	--	--	6	0.44	--	--	--	--	--	--
MAR 29...	0.020	0.06	--	28	69	--	--	--	--	--	--
MAY 22...	<0.010	--	--	12	7.2	--	--	--	--	--	--
JUN 25...	0.010	0.03	--	7	0.13	--	--	--	--	--	--
JUL 18...	<0.010	--	30	18	5.2	68	<1.00	<1.00	<1.00	<1.00	<1.00
SEP 05...	<0.010	--	15	13	0.52	76	3.00	4.00	6.00	1.00	<1.00

POTEAU RIVER SUBBASIN

07247500 FOURCHE MALINE NEAR RED OAK, OKLAHOMA

LOCATION.--Lat 34°54'45", long 95°09'20", in NW1/4NW1/4 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.

AVERAGE DISCHARGE.--57 years (1939-90, 1991-96), 134 ft³/s.

EXTREMES.--October 1938 to April 1991, October 1991 to current year: Maximum discharge 41,500 ft³/s May 19, 1960; no flow at times.

REMARKS.--Water-discharge records fair. Some regulation by several flood-retarding structures. 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	1,437.6	618	3.8	46.4	2,850
November	190.7	10	5.2	6.36	378
December	1,050.9	254	4.3	33.9	2,080
January	4,184	828	21	135	8,300
February	505.4	45	6.7	17.4	1,000
March	3,836.2	1,430	5.8	124	7,610
April	14,099	2,920	42	470	27,970
May	4,821	1,240	19	156	9,560
June	1,155.5	265	4.8	38.5	2,290
July	2,398.0	608	2.8	77.4	4,760
August	617.2	158	4.1	19.9	1,220
September	3,554.0	1,300	3.2	118	7,050
Water year 1996	37,849.5	2,920	2.8	103	75,070

POTEAU RIVER SUBBASIN

07247500 FOURCHE MALINE NEAR RED OAK, OKLAHOMA--CONTINUED

PERIOD OF RECORD.--Water years 1952, 1954, 1956-60, 1978, 1979, December 1991 to July 1996 (discontinued).

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 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE	TEMPER-	BARO-	AGENCY	AGENCY	DIS-	GAGE	SPE-	OXYGEN,	PH
		LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	ATURE WATER (DEG C) (00010)	METRIC PRES- SURE (MM OF HG) (00025)	COL- LECTING SAMPLE (CODE NUMBER) (00027)	ANA- LYZING SAMPLE (CODE NUMBER) (00028)	CHARGE, INST. CUBIC FEET PER SECOND (00061)		CIFIC CON- DUCT- ANCE (US/CM) (00095)		
JUN											
13...	0823	2.00	23.5	750	1028	1028	18	2.54	122	5.0	7.3
13...	0826	5.00	23.5	750	1028	1028	18	2.54	122	4.8	7.3
13...	0832	8.00	23.5	750	1028	1028	18	2.54	122	4.9	7.2
13...	0836	11.0	23.5	750	1028	1028	18	2.54	122	4.9	7.1
13...	0840	14.0	23.5	750	1028	1028	18	2.54	122	5.0	7.2
13...	0844	17.0	23.5	750	1028	1028	18	2.54	122	5.1	7.1
13...	0848	20.0	23.5	750	1028	1028	18	2.54	122	5.0	7.1
13...	0852	23.0	23.5	750	1028	1028	18	2.54	122	5.0	7.1
13...	0855	26.0	23.5	750	1028	1028	18	2.54	122	5.0	7.2
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 AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)		
NOV											
28...	1145	1028	80020	24	209	7.6	7.5	8.0	761		
JAN											
10...	1140	1028	80020	31	161	8.2	14.0	2.0	756		
FEB											
19...	1045	1028	80020	8.4	170	7.7	15.0	9.0	745		
MAR											
27...	1435	1028	80020	197	180	8.0	7.0	9.0	756		
27...	1830	1028	80020	276	139	7.8	6.0	8.5	756		
28...	0640	1028	80020	1570	91	7.8	6.5	7.0	755		
28...	1355	1028	80020	1560	97	7.3	9.5	8.5	753		
29...	0655	1028	80020	932	78	7.5	7.5	8.5	755		
APR											
02...	1140	1028	80020	110	90	7.5	20.0	12.5	753		
MAY											
22...	0810	1028	80020	41	105	7.0	22.0	23.0	748		
JUN											
25...	0800	1028	80020	5.1	176	7.6	26.0	27.0	750		
DATE	TIME	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINIT WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	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)		
NOV											
28...	2.7	23	90	0	74	--	--	<0.050	<0.015		
JAN											
10...	12.0	87	62	0	50	0.210	0.210	0.210	0.120		
FEB											
19...	10.8	96	39	0	32	0.070	0.070	0.070	<0.015		
MAR											
27...	10.7	94	35	0	29	0.160	0.160	0.160	0.030		
27...	9.0	77	22	0	18	0.130	0.130	0.130	0.060		
28...	10.4	87	18	0	15	0.150	0.150	0.150	0.070		
28...	9.8	85	16	0	13	0.380	0.380	0.380	0.220		
29...	10.4	90	15	0	12	0.130	0.130	0.130	0.060		
APR											
02...	8.8	84	21	0	17	0.150	0.150	0.150	0.020		
MAY											
22...	5.2	62	26	0	21	0.160	0.160	0.160	0.070		
JUN											
25...	3.0	38	65	0	53	0.220	0.220	0.220	0.100		
DATE	TIME	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	
NOV											
28...	--	0.90	0.90	0.90	0.140	0.020	0.06	9	0.58		
JAN											
10...	0.15	0.58	0.70	0.91	0.070	0.010	0.03	17	1.4		
FEB											
19...	--	0.60	0.60	0.67	0.050	<0.010	--	24	0.55		
MAR											
27...	0.04	0.97	1.0	1.2	0.180	0.030	0.09	259	138		
27...	0.08	1.2	1.3	1.4	0.190	0.030	0.09	236	176		
28...	0.09	1.0	1.1	1.2	0.190	0.050	0.15	654	2770		
28...	0.28	1.2	1.4	1.8	0.220	0.070	0.21	515	2170		
29...	0.08	0.74	0.80	0.93	0.120	0.030	0.09	228	572		
APR											
02...	0.03	0.58	0.60	0.75	0.090	0.010	0.03	56	17		
MAY											
22...	0.09	0.73	0.80	0.96	0.120	<0.010	--	84	9.3		
JUN											
25...	0.13	0.50	0.60	0.82	0.050	0.020	0.06	32	0.44		

POTEAU RIVER SUBBASIN

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 mi².

PERIOD OF RECORD.—December 1991 to current year.

REMARKS.—Specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)
JUN											
13...	0942	6.00	24.5	750	1028	1028	49	9.08	88	5.4	7.2
13...	0946	14.0	24.5	750	1028	1028	49	9.08	88	5.3	7.2
13...	0950	22.0	24.5	750	1028	1028	49	9.08	88	5.2	7.2
13...	0955	30.0	24.5	750	1028	1028	49	9.08	88	5.1	7.2
13...	1000	38.0	24.5	750	1028	1028	49	9.08	88	5.1	7.1
13...	1004	46.0	25.0	750	1028	1028	49	9.08	88	5.0	7.1
13...	1009	54.0	25.0	750	1028	1028	49	9.08	87	5.0	7.1
13...	1013	62.0	25.0	750	1028	1028	49	9.08	87	5.0	7.1
13...	1022	70.0	24.5	750	1028	1028	49	9.08	88	5.1	7.1
13...	1030	78.0	25.0	750	1028	1028	49	9.08	88	4.8	7.1

DATE	TIME NUMBER)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE SECOND) (00028)	DIS- CHARGE, INST. CUBIC FEET PER (US/CM) (00061)	SPE- CIFIC CON- DUCT- ANCE (UNITS) (00095)	PH WATER WHOLE FIELD (STAND- ARD (DEG C) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (NTU) (00010)	TUR- BID- ITY (HG) (00076)	BARO- METRIC PRES- SURE (MM OF (MG/L) (00025)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
JAN												
10...	1310	1028	80020	75	116	7.7	19.5	4.0	--	754	12.1	93
FEB												
19...	1250	1028	80020	24	118	7.1	21.5	11.0	--	744	10.4	96
MAR												
29...	0910	1028	80020	2640	74	7.1	17.0	9.5	--	755	10.0	88
MAY												
22...	1050	1028	80020	92	89	7.7	19.5	23.0	--	749	4.5	54
JUN												
25...	0930	1028	80020	19	140	7.7	27.5	27.5	--	750	4.8	62
JUL												
17...	0930	1028	80020	223	80	7.0	26.0	25.0	--	751	5.8	71
SEP												
04...	1015	1028	80020	14	127	7.5	23.0	24.0	27	753	5.8	70

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOC FECAL, KF AGAR PER (COLS. 100 ML) (31673)	HARD- NESS TOTAL AS (MG/L CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD HCO3 (00453)
JAN											
10...	--	--	--	--	--	--	--	--	--	--	28
FEB											
19...	--	--	--	--	--	--	--	--	--	--	30
MAR											
29...	--	--	--	--	--	--	--	--	--	--	13
MAY											
22...	--	--	--	--	--	--	--	--	--	--	33
JUN											
25...	--	--	--	--	--	--	--	--	--	--	49
JUL											
17...	180	88	400	23	5	5.3	2.4	5.2	30	0.5	2.8
SEP											
04...	100	K17	240	34	0	7.4	3.7	9.2	35	0.7	4.4

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	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 AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDE (MG/L) (00530)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
JAN												
10...	0	23	--	--	--	--	--	--	--	0.210	--	--
FEB												
19...	0	24	--	--	--	--	--	--	--	0.080	--	--
MAR												
29...	0	11	--	--	--	--	--	--	--	0.260	--	--
MAY												
22...	0	27	--	--	--	--	--	--	--	0.130	--	--
JUN												
25...	0	40	--	--	--	--	--	--	--	0.150	--	--
JUL												
17...	0	18	8.5	3.9	57	40	0.08	34.3	55	0.160	0.160	0.71
SEP												
04...	0	36	11	5.7	68	63	0.09	2.55	21	0.240	--	--

POTEAU RIVER SUBBASIN
07247650 FOURCHE MALINE NEAR LEFLORE, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 DIS- SOLVED (MG/L AS P) (00666)
JAN 10...	--	--	0.210	0.210	0.050	0.06	0.55	0.60	0.81	0.050	--
FEB 19...	--	--	0.080	0.080	<0.015	--	0.80	0.80	0.88	0.090	--
MAR 29...	--	--	0.260	0.260	0.080	0.10	1.0	1.1	1.4	0.190	--
MAY 22...	--	--	0.130	0.130	0.060	0.08	0.44	0.50	0.63	0.090	--
JUN 25...	--	--	0.150	0.150	0.080	0.10	0.72	0.80	0.95	0.050	--
JUL 17...	0.020	0.07	0.180	0.180	0.100	0.13	0.60	0.70	0.88	0.070	<0.010
SEP 04...	<0.010	--	0.240	0.240	0.030	0.04	0.47	0.50	0.74	0.060	<0.010
DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	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)	CHLORO- PHYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	PHEO- PHYTTIN PHYTO- PLANK- TON ACID M. (UG/L) (32218)	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)
JAN 10...	<0.010	--	--	22	4.4	--	--	--	--	--	--
FEB 19...	0.010	0.03	--	22	1.4	--	--	--	--	--	--
MAR 29...	0.030	0.09	--	338	2410	--	--	--	--	--	--
MAY 22...	0.010	0.03	--	40	10	--	--	--	--	--	--
JUN 25...	0.010	0.03	--	44	2.3	--	--	--	--	--	--
JUL 17...	<0.010	--	76	76	46	95	3.00	<1.00	3.00	<1.00	<1.00
SEP 04...	<0.010	--	140	37	1.4	83	6.00	<1.00	6.00	<1.00	<1.00

POTEAU RIVER SUBBASIN

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 mi².

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	TEMPER- ATURE WATER (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	GAGE HEIGHT (FEET) (00065)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD- WARD (STAND- ARD UNITS) (00400)
JUN											
13...	1105	44.0	26.0	748	1028	1028	17	13.63	45	7.7	7.3
13...	1109	39.0	25.5	748	1028	1028	17	13.63	45	7.4	7.3
13...	1113	32.0	25.5	748	1028	1028	17	13.63	45	7.2	7.2
13...	1118	27.0	25.0	748	1028	1028	17	13.63	45	7.1	7.1
13...	1122	22.0	25.0	748	1028	1028	17	13.63	45	7.1	7.1
13...	1127	17.0	25.0	748	1028	1028	17	13.63	45	7.0	7.1
13...	1131	12.0	25.0	748	1028	1028	17	13.63	45	7.0	7.1
13...	1135	7.00	25.0	748	1028	1028	17	13.63	45	7.2	7.1
13...	1140	2.00	25.5	748	1028	1028	17	13.63	45	7.2	7.1

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- WARD (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
NOV												
28...	1345	1028	80020	0.23	*68	7.6	8.5	10.0	--	758	9.8	87
JAN												
10...	1450	1028	80020	25	52	7.4	16.0	5.0	--	752	12.6	100
FEB												
19...	1420	1028	80020	8.7	48	6.9	25.5	11.0	--	741	10.8	101
APR												
02...	1320	1028	80020	54	44	6.8	25.0	14.5	--	749	9.2	92
MAY												
23...	0900	1028	80020	158	33	7.0	25.0	20.5	--	743	7.7	88
JUN												
25...	1110	1028	80020	5.4	52	7.4	31.5	29.0	--	748	5.5	73
JUL												
17...	0740	1028	80020	21	40	7.1	23.0	26.0	--	750	7.0	87
SEP												
04...	0800	1028	80020	5.1	51	7.5	16.5	23.5	2.5	752	6.6	79

*laboratory value instead of field value

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB DISSOLV FLD. AS CACO3 (MG/L) (00904)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
NOV											
28...	--	--	--	--	--	--	--	--	--	--	18
JAN											
10...	--	--	--	--	--	--	--	--	--	--	8
FEB											
19...	--	--	--	--	--	--	--	--	--	--	10
APR											
02...	--	--	--	--	--	--	--	--	--	--	8
MAY											
23...	--	--	--	--	--	--	--	--	--	--	7
JUN											
25...	--	--	--	--	--	--	--	--	--	--	17
JUL											
17...	65	23	150	10	1	1.5	1.4	3.2	39	0.5	10
SEP											
04...	K8	<1	140	13	0	2.1	2.0	3.5	33	0.4	17

DATE	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTIT- UENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)
NOV												
28...	0	14	--	--	--	--	--	--	--	--	--	--
JAN												
10...	0	7	--	--	--	--	--	--	--	0.110	--	--
FEB												
19...	0	8	--	--	--	--	--	--	--	--	--	--
APR												
02...	0	7	--	--	--	--	--	--	--	0.050	--	--
MAY												
23...	0	5	--	--	--	--	--	--	--	--	--	--
JUN												
25...	0	14	--	--	--	--	--	--	--	0.060	--	--
JUL												
17...	0	8	4.8	2.6	37	20	0.05	2.09	2	0.060	0.060	0.27
SEP												
04...	0	14	4.8	3.0	36	25	0.05	0.50	<1	--	--	--

POTEAU RIVER SUBBASIN
07247800 HOLSON CREEK AT SUMMERFIELD, OKLAHOMA--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	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 DIS- SOLVED (MG/L AS P) (00666)
NOV 28...	--	--	--	<0.050	<0.015	--	0.50	0.50	0.50	0.030	--
JAN 10...	--	--	0.110	0.110	<0.015	--	0.30	0.30	0.41	0.010	--
FEB 19...	--	--	--	<0.050	0.040	0.05	--	<0.20	--	0.010	--
APR 02...	--	--	0.050	0.050	<0.015	--	--	<0.20	--	0.020	--
MAY 23...	--	--	--	<0.050	0.020	0.03	0.28	0.30	0.30	0.030	--
JUN 25...	--	--	0.060	0.060	0.050	0.06	0.25	0.30	0.36	0.020	--
JUL 17...	0.010	0.03	0.070	0.070	0.080	0.10	--	<0.20	--	0.020	<0.010
SEP 04...	<0.010	--	--	<0.050	0.020	0.03	0.18	0.20	0.20	0.020	<0.010
DATE	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	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)	CHLORO- PHYLL A PHYTO- PLANK- TON ACID M. (UG/L) (32211)	PHEO- PHYTTIN PHYTO- PLANK- TON ACID M. (UG/L) (32218)	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)
NOV 28...	<0.010	--	--	3	0.00	--	--	--	--	--	--
JAN 10...	<0.010	--	--	1	0.05	--	--	--	--	--	--
FEB 19...	<0.010	--	--	6	0.13	--	--	--	--	--	--
APR 02...	<0.010	--	--	10	1.5	--	--	--	--	--	--
MAY 23...	<0.010	--	--	19	8.1	--	--	--	--	--	--
JUN 25...	0.020	0.06	--	8	0.12	--	--	--	--	--	--
JUL 17...	<0.010	--	12	14	0.79	90	<1.00	<1.00	<1.00	<1.00	<1.00
SEP 04...	<0.010	--	17	8	0.11	89	<1.00	<1.00	<1.00	<1.00	<1.00

POTEAU RIVER SUBBASIN

07249400 JAMES FORK NEAR HACKETT, ARKANSAS

LOCATION.--Lat 35°09'45", long 94°24'25", 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 mi².

AVERAGE DISCHARGE.--38 years, 143 ft³/s.

EXTREMES.--April 1958 to current year: Maximum discharge 30,000 ft³/s May 14, 1968; no flow at times.

REMARKS.--Water-discharge 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	134.2	16	1.4	4.33	266
November	195.3	16	2.0	6.54	387
December	934.8	248	3.0	30.2	1,850
January	4,141	758	13	134	8,210
February	906	56	17	31.2	1,800
March	2,412.5	940	9.5	77.8	4,790
April	12,315	4,880	33	410	24,430
May	1,499	322	11	48.4	2,970
June	991.1	170	5.4	33.0	1,970
July	2,300.3	554	9.5	74.2	4,560
August	1,421.7	436	4.0	45.9	2,820
September	4,757.3	1,260	5.6	159	9,440
Water year 1996	32,008.2	4,880	1.4	87.5	63,490

POTEAU RIVER SUBBASIN

07249400 JAMES FORK NEAR HACKETT, ARKANSAS--CONTINUED

PERIOD OF RECORD.—October 1960 to September 1971, October 1975 to September 1978, October 1983 to current year.

REMARKS.—Specific conductance, pH, water temperature, dissolved oxygen, and alkalinity were determined in the field.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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 PER CENT (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT 13...	1030	80513	81213	4.0	388	8.2	752	18.0	9.2	98
DEC 13...	1030	80513	81213	7.4	408	8.2	746	5.0	9.5	76
DATE	TIME	COLI- FORM, FECAL, O.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COLS./ 100 ML) (31633)	STREP- TOCOCCI FECAL KF AGAR (COLS./ 100 ML) (31673)	HARD- NESS TOTAL (MG/L CAC03) (00900)	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 PERCENT (00932)	
OCT 13...	1030	<48	66	100	120	18	19	28		32
DEC 13...	1030	46	72	160	110	17	16	27		35
DATE	TIME	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L AS N) (00960)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00625)	
OCT 13...	1030	1	3.1	87	6.4	242	--	--	--	
DEC 13...	1030	1	2.3	90	7.3	275	0.210	0.210	0.93	
DATE	TIME	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	
OCT 13...	1030	0.010	0.03	--	<0.020	0.010	0.01	0.29	0.30	
DEC 13...	1030	0.010	0.03	0.220	0.220	0.010	0.01	0.27	0.28	
DATE	TIME	NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00665)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00660)	SEDI- MENT, SUS- PENDED (MG/L (T/DAY) (80155)	SEDI- MENT, SUS- PENDED (MG/L (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	
OCT 13...	1030	0.30	--	0.050	0.010	0.03	25	0.27	99	
DEC 13...	1030	0.50	<0.020	<0.020	0.010	0.03	19	0.38	90	
DATE	TIME	AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)			
JAN 29...	1558	80513	80513	100	0.50	0.50	71			
29...	1559	80513	80513	100	0.30	0.30	--			
29...	1600	80513	80513	100	0.40	0.40	--			
29...	1601	80513	80513	100	0.70	0.70	--			
29...	1602	80513	80513	100	0.60	0.60	--			
29...	1603	80513	80513	100	0.60	0.60	--			
29...	1604	80513	80513	100	0.70	0.70	--			
29...	1605	80513	80513	100	1.00	2.00	--			
29...	1607	80513	80513	100	1.00	2.00	--			
29...	1608	80513	80513	100	1.00	2.00	--			
DATE	TIME	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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)			
JAN 29...	1558	171	7.3	6.5	12.5	103	752			
29...	1559	169	7.3	6.5	12.1	100	752			
29...	1600	172	7.2	6.5	12.1	99	752			
29...	1601	171	7.2	6.5	11.9	98	752			
29...	1602	171	7.2	6.5	11.9	98	752			
29...	1603	171	7.1	6.5	11.9	98	752			
29...	1604	170	7.2	6.5	11.9	98	752			
29...	1605	170	7.1	6.0	11.9	97	752			
29...	1607	171	7.2	6.0	11.9	98	752			
29...	1608	171	7.1	6.0	12.0	98	752			

POTEAU RIVER SUBBASIN

07249400 JAMES FORK NEAR HACKETT--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
MAR	19...	1400	80513	81213	85	302	8.1	750	10.0	9.6	87
MAY	29...	1330	80513	81213	18	355	7.6	749	24.5	5.8	71
JUL	30...	1345	80513	81213	1200	120	7.4	751	23.5	6.8	81
SEP	04...	1345	80513	81213	23	230	8.9	749	24.0	5.1	62
		COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CaCO3) (00900)	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 PERCENT (00932)		
MAR	19...	1400	740	520	380	100	17	15	11	18	
MAY	29...	1330	62	60	97	130	20	19	15	20	
JUL	30...	1345	3800	K700	K41000	13	2.9	1.5	4.1	32	
SEP	04...	1345	230	92	280	82	13	12	14	26	
		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)		
MAR	19...	1400	0.5	1.8	77	6.6	176	0.050	--	--	
MAY	29...	1330	0.6	2.5	82	5.4	214	0.090	--	--	
JUL	30...	1345	0.5	4.1	3.6	3.2	58	0.241	0.241	1.1	
SEP	04...	1345	0.7	3.2	45	5.0	150	0.200	--	--	
		NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)		
MAR	19...	1400	<0.010	--	0.050	0.050	0.040	0.05	0.25	0.29	
MAY	29...	1330	<0.010	--	0.090	0.090	0.050	0.06	0.32	0.37	
JUL	30...	1345	0.019	0.06	0.260	0.260	0.063	0.08	2.2	2.3	
SEP	04...	1345	<0.010	--	0.200	0.200	0.040	0.05	0.46	0.50	
		NITRO- GEN, TOTAL (MG/L AS N) (00600)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)		
MAR	19...	1400	0.34	0.050	<0.020	0.010	0.03	51	12	89	
MAY	29...	1330	0.46	<0.020	<0.020	<0.010	--	75	3.6	90	
JUL	30...	1345	2.6	0.800	0.320	0.260	0.80	642	2080	97	
SEP	04...	1345	0.70	0.050	<0.020	<0.010	--	49	3.0	99	

LEE CREEK SUBBASIN
07249985 LEE CREEK NEAR SHORT, OKLAHOMA

LOCATION.--Lat 35°29'40", long 94°26'58", in SE1/4, sec.21, T.12 N., R.27 E., Indian Meridian, Sequoyah County, Oklahoma, Hydrologic Unit 11110104, on left bank 0.5 mi west of Arkansas-Oklahoma State line, 500 ft downstream from Webbers Creek, 4.1 mi south of Short, Oklahoma, 7.5 mi southwest of Uniontown, Arkansas, and at mile 11.0.

AVERAGE DISCHARGE.--420 mi².

AVERAGE DISCHARGE.--52 years (1930-36, 1950-96), 529 ft³/s.

EXTREMES.--September 1930 to June 1937, October 1950 to current year: Maximum discharge 80,600 ft³/s May 6, 1960; no flow at times.

REMARKS.--Records good, except estimated daily discharges, which are fair. Prior to October 1992 published as 07250000 Lee Creek near Van Buren, 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	4,186	1,270	14	135	8,300
November	1,049	47	28	35.0	2,080
December	7,920	2,510	21	255	15,710
January	25,681	7,840	139	828	50,940
February	4,274	318	66	147	8,480
March	8,289	1,930	37	267	16,440
April	47,304	9,650	368	1,577	93,830
May	14,474	2,780	74	467	28,710
June	4,049	628	31	135	8,030
July	2,629	415	16	84.8	5,210
August	2,108	300	14	68.0	4,180
September	9,259.23	3,790	0.37	309	18,370
Water year 1996	131,222.23	9,650	0.37	359	260,300

LEE CREEK SUBBASIN

7250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN, ARKANSAS

LOCATION.--Lat 35°29'02", long 94°42'33", in SE1/4SW1/4, sec.3, T.9 N., R.32 W., Crawford County, Hydrologic Unit 11110104, in control house at dam on left bank, 2.8 mi northwest of Van Buren, and at mile 3.5.

DRAINAGE AREA.--432 mi².

AVERAGE DISCHARGE.--4 years, 594 ft³/s.

EXTREMES.--October 1992 to current year: Maximum discharge 32,000 ft³/s Apr. 14, 1993; no flow at times.

REMARKS.--Water-discharge records good, except estimated daily discharges, which are fair. Records given herein represent spillway flow and do not include water diverted for municipal water supply of Fort Smith. Flow regulated by storage in Lee Creek Reservoir, capacity 7,118 acre-ft and power releases.

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	647.23	140	0.00	20.9	1,280
November	699.1	50	2.2	23.3	1,390
December	6,414.5	2,060	1.4	207	12,720
January	23,539	8,300	114	759	46,690
February	2,726	222	34	94.0	5,410
March	6,181.38	1,700	.46	199	12,260
April	47,784	11,800	288	1,593	94,780
May	13,174	2,440	64	425	26,130
June	2,693	439	16	89.8	5,340
July	1,038.70	222	.00	33.5	2,060
August	1,343.50	254	.00	43.3	2,660
September	9,216.49	4,840	.00	307	18,280
Water year 1996	115,456.90	11,800	0.00	315	229,000

LEE CREEK SUBBASIN

07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN, ARKANSAS--CONTINUED

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

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 12...	1430	80513	81213	60	120	8.2	753	21.5	8.8	101	K10
DEC 14...	0930	80513	81213	25	108	8.8	750	7.0	9.1	75	K3
		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCHI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)
DATE	TIME										
OCT 12...	1430	27	23	39	13	1.6	3.6	16	0.3	1.5	5.3
DEC 14...	0930	K1	K2	36	12	1.5	4.1	19	0.3	1.0	5.6
		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS RESIDUE AT 180 DEG C DIS- SOLVED (MG/L AS N) (70300)	NITRO- GEN NITRATE TOTAL (MG/L AS N) (00620)	NITRO- GEN NITRATE TOTAL (MG/L AS N) (00618)	NITRO- GEN NITRATE TOTAL (MG/L AS NO3) (71851)	NITRO- GEN NITRATE TOTAL (MG/L AS N) (00613)	NITRO- GEN NITRATE TOTAL (MG/L AS NO2) (71856)	NITRO- GEN NO2+NO3 DIS- SOLVED (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)
DATE	TIME										
OCT 12...	1430	6.1	70	0.040	0.040	0.18	0.010	0.03	0.050	0.050	0.010
DEC 14...	0930	7.6	68	--	--	--	0.010	0.03	--	<0.020	0.020
		NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4) (00660)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN 0.62 MM (70331)
DATE	TIME										
OCT 12...	1430	0.01	<0.20	<0.020	<0.020	<0.010	--	<0.100	15	2.4	97
DEC 14...	0930	0.03	<0.20	<0.020	<0.020	0.010	0.03	3.00	9	0.61	95
		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	DIS- CHARGE, INST- CUBIC FEET PER SECOND (00061)				
JAN											
30...	1215	80513	80513	80.0	1.50	3.00	320				
30...	1216	80513	80513	80.0	1.50	3.00	--				
30...	1217	80513	80513	80.0	1.50	3.00	--				
30...	1218	80513	80513	80.0	1.00	2.00	--				
30...	1219	80513	80513	80.0	1.00	2.00	--				
30...	1220	80513	80513	80.0	1.00	2.00	--				
30...	1221	80513	80513	80.0	1.00	2.00	--				
30...	1222	80513	80513	80.0	1.00	2.00	--				
30...	1223	80513	80513	80.0	0.50	1.00	--				
30...	1224	80513	80513	80.0	0.50	1.00	--				
		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 (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BARO- METRIC PRES- SURE (MM OF HG) (00025)				
DATE	TIME										
JAN											
30...	1215	73	7.2	6.0	11.4	92	755				
30...	1216	73	7.2	6.0	11.2	90	755				
30...	1217	72	7.2	6.0	11.1	90	755				
30...	1218	70	7.1	6.0	11.1	90	755				
30...	1219	70	7.1	6.0	11.1	90	755				
30...	1220	65	7.1	6.0	11.1	89	755				
30...	1221	58	7.0	6.0	11.2	91	755				
30...	1222	55	7.0	6.0	11.4	92	755				
30...	1223	49	7.0	6.0	11.3	91	755				
30...	1224	45	6.8	5.5	11.3	91	755				
		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
DATE	TIME										
MAR 14...	1000	80513	81213	37	92	7.5	748	11.5	8.5	79	43
APR 23...	1245	80513	81213	11400	48	6.8	758	13.5	9.8	94	1300
JUL 31...	1430	80513	81213	95	115	8.9	752	28.5	5.7	74	78
SEP 03...	1100	80513	81213	26	112	8.8	751	26.0	5.3	66	K10

LEE CREEK SUBBASIN

07250085 LEE CREEK AT LEE CREEK RESERVOIR NEAR VAN BUREN, ARKANSAS--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	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 PERCENT (00932)	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	
MAR	14...	1000	33	230	36	12	1.5	3.0	15	0.2	0.80	5.7
APR	23...	1245	1000	2500	17	5.2	0.90	1.0	11	0.1	1.1	3.7
JUL	31...	1430	74	120	42	14	1.6	3.0	13	0.2	1.7	4.2
SEP	03...	1100	K6	35	42	14	1.7	3.6	15	0.2	1.4	4.3
		CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE TOTAL (MG/L AS N) (00620)	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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)		
MAR	14...	1000	5.2	52	0.600	<0.010	0.600	0.600	0.030	0.04	--	
APR	23...	1245	1.8	40	0.320	<0.010	0.320	0.320	0.010	0.01	0.71	
JUL	31...	1430	3.7	74	0.040	<0.010	0.040	0.040	0.019	0.02	0.22	
SEP	03...	1100	4.7	64	--	<0.010	--	<0.020	0.012	0.02	--	
		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 DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	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)		
MAR	14...	1000	<0.20	--	<0.020	<0.020	<0.010	<0.100	21	2.1	70	
APR	23...	1245	0.72	1.0	0.210	0.030	<0.010	<0.100	292	8990	83	
JUL	31...	1430	0.24	0.28	<0.020	<0.020	<0.010	2.80	34	8.7	61	
SEP	03...	1100	<0.20	--	<0.020	<0.020	<0.010	--	14	0.98	98	

ARKANSAS RIVER SUBBASIN

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 mi², of which 22,241 mi² is probably noncontributing.

AVERAGE DISCHARGE.—Prior to regulation, 42 years (water year 1928-69) 30,220 ft³/s; 27 years (water years 1970-96) 39,370 ft³/s.

EXTREMES.—October 1927 to current year: Maximum discharge 850,000 ft³/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.—Water-discharge records good except for discharges below 10,000 ft³/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	220,066	23,100	16	7,099	436,500
November	93,051	11,700	15	3,102	184,600
December	149,920	16,600	30	4,836	297,400
January	382,530	42,700	1,020	12,340	758,700
February	213,640	13,600	2,160	7,367	423,800
March	237,157	33,400	30	7,650	470,400
April	795,490	114,000	3,090	26,520	1,578,000
May	676,740	46,200	6,640	21,830	1,342,000
June	542,370	31,400	4,450	18,080	1,076,000
July	440,430	29,200	3,260	14,210	873,600
August	660,300	35,400	8,470	21,300	1,310,000
September	665,800	120,000	3,350	22,190	1,321,000
Water year 1996	5,077,494	120,000	15	13,870	10,070,000

ARKANSAS RIVER SUBBASIN

07250550 ARKANSAS RIVER AT JAMES W. TRIMBLE LOCK AND DAM NEAR VAN BUREN, ARKANSAS--CONTINUED
PERIOD OF RECORD.--October 1969 to September 1992, June to September 1995. Prior to October 1969, published as 07250500
Arkansas River at Van Buren.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	
OCT	10...	1430	80513	81213	10500	690	8.6	754	23.0	9.5	113
DEC	14...	1230	80513	81213	5990	610	8.5	750	8.5	9.5	82
		COLI- FORM, FECAL, 0.7 UM-MF (COLS/ 100 ML) (31625)	E. COLI WATER WHOLE KF AGAR (COLS/ 100 ML) (31633)	STREP- TOCOCCHI FECAL KF AGAR (COLS/ 100 ML) (31673)	HARD- NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00931)		
OCT	10...	1430	K34	K26	K15	150	42	11	72	50	3
DEC	14...	1230	34	34	K11	150	41	11	71	50	3
		POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00620)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00618)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO3) (71851)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N) (00613)		
OCT	10...	1430	5.2	57	110	402	0.310	0.310	1.4	0.010	
DEC	14...	1230	4.2	60	110	406	0.280	0.280	1.2	0.010	
		NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS NO2) (71856)	NITRO- GEN, NO2+NO3 DIS- SOLVED (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, AMMONIA DIS- SOLVED (MG/L AS NH4) (71846)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00605)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00625)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00600)		
OCT	10...	1430	0.03	0.320	0.320	0.020	0.03	0.48	0.50	0.82	
DEC	14...	1230	0.03	0.290	0.290	0.030	0.04	0.44	0.47	0.76	
		PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)	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	10...	1430	0.080	0.060	0.060	0.18	2.00	74	2100	100	
DEC	14...	1230	0.070	0.030	0.050	0.15	3.00	35	566	65	
		AGENCY COL- LECTING SAMPLE (CODE NUMBER) (00027)	AGENCY ANA- LYZING SAMPLE (CODE NUMBER) (00028)	STREAM WIDTH (FT) (00004)	SAM- PLING DEPTH (FEET) (00003)	DEPTH AT SAMPLE LOC- ATION, TOTAL (FEET) (81903)	DIS- CHARGE, INST- CUBIC FEET PER SECOND (00061)				
JAN	30...	0814	80513	80513	1000	7.50	15.0	20700			
	30...	0816	80513	80513	1000	7.50	15.0	--			
	30...	0817	80513	80513	1000	7.50	15.0	--			
	30...	0819	80513	80513	1000	7.50	15.0	--			
	30...	0820	80513	80513	1000	7.50	15.0	--			
	30...	0821	80513	80513	1000	7.50	15.0	--			
	30...	0822	80513	80513	1000	5.00	10.0	--			
	30...	0823	80513	80513	1000	4.00	8.00	--			
	30...	0824	80513	80513	1000	4.00	8.00	--			
	30...	0825	80513	80513	1000	4.00	8.00	--			
		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)	BARO- METRIC PRES- SURE (MM OF HG) (00025)				
JAN	30...	0814	545	7.7	4.0	13.2	103	755			
	30...	0816	540	7.8	4.5	13.3	103	755			
	30...	0817	546	7.9	4.0	12.8	99	755			
	30...	0819	542	7.9	4.0	13.3	103	755			
	30...	0820	538	7.9	4.0	13.2	103	755			
	30...	0821	543	8.0	4.0	13.3	103	755			
	30...	0822	548	8.0	4.0	13.2	102	755			
	30...	0823	551	8.0	4.0	13.1	102	755			
	30...	0824	551	8.0	4.0	12.8	99	755			
	30...	0825	554	8.0	4.0	13.0	101	755			

ARKANSAS RIVER SUBBASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

DATE	TIME	AGENCY COLLECTING SAMPLE (CODE NUMBER)	AGENCY ANALYZING SAMPLE (CODE NUMBER)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD) (UNITS) (00400)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	TEMPER-ATURE OF WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR 14...	1200	80513	81213	10200	810	8.8	748	9.5	12.4	111
MAY 22...	1330	80513	81213	28000	402	8.1	749	24.5	6.7	81
JUL 30...	1000	80513	81213	15100	650	8.6	754	29.5	5.0	67
AUG 27...	1130	80513	81213	15000	1300	8.6	752	28.5	5.5	72

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL/100 ML) (31633)	STREP-TOCOCOCCI FECAL KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
MAR 14...	1200	<1	K7	K2	180	47	14	100	3
MAY 22...	1330	150	220	110	110	33	7.1	28	1
JUL 30...	1000	44	K36	670	130	34	9.8	72	3
AUG 27...	1130	K2900	K2600	230	190	49	17	180	6

DATE	TIME	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00620)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3) (71851)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00613)
MAR 14...	1200	4.0	70	160	482	--	--	--	<0.010
MAY 22...	1330	3.5	37	40	232	0.220	0.220	0.97	0.020
JUL 30...	1000	3.3	60	120	424	--	--	--	<0.010
AUG 27...	1130	4.9	89	290	824	--	--	--	--

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2) (71856)	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, AMMONIA DIS-SOLVED (MG/L AS NH4) (71846)	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)
MAR 14...	1200	--	--	<0.020	0.030	0.04	0.58	0.61	0.61
MAY 22...	1330	0.07	0.240	0.240	0.030	0.04	0.66	0.69	0.93
JUL 30...	1000	--	--	<0.020	0.067	0.09	0.51	0.58	0.58
AUG 27...	1130	--	--	--	<0.010	--	0.49	0.49	0.49

DATE	TIME	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	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)
MAR 14...	1200	0.020	<0.020	0.010	0.03	12.0	81	2230	97
MAY 22...	1330	0.090	0.020	0.010	0.03	9.64	74	5590	94
JUL 30...	1000	0.030	<0.020	0.030	0.09	3.80	47	1920	98
AUG 27...	1130	0.090	0.030	<0.010	--	--	104	4210	98